

**Public Comments on the
Michigan Department of Environmental Quality's
Supplying Water to the Public
Draft Rules (Lead and Copper Rules)
March 13, 2018**

Prepared for consideration (supported) by:

Michigan Municipal League, Michigan Townships Association, Southeast Michigan Council of Governments (SEMCOG), Detroit Water and Sewerage Department (DWSD), Great Lakes Water Authority (GLWA), Oakland County Water Resources Commissioner, and the Michigan Section of the American Water Works Association (MI-AWWA).

Executive Summary

This public comment document is provided in response to the Michigan Department of Environmental Quality's Supplying Water to the Public Draft Rules (Lead and Copper Rules) dated January 30, 2018. While this entire document must be evaluated in its entirety to understand the breadth and detail of the coalition's comments, recognize that these comments are provided in the framework of protecting public health. First, there is agreement with the state on a number of suggested rule changes, outlined as follows:

- When a change in source water is proposed, a coordinated evaluation and technical analysis **must** occur to address potential corrosion control treatment requirements.
- Partial lead service line removal is not protective of public health and should only be completed in critical situations.
- Full lead service line removal should be completed as part of a community's asset management program with service line material as a contributing factor.
- Other water quality parameters, such as sulfate and chloride, should be used as early detection parameters for optimal corrosion control.
- Lead service line materials inventories are the first step to identifying lead service line locations.

At the same time, there are a number of proposed rule changes that are inconsistent with the suggested approach outlined in this document and which include the following:

- The action level (AL) should remain at 15 ppb until the EPA completes the scientific and health-based model and analysis that will inform any changes to the AL. Similarly, for the household advisory level.
- All lead service line removals should be completed as part of a community's asset management program, not part of the proposed tiered approach. Lead service line removal should be driven by three elements: exceedance of the action level after installation of corrosion control technology; schedules in coordination with approved asset management programs; and mitigation of elevated levels at known sources.
- Compliance with the AL should be determined by first draw samples. First draw samples are reflective of both recent exposure of the water to household plumbing and the service line. If that first draw results are above the AL, an investigation should begin.

- Sequential sampling should be used as part of an investigation in response to elevated levels. These samples should not be used for compliance with the AL, nor should they be used to trigger any system-wide LSLR. The purpose of sequential sampling is to determine the source of the elevated level, which will then drive decisions about mitigation of the source.
- Finally, public water rate payer funds cannot be used to implement improvements on private property, including replacement of the privately-owned portion of lead service lines.

The remainder of this document outlines a solutions-based comprehensive approach that is protective of public health. Coordinating actions across multiple state and local departments, water service providers and licensing agencies will address lead exposure in a collaborative manner, leading to removal of the source, whether paint, soil, dust, indoor plumbing, lead service line or other household items.

Why the proposed rule must be reworked before it is finalized

Michigan’s framework for addressing infrastructure challenges was established by the 21st Century Infrastructure Commission. That framework is built on a premise: investments in infrastructure must be more systematic and focused on achieving 4 outcomes that are all crucial to a vibrant Michigan. Those outcomes are:

- Economic prosperity
- A healthy Environment
- Reliable, high quality service
- Value for investment

In every single work group advisory meeting, we requested the State apply the Commission’s proposed framework in crafting holistic actions to confront the issue of elevated exposure to lead guided by these outcomes. The more systematic, outcome based framework developed by the Commission is the path that best serves the public’s interest.

Thankfully, the more systematic approach to addressing public health protection from lead is also embraced in the recommendations of the Child Lead Poisoning Elimination Board. Their report, “A Roadmap to Eliminating Child Lead Exposure” recognizes there are various pathways to lead exposure with highly varying degrees of impact. Their report emphasizes that a combination of actions are needed on two paths: preventing new problems and remediating existing ones. We agree.

Some key statements from their report are relevant to our comments on both this specific rulemaking and on what should be the State’s policy on this topic. (**Bolded** wording is for emphasis.)

- “A greater focus on primary prevention will also require the recognition and **coordinated targeting of all lead dangers**.
- Health equity must be the foundation of all policy and funding recommendations, **with areas of disparate lead exposure given higher priority**.

- **By far** the most common identified form of lead exposure for children is through lead paint and lead dust in older homes...
- The board proposes that its recommendations be prioritized so that known sources of ongoing exposure (those houses, apartments, and other structures and areas where child lead exposure has been identified and where families continue to live or visit) are addressed first.
- The board further proposes that **prioritization of its recommendations to eliminate exposure risk be based on the likelihood that a particular type and level of exposure will result in child EBLs.**
- The only way to truly eliminate child lead exposure is to test every child in Michigan and then target well-defined, high-risk areas to provide a comprehensive, **targeted remediation approach.**”

Taken together, the reports of the Infrastructure Commission and the Child Lead Poisoning Elimination Board provide an excellent policy framework for aligning the actions of government and addressing the problem of lead poisoning in a way that maximizes public health protection per dollar expended.

Unfortunately, the proposed rule is out of alignment with the advice sought by, and given to, the State in these two reports. Both the rule and the Regulatory Impact Analysis lack the big picture context and systematic actions called for by both of the expert advisory boards.

Also, numerous issues raised during workgroup meetings were placed in a “parking lot”. They are listed as part of our comments on the Regulatory Impact Statement. The fact that those issues were never addressed prior to the formal rule proposal is a key reason our comments and concerns are so extensive.

We respectfully request that the drinking water rule revisions not be finalized until:

- 1. The rule reflects the systematic, targeted approach envisioned by both the Infrastructure Commission and the Child Lead Poisoning Elimination Board.**
- 2. The Regulatory Impact Statement is revised to accurately reflect total costs, alternatives considered and their comparative benefits, expected costs to property owners with lead service lines, and the necessity to proceed in advance of federal rulemaking the state acknowledges will require more stringent protection from exposure to lead in drinking water.**
- 3. The numerous legal issues outlined in the attached memorandum are resolved.**

Michigan simply cannot meet the challenges of the 21st century and provide the quality of life fundamental to its success if it continues to confront challenges such as lead poisoning by issuing policy and rules in silos through departments based on their individual, independent areas of

authority. By definition, the problem transcends the responsibilities of individual organizations and departments. So the solution must also transcend these boundaries.

The framework of an effective program to reduce blood lead levels

To represent the full continuum of public's interests in both public health protection and cost optimization, the final rule on drinking water must be shown to appropriately represent that particular component of the whole solution to lead poisoning. Doing this requires the State first lay out the whole solution for public scrutiny. That is the only way we can assess whether the State's proposed actions will maximize public health benefits no matter the source of lead exposure.

Our perception is that the State shares our desire to steer actions and investments to where the greatest public health benefits accrue. However, for the reasons outlined below, the current State proposal will not get us to the desired outcome as quickly, efficiently, or effectively as possible. This applies to the current rule proposal for addressing the drinking water pathway, and the absence of an aligned proposal to address other pathways.

It is our belief that resolving these issues before taking final action best serves the public. We commit to working with Michigan in crafting a program that is a national model of policy and regulatory innovation. Michigan's program should prioritize short-term investments on remediation of existing problems and longer-term investments in prevention of new problems. Both short-term and long-term investments must be focused on maximizing public health protection.

This framework is outlined below. We offer to work with the state in developing the details.

- In the drinking water rule, require the replacement of lead service lines as part of an asset management plan.
- In the drinking water rule, require the replacement of a lead service line immediately if it is shown to be the source of an EBL.
- In the drinking water rule, improve the testing protocols to assure valid samples and target areas with likely problems first.
- In the drinking water rule, strengthen state oversight of proposed changes to source water.
- Establish a dedicated revenue source to pay for lead line and/or plumbing fixture replacement on private property when it is a known source of contamination and the property owner qualifies for financial assistance.
- Institute an ombudsman position for the public to have direct access to ask questions and have concerns addressed.
- In a separate rule or legislation, establish and implement recommendations from the Child Lead Poisoning Elimination Board that support collaboration with water service providers, including protocols for blood level testing, data sharing, expanded case management services and targeted source removal.

- In other rules or legislation, require follow up investigation and remediation of the source of lead causing an EBL.
- Develop a statewide public information program explaining actions the public can take to minimize their exposure to lead and where to turn for assistance.
- Evaluating other avenues for eliminating lead exposure (real estate disclosure, rental disclosure and abatement, school and day care licensing)

Knowledge-based realities providing the basis for guiding public health protection actions designed to resolve current problems and prevent creation of new ones

- ✓ Lead in blood is a result of an individual's total exposure to lead. Total exposure to lead varies greatly **from one property to the next**. Key factors are the age of the home, whether it contains lead based paint, whether it contains lead based plumbing fixtures, and whether service includes piping containing lead.
- ✓ The crisis in Flint has rightly led to the need to scrutinize Michigan's rules in search of improved public health protection. The crisis in Flint was mostly a result of a source water change and improper corrosion control. Improved corrosion control has greatly reduced exposure to lead from drinking water. Greater attention to corrosion control is needed in Michigan rules.
- ✓ The draft rule presumes that the massive cost of lead line replacements produces the greatest public health benefits per dollar expended both in the aggregate, and more importantly, to specific people. But, exposures from the drinking water pathway vary greatly. They include improper corrosion control, disturbance of lead lines on private property, plumbing fixtures and solder.

Yet, under the proposed plan, many homeowners would pay thousands of dollars to have a lead line replaced when the greatest source of their exposure has a high likelihood of being from a different source: e.g. plumbing fixtures, paint, dust, etc. We are concerned that replacement of lead lines in these circumstances will leave residents with the impression the problem has been solved when in fact far more public health benefit to them would result from some other remedial action(s).

- ✓ We are deeply concerned that both the cost and public health benefits of the current draft rule are not transparent. The stipulation that the service provider must pay for lead line replacement on private property if requested by the owner facilitates a false impression: that lead lines on private property will be replaced at no cost to the property owner. This is not possible under Michigan's Constitutional structure governing fees. And, despite the science showing the degree of variance in exposure by property with lead based paint and dust the most likely culprit, the rules emphasis on lead line replacement makes it easy to erroneously conclude this action would eliminate the greatest source of public exposure.

- ✓ As noted in the Childhood report, by far, the most common cause of high blood levels is lead based paint and dust from lead based paint. To illustrate, follow up inspections in homes of Detroit residents and elsewhere in Southeast Michigan having high blood lead levels has not yet resulted in cases where the cause is source drinking water.
- ✓ Because of the realities above, **maximizing public health benefits requires investments in the places most warranted by site-specific circumstances.**
- ✓ We have consistently committed to the replacement of lead lines as part of asset management plans. But the high cost of replacing the approximate 500,000 lead lines in Michigan is being made unnecessarily higher.

The State only allows lead line replacements to be based on asset management plans in narrowly defined circumstances, i.e. a non-health based action level of 5 ppb. This is arbitrary. Furthermore, it is likely that the new sequential sampling will mean most suppliers will not meet the 5 ppb threshold making them unable to incorporate lead line replacement into their asset management program.

Experience already demonstrates costs are lowest when lead line replacement is done in conjunction with other service improvements. Conversely, per unit cost increase by roughly \$1,500 when work is not coordinated with other improvements. That means costs will unnecessarily rise by about \$750,000,000! Total cost of line replacement is in the vicinity of \$2,500,000,000. Many, if not most, of those expenses would be incurred in our oldest cities. For example, Detroit estimates there are approximately 125,000 lead service lines on private property.

- ✓ Expenditures of this magnitude must be aligned with other needs or it will jeopardize the ability of utilities to invest in even the most basic maintenance of its infrastructure assets in place to protect public health. The result of an overly ambitious replacement schedule will be adverse public health impacts caused by failures such as ruptured pipes, sinkholes, and basement flooding. Detroit, for example, has made clear that its ongoing program for maintaining assets of its drinking water system would be undercut if this rule is adopted as proposed.

The public costs of resulting failures transcend the extremely high costs of emergency infrastructure fixes. They include property damage, displacement of vulnerable populations in hospitals and senior centers, loss of revenue to businesses, etc.

- ✓ The fiscal capacity of residents in many of our older communities is very limited. For example about 36% of Detroit's residential customers live below the federal poverty level. Water and sewer service costs in many older areas are already at, or approaching levels recognized by USEPA as unaffordable.

Legal realities providing the basis for guiding public health protection actions that resolve current problems and prevent creation of new ones

There are several critical legal issues arising from the proposed rule that were repeatedly raised in stakeholder meetings. These are described in detail in the attached Memorandum Draft Rule: Supplying Water to the Public. A brief summary follows.

- ✓ Michigan's Constitution prohibits using public money to make improvements on private property, (as used in the Constitution "appropriation"), without the assent of two-thirds of the members of each house of the legislature. MCLS Const. Art. IV, § 30. Yet the draft rule requires that utility revenue from fees, which is public money, be used to make such improvements.
- ✓ The State's current proposal creates the appearance that the cost of removing lead lines will not be a homeowner expense but rather will somehow fall to another party (the utility). This is inaccurate. Utility rates must meet Michigan's Constitutional requirement that charges to specific users be proportioned based on the cost of services and benefits to those specific users. Spreading the cost of lead line replacement to all users in a system would violate the Constitution and, ironically, expose utilities and all their customers to paying the costs of expensive settlements.
- ✓ The draft rule stipulates that a water utility must pay for the replacement of lead lines if requested by the customer. Given the high cost, very few, if any, building owners would elect to pay on their own thus leaving the burden on the utility.

The utility is funded with fees to the customer who benefits, per *Bolt v. City of Lansing*, 459 Mich. 152 (1998). Clearly, the utility could not pay for improvements on some properties and then spread the cost to its entire rate base without exposing itself to legal risk to revise its rate structure so that only parties benefiting are paying costs.

If fees collected by a utility are used to pay for a lead line replacement to comply with a state rule, the actual costs of those improvements on private property must ultimately be charged right back to the property owner.

- ✓ Even if, despite the points above, the State were to pursue a policy requiring use of public funds to benefit private property, it is a matter for debate in the legislative branch as required by Art. IV, § 30. This is especially important because the Headlee Amendment requires the state to cover the costs of new obligations it places on local government. MCLS Const. Art. IX, § 25. Further, the state is prohibited from requiring any new or expanded activities by local governments without full state financing.

Lead line replacements on private property alone will exceed a billion dollars. Some of these costs could become obligations of the State. Thus, the fiscal ramifications for the

state budget are enormous and must be discussed in a legislative forum. If using public money to make improvements on private property is prohibited, so too is an administrative rule requiring utilities to implement the policy.

Why the regulatory impact analysis must be redone to serve as the intended backdrop for assessing the validity of a proposed administrative rule in Michigan

Michigan procedures require that proposed rules be accompanied by a Regulatory Impact Statement (RIS). The RIS for this rulemaking contains several factual errors. It also contains inconsistent statements. And, it does not include several relevant pieces of information that would inform the process. Each of these issues are addressed in detail in Attachment 2: Response to Regulatory Impact Statement. Since the proposed rule is based on an RIS guiding the public's understanding that contained documented factual errors, the process must be restarted beginning with a corrected RIS.

Recommended modifications to proposed rule

As indicated throughout this document, the final language of changes to this rule cannot be completed until it is aligned with other programs to assure public health is protected and we maximize the benefits of our investments. The holistic approach needed to maximize public health benefits requires a proper referencing in this rule to other programs, e.g. blood lead testing, needed to assure the existing problems are identified and resolved as soon as practicable. Therefore, our comments on rule language in Attachment 3 cannot be finalized until the content of a thorough program based on the targeted remediation approach recommended by the Childhood Lead Advisory Board is developed.

The following attachments are provided in this document:

Attachment 1: Memorandum on Legal Issues in the Draft Rule: Supplying Water to the Public
Attachment 2: Response to Regulatory Impact Statement
Attachment 3: Comments on the Proposed Regulatory Language of the Draft Lead and Copper Rules

ATTACHMENT 1
MEMORANDUM ON LEGAL ISSUES IN THE DRAFT RULE:
SUPPLYING WATER TO THE PUBLIC

**OAKLAND COUNTY
WATER RESOURCES COMMISSIONER****MEMORANDUM**

TO: Commissioner Jim Nash

FROM: Kelsey Cooke, WRC Senior Attorney

SUBJECT: Draft Rule: Supplying Water to the Public

DATE: March 13, 2018

After a thorough review of the State of Michigan's Draft Rule regarding Supplying Water to the Public and the relevant articles of the State Constitution, the Safe Drinking Water Act, and case law on the subject matter, I discovered that many legal issues need to be addressed. I am requesting that the state respond to the legal issues outlined in this memorandum.

Introduction

The Governor's office, through the Michigan Department of Environmental Quality (MDEQ), has promulgated an administrative rule under section 5 of the Safe Drinking Water Act (Act) to address the replacement throughout the state of water service lines made of lead. The draft rule considers lead lines under the jurisdiction of local units of government as well as the portion of the water line owned by private building owners. The draft rule proposes that when a lead service line is discovered, the building owner may elect to have the local unit of government service provider replace the entire line, both the private and public portions, at the expense of the service provider.

If the state intends to implement such a rule through its lead water line initiative, we need to focus on transparency and the potential implications of such a rule, as well as the state's authority to promulgate such a rule under the Act. As the analysis below demonstrates, the cost of such a program is ultimately born by the building owner receiving the benefit. If this is not the intent of the rule, then the state should fund the cost of compliance.

I. The state lacks authority to spend public money for improvements on private property.

Michigan's Constitution prohibits using public money to make improvements on private property, (as used in the Constitution "appropriation"), without the assent of two-thirds of the members of each house of the legislature. Const 1963, art 4, § 30. Yet the draft rule requires the water supply's revenue from fees, which is public money, be used to make such improvements.

Const 1963, art 7, §26, imposes similar restrictions on cities and villages, providing: "*Except as otherwise provided in this constitution, no city or village shall have the power to loan its credit for any private purpose or, except as provided by law, for any public purpose.*" Const 1963, art 7, § 21 permits cities and villages to levy taxes only for public purposes. Under precedent interpreting these provisions, public money cannot be used for private purposes and a city or village cannot appropriate money to a private entity without authorization for that activity under state law. An agency rule is not a state law and therefore lacks sufficient authorization under the Constitution to impose charges or taxes to pay for replacement of private water lines and associated activity on private property.

If Michigan chooses to adopt a new infrastructure policy to address the broad-based issue of public good, it should explore and disclose options for raising the revenue to pay for its implementation to meet the requirements of the Headlee Amendment and Michigan Supreme Court decisions.

II. The draft rules appear to exceed the scope of the MDEQ's rulemaking authority under the Safe Drinking Water Act.

If the building owner consents to replacement of the private lead service line, the water supply's cost to perform this replacement would ultimately be borne by the building owner. The Safe Drinking Water Act does not provide the state the authority to regulate private homeowners in this way because the Act applies to water systems. Further, the Act does not grant authority to the state to promulgate a rule requiring water providers to pay for replacement of private water lines. The MDEQ cannot, through the adoption of a rule, expand the scope of a waterworks system beyond what is provided for in the Act. Furthermore, this also applies to the MDEQ's proposed creation of new governmental bodies as set forth within the draft rule. The creation of advisory bodies by rule is not supported by any authority in the Act.

III. An act of the Legislature is required to authorize the state to require the public make improvements on private property.

Even if, despite the points above, the state were to pursue a policy requiring use of public funds to benefit private property, it is a matter for debate in the legislative branch as required by Art. IV, § 30. As mentioned, the Act authorizes the regulation of water supply systems, not private homeowners and nothing in section 5 of the Act providing for administrative rules appears to authorize any regulation of private homeowners. Again, the MDEQ lacks the authority to expand the scope of its regulatory authority by rule.

Moreover, the Headlee Amendment requires the state to pay the costs of new obligations it places on local government. Const 1963, art 9, § 25. And, the state is prohibited from requiring any new or expanded activities by local governments without full state financing. These constitutional restrictions apply to the MDEQ in the same manner as they would apply to any legislative expansion of regulatory authority.

Replacement of lead service lines on private property alone could easily exceed \$1.5 billion. Thus, the fiscal ramifications for the state budget are enormous and should be discussed in a legislative forum. The MEDQ cannot spend any money without legislative authorization. Const 1963, art 9, § 17. If using public money to make improvements on private property is prohibited, so too is an administrative rule requiring utilities to implement the policy.

IV. Is the state implying that property owners will not pay for improvements?

If the state attempts to force service providers to pay for improvements on private property, the only choice for the service provider is to charge the cost back to the building owner in the form of a fee, as service providers generally lack taxing authority or other sources of revenue. The Michigan Supreme Court in *Bolt v City of Lansing*, 459 Mich 152 (1998) set forth three criteria to be considered when distinguishing between a fee and a tax. The first criterion is that a user fee serves a regulatory purpose and a tax serves a revenue-raising purpose. The second criterion is that a user fee is proportionate to the necessary costs of the service; the revenue derived from the fee is not disproportionate to the cost for which the revenue is paying, otherwise it is a tax. The third criterion is voluntariness; a fee allows property owners to elect the commodity or service whereas a tax is not voluntary on an individual level.

In applying these three factors to the draft rule: upon the discovery of a lead service line a building owner can elect to have its local water supplier “pay” to replace that pipe in the form a purported user fee (the rules do not authorize a levy or the imposition of a tax). While this mandate may serve a regulatory purpose, under the rules the cost to the public for this action is the cost of the lead line replacement service. A property owner can elect to have this service performed or not.

This leaves the water supplier with a dilemma under *Bolt*. The water supplier can charge the user for the cost of replacing the line, in which case the building owner ends up paying for the line replacement. Or, if the water supplier does not directly charge the user, then the cost of the line improvements would be spread to other system users not benefitted by the line replacement. The latter approach appears to run afoul of the holding in *Bolt* in that it would be imposing a tax on its users without voter approval as required under Headlee. Under *Bolt*, the provider cannot not pay for improvements on some properties and then spread the cost to its entire rate base without exposing itself to significant legal risk.

V. The Headlee Amendment requires the state reimburse local units of government for the imposition of new requirements, i.e., it is possible that the state will be required to fund the cost of compliance.

Imposing both a new requirement that lead service lines be replaced and a requirement that all costs, including improvements on private property, be borne by the utility is untenable under the Headlee Amendment and likely exceeds the MDEQ’s rulemaking authority under the Act. This approach results in the proverbial “Catch-22” under Michigan’s legal framework governing taxes and fees: the cost of new requirements imposed by the state must be paid by the state (Headlee Amendment) and fees must only be charged to parties receiving a service (*Bolt*).

VI. Public representation of the rules should disclose known risks from lead in comparison to other sources as well as the cost of reducing those risks.

It is my understanding that the proposed rules are only one part of a larger state effort to reduce risks from lead exposure. I support this purpose and the need to do our part.

Therefore, the public’s interest regarding the appropriateness of certain aspects of the proposed rule can be determined only with some understanding of the various sources of lead exposure, the comparative risks from those sources, and the comparative costs to the public of reducing risks from those sources. One way or another, building owners will be paying the cost of service line replacements. The public should know if they could receive a greater benefit by replacing fixtures or removing lead-based paint for example, at a lesser cost.

ATTACHMENT 2
RESPONSE TO REGULATORY IMPACT STATEMENT

COMMENTS OF THE SOUTHEAST MICHIGAN COUNCIL OF GOVERNMENTS (SEMCOG), MICHIGAN MUNICIPAL LEAGUE (MML), MICHIGAN TOWNSHIPS ASSOCIATION (MTA), MICHIGAN SECTION AMERICAN WATER WORKS ASSOCIATION (MI-AWWA), DETROIT WATER AND SEWERAGE DEPARTMENT (DWSD), GREAT LAKES WATER AUTHORITY (GLWA), AND OAKLAND COUNTY WATER RESOURCES COMMISSIONER,

RE:

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ)
REGULATORY IMPACT STATEMENT (RIS)
and COST-BENEFIT ANALYSIS**

For Supplying Water to the Public, R 325.10101 through R 325.12820

NO COMMENTS on PART 1: INTRODUCTION or PART 2 APPLICABLE SECTIONS OF THE APA.

PART 3: DEPARTMENT/AGENCY RESPONSE

1. Compare the proposed rule(s) to parallel federal rules or standards set by a state or national licensing agency or accreditation association, if any exist. Are these rule(s) required by state law or federal mandate? If these rule(s) exceed a federal standard, please identify the federal standard or citation, describe why it is necessary that the proposed rule(s) exceed the federal standard or law, and specify the costs and benefits arising out of the deviation.

The Lead and Copper Rule (LCR) is a component of the rules promulgated pursuant to the federal Safe Drinking Water Act (SDWA) and of the Michigan Supplying Water to the Public rules. Michigan's Supplying Water to the Public rules currently contain all of the provisions of the federal SDWA rules, and therefore, Michigan has primacy for overseeing drinking water systems in the state.

The proposed new LCR rules contain some provisions that are more stringent than the federal regulations (40 CFR 141.80 – 141.91), including a lowering of the lead action level from 15 parts per billion (ppb) to 10 ppb and the removal of lead service lines prior to the exceedance of the lead action level. However, the federal rules are under revision, and it is likely that the revised rules will contain many of the same provisions as proposed in this rules package. It has been determined, based on a national dialogue, that the LCR provisions pertaining to household drinking water need to be strengthened in order to protect human health.

COMMENT: The MDEQ has not provided a response to this question. The Department acknowledges that there is a federal Lead and Copper Rule (LCR) but then fails to: 1) identify if the proposed MDEQ revisions to the LCR are required by state law or federal mandate; 2)

describe why it is necessary for the MDEQ to exceed the regulatory standards of the federal LCR; and 3) specify the costs and benefits associated with deviating from the federal LCR.

To the best of our knowledge, the state Safe Drinking Water Act, MCL 325.1001 *et seq.*, and Supplying Water to the Public Rules do not require the MDEQ to modify the existing federal LCR. Moreover, we are not aware of the U.S. Environmental Protection Agency (EPA) requiring Michigan, or any other state for that matter, to assume responsibility for modifying the existing federal LCR. Nor is there a federal mandate to do so pursuant to the federal Safe Drinking Water Act (SDWA), 42 U.S.C. §300f *et seq.* Quite the opposite. Pursuant to the SDWA, EPA has the responsibility to set national standards for drinking water quality, while the states implement the technical components of rules developed by EPA.

EPA first issued the LCR in 1991, and most recently amended it in 2007. The LCR was promulgated in response to scientific studies showing that exposure to lead and copper have significant adverse effects on human health, especially children's health. The rule imposes treatment, testing and monitoring requirements to limit the levels of lead and copper in drinking water. The LCR has nationwide applicability, affecting 68,000 public water systems serving approximately 300 million people.

In December 2017, the EPA sent letters to state drinking water agencies inviting them to participate in EPA's rulemaking process to update and revise the existing LCR. This rulemaking, in part in response to the Flint crisis, demonstrates EPA's commitment to assume responsibility for, and take a leadership role in, identifying how the rule can be improved to better protect human health. The MDEQ fails to articulate why it is necessary for the state to get out front of EPA to modify the LCR rather than participate in and contribute to federal efforts to revise the existing rule. A revised federal LCR will apply standards applicable not only to Michigan communities but communities across the country. Also, the federal revisions to the LCR will be based on scientific and technical expertise possessed by the EPA but lacking at the state level. Moreover, it will reflect input and the experiences of many more stakeholders than involved in the MDEQ process thereby resulting in a more-informed and effective rule.

The MDEQ furthermore fails to specify the costs and benefits likely to occur if the state takes action that deviates from EPA's efforts to revise the LCR. The MDEQ asserts that the modified EPA rule "will contain many of the same provisions," as the proposed state Rule, but offers no support for this conclusion. As water providers and suppliers, we are concerned that a revised federal LCR may vary significantly from the proposed state LCR, resulting in needless confusion and inconsistency, and imposing substantial unintended costs on water suppliers and their customers. By way of example, the EPA could recommend an action level at odds with the MDEQ level, and is specifically asking for input as to whether different types of sampling protocols should be adopted. If the MDEQ truly believes that federal revisions to the LCR will largely track MDEQ's proposed changes, then why not be part of the federal review process and avoid any potential for unnecessary conflict? At a minimum, the MDEQ needs to provide a robust cost/benefit analysis as required by this Question.

2. Compare the proposed rule(s) to standards in similarly situated states, based on geographic location, topography, natural resources, commonalities, or economic similarities. If the rule(s)

exceed standards in those states, please explain why and specify the costs and benefits arising out of the deviation.

Other states in the country have closely paralleled the federal regulations with their LCRs, just as Michigan has done in the past. For instance, most if not all states have set the lead action level at 15 ppb, matching the federal regulations. Therefore, the new Michigan rules will exceed the current standards in all other states, including those in the Great Lakes region. However, as soon as the new federal rule is adopted, other states will need to follow suit in order to retain primacy. Michigan is in a position to be a leader with regard to lead and copper regulations in order to protect human health.

COMMENT: The intent of this Question is to require the state to justify actions that go beyond federal or other state regulatory requirements, and thereby impose different and/or additional burdens on regulated entities. In this circumstance, the MDEQ maintains that other states have adopted the federal LCR and have *not* varied from it in substantive ways. Once again the MDEQ does not identify any costs or benefits associated with getting out front of EPA and the other states on this issue. The fact that the MDEQ Rule imposes burdens on water suppliers above and beyond what is presently required by federal law (and by other states) certainly will result in increased costs for the suppliers and their customers. As stated throughout our response, the MDEQ offers no substantive or independently verifiable justification for imposing such additional costs and burdens. Changes in the lead action level should not be codified in the rules until the EPA completes the scientific and technical evaluation and updates the federal rules. EPA has initiated a peer-reviewed scientific modeling approach to inform the determination of health-based benchmarks for lead in drinking water. The results of the lead modeling approach are intended to related drinking water lead concentrations to blood lead levels in children and assess risk of reduced IQ.

3. Identify any laws, rules, and other legal requirements that may duplicate, overlap, or conflict with the proposed rule(s). Explain how the rule has been coordinated, to the extent practicable, with other federal, state, and local laws applicable to the same activity or subject matter. This section should include a discussion of the efforts undertaken by the agency to avoid or minimize duplication.

No other rules or legal requirements pertain.

COMMENT: In its short response, the MDEQ ignores the potential duplication, overlap and conflict its revisions to the LCR may have with the existing federal LCR and with any revisions EPA promulgates to the existing LCR. Also, we are not aware of any effort on MDEQ's part to coordinate its efforts on LCR with the EPA, or to avoid duplication. As noted above, a more prudent and reasonable approach on the MDEQ's part would be to participate with the EPA in the federal rulemaking to update and revise the LCR which then will apply to similarly situated water suppliers nationwide.

In addition, the MDEQ response does not take into account the adverse impact the draft Rule will have on water provider asset management plans. These plans are intended to ensure that local governments have the ability to continue investing in needed drinking water, sanitary

sewer, and stormwater infrastructure improvements given available financial resources. The Rule would prioritize virtually all available funds to LSL replacement, thereby depriving water suppliers from addressing other pressing public health issues.

Lastly, the MDEQ makes no effort to address the serious Constitutional issues and conflicts with existing law posed by the draft LCR. (Headlee Amendment; and *Bolt v. City of Lansing*, 459 Mich. 152 (1998)). The Headlee and *Bolt* issues are more thoroughly discussed in the *Memorandum on the Legal Issues in the Draft Rule: Supplying Water to the Public*.

Purpose and Objectives of the Rule(s):

4. Identify the behavior and frequency of behavior that the proposed rule(s) are designed to alter. Estimate the change in the frequency of the targeted behavior expected from the proposed rule(s). Describe the difference between current behavior/practice and desired behavior/practice. What is the desired outcome?

The proposed rules are designed to alter the current practices of public water supplies (PWSs) in the state of Michigan in order to be more protective of public health. The current rules are designed to determine the impact of drinking water's corrosivity on the PWS's distribution systems, but not to fully protect health by eliminating the source of lead within these systems. This proposal will require PWSs to remove lead service lines (LSLs) when the 90th percentile levels exceed a 5 parts per billion (ppb) threshold and require PWSs not exceeding that limit to address LSL replacement in their Asset Management Plans, as well as lowering the lead action level from 15 ppb to 10 ppb by 2024, in order to protect public health from lead exposures.

COMMENT: The MDEQ fails to offer reasons for modifying the LCR that are distinct from EPA's reasons for revising the federal LCR. The EPA and the MDEQ clearly have the same objective in mind, i.e.; better protecting human health. Consequently, Michigan should participate in the federal LCR revision process and coordinate its regulatory efforts with the EPA and other impacted states. As mentioned previously, by pursuing its own revisions to the LCR, Michigan guarantees disparate outcomes and conflict between Michigan's LCR and the federal LCR, the consequence of which will be increased costs for water suppliers and their customers. This is particularly true in this instance where the MDEQ is proposing to lower the action level from 15 ppb to 10 ppb, and impose a new threshold of 5 ppb to trigger the removal of lead service lines (LSLs).

Lowering the action level gives the impression that it contributes to reducing blood lead levels. Yet, the MDEQ does not provide a scientific or technical rationale for reducing the action level from 15 ppb to 10 ppb. It is helpful to remember that, as acknowledged by the MDEQ throughout the Stakeholder Workgroup process, the 15 ppb action level is a "technology-based" requirement selected by the EPA as being representative of effective corrosion control treatment. *Lead and Copper Rule Revisions White Paper, EPA, p. 11 (October 2016)*. A reduction from 15 to 10 ppb is unlikely to have a discernible impact on the effectiveness of corrosion control. Nor does the change from 15 to 10 ppb have any health-based significance. As noted by the EPA, "[a] health-based benchmark (in addition to technology standards) for lead in drinking water could help to guide appropriate actions to communicate and mitigate risk, particularly at the household level." *White Paper, p. 11*. To establish a meaningful health-based benchmark, the agency states:

EPA is currently developing up-to-date *scientific modeling of the relationship between lead levels in drinking water and blood lead levels* – particularly for sensitive lifestages such as formula-fed infants and children under age 6. EPA expects to conduct an expert peer review panel to identify approaches to derive a health based value for lead in drinking water. Following this public peer review process, *EPA expects to evaluate and determine what specific role or roles a health-based value may play in the revised LCR.*

White Paper, p. 12 (emphasis added).

The EPA has not yet completed its modelling analysis, but intends to do so as it considers revisions to the federal LCR. In addition to modelling, EPA also will have an opportunity to consider field data and studies provided by water suppliers on the relationship of blood lead levels and drinking water. The MDEQ's proposed revisions to the LCR simply lack the technical and scientific breadth and depth the EPA is pursuing in support of revisions to the LCR.

Additionally, the MDEQ does not acknowledge that, when combined with sequential sampling, the 5 ppb threshold for LSL removal will put most - if not all - water supply systems in the proposed 5% removal category. In turn, this will have draconian fiscal impacts for water suppliers, drastically increasing the costs associated with the MDEQ Rule (\$2.5 Billion statewide). For a more complete assessment of the true cost impacts of the Rule, please see the response to question 11.

Simply put, the program for LSL removal should not be triggered by the action level but should be implemented through asset management plans that include numerous other infrastructure objectives sought by the state. The purpose of the state's very own pilot asset management project is to find more holistic approaches that align the multiple needs water suppliers also are seeking to achieve. An asset management approach will allow state and local governments to implement a lead reduction program that is protective of public health and within available resources. It will also ensure that local governments have the ability to continue investing in needed drinking water, sanitary sewer, and stormwater infrastructure improvements so that a different set of public health problems does not arise from unintended consequences of newer, more stringent lead service line replacement requirements. For instance, in Southeast Michigan's aged drinking water infrastructure, a significant number of breaks occur annually, and left unaddressed each break is an opportunity for backflow or microbes in the soil to enter the drinking water supply. *See the 21st Century Infrastructure Report regarding the benefits of asset management programs.*

5. Identify the harm resulting from the behavior that the proposed rule(s) are designed to alter and the likelihood that the harm will occur in the absence of the rule. What is the rationale for changing the rule(s) instead of leaving them as currently written?

Removing LSLs from homes all over Michigan and lowering the lead action level will clearly reduce the public exposure to lead, and therefore, protect the health of Michigan's current and future population.

COMMENT: We agree that the LCR can be improved to better protect human health but, for the reasons stated above, we believe efforts to revise the Rule should be coordinated and guided by the EPA.

Importantly, the changes to the LCR contemplated by the MDEQ have not been shown to achieve the ultimate goal of appreciably reducing blood lead levels in individuals and, in particular, children. Lead in drinking water is just one of several potential sources of lead poisoning in children. It is not the most significant, which remains lead-based paint and dust from old housing stock. According to the Ecology Center, lead paint contributes about 70% of total children's lead levels, with the remaining 30% coming from all other sources including water. *“Costs of Lead Exposure and Remediation in Michigan: Update,”* p. 5 (October 2016). See also the the Child Lead Poisoning Elimination Board report, *“A Roadmap to Eliminating Child Lead Exposure”* which likewise identifies lead paint and lead dust as the primary contributors to elevated blood lead levels, p. 7 Moreover, within the SEMCOG region, there are various instances where state and local agencies coordinate to address individual cases of high lead blood level results. *None of these cases have resulted in identifying water as a source of exposure.* In fact, communications with the SEMCOG region's health departments have determined that lead paint and dust continue to be recognized as the primary source of lead exposure and resulting high blood lead levels.

Presently, the EPA is applying modelling techniques to better understand the relationship of lead in drinking water to blood lead levels, information that currently is lacking.

A more effective approach to reducing blood lead levels in sensitive populations would take into account the relative contribution of all major sources to lead poisoning and the best use of available technical and financial resources. The proposed MDEQ Rule does not do that. The draft Rule would impose a huge financial burden on water suppliers to reduce lead in drinking water. This, in turn, would result in depleted funding for water suppliers and municipal governments to address other public health priorities (including lead-based paint), as well as basic infrastructure maintenance obligations. We have suggested to the MDEQ that water suppliers be allowed to remove LSLs in accordance with a timeline approved under their Asset Management Plans. This would be consistent with the framework to address infrastructure challenges established by the 21st Century Infrastructure Commission (discussed later), and allow communities to address multiple pathways of lead exposure and target technical and financial resources to achieve the greatest public benefits.

6. Describe how the proposed rule(s) protect the health, safety, and welfare of Michigan citizens while promoting a regulatory environment in Michigan that is the least burdensome alternative for those required to comply.

The draft rule package will provide public health protection by requiring the removal of LSLs from the distribution systems of PWSs, reducing the presence of lead in drinking water. It will further protect public health by reducing the lead action level from 15 ppb to 10 ppb. There is a significant cost associated with these draft regulations. In particular, the cost of LSL removal is burdensome for communities. However, the removal of LSLs is the most effective way to reduce lead exposure from drinking water and therefore is incorporated in the rules. The best way to minimize this burden is to allow PWSs sufficient time to incorporate this work into their scheduled infrastructure improvement projects. These rules allow PWSs without high lead levels to perform LSL removal in accordance with their asset management plans, thereby reducing the financial and logistical burden. The DEQ engaged a group of stakeholders from a wide

variety of viewpoints to focus the required efforts on tasks that would be most beneficial and also took into account comments to determine reasonable time lines.

COMMENT: The MDEQ states that removing lead service lines is the most effective way to remove lead exposure in drinking water. This is true if the lead service line has been identified as a source. The structure of the proposed rules ignores all available options that would allow water service providers, health departments and other agencies to work collaboratively to identify the source of lead exposure in drinking water, which could easily be attributed to indoor lead plumbing and fixtures. Investing in lead service line removal in this manner provides no guarantee that the source of lead exposure has been eliminated.

Lastly, the MDEQ states that it engaged stakeholders in the development of its proposed Rule, but fails to acknowledge that municipal stakeholders repeatedly expressed technical, scientific and legal concerns with the draft LCR. The list of issues and concerns conveyed by the stakeholders but placed in the “parking lot” with no further consideration included:

- Use of public funds for private benefit.
- Impact and significance of the *Bolt* decision and the Headlee Amendment to the rulemaking, and the request for an Attorney General opinion on these legal matters.
- Issues of customer refusal of access.
- Landlord refusal to undertake lead service line and other work.
- Lack of a funding source for the new mandates imposed by the draft LCR.
- Placing entire financial burden of lead service line replacement on water suppliers with no fee for services provided.
- Recommendation to adopt an Asset Management based approach.
- Recommendation to include real estate transaction triggers in the rule.
- Recommendation to include rental inspection triggers.
- Removal of abandoned lead services from the ground and the potential future liability.
- Conflict with upcoming federal LCR changes.
- Recommendation to remove galvanized piping.
- Difficulties with sequential sampling and the impact on costs.
- Difficulty for water utilities/suppliers to track vulnerable populations.
- Concern that full lead service line replacement on old mains may still leave lead remnants in the pipe - too much cutting and patching on old mains not prudent.
- Potential easement requirements for access.

7. Describe any rules in the affected rule set that are obsolete or unnecessary and can be rescinded.

There are no components that are obsolete.

NO COMMENT

Fiscal Impact on the Agency:

Fiscal impact is an increase or decrease in expenditures from the current level of expenditures, i.e. hiring additional staff, an increase in the cost of a contract, programming costs, changes in reimbursement rates, etc. over and above what is currently expended for that function. It would

not include more intangible costs or benefits, such as opportunity costs, the value of time saved or lost, etc., unless those issues result in a measurable impact on expenditures.

8. Please provide the fiscal impact on the agency (an estimate of the cost of rule imposition or potential savings for the agency promulgating the rule).

These rules will impose a significant fiscal impact on the DEQ, due to increased oversight and data handling. More oversight will be required to review and adjust the corrosion control treatment design at all PWSs, particularly those proposing a change in source or treatment of drinking water. More frequent and rigorous sampling by PWSs will require upgraded data systems for tracking and processing lead and copper data in order to closely monitor these results. Additionally, the submittal of distribution system material inventories, new sampling pools, and updated Asset Management Plans will require more staff review. The DEQ is proposing a new Lead and Copper Unit with approximately 10 new (full-time employees) FTEs for this purpose. This will cost the DEQ approximately \$1.5 million annually.

NO COMMENT

9. Describe whether or not an agency appropriation has been made or a funding source provided for any expenditures associated with the proposed rule(s).

No identification of funding source or appropriation has taken place.

COMMENT: The MDEQ is proposing revisions to the existing LCR that will increase its administrative burden without identifying or obtaining funding for such increased activities. Our experience tells us that an underfunded regulatory program will cause uncertainty within the regulated community and result in the uneven application of program requirements. As a consequence, inequities will occur with some water suppliers being disproportionately burdened in comparison to others. This, in turn, will undercut the overall effectiveness of the program. The MDEQ can avoid these consequences by participating in EPA's efforts to update the LCR.

10. Describe how the proposed rule(s) is necessary and suitable to accomplish its purpose, in relationship to the burden(s) it places on individuals. Burdens may include fiscal or administrative burdens, or duplicative acts. Despite the identified burden(s), identify how the requirements in the rule(s) are still needed and reasonable compared to the burdens.

While this new set of regulations will impose a significant financial and administrative burden on all PWSs in Michigan, it is necessary in order to protect the public health of our citizens. Our state and country must invest substantially in its infrastructure, and removal of LSLs is an important piece of that upgrade.

COMMENT: The MDEQ's statement is not responsive to the question. First, the purpose and ultimate goal of revising the LCR is to reduce blood lead levels in individuals, especially children. Lead in drinking water may contribute to blood lead levels, but lead-based paint and dust remains the predominate source of lead poisoning in children. A more effective and ultimately successful rule would evaluate the multiple pathways contributing to lead exposure and allocate available technical and financial resources to achieve the greatest risk reduction practicable.

The MDEQ does acknowledge that its draft LCR will impose significant administrative and financial burdens on water suppliers without any guarantee of funding assistance from the state for the suppliers. Recently, Governor Snyder announced a proposed Water fee ostensibly to cover some of the suppliers' costs imposed by the draft LCR. Approval of the Water fee will require legislative action. The Legislature's initial reaction to the fee proposal has been tepid, and it appears that the prospect of the fee being enacted into law is unlikely. A crucial point left unaddressed is the fact that the water supplier's obligations under the draft LCR are *not* contingent on the Water fee becoming law. And lastly, we agree that our state and country need to invest in water infrastructure, but this is a shared responsibility - and not one that should be borne entirely by the water suppliers. Moreover, enacting the draft Rule as written will prevent needed investment in other aspects of drinking water infrastructure.

Impact on Other State or Local Governmental Units:

11. Estimate any increase or decrease in revenues to other state or local governmental units (i.e. cities, counties, school districts) as a result of the rule. Estimate the cost increases or reductions for other state or local governmental units (i.e. cities, counties, school districts) as a result of the rule. Please include the cost of equipment, supplies, labor, and increased administrative costs in both the initial imposition of the rule and any ongoing monitoring.

This rule will impose costs on local government units that own a public water supply, including most municipalities (community water supplies) along with some schools and other public entities that are on their own wells (nontransient noncommunity water supplies). There are approximately 1,390 community water supplies (CWSs) in the state, and 733 of them are owned by a local unit of government. There are approximately 1,300 nontransient noncommunity water supplies in the state, and 291 of them are owned publicly. These two categories make up the water supplies that will be impacted by this rule. The cost estimates below apply to all impacted water supplies, both private and public.

The largest source of the costs to all water supplies regulated by this rule will be the requirement to complete an inventory of all distribution system materials (water main, service lines, etc.) and remove LSLs when lead levels exceed a 5 ppb threshold. There will also be additional costs associated with increased sampling.

In order to estimate the costs of conducting distribution system materials inventories, attention was focused on the CWSs, since the smaller noncommunity supplies have a much smaller system to inventory and often have existing plans with this information. Out of the 1,390 community supplies, only 138 of them serve more than 10,000 people, and these 138 supplies will incur the majority of the costs due to the size of their distribution systems.

The inventory will require public outreach, records research, and database maintenance, as well as potentially a home inspection and, in some cases, a partial excavation (hydrovac procedure) of the service line. There are approximately two million service connections in Michigan, and it is estimated that half of them are of known and confirmed composition. It is estimated that one out of every 20 of these million supply lines, or 50,000 lines, will need to be fully investigated via partial excavation. The cost of this excavation is approximately \$500 per service line, based on work performed in Lansing and Flint,

resulting in a total cost of \$25 million. The cost of all other inventory activities is estimated at \$5 million, resulting in a total inventory cost of \$30 million.

The cost of LSL replacement makes up the bulk of the funding required to be spent based on these rule changes. The proposed rule would require any system that has a 90th percentile lead level of 5 ppb or higher to remove LSLs at an average rate of 5% per year. Currently, there are 152 systems that would fall into this criteria with a total of 260,361 service connections. Assuming that 40% of these service lines are made of lead, based on data from LSL replacement in Flint, this amounts to 99,733 LSLs (some affected systems have no LSLs) that would be required to be replaced. Data provided by the Lansing Board of Water and Light, which has removed all of their LSLs, indicates that an average of \$5,000 per LSL removal is a good estimate of cost. This number was validated during the stakeholder process; although many removals can be accomplished for \$3,000-\$4,000, there are significant costs associated with homeowner follow up, tracking, and some more complicated removals that are more expensive. Therefore, the cost of LSL replacement in Michigan has been estimated at \$499 million, and this cost will be incurred over 20 years. Water systems could potentially test out of the mandatory LSL replacement if their 90th percentile lead level drops under the 5 ppb limit after a one-year period. New testing requirements and methods make estimating the number of systems that may test above or below this level highly complex. This cost represents only the mandated LSL removals. Water systems testing under 5 ppb will still be required to address removal LSLs in their Asset Management Plans with a schedule that will be dependent on resources and risk.

Increased sampling costs are more difficult to estimate, as they impact segments of the regulated community differently. There are ~250 large supplies and customers of those supplies with optimal corrosion control, currently taking an average of 25 lead and copper samples every three years – 6,250 samples in three years, or 2,083 samples annualized. These supplies will be required to sample annually pursuant to the new regulations, taking 6,250 samples every year, or 4,167 more samples per year. It costs approximately \$114 per sample (including sampling, analysis, and data handling), so it will cost these 250 supplies approximately \$475,000 per year more under the new regulations, which works out to \$1,900 per supply per year. This is a worst case scenario, as some of these supplies may be able to stay on triennial sampling if they maintain a low 90th percentile.

Approximately 120 small and medium supplies with corrosion control technology will also be required to sample annually. These supplies currently average 10 samples every three years, totaling 1,200 samples or 400 samples annualized. Annual sampling will require 1,200 samples each year – 800 more samples than current regulations. Therefore, these 120 supplies will be paying \$91,200 more per year, or \$760 more per supply per year.

There are also additional water quality parameter monitoring costs in addition to the lead and copper monitoring. This mostly impacts the small and medium supplies with corrosion control, totaling 120 supplies. An average of three sites per supply would need to be sampled twice per year, for a total of 720 samples. At a cost of \$80 per water quality sample, this would total \$57,600 or \$480 per supply per year.

There is also the increased cost associated with the lead action level decreasing from 15 ppb to 10 ppb. From 2000 through 2016, approximately 150 regulated supplies exceeded the 15 ppb lead action level. During this same time frame, approximately 300 regulated supplies had at least one sampling round between 11 and 15 ppb. An estimated 300 additional supplies could be over the lead action level when it is lowered to 10 ppb. This will not occur immediately, but activities associated with an action level exceedance range from public notification and increased sampling frequency to full-scale corrosion control study and treatment plant modification.

In conclusion, there are many costs to regulated supplies, including ancillary administrative costs, but the largest expense will be the distribution system material inventory and LSL removal, totaling \$499 million over 20 years. Again, this is the cost for all impacted water supplies in the state, both public and private, with the largest impact to medium and large municipalities

COMMENT: The MDEQ estimates that the overall cost for LSL replacement under the draft LCR is \$499 Million over 20 years. This is based on the following assumptions: (i) only 152 water systems will be impacted; (ii) these 152 water systems have 260,361 service connections; (iii) only 40% of these lines are lead, or 99,733 lines (our math indicates 40% is 104,144.4 lines); and (iv) a reasonable average replacement cost is \$5,000 per line ($\$5,000 \times 99,733 = \499 Million). As discussed below, the MDEQ's grossly underestimates the compliance costs associated with the Rule.

First, the impact of the draft Rule will *not* be limited to 152 water suppliers. If enacted, the Rule will require water suppliers to conduct sequential sampling in lieu of first draw sampling. As discussed with the MDEQ during the Stakeholder meetings, a switch to sequential sampling at sites with LSL will result in virtually all of those water providers exceeding the proposed 5 ppb trigger, thereby requiring expedited replacement of LSL

Compliance with the lead action level should be determined by first draw samples. First draw samples are reflective of both recent exposure of the water to household plumbing and service line. If that first draw sample comes back above the action level, an investigation should begin. Sequential sampling should be used as part of an investigation in response to elevated levels. These samples should not be used for compliance with the action level, nor should they be used to trigger any system-wide LSL replacement. The purpose of sequential sampling is to determine the source of the elevated level, which will then drive decisions about mitigation of the source. Also, EPA is seeking input on sampling protocols and might require an entirely different approach to sequential sampling.

Second, with sequential sampling the number of LSLs subject to expedited replacement under the draft Rule is approximately 500,000 lines – not 99,733. Again, as discussed as part of the Stakeholder Workgroup process, the total number of lead lines still in use in existing water provider systems is about 500,000. The MDEQ does not dispute this number. The MDEQ's attempt to reduce the number of lines subject to the Rule by assuming only 40% of service lines are LSLs is not supported by any body of evidence or fact that we are aware of and, in fact, the MDEQ cites no support for its use of the 40% factor.

Lastly, taking into account reliance on sequential sampling and the potential applicability of the Rule to 500,000 LSLs, what is a fair replacement cost per line? The MDEQ uses \$5,000 as a

reasonable average cost. This amount falls within the range of service line replacement costs recently cited by the EPA. See *“Lead and Copper Rule Revisions,”* EPA Office of Ground Water and Drinking Water PowerPoint, Federalism Consultation Meeting (January 8, 2018). The EPA average cost range was \$1,200 to \$12,300, with an average of \$4,700. This also is within the range of line replacement costs identified by SEMCOG. In surveying water providers within its territory, SEMCOG received substantial information on replacement costs associated with LSL removal. After removing the lowest and highest outlier values, and removing estimates for legal access, construction easements/permanent easements for private property and ordinance updates, the information provided to SEMCOG can be summarized as follows:

- Public Side Range: \$2,250 - \$7,500; Average short side = \$3,700; Average long side = \$5,400
- Private Side Range: \$1,000 - \$6,000; Average short side = \$3,400; Average long side = \$4,300
- Average in-home work = \$900

Accordingly, the total range for the water providers is be about \$4,100 to \$14,000, which is generally consistent with EPA estimates. Adding the averages results in an average cost of about \$8,000 to \$10,600 per line – an average cost far greater than the MDEQ’s \$5,000 estimate. The discrepancy in these values might be attributable to the MDEQ not including certain expenses that will be borne by water suppliers when replacing LSLs. Some of these expenses are:

- Obtaining legal access to private property
- Preparing temporary construction or permanent easements on private property
- In-home work associated with meter replacement and any restoration
- Updating local ordinances

In sum, calculating an average cost per LSL replacement is not a simple matter. That said, if we use the MDEQ’s average cost of \$5,000 per line, then the overall cost associated with the Rule is: **\$2.5 Billion** (\$5,000 per line x 500,000 lines). This is far exceeds the MDEQ cost estimate of \$499 Million, and borders on being punitive. This is particularly true given that the Rule does not provide any source of funding to cover the LSL replacement and places the entire burden on the water providers.

12. Discuss any program, service, duty or responsibility imposed upon any city, county, town, village, or school district by the rule(s). Describe any actions that governmental units must take to be in compliance with the rule(s). This section should include items such as record keeping and reporting requirements or changing operational practices.

Water supplies owned by governmental units will need to comply with all of the requirements of the new LCR, including distribution system materials inventory, LSL removal, and increased sampling with reporting. There are also expanded public notification requirements and follow up based on sampling results. Additionally, municipalities with a population above 30,000 will need to form a Local Advisory Council on drinking water.

COMMENT: In its response, the MDEQ overlooks the fact that the proposed LCR will place undue administrative and financial burdens on water systems and suppliers with respect to

inventory, service line removal, sampling and reporting. Accessing private property to complete an inventory and complete LSL replacement will require local governments to revise their ordinances and/or securing easements from property owners. Water systems serving more than 50,000 customers will be required to form a Water Advisory Council, duplicating work of the state-wide Water Advisory Council. Many systems of this size already have other advisory Boards and Commissions, yet the proposed Rule does not allow the functions of a water advisory council to be rolled into a water system's existing governing structure.

Moreover, the format of reporting to the state on the inventory is unknown, and so the anticipated costs to adhere to a specified format cannot yet be determined. Also, the new LCR does not enable water suppliers to exempt a sample that was collected incorrectly by a homeowner. The MDEQ disregards the fact that water suppliers often cannot gain access to homes for sample collection, yet under the Rule suppliers will be forced to make every attempt to enter private property to perform sample collection in order to maintain sampling integrity.

13. Describe whether or not an appropriation to state or local governmental units has been made or a funding source provided for any additional expenditures associated with the proposed rule(s).

No identification of funding source or appropriation has taken place.

COMMENT: As noted by the MDEQ, no appropriation has been made to either the state or local governments to cover the costs associated with the revised LCR. This has significant fiscal implications. As identified in Comments to Question 12, the draft Rule will impose myriad new obligations on local municipal water suppliers. This is important because the Headlee Amendment to the Michigan Constitution requires the state to cover the costs of new unfunded mandates that it places on local government. *Const. Art. IX, § 25*. To that point, the state is prohibited from requiring any new or expanded activities by local governments without full state financing. Consequently, the MDEQ's proposed Rule could obligate the state to pay hundreds of millions of dollars in LSL replacement, testing, monitoring, and notification costs.

Even if the Headlee Amendment did not apply, the MDEQ draft LCR raises additional Constitutional issues. Municipal water suppliers can only charge their customers for services delivered in proportion to the cost of delivering those services. If fees collected by a supplier are used to pay for LSL replacement, then the actual costs, or "benefits", to the property must be charged back to the customer/property owner. To do otherwise would render the "fee" a "tax" in violation of *Bolt v. City of Lansing*, 459 Mich. 152 (1998).

The Headlee and *Bolt* issues are more thoroughly discussed in the *Memorandum on the Legal Issues in the Draft Rule: Supplying Water to the Public*.

Rural Impact:

14. In general, what impact will the rules have on rural areas? Describe the types of public or private interests in rural areas that will be affected by the rule(s).

In general, rural areas will be less impacted by these rules than urban areas, since most of the LSLs are located in cities. There are more manufactured housing communities in the rural areas of the state; however, most of them do not have any LSLs in their infrastructure. However, smaller municipalities and local units of governments, as well as small nontransient noncommunity supplies (churches,

schools, etc.), may be impacted from the administrative burden of complying with the proposed rules. DEQ staff will be gearing up to provide additional direct assistance to small rural supplies if these rules are promulgated.

COMMENT: There will be an impact to small businesses because water providers will pass on costs of LSL replacement through increased rates, i.e.; the increased rate base to account for service line removal will include small businesses as well as residential homeowners.

Environmental Impact:

15. Do the proposed rule(s) have any impact on the environment? If yes, please explain.

No significant environmental impacts are associated with this rule change; the benefits are primarily associated with public health.

COMMENT: The MDEQ's proposed level of 5 ppb will trigger corrosion control at a lower level. The most common and cost effective form of corrosion control treatment is through addition of orthophosphate. If those water systems that exceed 10 ppb but did not exceed 15 ppb elect to add orthophosphate for corrosion control, this may have the undesirable outcome of increasing phosphorous levels in Michigan's waterways. Downstream regulated NPDES permitted wastewater treatment plants would then have an added burden to remove phosphorous being added by upstream water systems, or risk exceeding their phosphorous discharge limits or TMDLs at downstream regulated MS4 communities. This is a significant potential environmental consequence of the Rule that has not been sufficiently studied or addressed by the MDEQ.

NO COMMENTS ON QUESTIONS 16-25

Small Business Impact Statement:

[Please refer to the discussion of "small business" on page 2 of this form.]

16. Describe whether and how the agency considered exempting small businesses from the proposed rule(s).

No - the DEQ did not consider exempting small businesses from the proposed rules.

17. If small businesses are not exempt, describe (a) the manner in which the agency reduced the economic impact of the proposed rule(s) on small businesses, including a detailed recitation of the efforts of the agency to comply with the mandate to reduce the disproportionate impact of the rule(s) upon small businesses as described below (in accordance with MCL 24.240(1)(a-d)), or (b) the reasons such a reduction was not lawful or feasible.

While small private water supplies do need to remove their LSLs and comply with other provisions of these proposed rules, schedules are less restrictive for smaller supplies with fewer LSLs in place. Due to their smaller populations, they will have

to take fewer samples and remove fewer LSLs in any given year. Additionally, small supplies are exempted from the requirements to form a Local Advisory Council and can remain sampling every three years (rather than moving to annual sampling) as long as they are not currently required to optimize for corrosion control.

A. Identify and estimate the number of small businesses affected by the proposed rule(s) and the probable effect on small business.

There are approximately 650 privately-owned CWSs with populations under 10,000 and approximately 1,000 privately-owned nontransient noncommunity water supplies in Michigan. These two categories constitute the PWSs that are impacted by the proposed LCR rule. These PWSs will be required to comply with the requirements of the rule, including LSL replacement, creating a financial and administrative burden.

B. Describe how the agency established differing compliance or reporting requirements or timetables for small businesses under the rule after projecting the required reporting, record-keeping, and other administrative costs.

While small private PWSs do have to comply with the proposed rule requirements, they will have the ability to reduce sample frequency if they do not need to treat for corrosion.

C. Describe how the agency consolidated or simplified the compliance and reporting requirements and identify the skills necessary to comply with the reporting requirements.

The DEQ is working on a new database system that will allow laboratories to report monitoring results electronically, as well as accept electronic submittal of reports. This will significantly reduce the effort involved for all.

D. Describe how the agency established performance standards to replace design or operation standards required by the proposed rule(s).

Much of the LCR, including the lead and copper action levels and the water quality parameter testing, is already performance-based.

18. Identify any disproportionate impact the proposed rule(s) may have on small businesses because of their size or geographic location.

Small businesses should be impacted less by this regulation since they have fewer LSLs than municipalities due to their size and less urban location. Additionally, many small private water supplies are newer than municipalities, so they are much less likely to have lead in their underground infrastructure.

19. Identify the nature of any report and the estimated cost of its preparation by small businesses required to comply with the proposed rule(s).

Small privately-owned water supplies will have to prepare an inventory report, identifying all water distribution system materials

and locations. However, most small PWSs have plans to indicate this. In fact, most manufactured housing communities (the majority of private CWSs) were built using only PVC infrastructure so the inventory reports will be easy to complete.

20. Analyze the costs of compliance for all small businesses affected by the proposed rule(s), including costs of equipment, supplies, labor, and increased administrative costs.

The compliance costs for all PWSs are analyzed above in #11; however, these costs will impact the medium and large municipal systems far more than the smaller private supplies. Specific costs are directly related to the number of LSLs at the supply as well as whether corrosion control treatment is required. Many of the other ancillary costs associated with this rule have been minimized for small supplies.

21. Identify the nature and estimated cost of any legal, consulting, or accounting services that small businesses would incur in complying with the proposed rule(s).

It is possible that a small private PWS will hire an engineering firm to help them with rule compliance, but the majority of them will be able to comply without third party assistance. The DEQ will be placing considerable emphasis on providing compliance assistance to PWSs.

22. Estimate the ability of small businesses to absorb the costs without suffering economic harm and without adversely affecting competition in the marketplace.

Since the rule applies equally to all small private PWSs, there will not be an uneven distribution of burden between them. It is likely that some costs will be passed along to rate payers who are using the drinking water supply.

23. Estimate the cost, if any, to the agency of administering or enforcing a rule that exempts or sets lesser standards for compliance by small businesses.

None – there will be equal oversight for all impacted by the rule.

24. Identify the impact on the public interest of exempting or setting lesser standards of compliance for small businesses.

The rules still require small businesses to remove LSLs and adhere to the lowered action level, thereby protecting public health interests.

25. Describe whether and how the agency has involved small businesses in the development of the proposed rule(s). If small businesses were involved in the development of the rule(s), please identify the business(es).

Several small businesses and/or those serving small private water supplies were involved in the stakeholder process. These include: Elhorn Engineering Company, Infrastructure Alternatives, Michigan Manufactured Housing Association, Michigan Rural Water Association, Safe Water Engineering, and Nova Environmental, Inc.

Cost-Benefit Analysis of Rules (independent of statutory impact):

26. Estimate the actual statewide compliance costs of the rule amendments on businesses or groups. Identify the businesses or groups who will be directly affected by, bear the cost of, or directly benefit from the proposed rule(s). What additional costs will be imposed on businesses and other groups as a result of these proposed rules (i.e. new equipment, supplies, labor, accounting, or recordkeeping)? Please identify the types and number of businesses and groups. Be sure to quantify how each entity will be affected.

The businesses that will be most affected by this rule will be those with their own water supply. This includes approximately 650 CWSs. More than half of these are manufactured housing communities, and many of the rest are condominiums, apartment buildings, and other residential units. It also includes approximately 1,000 nontransient noncommunity water supplies – industries, small businesses, etc. - that are not hooked up to municipal water.

The compliance costs for all PWSs are analyzed above in #11; however, these costs will impact medium and large municipal systems far more than smaller private supplies. Specific costs are directly related to the number of LSLs at the supply as well as whether corrosion control treatment is required. Many of the other ancillary costs associated with this rule have been minimized for small supplies.

COMMENT: Refer to our Comment to Question 11.

27. Estimate the actual statewide compliance costs of the proposed rule(s) on individuals (regulated individuals or the public). Please include the costs of education, training, application fees, examination fees, license fees, new equipment, supplies, labor, accounting, or recordkeeping. How many and what category of individuals will be affected by the rules? What qualitative and quantitative impact does the proposed change in rule(s) have on these individuals?

There are no direct compliance costs to the public for this rule. There is a likelihood that PWSs will pass along at least some of the costs associated with rule compliance to their customers. Municipalities and other governmental bodies, in particular, will likely need to increase their utility rates to pay for their infrastructure upgrades and additional compliance costs. This will result in higher costs to homeowners, but it is very difficult to estimate this impact. It is important to note that drinking water has historically been the most affordable utility and will likely remain this way even with increases.

COMMENT: Although it asserts there are no direct costs imposed on the public by the draft LCR, the MDEQ readily acknowledges that water suppliers likely will pass some costs onto their customers. As noted in the accompanying Legal Memorandum, the Michigan Safe Drinking Water Act does not authorize the MDEQ to require water suppliers to pay for the replacement of privately owned water lines. As a consequence, the public will bear virtually *all* of the costs imposed by the Rule. As noted elsewhere in this response, a conservative estimate of the cost associated with removal of LSLs in accordance with the draft Rule is \$2.5 Billion. Consequently, homeowners that have service lines replaced will see potentially significant increases in their monthly water bills.

28. Quantify any cost reductions to businesses, individuals, groups of individuals, or governmental units as a result of the proposed rule(s).

There are no known cost reductions associated directly with these rules.

COMMENT: The MDEQ confirms that all of the costs imposed by its draft LCR are negative costs, and that no aspect of the proposal reduces the financial burden being placed on water providers. The burden is even worse than that contemplated by the Department which grossly underestimated the real costs associated with the rule. See Comments to Question 11.

29. Estimate the primary and direct benefits and any secondary or indirect benefits of the proposed rule(s). Please provide both quantitative and qualitative information, as well as your assumptions.

The primary benefits of this rule package are reducing the exposure to lead in drinking water and protecting public health. The Ecology Center found that costs associated with elevated blood lead levels totaled \$270 million for the state of Michigan in 2014 (see the second bullet in #32). Of these costs, \$112 million were transferred to taxpayers. Estimated ongoing annual costs include: increased healthcare (\$18 million), increased crime (\$77 million), special education (\$2.8 million), and decreased lifetime earnings (\$171 million). Additional benefits will be general improvement to water systems and quality, creation of jobs, and increased community goodwill through better service to customers.

COMMENT: The MDEQ's reliance on the Ecology Center Report is misplaced. The Report unequivocally states that:

"We note that this research began in 2013 before Flint's water-related lead exposures, and the scope of the work is state-wide. The impacts here are calculated using state-wide elevated blood lead levels in 2014, and associated costs of education, crime, health care, and lifetime earnings in 2014, so these calculations reflect little of the costs associated with Flint's water contamination. Instead, these figures indicate the baseline costs and economic impacts of lead exposure in Michigan, largely associated with lead paint.

Ecology Center Report, p. 5 (emphasis added).

The MDEQ's purpose in citing the Report's cost figures may be to suggest that these costs represent the quantified value of the benefits referenced by the MDEQ in support of the draft Rule. But this is an inference without merit. The Report makes clear that the quoted costs reflect the impacts of lead exposure from lead paint. ("A discussion of lead in water contamination is beyond the scope of this report." *Report, p. 30*) The Report actually supports a recommendation we repeatedly have made i.e.; a more effective rule would evaluate the multiple pathways contributing to lead exposures and use this as the yard stick for allocating resources to reduce overall risk.

As for the benefits of draft LCR, the MDEQ provides only generic declarations (e.g.; reducing exposure to lead, protecting public health, creating jobs). The Department makes no effort to

articulate more specific benefits, or quantify the value of the cited benefits, thereby allowing for a valid comparison of costs to benefits. In consequence, what is provided falls short of being a true Cost-Benefit Analysis. The MDEQ should be required to provide such an analysis before moving forward with its modifying the existing LCR.

30. Explain how the proposed rule(s) will impact business growth and job creation (or elimination) in Michigan.

The proposed rule has the potential to significantly impact the underground infrastructure construction industry due to the need to investigate and replace LSLs around the state. The rule will also cause laboratories to increase staffing and capabilities in order to provide necessary services. Additionally, more personnel will be needed in the water industry in order to administer this rule.

COMMENT: See Comments to Questions 28 and 29 above.

31. Identify any individuals or businesses who will be disproportionately affected by the rules as a result of their industrial sector, segment of the public, business size, or geographic location.

The majority of the remaining half-million LSLs are located in urban areas, and many of them are in economically-stressed communities. While these areas would be more disproportionately impacted by the cost and logistics of LSL removal, they are also the communities that are currently being more affected by lead in drinking water. Therefore, it is even more important that these PWSs upgrade their infrastructure and protect the public health of their citizens.

COMMENT: See responses provided throughout this Statement.

32. Identify the sources the agency relied upon in compiling the regulatory impact statement, including the methodology utilized in determining the existence and extent of the impact of a proposed rule(s) and a cost-benefit analysis of the proposed rule(s). How were estimates made, and what were your assumptions? Include internal and external sources, published reports, information provided by associations or organizations, etc., which demonstrate a need for the proposed rule(s).

- **National Cost Implications of Potential Long-Term LCR Requirements.** Slabaugh et al., American Water Works Association, August 2015
- **Costs of Lead Exposure and Remediation in Michigan: Update.** Ecology Center and Michigan Network for Children’s Environmental Health, October 2016
- **Financing Lead Risk Reduction Report.** The Environmental Financial Advisory Board
- **Flint Water Interagency Coordinating Committee Recommendations,** September 2016
- **Flint Water Advisory Task Force Recommendations,** August 2016
- **EPA Lead and Copper Revisions White Paper,** October 2016
- **Report of the Lead and Copper Rule Working Group to the National Drinking Water Advisory Council,** August 2015

COMMENT: The MDEQ provides a list of documents/reports relied on to prepare the Regulatory Impact Statement, but does not provide any analysis or description of methodology used to determine the impact of the draft LCR or the cost-benefit analysis. Consequently, it is unclear as to the relevancy of the cited documents/reports to the development of the draft Rule. As pointed out above, the Ecology Center Report explicitly does *not* support the draft LCR.

To effectively address lead exposure the proper focus must be on reducing blood lead levels. This requires a multi-pathway evaluation. This more systematic approach to addressing public health protection from lead is embraced in the recommendations of the Child Lead Poisoning Elimination Board. Their report, “*A Roadmap to Eliminating Child Lead Exposure*” recognizes there are various pathways to lead exposure with highly varying degrees of impact. The Report emphasizes that a combination of actions are needed on two paths: preventing new problems and remediating existing ones. We agree.

Some key statements from this Report are relevant to our comments on the draft LCR and on state policy on this topic (**bolded** wording is for emphasis.):

- “A greater focus on primary prevention will also require the recognition and **coordinated targeting of all lead dangers**.
- Health equity must be the foundation of all policy and funding recommendations, **with areas of disparate lead exposure given higher priority**.
- By far the most common identified form of lead exposure for children is through lead paint and lead dust in older homes.
- The board proposes that its recommendations be prioritized so that known sources of ongoing exposure (those houses, apartments, and other structures and areas where child lead exposure has been identified and where families continue to live or visit) are addressed first.
- The board further proposes that **prioritization of its recommendations to eliminate exposure risk be based on the likelihood that a particular type and level of exposure will result in child EBLs**.
- The only way to truly eliminate child lead exposure is to test every child in Michigan and then target well-defined, high-risk areas to provide a comprehensive, **targeted remediation approach.**”

Another report we have relied on in responding to the draft Rule is the *21st Century Infrastructure Commission Report*. The Report details Michigan’s framework for addressing infrastructure challenges. The framework is built on a premise: investments in infrastructure must be more systematic and focused on achieving 4 outcomes that are all crucial to a vibrant Michigan. Those outcomes are: 1) Economic Prosperity; 2) Healthy Environment; 3) Reliable, High Quality Service; and 4) Value for Investment.

In every single Stakeholder Workgroup meeting, we requested the MDEQ apply the Commission's proposed framework in crafting holistic actions to confront the issue of lead exposure guided by these outcomes. The more systematic, outcome based framework developed by the Commission is the path that best serves the public interest.

Alternatives to Regulation:

33. Identify any reasonable alternatives to the proposed rule(s) that would achieve the same or similar goals. In enumerating your alternatives, please include any statutory amendments that may be necessary to achieve such alternatives.

There are no reasonable alternatives to these rules that would provide for the removal of LSLs in order to protect public health. There is available technology to line LSLs, but this would likely exacerbate the problem, moving particulate lead into the drinking water.

COMMENT: The MDEQ asserts that there is no reasonable alternative to the approach set out in the draft LCR. We disagree and have shared with the Department during the Stakeholder meetings our ideas for an alternative approach. Key provisions of an alternative approach include:

- Require the replacement of lead service lines as part of an asset management plan.
- Require the replacement of a lead service line immediately if it is shown to be the source of an EBL or in home sampling shows elevated lead levels.
- Strengthen the provisions for corrosion control.
- Improve the testing protocols to assure valid samples and target areas with likely problems first.
- Strengthen state oversight of proposed changes to source water.
- Establish a dedicated revenue source to pay for lead line and/or plumbing fixture replacement on private property when it is a known source of contamination and the property owner qualifies for financial assistance.
- Establish and implement protocols for blood level testing consistent with the recommendations of the Child Lead Poisoning Elimination Board.
- Require follow up investigation and remediation of the source of lead causing an EBL.
- Develop a statewide public information program explaining actions the public can take to minimize their exposure to lead and where to turn for assistance.
- Evaluate other avenues for eliminating lead exposure (real estate disclosure, rental disclosure and abatement, school and day care licensing)

34. Discuss the feasibility of establishing a regulatory program similar to that proposed in the rule(s) that would operate through private market-based mechanisms. Please include a discussion of private market-based systems utilized by other states.

This is a federal law that must be implemented in Michigan; no other states have implemented a market-based system of regulation and this does not seem feasible.

NO COMMENT

35. Discuss all significant alternatives the agency considered during rule development and why they were not incorporated into the rule(s). This section should include ideas considered both during internal discussions and discussions with stakeholders, affected parties, or advisory groups.

Stakeholders had concerns regarding the cost and logistics of replacing the private portion of LSLs that could not be addressed within the scope of these rules. There were also calls for additional testing of schools, nursing homes, and daycares that will need to be addressed by separate legislation.

Many alternatives discussed dealt with changes to the timing and logistics of the new requirements, particularly the LSL replacement. The stakeholder group discussed the alternative of just requiring 5 percent of LSLs to be replaced every year, but changed it to an average of 5 percent per year after input from the Governor's Council on 21st Century Infrastructure. There also were discussions about the frequency of sampling and the cost and logistics of the proposed second sample for homes with LSLs. There were also discussions about the correct value for the lead action level and the household advisory level. There were differing opinions on these issues, and the draft rules represent a middle ground – protective of public health while not imposing unnecessary burden.

COMMENT: See our Comments to Question 33. Although some changes have been made to the draft Rule initially proposed by the MDEQ, many of our substantive comments, suggestions and alternatives were not incorporated into the draft LCR.

Additional Information

36. As required by MCL 24.245b(1)(c), please describe any instructions regarding the method of complying with the rule(s), if applicable

Significant guidance material will be available to provide compliance assistance.

NO COMMENT

ATTACHMENT 3
COMMENTS ON THE PROPOSED REGULATORY
LANGUAGE OF THE DRAFT LEAD AND COPPER RULES

Comments on the Proposed Regulatory Language of the Draft Lead and Copper Rules

The following comments are provided in response to specific citations and page numbers of the Michigan Department of Environmental Quality's Supplying Water to the Public Draft Rules (Lead and Copper Rules) dated January 30, 2018. These comments must be evaluated in concert with the remaining content in this document in order to fully understand the recurring suggestions about a solutions-based comprehensive approach to address lead exposure.

R 325.10105 Definitions; F to L.

Comment: The following definitions are needed in any revised rules:

- Second, 6-liter sample and
- Household advisory Level.

Part 4: Public Notification & Public Education.

R 325.10401a General Public Notification Requirements

PAGE 9 Action level of 15 ppb through 2023 & 10 ppb starting 2024.

Comment: Changes in the lead action level should not be codified in the rules until the EPA completes the scientific and technical evaluation and updates the federal rules. EPA has initiated a peer-reviewed scientific modeling approach to inform the determination of health-based benchmarks for lead in drinking water. The results of the lead modeling approach are intended to relate drinking water lead concentrations to blood lead levels in children and assess risk of reduced IQ.

PAGE 24 Action level of 15 ppb through 2023 & 10 ppb starting 2024.

Comment: Changes in the lead action level should not be codified in the rules until the EPA completes the scientific and technical evaluation and updates the federal rules. EPA has initiated a peer-reviewed scientific modeling approach to inform the determination of health-based benchmarks for lead in drinking water. The results of the lead modeling approach are intended to relate drinking water lead concentrations to blood lead levels in children and assess risk of reduced IQ.

R 325.10410 Public Education Regarding Lead.

PAGES 36 – 38 Rule 410. (2) & (3) regarding written public education materials and delivery of materials

Comment: This section should outline the development of public education materials or templates of these materials as a role of any proposed statewide advisory council. This creates an opportunity for the statewide advisory council to collaborate with other state-wide lead public health programs, especially through health and human services. For example, the *Child Lead Poisoning Elimination Board, A Roadmap to Eliminating Child Lead Exposure*, outlines many recommendations related to public education and outreach. Aligning water-related lead

messaging about exposure and reducing exposure should be coordinated with these other recommendations to minimize disjointed public messaging on lead.

For example, the state-wide advisory council shall:

- Coordinate with other state departments to evaluate existing public education materials regarding lead exposure
- Identify opportunities to integrate public messaging about those “water-related” topics listed in the current rule
- Develop new or revise existing materials or templates that may be used by those communities subject to the requirements of this part.

Clarification is needed regarding messaging availability of filters certified to remove lead. Water service providers are not in a position to recommend or endorse any filter types. The ambiguity of this requirement is further rationale for the development of this information to fall under the state or any state advisory council.

PAGE 38 (3) (b) (iv) regarding posting materials on website if the supply serves a population > 1,000.

Comment: Not all water supply systems have websites. Provide an alternative that allows smaller systems to use publicly available website that can support the water supply information. There needs to be an exemption clause.

PAGE 39 – 40 (5) (b) For lead results greater than or equal to the household advisory level.

Comment: While water service providers are in agreement that there are situations where escalated responses are needed, the scientific basis for the 40 ppb is unclear. Similar to the comments on the action level, a household advisory level should not be codified in the rules until the EPA completes the scientific and technical evaluation and updates the federal rules. EPA has initiated a peer-reviewed scientific modeling approach to inform the determination of health-based benchmarks for lead in drinking water. The results of the lead modeling approach are intended to related drinking water lead concentrations to blood lead levels in children and assess risk of reduced IQ.

Additionally, this number is not listed in any of the previous tables that specify concentration levels.

PAGE 40 (5) (c) Consumer notice information

- (i) *Comment:* The 3-day requirement will be challenging for many and no indication of what constitutes compliance.
- (ii) *Comment:* Providing notification to the health department is important; however, the health departments should lead coordination with health and human services. There are already coordination programs between local health departments and the state health and human services for case management services. If escalated responses are desired by the DEQ, then the structure of existing programs at the state level should be evaluated and modified to integrate water service providers where appropriate. Including only a

statement for the water supply to refer results minimizes the opportunities for coordinated follow-up and evaluation of the potential source. See the *Child Lead Poisoning Elimination Board, A Roadmap to Eliminating Child Lead Exposure*.

- (iii) *Comment:* Water service providers can refer the public to the local health department, but should not be in a position to explain, in detail, blood lead level testing. Water service providers should also not be in a position to recommend any specific contractors or plumbers which will be the resulting question from a resident about plumbing assessment suggestions. Are their special training requirements for plumbers working with lead plumbing systems?

Development of these materials just described should also be part of the State Advisory Committee role.

PAGE 40 (6) Statewide Advisory Council

Comment: See Memorandum on Legal Issues in the Draft Rule: Supplying Water to the Public included as Attachment 1. The legal analysis indicates that there is no authority in the Act for the MDEQ to create new governmental bodies at the state level and local level (the advisory bodies) by rule.

Outside of the legal issues described, we offer comments regarding the draft language in this section on the advisory councils:

A statewide advisory council without the local council requirements would be an acceptable consideration. MI-AWWA should have a seat on this council. With regard to local councils, clarification is needed on whether these councils must be separate from existing bodies. Communities have difficulty filling these types of positions.

PAGE 41 (6) (j) The statewide council shall do the following:

Comment: The list of items should clearly list public messaging materials that will be developed to support local efforts. Compare the list of required information that local systems must provide and include that list as part of the state advisory council responsibilities. These materials should be provided to water service providers to ensure consistent messaging and to minimize duplication of effort.

Additionally, the statewide advisory council should be coordinating with other state and local departments in a multi-agency approach to address public health lead issues. Without the coordinated actions across state and local health departments, water service providers and licensing agencies, the ability to identify and eliminate sources of lead exposure will continue in a haphazard manner.

Page 41 (7)

Comment: Public awareness materials should be provided through the statewide advisory council. See Memorandum on Legal Issues in the Draft Rule: Supplying Water to the Public

included as Attachment 1. regarding any reference to private side lead service line replacement. Reference to “development of appropriate plans and remediation and public education to be implemented if the lead action level is exceeded” is very subjective. Seems to be implying that “appropriate” is in the opinion of the council. Because there are requirements in place for water supply actions as a result of lead action level exceedances, this statement should not imply varying requirements.

R 325.10420 Annual Consumer Confidence Reporting; Contaminants for Vulnerable Subpopulation.

PAGE 48 Table 1 referencing revised lead action level.

Comment: Changes in the lead action level should not be codified in the rules until the EPA completes the scientific and technical evaluation and updates the federal rules. EPA has initiated a peer-reviewed scientific modeling approach to inform the determination of health-based benchmarks for lead in drinking water. The results of the lead modeling approach are intended to relate drinking water lead concentrations to blood lead levels in children and assess risk of reduced IQ.

Part 6. State Drinking Water Standards and Analytical Methods

R 325.10604f Treatment Techniques for Lead & Copper; Household Advisory Level for Lead.

PAGE 48 (c)

Comment: Changes in the lead action level should not be codified in the rules until the EPA completes the scientific and technical evaluation and updates the federal rules. EPA has initiated a peer-reviewed scientific modeling approach to inform the determination of health-based benchmarks for lead in drinking water. The results of the lead modeling approach are intended to relate drinking water lead concentrations to blood lead levels in children and assess risk of reduced IQ.

PAGE 49 Rule 604f (l) household advisory level

Comment: While water service providers are in agreement that there are situations where escalated responses are needed, the scientific basis for the 40 ppb is unclear. Similar to the comments on the action level, a household advisory level should not be codified in the rules until the EPA completes the scientific and technical evaluation and updates the federal rules. EPA has initiated a peer-reviewed scientific modeling approach to inform the determination of health-based benchmarks for lead in drinking water. The results of the lead modeling approach are intended to relate drinking water lead concentrations to blood lead levels in children and assess risk of reduced IQ.

PAGE 49 Rule 604f (m) new source or long-term change in treatment

Comment: Change “may” to “shall”. When a change in source water is proposed, a coordinated evaluation and technical analysis must occur to address potential corrosion control treatment requirements.

PAGE 55 Subpart (5) (c) Lead service line removal requirements contained in existing rule.

Comment: See Memorandum on Legal Issues in the Draft Rule: Supplying Water to the Public included as Attachment 1. regarding any reference to “at water supply expense” as it relates to private side lead service line replacement.

PAGE 56 Subpart (6) Lead service line removal requirements resulting from sample results exceeding 5 ppb.

Comment: Remove subpart (6). A lead service lines replacement requirement outlined in this manner is a disjointed, silo-based approach that requires significant financial and staff capacity investment without any guarantee that the lead source is removed or any direct public health benefit. Sources could still be household plumbing and fixtures.

Changes in any compliance levels for lead should not be codified in the rules until the EPA completes the scientific and technical evaluation and updates the federal rules. EPA has initiated a peer-reviewed scientific modeling approach to inform the determination of health-based benchmarks for lead in drinking water. The results of the lead modeling approach are intended to related drinking water lead concentrations to blood lead levels in children and assess risk of reduce IQ.

A tiered approach for triggers to LSL replacement rates does not represent a comprehensive approach as described throughout this document. Lead service line replacement should be driven by three things: exceedance of the action level after installation of CCT, schedules in coordination with approved asset management programs, and mitigation of elevated levels at known sources.

Compliance with the AL should be determined by first draw samples. First draw samples are reflective of both recent exposure of the water to household plumbing and service line. If that first draw sample comes back above the AL, an investigation should begin.

Sequential sampling should be used as part of an investigation in response to elevated levels. These samples should not be used for compliance with the AL, nor should they be used to trigger any system-wide LSLR. The purpose of sequential sampling is to determine the source of the elevated level, which will then drive decisions about mitigation of the source.

A multi-agency approach is critical to effectively reducing all lead exposure and identifying the exact source for each unique situation. A lead service line replacement requirement outside of the asset management approach fails to consider whether lead plumbing or fixtures within a house are sources of lead exposure. Likewise, state health agencies that respond to high blood level results in children primarily focus on lead exposure from paint, dust and soil. Aligning

these agencies and programs will result in a targeted approach for all lead dangers and in the most critical areas.

Finally, See Memorandum on Legal Issues in the Draft Rule: Supplying Water to the Public included as Attachment 1. regarding any reference to “at water supply expense” as it relates to private side lead service line replacement.

Part 7: Surveillance, Inspection, and Monitoring

R 325.10710a Lead and Copper in Tap Water; Monitoring Requirements

PAGE 60 sequential sampling

Compliance with the AL should be determined by first draw samples. First draw samples are reflective of both recent exposure of the water to household plumbing and service line. If that first draw sample comes back above the AL, an investigation should begin.

Sequential sampling should be used as part of an investigation in response to elevated levels. These samples should not be used for compliance with the AL, nor should they be used to trigger any system-wide LSLR. The purpose of sequential sampling is to determine the source of the elevated level, which will then drive decisions about mitigation of the source.

PAGE 60 reference to the supply shall not challenging the accuracy of the sampling results based on alleged errors in sample collection.

Comment: Being protective of public health includes ensuring that appropriate QA/QC procedures are followed for all sample collection and analysis. Not only is this statement completely inconsistent with DEQ requirements as they relate to sample collection for other water programs, but it completely demonstrates bad science. Stakeholders consistently raised the issue that when homeowners are collecting the samples, there is no ability to ensure that QA/QC procedures are followed. A multi-agency approach to addressing lead exposure that includes public messaging and targeted assessments could help to improve opportunities for water service providers to conduct needed sampling. Even the most educated city within the state experiences significant challenges in educating residents about sampling protocols. If this is not addressed in a solutions-based manner, then the state is, in essence, implying that future infrastructure investments are acceptable based on potentially erroneous results.

Part 16: General Plans

R 325.11604 Contents of General Plans for all Applicable Systems

PAGE 75 Rule 1604 (c) Material Inventory

Comment: The timeframes, the level of detail, and the field work are inconsistent with utilizing an asset management approach and principles.

A public-side lead service line material inventory can be developed over time, but as part of asset management programs. There is no single inventory of all lead service lines. The importance of creating this inventory through asset management programs will allow water service providers to refine inventory information in conjunction with other water system activities, and coordinate, when needed, during specific case management evaluations of lead exposure. The information about pipe material on private property is very limited and not part of any water service provider records.

A physical inventory of lead service lines requiring exposure of underground infrastructure that is not performed in conjunction with any infrastructure improvements is not cost-effective. While looking at the incremental cost may appear manageable for discrete requirements, taken in total these costs will exacerbate affordability issues for many residents. Focusing on an ongoing records evaluation to develop a preliminary material inventory combined with lead service line replacement as part of asset management programs will incrementally work towards the ultimate goal of eliminating lead in these systems in the most cost effective manner.

Additionally, and as mentioned above, evaluating lead service line replacement as part of other collaborative lead exposure programs at the state and local levels will successfully integrate those critical timeframes to address the source of lead exposure.

Furthermore, there are multiple opportunities to address lead service line replacement outside of the water rule. These include rental inspections, property transfers, licensing of facilities such as day care and retirement/senior centers, etc.

Finally, see Memorandum on Legal Issues in the Draft Rule: Supplying Water to the Public included as Attachment 1. relating to any private side lead service line discussion in this section.