Ohio Environmental Protection Agency

Hearing Summary

Rule Package: Lead and Copper rules

Original filing date: January 31, 2018

Public comment start date: January 31, 2018

Public comment end date: March 6, 2018

Public hearing date: March 6, 2018

List of Rules: 3745-81-01, 374581-04, 3745-81-80, 3745-81-81, 3745-81-84,

3745-81-85, 3745-81-86, 374-81-87, 3745-81-89, 3745-81-90

3745-89-08 and 3745-96-02

Were there any participants in this public hearing beyond Ohio EPA staff or JCARR staff?

X Yes ☐ No

Were there comments received during the public comment period outside of those presented at this hearing?

X Yes ☐ No

This hearing summary has been compiled to meet the requirements of Section 119.03 of the Revised Code.

This hearing summary includes this cover sheet and the following attachments:

1. **Attachment A -** A copy of the public notice for this hearing.
2. **Attachment B -** A copy of the sign-in sheet for this hearing.
3. **Attachment C -** A copy of the script read into the record to begin and end the hearing.
4. **Attachment D** - A copy of the public hearing transcribed.
5. **Attachment E -** A copy of the response to comments.

Ohio EPA's response to comments document includes the comments received, who commented, the agency response to comments, and a statement of whether or not the rule was changed due to the comments.

Ohio Environmental Protection Agency

BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY

January 31, 2018
Public Notice: Proposed Rulemaking Governing Lead and Copper

Notice is hereby given that the Ohio Environmental Protection Agency, Division of Drinking and Ground Waters (DDAGW) proposed revisions to several rules governing primary drinking water standards and the lead and copper rule in OAC Chapter 3745-81, as well as a laboratory certification rule in Chapter 3745-89 and consumer confidence rule in Chapter 3745-96 of the OAC to incorporate provisions of Ohio House Bill 512 (effective in Ohio Revised Code § 6109.121) in Ohio's lead and copper rule.

The revisions were prompted by the passing of Ohio House Bill 512 which became effective in Ohio Revised Code (ORC) § 6109.121, Sept. 9, 2016. This law addresses lead notification and monitoring for community water systems and nontransient noncommunity water systems. Since the adoption of the law, DDAGW has focused on aggressively implementing the currently effective provisions of ORC § 6109.121 in addition to incorporating language from the ORC, including changes within the spirit of this law.

Several revisions were made after the comment period ended. These revisions include the modification of the interim lead public notification requirement, addition of language to clarify the filter requirement, the addition of analytical requirements for laboratories and the deletion of proposed OAC Rule 3745-81-91.

A public hearing pursuant to ORC §106.03 will be conducted on March 6, 2018, beginning at 10.30 am in Conference Room A at the Ohio EPA, Lazarus Government Center, 50 West Town Street, Columbus, Ohio. All interested persons are entitled to attend or be represented and give their written or oral comments on this proposed rule-making. A presiding officer will be present until all interested persons have been heard.

To facilitate scheduling of oral presentations, persons intending to give testimony at the hearing should ensure that Ohio EPA receives notice of such intent by March 5, 2018, 5:00 p.m. Persons who provide Ohio EPA with prior notice will be heard ahead of persons who register at the hearing. **All visitors to Ohio EPA must register at the Security desk in the lobby upon arrival. Please bring photo identification (such as a valid driver's license). For security reasons, visitors are required to wear their badge at all times while in the building. Please arrive early to complete these procedures.** To provide notice of intent to give oral comments

at the public hearing, contact Colin White by mail at Ohio EPA, DDAGW, Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, Ohio 43215, or by phone at (614) 644-2759.

In order to ensure that written comments are considered as part of the official record of this hearing, written comments must be received by Ohio EPA by the close of business March 6, 2018. Written comments on the proposed rules may be given to the presiding officer during the hearing, sent by mail to Colin White at the address above, or sent by email to the following address ddagw_rulecomments@epa.ohio.gov.

To obtain a copy of the proposed rules, contact Colin White at Ohio EPA at (614) 644-2759 or email at Colin.White@epa.ohio.gov. Please request the "Lead and Copper Rules" and be sure to include your name, telephone number, and complete mailing address. There is no charge for proposed rules. The proposed rules will be available on the Agency web page until their adoption or withdrawal. They can be found at http://epa.ohio.gov/ddagw/rules.aspx on the "Proposed Rules" tab.

Comments can be submitted in hard copy to the following address: "Ohio Environmental Protection Agency, DDAGW, P.O. Box 1049, Lazarus Government Center, Columbus, Ohio 43216-1049, Attn: Colin White" or by email to **ddagw_rulecomments@epa.ohio.gov**. Comments should be received at the above address by close of business, March 6, 2018.

Ohio
Ohio Environmental Protection Agency

SIGN-IN SHEET

Subject: DDAGW Lead and Copper Rules
County: Statewide **Date: March 6, 2018**

PLEASE PRINT PLEASE PRINT PLEASE PRINT PLEASE PRINT

pass

NAME: Patrick Moore E-MAIL: Patrick@120 Water Audit.com
MAILING ADDRESS: 10 1/2 Main St, Zoinsville, IN
CITY: Zionsville STATE: IN ZIP:
TELEPHONE: 248-840-6439

NAME: E-MAIL:
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Ohio Environmental Protection Agency

SIGN-IN SHEET

Subject: DDAGW Lead and Copper Rules
County: Statewide **Date: March 6, 2018**

PLEASE PRINT PLEASE PRINT PLEASE PRINT PLEASE PRINT

NAME: Sarah Lindsey E-MAIL: Sarah@gmail.com
MAILING ADDRESS: 565 Metro Place S Suite 300
pass
CITY: Dublin STATE: OH ZIP: 43017
TELEPHONE: 614-686-7335

NAME: Michael Brown E-MAIL: MBrown@Ritman.com
MAILING ADDRESS: 30 N Main
pass
CITY: Ritman STATE: oh ZIP: 44270
TELEPHONE: 330 715-1192

NAME: _____ E-MAIL: _____
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Ohio Environmental Protection Agency

SIGN-IN SHEET

Subject: DDAGW Lead and Copper Rules
County: Statewide **Date: March 6, 2018**

PLEASE PRINT PLEASE PRINT PLEASE PRINT PLEASE PRINT

NAME: MIKE WIMER E-MAIL: mwipert@wyomingohio.gov
MAILING ADDRESS: 80 OAK AVE
CITY: WYOMING STATE: OH ZIP: 45215
TELEPHONE: 513-821-0937

testimony

NAME: Kenneth Mann E-MAIL: Kmann@rittman.com
MAILING ADDRESS: 30 North Main St.
CITY: Rittman STATE: OH ZIP: 44270
TELEPHONE: 330-571-6149

testimony

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DDAGW Lead and Copper Rules Hearing

3/6/18

My name is Mary McCarron. I am with the Public Interest Center. I will be presiding over today's public hearing.

Thank you for taking time to attend this hearing before Ohio EPA. The purpose of the hearing today is to obtain comments from any interested person regarding Ohio EPA's proposed rules.

Ohio EPA Division of Drinking and Ground Waters is proposing revisions to the following rules of the Ohio Administrative Code chapter 3745-81, governing primary drinking water standards and the lead and copper rule, Chapter 3745-89 governing a laboratory certification rule and Chapter 3745-96 to incorporate provisions of Ohio House Bill 512 in Ohio's lead and copper rule.

These rules have been filed with the Joint Committee on Agency Rule Review. Copies of the rules are available for public review at Ohio EPA's Columbus Office and on our website.

All interested persons are entitled to attend or be represented, and to present oral and/or written comments concerning the proposed rules. All written and oral comments received as part of the official record will be considered by the director of Ohio EPA.

To be included in the official record, written comments must be received by Ohio EPA by the close of business, today, March 6, 2018. These comments may be filed with me today or emailed to ddagw_rulecomments@epa.ohio.gov. All written comments submitted for the record receive the same consideration as oral testimony given today.

Written statements submitted after today may be considered as time and circumstances permit, but will not be part of the official record of the hearing.

There is no cross examination of speakers or of representatives of Ohio EPA in public hearings. Ohio EPA hearings such as this afford citizens the opportunity to provide comments on the official record. Therefore, we will not be able to answer questions during the hearing. However, members of the panel may ask clarifying questions of the person testifying to ensure the record is as complete and accurate as possible.

I will now read the names of those who have registered at this hearing and will give each person an opportunity to testify.

Is there anyone else who wishes to testify at this time?

Seeing no further requests for testimony, I remind you that written comments can be submitted through the close of business today.

Thank you for attending. The time is now 10:56 and this hearing is adjourned.

BEFORE THE OHIO ENVIRONMENTAL PROTECTION AGENCY

- - -

IN RE: :
:
Proposed Rule Revisions to :
Ohio Administrative Code :
Chapters 3745-81, 3745-89, :
and 3745-96 :

- - -

Public Hearing before Moderator Mary McCarron, taken at the Ohio Environmental Protection Agency, 50 West Town street, Suite 700, Conference Room A, Columbus, Ohio, called 10:30 a.m. on Tuesday, March 6, 2018.

- - -

APPEARANCES:

Colin White
Ashley Voskuhl
Mandi Payton
Justin Burke
Kamalpreet Kawatra
Colin Bennett

FRALEY COOPER & ASSOCIATES
200 East Town Street, Second Floor
Columbus, Ohio 43215
(614) 228-0018 - (800) 852-6163

- - -

P-R-O-C-E-E-D-I-N-G-S

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MODERATOR McCARRON: My name is Mary McCarron. I'm with the Public Interest Center here at Ohio EPA, and I'll be presiding over the meeting today. With me today are Colin White, Ashley Voskuhl, Justin Burke, and Kamalpreet Kawatra with our Drinking and Ground Waters program, and then Mandi Payton and Colin Bennett are also with the Agency.

Thank you for taking the time to attend this hearing before Ohio EPA. The purpose of the hearing today is to obtain comments from any interested person regarding Ohio EPA's proposed rules.

Ohio EPA, Division of Drinking and Ground Waters, is proposing revisions to the following rules of the Ohio Administrative Code: Chapter 3745-81, governing primary drinking water standards and the lead and copper rule; Chapter 3745-89, governing a laboratory certification rule; and Chapter 3745-96 to incorporate provisions of Ohio House Bill 512 in Ohio's lead and copper rules.

These rules have been filed with the Joint Committee on Agency Rule Review, and copies of

the rules are available for public review at Ohio EPA's Columbus office and on our website.

All interested persons are entitled to attend or be represented and to present oral and/or written comments concerning the proposed rules. All written and oral comments received as part of the official record will be considered by the Director of Ohio EPA.

To be included in the official record, written comments must be received by Ohio EPA by the close of business today, March 6, 2018. These comments may be filed with me today or e-mailed to ddagw_rulecomments@epa.ohio.gov, and that address is also on the public notice. All written comments submitted for the record receive the same consideration as any oral testimony given today.

Written statements submitted after today may be considered as time and circumstances permit, but won't be part of the official record for this hearing.

There is no cross-examination of speakers or representatives of Ohio EPA in public hearings. Ohio EPA hearings such as this afford citizens an opportunity to provide comments on the official record. Therefore, we will not be able to

answer any questions during the hearing. However, members of the panel may ask clarifying questions of the person testifying to ensure the record is as accurate as possible.

I will now read the names of those who have registered at this hearing and give each person an opportunity to testify. If I read your name and you do not want to testify, go ahead and just say pass.

Patrick Moore.

MR. MOORE: Pass.

MODERATOR McCARRON: Sarah Lindsey.

MS. LINDSEY: Pass.

MODERATOR McCARRON: Michael Brown.

MR. BROWN: Pass.

MODERATOR McCARRON: And Mike Lippert.

MR. LIPPERT: Yes.

MODERATOR McCARRON: Excellent. Go ahead. If you can spell your name for our court reporter and proceed with your testimony.

MR. LIPPERT: Okay. Mike Lippert, last name is L-i-p-p-e-r-t. Got that? I'll just begin by thanking you for the opportunity to comment on the proposed lead and copper rule revisions. I'm a Class III operator and operator of record for the Wyoming

Water Works. That's OH3102212 in Hamilton County, Ohio.

Wyoming Water Works is a community water system which serves less than 10,000 people. We are a groundwater system. Our 90 percent lead results from our last round of testing was nondetect. Financially we are challenged with paying off our water plant debt while serving a build-out system with declining usage and of course revenue. Our usage is down 30 percent in the last 15 years.

I want to comment specifically on Section 3745-81-84, lead service line requirements. The first item deals with 3745-81-84(A)(2). The proposed regulation discusses replacing annually at least seven percent of the initial lead service lines in its distribution system if there is an exceedance of the lead action level. My only concern is with the first year replacement. The rule states a replacement program "shall begin on the first day following the end of the monitoring period." I suggest the replacement program begin January 1st the following year. The reason is that as a city, we will not have a budget to begin replacement work in the current year. That money must be budgeted and will only be available the following year.

I don't think you can classify this as an emergency if the replacement timetable is 14 years. The proposed timetable is unworkable for us, and I imagine many others. Our current monitoring cycle ends in September, so the delay would only be three months for us until the following year. I don't see how a three-month delay is going to create any issues. Even with the delay we would begin planning replacement immediately during those three months.

The second item deals with 3745-81-84(B)(1). The water system shall provide notice of work to be performed in the impacted area at least 45 days prior to commencing the main or service line replacement. I am concerned that 45-day notice is too long, especially for bid projects, and that may delay the start of a project. I don't believe the city should send out notices until a contract is accepted and a contractor on board for main replacement work; otherwise, we may reject the bid, and the notice that we sent out would be for not. I suggest changing to a 30-day notice or even less. This way the city will have time to notify residents in a timely fashion and not delay a starting date for contractors in a bid award

situation. Moreover, I suggest all 45-day notices be changed to the 30-day or less notices throughout this section.

The third item deals with Section 3745-81-84(C), particularly the following: "In cases where the system does not own the entire lead service line, the system shall notify the owner of the line...and offer to replace the owner's portion of the line." As a public entity, the City of Wyoming Water Works does not perform private work typically. Second, even if we are paid by the homeowner, I am extremely concerned with the details of such an arrangement. What if the homeowner is unhappy with, say, the lawn restoration or if a tree is damaged? What if there's damage inside the home? Ultimately, since the city hired the contractor, I think we would be responsible for any repairs if the contractor failed to satisfy the owner.

The fourth and final item deals with Section 3745-81-84(C)(1). It states, "The water system shall inform the residents serviced by the line that the system will, at the system's expense, collect a sample from each partially-replaced lead service line that is representative of the water in the service line for analysis of lead content" --

"content...within 72 hours after the completion of the partial replacement of the service line."

I know this language is in the existing code, but I believe it's unrealistic. Seventy-two hours is too short. The problem with this requirement is that in our case the city is dependent on the residents to run the test within 72 hours. We have no control. We can drop off bottles and let people know the deadline, but they may not comply. We will not be able to contact some residents. Some will forget. Some will be on vacation or going on vacation or just too busy to collect the samples. Will we be penalized if people don't comply?

There are internal logistic issues as well. We are going to have to closely monitor the schedule of service line replacement, then drop off bottles probably daily during a project to affected homes until service line replacements are complete, then keep track of when bottles are dropped off and when samples need to be run for each home individually. Our limited staff will be challenged. I suggest changing the language to accommodate the issues I've raised. We can drop off bottles typically within -- with sampling directions within a couple days no problem. We can't control when

residents take their samples.

Again, I'd like to thank you for the opportunity to comment, and I hope you can seriously consider my suggestions and concerns.

MODERATOR McCARRON: Thank you.

Kenneth Mann.

MR. MANN: My name is Kenneth Mann, M-a-n-n, and I have a comment. I thought it might be a question. They're not going to be answered, but on 3745-81-84, the very first paragraph, "All water systems that replace lead service lines, replace water mains in areas that contain or are likely to contain lead service lines, or exceed the lead action level after the implementation of corrosion control or source water treatment shall comply with applicable requirements in this rule."

When I read that, it sounds like if I'm replacing water lines or lead service lines, I have to follow this rule, but later on down on the same rule, (A)(2), where it says that, "The initial number of lead service lines is the number of lead lines in place at the time the replacement program" -- "the first year of lead service line replacement shall begin on the...day following the end of the monitoring period in which the action level was

exceeded under paragraph (A)."

To me, it sounds like that "or," should be an and. I can understand if I'm exceeding the action levels, then these are the things I need to do, but if I'm just out there doing a project to replace a line that has lead services, I'm replacing the entire line. I'm not sure that I need to do anything more than that to protect the people of my community.

Mr. Lippert here has mentioned all the other things in that section that I had concerns about -- oh, I'm sorry. There's one more. Still in 81-84, Section (C)(1), in the middle of the paragraph it talks about, "The director may allow the owner or operator of a water system to provide notice under the previous sentence less than 45 days prior to commencing lead service line replacement where such replacement is in conjunction with emergency repairs."

As of right now I'm going to consider "emergency repairs" if their lead service line is leaking, I'm going to replace it. I'm not going to wait 45 days and let water run around my town. I'm going to consider that an emergency. If I need to contact my local EPA person, I'll do that. It just

seems to me that we want to get these lead services out of there. Why do I need to call up the EPA and say I'm going to take out a lead service line to protect my residents? I do that already. If we find them, we pull them out. That's what we should do, I think. I think that's all I have.

MODERATOR McCARRON: Okay. Thank you.

That is the last person I have signed in at this time, so I will go ahead and close the public hearing portion. The time is now 10:56, and this hearing is adjourned. Thank you for attending.

(Thereupon, the hearing was adjourned at 10:56 a.m.)

CERTIFICATE

I do hereby certify that the foregoing is a true and correct transcript of the proceedings taken by me in this matter on Tuesday, March 6, 2018, and carefully compared with my original stenographic notes.

_____

Valerie J. Sloas, Registered Professional Reporter and Notary Public in and for the State of Ohio.

My commission expires June 10, 2021.

(VJS-86206)

Division of Drinking and Ground Waters
Public Hearing Response to Comments

Proposed Revisions to the Lead and Copper Rules

3745-81-01 (Amend), Primary drinking water standards definitions
3745-81-04 (Rescind), Administrative penalties
3745-81-04 (New), Administrative penalties
3745-81-80 (Amend), Control of lead and copper – general requirements
3745-81-81 (Amend), Control of lead and copper – applicability of corrosion control treatment steps to small, medium-size and large water systems
3745-81-84 (Amend), Control of lead and copper – lead service line requirements
3745-81-85 (Rescind), Control of lead and copper – public education, supplemental monitoring requirements and consumer notification
3745-81-85 (New), Control of lead and copper – response to lead monitoring results
3745-81-86 (Amend), Control of lead and copper – monitoring requirements for lead and copper in tap water
3745-81-87 (Amend), Control of lead and copper – monitoring requirements for water quality parameters)
3745-81-89 (Amend), Control of lead and copper – analytical methods
3745-81-90 (Amend), Control of lead and copper – reporting and record keeping requirements
3745-89-08 (Amend), Reporting of analytical results
3745-96-02 (Amend), Consumer confidence report – required content

Agency Contact for this Package

Colin White, Division of Drinking and Ground Waters (DDAGW)
(614) 644-2752, colin.white@epa.ohio.gov

Ohio EPA issued public notice and requested comments for the public hearing comment period of January 31, 2018 to March 6, 2018 on revised rules in the Ohio Administrative Code (OAC). This document summarizes the comments and questions received during the comment period.

Ohio EPA reviewed and considered all comments received during the interested party comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. The name of the commenter follows the comment in parentheses.

General Comments

Comment 1: Ohio EPA received the following comments about the rule package as a whole, the intent of the proposed rules, and their relation to Ohio House Bill 512. It was suggested that Ohio EPA develop and mandate a lead public education program and wait for US EPA to propose and finalize their Long-Term Revisions to the Lead and Copper Rule, rather than adopting a several rule revisions. It was suggested that Ohio EPA create a working group with stakeholders to develop an implementation program for the rules.

"Though the proposed regulations will better protect public health to an extent, the AWWA Ohio Section believes that provisions of the proposed regulations go far beyond that which is required by H.B. 512 and will substantially add cost, without adding significant benefit. Especially because utilities, in general, are in the midst of major infrastructure renewal and replacement programs, utilities should not be required to make sub-optimal investments. As proposed, the regulation could easily cost the citizens of Ohio more than $1 billion, with a public benefit that, in our opinion, does not merit the cost.

We thank Ohio EPA for meeting with us on March 1, 2018, to discuss our largest concerns and hope Ohio EPA will TBR (to be refiled) these regulations. We do agree that the provisions specifically required in H.B. 512, such as the notification of lead results, notification of high results to the health departments, and the mapping requirements are required by the legislation; and those provisions of the proposed lead and copper rule language should go forward without delay.

However, we also believe that some of the provisions in the rule package are beyond what was required in H.B. 512, and we believe that further discussion of the most important areas are needed. Specifically, three areas that must be revisited relate to: (1) the need to continue to have an off-ramp to replacing lead service connections if a utility comes back into compliance with the Lead and Copper Rule, (2) the requirement to install filters when doing work in areas with lead service lines, and (3) public notification requirements. As stated in our meeting, we believe there are alternative ways to improve public health protection without costing the citizens of Ohio billions of dollars through significantly higher water rates. With the belief that we will be able to create the working group to effectively discuss these items, we will not belabor the points below.

During our meeting on March 1, that last major area of discussion related to public notification, especially that which is proposed in OAC 3745-83-02(G) regarding disruption of service in areas known or likely to contain lead service lines. We discussed the potential of an education program which may be implemented in lieu of notification. We share a commitment to most-appropriately protect the public and look forward to resolving with Ohio EPA the notification issue in a way that both protects the public and does not inappropriately elevate concern about the health and safety of the public water system.

We understand that Ohio EPA worked with the legislature to draft H.B. 512 in response to issues in Flint and Sebring in order to help reassure the citizens of Ohio that the water systems

are appropriately protecting public health. We share that goal and ask Ohio EPA to work more closely with us as it drafts legislation for consideration. With both the Lead and Copper Rule and the Harmful Algal Bloom Rule, Ohio EPA has implemented requirements establishing contaminant thresholds well below any publicly (USEPA, CDC, etc.) determined acute toxicity level and led the public to believe that they are in immediate danger if those levels were exceeded. This sends an inappropriate message to the citizens of Ohio and could lead to an unwarranted loss of public confidence in water systems. As an example, we continue to believe that the two-day notification requirement is excessive when taking into account that the sampling requirement is meant to detect worst-case conditions—not what customers are typically drinking." (Todd Danielson, Ohio American Water Works Association, Avon Lake Regional Water)

Ohio EPA Should Coordinate its Rule Making Efforts with U.S. EPA and U.S. EPA's Planned Revisions to the Federal Lead & Copper Rules. On December 14, 2017, U.S. EPA requested input on its planned revisions to the federal Lead and Copper Rules. On January 8, 2018, U.S. EPA met with several intergovernmental associations to provide additional details regarding the planned revisions, and U.S. EPA requested feedback on several aspects of, and potential improvements to, the federal Lead and Copper Rules. Comments to U.S. EPA's planned revisions are due on March 8, 2018.

In light of the fact that U.S. EPA has announced plans to revise the federal Lead & Copper Rules, it would be prudent for Ohio EPA to delay adoption of the Proposed Rules until after Ohio EPA and the Ohio Public Water Systems ("PWS") have more detailed information on U.S. EPA's planned changes to the federal Lead & Copper Rules. PWS need certainty and clarity with regard to the regulatory requirements that will apply to lead and copper. As a result, it is critically important that Ohio EPA avoid adopting rules that could possibly be inconsistent with U.S. EPA's future revisions to the federal Lead & Copper Rules. Inconsistent regulatory requirements will only result in confusion and will undermine public confidence in the regulatory system.

Suspending the adoption of the Proposed Rules on a temporary basis is clearly the most prudent course of action to take at this time. However, if Ohio EPA does determine to move forward at this time, at a minimum, Ohio EPA should limit the number of rules that are actually adopted, opposed to adopting the entire set of Proposed Rules, to minimize the risk of having requirements that will be inconsistent with the future changes to the federal Lead and Copper Rules.

In Lieu of Adopting the Proposed Rules, Ohio EPA should Develop A Public Education Program. Akron submits that the Proposed Rules are not supported by existing scientific research. As a result, the Ohio EPA and PWS should encourage U.S. EPA to fund research on the causes of lead in drinking water and the associated risks to the public. In the meantime, and in lieu of the Proposed Rule, Ohio EPA should work with PWS to develop an overall public education program that would be implemented by each PWS. The purpose of the program would be to educate the public on the know causes of lead in drinking water, the associated risks to public health, and steps that the public can take to minimize those risks. Such a program would

provide a greater benefit to the public than the requirements in the Proposed Rules." (Jefferey Bronowski, Akron Water Supply)

"As stated in Columbus' comment letter at the Draft-stage of the rule, Columbus supports the rule's underlying policy goal of protecting public health from lead exposure that may result from inadequate corrosion control by community water systems.

However, clearly the intent of HB 512, Section 6109.121 is for rules to be adopted which establish schedules for lead and copper sampling, conduct sampling of the system based upon the director's evaluation of risk factors like aging infrastructure and whether corrosion control requirements are being met. [See§ 6109. 121 (A)] Nowhere are requirements prescribed that outline the requirement to replace either partial or full lead service lines, the time frame in which the lines should be replaced or the volume that should be replaced per year.

Additionally, although the agency justifies the imposition of filter devices based on the US EPA White Paper on potential revisions to the federal Lead & Copper Rule (LCR), this is a premature presumption of what the USEPA will require, and it also is an extended overreach of what HB512 legislatively requires. Clearly, legislative intent is confined to ensuring that optimum corrosion control treatment is being accomplished, not lead service line replacement.

Although the agency seems to have accepted some of Columbus' recommendations, other provisions of the proposed rule still impose substantial burdens and costs upon public water systems and will not further the goal of protecting public health from lead exposure. More specifically, the full removal of lead service lines from a water distribution system – absent federal/state funding for this removal - should be driven on a case-by-case basis, based on sound science, current utility mitigation efforts, and a reasonable cost-benefit analysis. Accordingly, Columbus requests that Ohio EPA again reconsider the imposition of some of the requirements in the proposed rule.

Columbus is also ready to work post haste with Ohio EPA on the rule and on the additional requirements through a working committee if one is established by Ohio EPA to ensure that all rule requirements are protective of public health, implementable, cost effective, and protective of state wide economic development." (Richard Westerfield, Columbus Division of Water)

Response 1: The State of Ohio has decided to take a more proactive approach to addressing the threat to public health posed by lead infrastructure throughout the state. Ohio House Bill 512 passed unanimously in both the Ohio House and Ohio Senate and became effective on September 9, 2016. Ohio EPA has the authority to adopt rules that are more stringent than both the federal requirements and those established under ORC Section 6109. The Agency has amended these rules to address shortcomings in the current federal lead and copper rule (LCR) while simultaneously more effectively protecting Ohioans from potential lead exposure.

Given the expectations of HB 512, as well as the additional years required for the lengthy federal rule proposal, finalization, and adoption process, it is not in the best interest of the

people of Ohio to delay revisions addressing this threat. If and when US EPA finalizes their own revisions to the LCR, Ohio EPA will be required to change our rules as necessary to maintain primacy.

Ohio HB 512 requires a two-day consumer notification of results and two-day public notification in the event of an action level exceedance (ALE). The increased timeliness of notification addresses concerns under the previously effective rule that an individual, particularly an infant or child, could be drinking water with high lead levels for months before the individual or caretaker would have known of the problem. The current maximum contaminant level goal (MCLG), zero, is the best estimate below which there is no known or expected risk to health from lead in drinking water.

The Agency has decided to reinstate paragraphs (F) and (B)(2) of the currently effective OAC Rule 3745-81-84 into the revised OAC Rule 3745-81-84. By doing so, water systems triggered into mandatory lead service line (LSL) replacement following an action level exceedance (ALE) will have the ability to cease the LSL replacement program after two subsequent, consecutive, 6-month monitoring periods with 90th percentile results below the action level. The reinstatement of these paragraphs will help relieve the financial burden of a water system following an ALE. All systems should note, however, that while corrosion control will remain the primary method in which systems reduce lead levels at the tap, as seen in Washington DC and more recently in Flint MI, the chemical reactions responsible for the formation of the passivating films are easily reversible if they are not maintained. The Agency therefore encourages PWSs to include a long-term LSL replacement program as a capital improvement in their asset management program required by ORC Section 6109.24.

Ohio EPA decided to delay implementation of the new requirements in OAC Rule 3745-81-84 until October 1, 2018. The Division of Drinking and Ground Waters (DDAGW) would like to take the time prior to implementation to work with stakeholders on creating an implementation program that can be utilized by PWSs throughout Ohio.

Ohio EPA wholeheartedly supports and encourages PWSs that go above and beyond the requirements of the LCR by developing their own public education program. The Agency will happily work with utilities looking to create public education programs such as this; however, at this time the Agency will not require public education, beyond that already in the rules.

OAC 3745-83-02(G) is a draft rule in a separate rule package currently in Interested Party Review (IPR) and will not be specifically commented on in this response to comments.

Comment 2: "OEC reiterates the recommendations of the Lead and Copper Working Group (LCRWG) of the National Drinking Water Advisory Council (NDWAC). We acknowledge that the Ohio EPA is correct in stating that the NDWAC recommendations are for the United States Environmental Protection Agency ("U.S. EPA"), and that if the U.S. EPA modifies its own rules Ohio must follow suit. Nevertheless, the Ohio EPA always maintains the option to adopt more stringent rules than the federal agency. Indeed, Ohio has already gone beyond current U.S. rules on lead and copper. While the suggestions of the Lead and Copper Working Group are not without

criticism, the OEC once again emphasizes that the Ohio EPA should incorporate the recommendations of the Report of the Lead and Copper Working Group to the National Drinking Water Advisory Group as applicable to the Ohio rules. In particular, the OEC emphasizes the following recommendations of that Report:

1. Require lead service line replacement programs that go beyond replacement only in the case of action level exceedance;
2. Develop more in-depth public education materials that educate the public in the event of an action level exceedance;
3. Strengthen corrosion control processes and guidance document review;
4. Modify monitoring requirements and consider voluntary monitoring programs;
5. Create a household action level to assist homes with high lead levels in a public water system that does not exceed the action level for such public water systems;
6. Separate copper and lead from one another within the regulatory framework;
7. Ensure that the rule has appropriate enforcement and compliance mechanisms." (Chris Tavenor, Ohio Environmental Council)

Response 2: As applicable, and with the authority Ohio EPA has as a state agency, DDAGW has indeed incorporated a number of NDWAC's suggestions. The Agency has developed more in-depth public education materials; these materials can be tailored to an individual system so that in the event of an ALE, consumers are able to receive public education materials specific to their water system, allowing them to make informed decisions regarding their water. A corrosion control guidance document was proposed on January 3, 2017, was revised following public comment, and will be released with these final rules. DDAGW enhanced the stringency of both tap and water quality parameter monitoring requirements. Finally, the Agency has a lead and copper working group who has worked for the past year on streamlining the enforcement and compliance mechanisms for these new revisions to the rule. Legislative support on a federal level and input from US EPA is needed for the implementation of the remaining NDWAC suggestions.

Comment 3: "We do not understand Ohio EPA's expanded reliance on lead tap sampling as an "MCL rule" in lieu of placing greater emphasis on the treatment technique. True corrosion control is required by rule and evaluated through water quality parameter monitoring. Ohio EPA referred to the Lead and Copper Rule as a "treatment technique rule" in the responses to public comments (Response 113), but has turned away from expanding the use of treatment technique measurements. We continue requesting Ohio EPA expand its focus on water quality parameters to prevent lead corrosion." (Alex Margevicius, Cleveland Division of Water)

Response 3: MCLGs reflect the aspirational health goals of the Safe Drinking Water Act, set at a level at which there are no known health effects and which allows an adequate margin of safety. The MCLG was set in 1991 at zero for lead; because the MCLG is zero, the LCR was established by US EPA as a treatment technique rule. A treatment technique rule must prevent known or anticipated adverse health effects on the health of persons to the extent feasible and can only be set if it is found that it is not economically or technologically feasible to ascertain the MCLG of the contaminant. The goal of this rule is to provide maximum human health protection by

reducing the lead and copper levels and the consumers' taps to as close to the MCLG as possible.

Only a small percentage of PWSs in Ohio have director-specified Optimal WQPs and a majority of PWSs in Ohio rely solely on lead and copper tap samples for compliance. Revisions addressing corrosion control were effectively addressed by Ohio House Bill 512. The corrosivity of water to lead is influenced by water quality parameters (WQPs), which are measured and considered for compliance with this rule. However, peer reviewed research has shown that simple associations between these parameters and lead levels at the tap do not exist.

For these reasons, Ohio EPA has chosen to primarily focus additional rule revisions on lead and copper tap sample results and subsequent communication of those results to consumers. Revisions were made to areas of the federal LCR that have previously shown to fall short of protecting human health to the maximum extent possible.

Comment 4: "Lead sampling at a particular spigot at a single point in time can yield different results from a sample collected at the same location at a different time. This has been documented in the literature and through our sampling experience and is not exclusive to lead and copper monitoring alone. We are a system that collects a minimum of 50 lead and copper compliance samples. These samples are collected from the worst locations, at the worst time of the year, at the worst time of day. If this sample exceeds the action level then we assume this result, and four other results like it, are representative of the water delivered to 1.4 million people thereby necessitating lead service line removal for all customers. The Ohio EPA's continued resistance to allow repeat/check compliance samples for high lead results is not on par with most other monitoring rules Ohio EPA administers including acute contaminants like total coliform, nitrate, and chlorite (repeat/confirmation/follow-up/extra sampling permitted), and repeat averaged results like disinfection byproducts. The samples cited above are collected by certified sample collectors and oddities still occur which require additional confirmation sampling. If a water system has a problem with their corrosion control treatment, it will still be apparent with a confirmation sample. Forcing a utility to spend $600 million for a 14-year lead service line replacement program based solely on these five results when the utility has no control over how the plumbing in premises are used or maintained, or when a homeowner can incorrectly take the sample, is a misuse of public funds based upon minimal information, and is not required by HB512. With the stakes Ohio EPA is forcing on utilities, the agency must allow repeat samples for compliance, particularly when the utility has demonstrated many years of successful monitoring. Additionally, the agency must allow a utility to stop systematic lead service line replacement if corrosion control is again optimized and the 90th percentile is again below the lead Action Level." (Alex Margevicius, Cleveland Division of Water)

Response 4: Monitoring at consumers taps is a federally mandated requirement of the LCR; Ohio EPA must create rules that are at least as stringent as the federal counterpart. The federal requirement to collect samples from locations that are most likely to have high concentrations of lead and copper in drinking water is necessary given the nature in which the contaminants enter drinking water and their significance as a public health concern. Lead and copper levels in drinking water are not distributed uniformly—they enter drinking water via corrosion of

service lines or household plumbing materials. By monitoring these high-risk locations, PWSs are able to ensure that high levels of lead are detected and that the system's treatment provides uniform and adequate levels of public health protection throughout the distribution system. PWSs are encouraged to take more than the required minimum number of eligible samples during the monitoring period to capture a comprehensive understanding of the effectiveness of their corrosion control treatment.

Water systems are permitted in paragraph (B) of OAC Rule 3745-81-86 to attempt to be the collectors of first-draw samples, as is customary with other (e.g. gas) utility personnel. However, due to the importance of ensuring sampling occurs at targeted, high-risk, locations, PWSs are given the option to have consumers assist in collecting lead and copper samples. Because of the same concerns regarding the accuracy of samples collected by consumers, US EPA included in the original LCR released in 1991 a provision that if a PWS allows residents to perform sampling, the system accepts responsibility for properly instructing them on the sampling protocol. To provide finality in sampling results, PWSs therefore may not challenge, based on alleged errors in sample collection, the accuracy of sampling results—any deviation from this would be contrary to federal requirements.

An action level does not determine the compliance status of a system as does a maximum contaminant level (MCL), but rather serves as a surrogate for a detailed optimization demonstration. Failure to meet the level indicates whether further action must be taken by the system to demonstrate that it has optimized corrosion control. Basing the action level on the 90th percentile allows systems to have several sample values above the action level and still not trigger system-wide action (systems serving over 100,000 people can have up to 10 samples, 5 if on reduced monitoring, above the action level without triggering action). PWSs even have the option to collect more than the minimum number of required samples if the samples are collected at qualifying sites.

Two-day notification requirements were supported by Ohio EPA and adopted by HB 512 so that if lead is detected at a site, a consumer can take necessary steps to mitigate the issue. If lead is detected at a sampling site, the Agency encourages PWSs to take follow up samples and work with the resident and property owner to determine the source with the goal of eliminating it.

In addition, the Agency has decided to reinstate paragraphs (F) and (B)(2) of the currently effective OAC Rule 3745-81-84 into the revised OAC Rule 3745-81-84. By doing so, water systems triggered into mandatory lead service line (LSL) replacement following an action level exceedance will have the ability to cease the LSL replacement program after two subsequent, consecutive, 6-month monitoring periods with 90th percentile results below the action level. The reinstatement of these paragraphs will help relieve the potential financial burden of a water system following an ALE.

Comment 5: "As one of the systems polled for "cost estimates", Cleveland Water was not fully informed of Ohio EPA's intentions. At that time, it was not specifically known Ohio EPA was going to require public notification and education for water line breaks and main replacement projects. The scope (and therefore the cost) of these efforts is drastically different given the breadth of Ohio

EPA's intentions as we now understand them. Additionally, it was not known at the time Ohio EPA was going to mandate lead service line replacements with no option to test out. This is not captured by the existing rule, could not have been anticipated when providing costs to Ohio EPA, and is grossly underestimated given the now-understood ramifications. Follow-up sampling after lead service line removal, requirements to analyze samples upon request, and staff time involved with outreach and developing education materials with other health agencies is also not accurately reflected. Finally, providing lead filters is not as simple or inexpensive as Ohio EPA suggests.

Cleveland Water finds the response to Question 115 disturbing: "DDAGW determined in this case the business community directly impacted by this rule are water systems and certified laboratories. Ohio EPA is unable to assess the indirect impacts of these regulations as all public water systems follow different business practices that affect consumer rates." For Cleveland Water customers, the impacts of complete city-side lead service connection replacement will cost $600-800 million, to be paid by 450,000 Cleveland Water account holders, or approximately $1800 per account. This includes residents and businesses. We estimate an immediate 10% rate hike would be required to get the program off the ground. Out of necessity, many capital improvement projects would be tabled or abandoned, including aging water main replacements and needed plant improvements. Additionally, each customer with a lead service line on the customer side will likely need to spend $3000 or more of their money to remove their lead connection, thereby resulting in a reduced amount of disposable income to spend on local business. Many of these lead connections are in historically poor, inner city and inner ring suburbs and will disproportionately impact these residents' disposable income. As a result, the true economic cost of lead line replacement will disproportionately affect inner-city residents who are dependent upon local businesses for their livelihood and entertainment. The impact will have a direct impact on business, particularly small businesses.

Cleveland Water's cost estimates need to be significantly increased since we now know the context and scope of what Ohio EPA intended for these figures. We note Cincinnati (one of the five PWSs polled) requested some of their numbers be multiplied by a factor of 10. An order of magnitude change indicates an inaccurate cost estimate, which brings significant uncertainty to the entire Business Impact Analysis. We believe Ohio EPA's BIA does not accurately reflect the costs of implementing this rule revision to Ohio residents and Ohio businesses." (Alex Margevicius, Cleveland Division of Water)

Response 5: The rule package released for Interested Part Review (IPR) included all provisions mentioned. Updated quantitative cost estimates were made to the Business Impact Analysis (BIA) following quantitative estimates received by PWSs in response to rules released for IPR. Updated cost estimates were then evaluated by Ohio's Common Sense Initiative (CSI) and it was found that Ohio EPA's cost justifications met the requirements and standards of the Initiative.

Cost estimates that increased by a factor of 10 following IPR were with regards to the actual number of samples taken by the system. Estimates were originally made based upon the historical number of compliance samples (100) rather than on the total number of samples

(2,500+) taken by the system following the implementation of a more robust sampling program which, in this case, is beyond current or proposed rule requirements. Because Ohio EPA supports the implementation of this kind of sampling program, costs estimates related to individual samples (consumer notifications, etc.) were increased by a factor of 10 so that estimates could conservatively estimate the cost of implementing such a program, rather than only accounting for the minimum number of samples required by rule.

With respect to Response No. 115 in the response to comments released following IPR, Ohio EPA would like to clarify the purpose of the business impact analysis. CSI Ohio was launched to reform Ohio's regulatory policies and eliminate excessive and duplicative rules and regulations. CSI helps to ensure Ohio's regulatory process is built on the foundations of transparency, consistency, predictability, and flexibility in regulatory activates so that a regulated business is able to more easily comply with regulation. The purpose of the BIA is to ensure new regulations meet the initiatives of CSI Ohio for the regulated community. Ohio EPA, DDAGW specifically, is unique, however, in that our regulated community is not necessarily a business—oftentimes it is a public utility. In the Adverse Impact to Business, Ohio EPA must evaluate the direct impact of our regulation on our regulated community. The directly impacted regulatory community for these rules are non-transient non-community PWSs, community PWSs and certified laboratories; therefore, the Agency gave the answer it did in the response to comments following IPR.

Ohio EPA understands the impact of regulation is often passed from public utilities to rate payers. The Agency also agrees that there is a disproportionate impact to those in historically poor, inner city residents—both because these areas are more likely to have LSLs and because rate increases would have a disproportionate effect on those residents' disposable income. Ohio EPA and PWSs need to work together to ensure residents in these areas are able to mitigate lead exposure without financial burden. The agency has addressed this issue in several ways throughout the rules. For residents, in instances they are unable to afford a full LSL replacement and the PWS performs a partial replacement, PWSs are required to provide NSF 53 certified filters to the resident; as recommended by the newly released ANSI/AWWA Standard C810. To ensure this portion of the rule is efficiently implemented, the Agency has decided to delay implementation until October 1, 2018 so we can work with stakeholders on creating an implementation program that can be utilized by PWSs throughout Ohio. To ensure PWSs don't suffer a financial burden, communities can seek grant and loan assistance from the Ohio Public Works Commission, through their district Public Works Integrating Committees to replace LSLs. Assistance is also available through the Water Supply Revolving Loan Account (WSRLA). Ohio EPA can fund LSL replacement at 0% for 20 years. Systems interested in applying for a WSRLA loan, may contact their district office loan coordinator.

The Agency has decided to reinstate paragraphs (F) and (B)(2) of the currently effective OAC Rule 3745-81-84 into the revised OAC Rule 3745-81-84. By doing so, water systems triggered into mandatory lead service line (LSL) replacement following an ALE will have the ability to cease the LSL replacement program after two subsequent, consecutive, 6-month monitoring periods with 90th percentile results below the action level. The reinstatement of these paragraphs will help relieve the potential financial burden of a water system following an action level exceedance. The Agency encourages PWSs to include a long-term lead service line

replacement program as a capital improvement in their asset management program so that the disproportionate potential for lead exposure in historically poor, inner city areas can be eliminated sooner rather than later.

The Agency has also decided to delay implementation of the new requirements in OAC Rule 3745-81-84 until October 1, 2018. The Division of Drinking and Ground Waters (DDAGW) would like to take the time prior to implementation to work with stakeholders on creating an implementation program that can be utilized by PWSs throughout Ohio.

3745-81-01 Primary drinking water standards definitions.

Comment 6: "OEPA should create a household action level to assist those homes with high lead levels in public water systems that do not exceed the public water system action level.

In our previous comments, the OEC called for the OEPA to create a household action level that would assist specific homes with high lead levels even if the public water system did not exceed the public water system action level. In response, the OEPA claims that it "is not in a position to establish a household action level. If U.S. EPA adopts a household action level, [OEPA] is required to adopt it as well."

The OEC would like OEPA to clarify why exactly it cannot establish a household action level. The federalist system of environmental laws in this country always allows the states to promulgate more stringent rules, and thus OEPA should have the authority to institute a household action level. If the OEPA does not feel a household action level is necessary to protect the public health, it should clarify why that is the case. If the OEPA believes it is illegal for them to institute a household action level, they should say so. Stating that "Ohio EPA is not in a position to establish a household action level" is not a sufficient explanation for why such protective action is not possible. In our effort to protect the health of Ohioans from lead in their drinking water, the OEC believes every household should be protected with a Household Action Level even if a public water system does not exceed the action level requirement.

The NDWAC recommends that "Household Action Levels" are necessary to mitigate situations where a home or set of homes may have dangerous levels of lead but the 90 th percentile action level was not exceeded by the set of samples. In particular, NDWAC believes that the US EPA would have the authority to invoke the Safe Drinking Water Act in the event that the 90 th percentile action level is not exceeded but specific homes have high lead levels. In this event, the "EPA could determine that the levels pose 'an imminent and substantial endangerment to the health of persons [in the households].'" These "Household Action Levels" would trigger a response by local health departments instead of by the state agency. The "Household Action Level" proposed would be whatever the EPA determines would cause "an infant to have a blood lead level greater than five micrograms per deciliter…based on consumption by an average, healthy infant of infant formula made with water." PWSs would notify households and local health departments in the event that a sample from the house "exceed[ed] the household action level."

HB 512 implements a set of provisions that largely accomplishes the aforementioned recommendation of NDWAC. Specifically, when a sample from a specific tap tests "above the applicable lead threshold as established under rules adopted under this chapter," ORC 6109.121(C)(2), a PWS must do the following: 1. Immediately remove all lead fixtures that are contributing to the lead levels in nontransient noncommunity water systems; 2. Include in the consumer confidence report explanations of health risks, actions consumers can do to reduce health risks, and what the system is doing to fix the problem, 3. Provide information to the consumer of where they can get health screening and blood lead level testing.

These provisions in HB512 mostly accomplish what NDWAC suggests except that the PWS engages in the communication with the consumer in place of the local health department. In rulemaking, the director should build upon these provisions and create a specific action level for household response, assisting the process outlined in ORC 6109.121(C)(2). Because the OEPA can promulgate rules more stringent than those established at the federal level, the agency can go beyond the rules of the U.S. EPA and not wait for that federal agency to act. Ohio should lead the way in protecting the public health of its residents, rather than wait for others to act in its stead." (Chris Tavenor, Ohio Environmental Council)

Response 6: Ohio EPA has chosen not to establish a household action level (HAL) because the Agency does not have the resources required to determine a science-based number that would cause "an infant to have a blood lead level greater than five micrograms per deciliter…based on consumption by an average, healthy infant of infant formula made with water." Moreover, US EPA is requiring assistance in the form of an external peer review of their models of lead toxicity from drinking water to derive a HAL.

Ohio EPA has spearheaded numerous requirements in this rule package that are protective of public health, including several beyond what is required by HB 512. However, Ohio EPA has chosen to wait for US EPA to determine a HAL for lead rather than establish an arbitrary value. HB 512 required Ohio EPA to establish a lead threshold level which is used for requiring NTNC water systems to replace fixtures. In the meantime, Ohio EPA is requiring consumer notification for all lead result, which includes the health effects of lead.

Comment 7: "Akron would also like to take this opportunity to address one of Ohio EPA's responses to the comments. As part of its original comments to the Proposed Rules, Akron sought to clarify when a service line would be considered a lead service line. In its Response to Comment 12, Ohio EPA appears to be separating a pigtail, gooseneck or fitting from the rest of the service line. However, such an interpretation is inconsistent with the definitions in both O.A.C. 3745-81-01 and 40 C.F.R. §141.2.

Moreover, in its Response to Comment 12, Ohio EPA also infers that any amount of lead in a component part would mean that the entire service line is a lead service line. This interpretation is inconsistent with both Ohio and federal law. Specifically, in determining whether a service line is "lead free" an entity uses the weighted average of the wetted surfaces of the component parts to determine the amount of lead in the wetted surfaces in the entire

product. See Ohio Revised Code §6109.01 and 42 U.S.C. §300g-6." (Jefferey Bronowski, Akron Water Supply)

Response 7: The lead-free definition under the Safe Drinking Water Act is for new pipes, pipe fittings, plumbing fittings, and fixtures that are being introduced into PWSs' distribution or plumbing within a home. The parts are required to have a weighted average lead level of the wetted surfaces less than 0.25% lead. Previously, "lead-free" parts were required to have a weighted average lead level of the wetted surfaces less than 8% lead; pipes, pipe fittings, plumbing fittings and fixtures that are already installed that met the previous definition of lead free but not the new definition of lead free are still considered lead free. For example, a service line that met the 8% lead free definition when installed (but may not meet the 0.25% lead free definition) is not considered a lead service line. This is different than a service line that has been partially replaced where there is still a portion of the line or a gooseneck *made of lead*.

The purpose of defining lead service line in this rule is to establish which sites are considered Tier 1 sites in OAC Rule 3745-81-86 and lines to which OAC Rule 3745-81-84 applies. As noted in US EPA guidance PWSs are to prioritize their Tier 1 sampling at sites with LSLs then sites with lead pigtails or goosenecks. Similarly, PWSs on a mandated service line schedule should attempt to prioritize LSL replacements in this manner.

Comment 8: "Given the different implications relative to how a term is defined and the associated consequences when a particular requirement becomes operative, Columbus strongly suggests the following terms be defined: 'emergency repair'; 'partial lead service line'; 'full lead service line'; 'replacement in conjunction with emergency repairs'. Does a full service line end at the curb when the homeowner's line contains no lead? Does it extend into the fixtures of the home? Clarification is necessary for these terms of art in order to ensure consistency in the application of the rules." (Richard Westerfield, Columbus Division of Water)

Response 8: The terms listed are identical to terms used in the federal counterpart of OAC Rule 3745-81-84; while Ohio EPA has expanded this chapter to apply to all water systems rather than those that have had an ALE, the interpretation of these terms has not changed.

3745-81-80 General requirements.

Comment 9: "Section (F) proposes that any system that replaces lead service lines, replaces water mains in areas that contain or are likely to contain lead service lines shall complete the lead service line requirements contained in rule 3745-81-84. This is another requirement that goes beyond the legislative intent and requirements of HB51, which again, appear intended to ensure optimum corrosion control and not absolute lead replacement. In fact, the amendment to this rule would penalize utilities who currently engage in proactive water main replacement program and service line removals, since substantial compliance costs would be added to actual removal costs. Current direct and indirect costs are estimated by Columbus to be $1,500,000 annually just for the provision of notifications and filter devices. This is equivalent to 0.8% increase in the current Columbus Division of Water budget. Columbus believes that education

programs accompanied by good flushing programs in the system and at the tap are more protective of public health." (Richard Westerfield, Columbus Division of Water)

Response 9: Please refer to Response No. 16 and Response No. 17.

3745-81-81 Applicability of corrosion control treatment steps to small, medium-size and large water systems.

Comment 10: "For large systems that are deemed by Ohio EPA not to have optimized corrosion control, OAC 3745-81-81(D)(2) requires systems to complete corrosion control studies and submit plans for approval within 18 months after the studies are required by Ohio EPA. OAC 3745-81-81(D)(4) requires implementation of the corrosion control plan approved by Ohio EPA within 6 months of approval. These timelines are unrealistic. The budgeting process may take up to one year. It may take six to nine months to execute consulting contracts and an additional year for a consultant to complete the study. An additional one to two years would be needed to implement construction contracts and complete plant improvements. Columbus requests that Ohio EPA provide flexibility in the schedule set out in the draft rule. Although the agency does state that the six month implementation schedule can be substituted with an alternative schedule approved by the Director, Columbus would prefer flexibility in acknowledging that six months is just an impractical implementation schedule for any municipal utility." (Richard Westerfield, Columbus Division of Water)

Response 10: Planning for the installation of treatment can begin when the water system is notified that they need to conduct a corrosion control treatment study. In addition, there is a provision in paragraph (D)(4) that allows the water system to provide an alternative schedule to the director if a six-month timeframe is too short. Ohio EPA is willing to grant extensions with due cause.

Comment 11: "Cleveland Water has requested more than once that Ohio. EPA provide the most recent version of the guidance document identifying what the agency considers changes requiring new or revised corrosion control studies. Since this guidance is integral to the rule, we request the agency either put these conditions in the rule or allow the public to see the final version of the guidance document as part of the rule commenting process." (Alex Margevicius, Cleveland Division of Water)

Response 11: Stakeholders will be notified when the guidance is finalized. The draft guidance is available for review on Ohio EPA's website, however it will not be finalized until after the rules are finalized to ensure consistency. Stakeholders may also find US EPA's in-depth guidance document, "Optimal Corrosion Control Recommendations for Primacy Agencies and Public Water Systems" useful for identifying these instances.

3745-81-84 Lead service line requirements.

Comment 12: "OEPA should require public water systems to mandate full lead service line replacement, not just offer full line service replacement, and only allow partial replacement when a full line replacement is impossible.

In our first set of comments, the OEC encouraged the OEPA to develop a robust set of rules that encourages full lead service line replacement and to ban partial lead service line replacement. The OEPA responded to these comments by arguing that a partial replacement is required under federal law when a full service line replacement is not an option, and that if Ohio banned partial service line replacement, it would have less stringent rules than federal law.

The OEPA misunderstands the OEC's argument. The OEC is not advocating for a full ban of lead service line replacement in all cases. If there is a circumstance where it is actually not possible to perform a full service line replacement and only a partial line replacement is possible, then of course, a partial line replacement is the next best option. But that option should only occur in situations where a public water system is coordinating the replacement of a private water line and the private water line cannot be replaced. Public water systems should make best efforts to find ways to finance the replacements of private water lines to ensure partial replacements do not occur. And in the cases where a partial replacement must occur, a procedure must exist for public water systems to replace those partial lines further down the road after the system has replaced its other lead service lines.

The OEC understands OEPA's concern that a ban on partial line replacement would result in conflict with U.S. EPA's rules. However, if OEPA includes a specific requirement that a partial line replacement is only allowed in instances where a private water system cannot afford to replace its own line and the public water system cannot financially assist, then OEPA's rules should not contradict the U.S. EPA's rules. Instead, OEPA would simply be requiring public water systems to implement full line replacements in all cases whenever feasible. Similarly, public water systems may not perform partial line replacements on their own lines. Finally, public water systems should make best efforts to financially assist private water systems with full lead line replacement, rather than just offer to replace. The OEPA should consider developing a financial assistance program that ensures partial line replacements do not occur wherever possible." (Chris Tavenor, Ohio Environmental Council)

Response 12: The Agency does not have the statutory authority to require PWSs to replace full lead service lines at this time. Concerns regarding lack of PWS legal authority, difficulty in obtaining permission to replaces LSLs on private property, and potential conflicts or lawsuits involving utilities, homeowners, and independent contractors are several reasons of note.

Ohio EPA did, however, add a requirement that all PWSs have to offer to replace owners portion during any LSL replacement, not just when the system has had an ALE. This increased awareness of the public should encourage full LSL replacements. In the event that a

homeowner refuses, PWSs will provide filters certified to remove lead and take a service line sample within 72 hours of the replacement. This ensures the exposure is mitigated without the financial burden to the PWS or its ratepayers. In addition, PWSs are required to keep a record of LSL replacements, so when funding becomes available or US EPA/Ohio EPA receives statutory authority to require full LSL replacements, PWSs will have a comprehensive LSL inventory to make the replacements.

PWSs who want to complete their own LSL replacement program can also seek grant and loan assistance from the Ohio Public Works Commission, through their district Public Works Integrating Committees to replace LSLs. Assistance is also available through the WSRLA. Ohio EPA can fund LSL replacement at 0% for 20 years. Systems interested in applying for a WSRLA loan, may contact their district office loan coordinator.

Comment 13: Ohio EPA received a question regarding to whom this rule applies. "'All water systems that replace lead service lines, replace water mains in areas that contain or are likely to contain lead service lines, or exceed the lead action level after the implementation of corrosion control or source water treatment shall comply with all applicable requirements in this rule.' When I read that, it sounds like if I'm replacing water lines or lead service lines, I have to follow this rule, but later on down on the same rule, (A)(2), where it says that, "The initial number of lead service lines is the number of lead lines in place at the time the replacement program" -- "the first year of lead service line replacement shall begin on the...day following the end of the monitoring period in which the action level was exceeded under paragraph (A)." To me, it sounds like that "or," should be an and. I can understand if I'm exceeding the action levels, then these are the things I need to do, but if I'm just out there doing a project to replace a line that has lead services, I'm replacing the entire line. I'm not sure that I need to do anything more than that to protect the people of my community." (Kenneth Mann, City of Rittman)

Response 13: Section (A) of this rule only applies to PWSs who have had an ALE. A PWS who has not had an ALE and is replacing a LSL is required to comply with the requirements in section (C) of this rule.

Comment 14: Ohio EPA received the following comment regarding section (A)(2) of this rule: "The proposed regulation discusses replacing annually at least seven percent of the initial lead service lines in its distribution system if there is an exceedance of the lead action level. My only concern is with the first year of replacement. The rule states that the replacement program shall begin on the first day following the end of the monitoring period. I suggest the replacement program begin January 1, the following year. That money must be budgeted and will only be available the following year. I don't think you can classify this as an emergency if the replacement timeline is 14 years. The proposed timetable is unworkable for us, and I imagine many others. Our current monitoring cycle ends in September, so the delay ins going to create an issue. Even with the delay, we would begin planning the replacement program during those 3 months." (Mike Lippert, Wyoming Water Works; Kenneth Mann, City of Rittman)

Response 14: This language is existing in the federal LCR; rules proposed by Ohio EPA must be as stringent as federal requirements. It should also be noted that this replacement schedule would only be triggered in the event of an ALE.

Comment 15: Ohio EPA received the following comments regarding section (C) of this rule, which establishes requirements for PWSs performing LSL replacements.

"The water system shall provide notice of work to be performed in the impacted area at least 45 days prior to commencing the main or service line replacement. I am concerned the 45-day notice is too long for bid projects and may delay the start of a project. I don't believe the city should send out notices until a contract is accepted and a contractor on-board for main replacement work. Otherwise, we may reject the bid and the notice would be for naught. I suggest changing it to a 30-day notice. This way, the city has time to notify residents in a timely fashion and not delay the starting date for contractors in a bid award situation. Moreover, I suggest all 45-day notices be changed to 30-day notices throughout Section 3745-81-84.

'In cases where the system does not own the entire service line, the system shall notify the owner of the line…and offer to replace the owner's portion of the line.' As a public entity, Wyoming Water Works does not perform private work, typically. Second, even if we are paid by the homeowner, I am extremely concerned with the details of such an arrangement. What if the homeowner is unhappy with the lawn restoration? Or if a tree is damaged? What if there is damage inside the home? Ultimately, since the city hired the contractor, I think we would be responsible if the contractor failed to satisfy the owner.

[(C)(1)] states 'the water system shall inform residents serviced by the line that the system will, at the system's expense, collect a sample from each partially replaced lead service line that is representative of the water in the service line for analysis of lead content…within 72 hours after the completion of the partial replacement of the service line.' I know the language is in the existing code, but I still believe it is unrealistic. 72 hours is too short. The problem with this requirement is that, in our case, the city is dependent on the resident to run the test within 72 hours. We do not have control. We can drop off the bottles and let people know the deadline but they may not comply. We will not be able to contact some residents. Some will forget. Some will be on vacation or going on vacation and too busy to collect the sample. Will we be penalized if people don't comply? There are internal logistic issues as well. We are going to have to closely monitor the schedule of service line replacement and then drop off bottles, probably daily, to affected homes until service line replacements are complete. Then, keep track of when bottles were dropped off and when samples need to be run for each home individually. Our limited staff will be challenged. I suggest changing the language to accommodate the issues I have raised. We can drop off bottles with sampling directions within 48 hours, no problem. We can't control when residents take their samples." (Mike Lippert, Wyoming Water Works; Kenneth Mann, City of Rittman)

""The director may allow the owner or operator of a water system to provide notice under the previous sentence less than 45 days prior to commencing lead service line replacement where such replacement is in conjunction with emergency repairs." As of right now I'm going to

consider "emergency repairs" if their lead service line is leaking, I'm going to replace it. I'm not going to wait 45 days and let water run around my town. I'm going to consider that an emergency. If I need to contact my local EPA person, I'll do that. It just seems to me that we want to get these lead services out of there. Why do I need to call up the EPA and say I'm going to take out a lead service line to protect my residents? I do that already. If we find them, we pull them out. That's what we should do, I think." (Kenneth Mann, City of Rittman)

"We proposed this be deleted since it is beyond HB512 or placed back under 3745-81-84 (A). Proposed OAC 3745-81-84(C) dictates a water system shall maintain record or a full or partial lead service line replacement with an acknowledgement from the owner of the line of the work performed by the water system for a minimum of twelve years. Columbus suggests that this requirement either be struck or modified to with the language that the PWS pursued an attempt at receiving an acknowledgement from the owner, and if an acknowledgement was received it was maintained accordingly. The City submits that it should maintain no liability for the failure of an owner to sign an acknowledgement, for which he may have no legal obligation to provide. Also, what is the reason for a 12 year records retention?" (Richard Westerfield, Columbus Division of Water)

Response 15: When performing LSL replacements, all PWSs are now required to offer to replace the privately-owned portion of the line. This requirement excludes those instances where doing so is precluded by State, local or common law. There is no requirement for the system to bear the cost of replacing the privately-owned portion of the line. Thus, if the property owner does not want to pay for removal of the privately-owned portion of the line, the system is only required to replace the portion it owns. The requirement for systems to offer assistance with replacement of privately-controlled service lines is an efficient and effective means of maximizing the public health benefits achieved by the rule. In addition, by maintaining consistency with the federal rule, Ohio EPA aims to streamline the implementation process and reduce confusion for PWSs.

By requiring a 45-day notice, Ohio EPA is remaining consistent with the federal counterpart of this rule. A 45-day notification requirement is also consistent with the newly released standard ANSI/AWWA C810 (See Response No. 16). Ohio EPA is willing to grant shortened notification timeframes with due cause, i.e. in the event of an emergency repair. PWSs do not need to report every LSL replacement to Ohio EPA, but rather keep records of the replacements that have been made in accordance with OAC Rule 3745-81-90.

Similarly, the requirement to take a service line sample following a partial LSL is consistent with the federal requirement for partial LSLs following an ALE. All efforts should be made to collect the sample. If the homeowner refuses and a sample cannot be taken, DDAGW recommends that this be documented and retained by the PWS, per paragraph (C) of the proposed rule. A sample from each partially-replaced lead service line representative of the water in the service line should be collected in accordance with OAC Rule 3745-81-86. This sample requires a different sampling method than compliance sampling.

By requiring the record of refusal, Ohio EPA is again staying consistent with the requirements outlined in the federal LCR for PWSs with an ALE. This record is to serve as a verification that the home owner was notified of the PWSs work to be conducted and the decision the customer made as to whether to go forward with the replacement of their portion of the LSL or not. The Agency is not prescribing what the record should look like or the method for maintaining it. At minimum, the paperwork should document the attempt to obtain the owner's acknowledgement of the LSL and option for replacement. In accordance with OAC Rule 3745-81-90 and CFR Rule 141.91, any system subject to the requirements of the LCR shall retain on its premises original records of all sampling data and analyses, reports, surveys, letters, evaluations, schedules, State determinations, and any other information required by the rules. Each water system shall retain the records required for no fewer than 12 years.

Comment 16: Ohio EPA received the following comments regarding sections (B) and (D) of this rule. Section (B) establishes requirements for PWSs conducting a main replacement in an area with LSLs, including a notice requirement and a requirement to comply with section (D) of the rule. Section (D) requires PWSs to offer lead filters to residents in areas with LSLs during main replacements as well as after a partial LSL replacement. It was suggested that Ohio EPA incorporate the new of ANSI/AWWA C810: Replacement and Flushing of Lead Service Lines into the rules and require PWSs to use the standard rather than include these two sections in the rule. It was also suggested that these requirements be delayed considering cost and implementation concerns.

"In 2017, the American Water Works Association published a best-practices standard for replacing lead service lines. This standard is not referenced in the proposed rules. We recommend Ohio EPA incorporate provisions of this standard in the new rules since it represents an industry standard recognized by all. This standard provides effective methods for flushing particulate lead from service lines and follow-up testing when lead service lines are replaced, and may be adequate to eliminate the need for lead filters in some situations (e.g., if there is no lead service line left on the customer side). The standard should be referenced in the rules and followed by all…

Cleveland Water continues to recommend that this proposed rule be changed to require water systems to flush the service line in accordance with AWWA Standard C810-17 upon completion of service line replacement. Impacted customers should be educated about the increased risk of elevated lead levels and flush their service line out daily for 90 days. Current research shows after 90 days, lead levels have typically returned to very low levels.

Customers with lead service lines remaining on the customer-side should be provided with filters for a period of 90 days. The rule should specify filters are required only if customer-side lead service lines remain. Notice requirements should be limited to that connection and similar connections in the construction area only." (Alex Margevicius, Cleveland Division of Water)

"The proposed rule OAC 3745-81-84(C)(4) requires systems to provide filtration devices to consumers in the impacted area for a period of three months. Since the time these regulations were first proposed, AWWA has developed a new standard of practice (AWWA Standard C810-

17). This standard became effective in November 2017 and was not available during the comment period, so the standard was not included in the comments and may not have been considered by the OAWWA during the rule development. This standard contains measures to be taken by water utilities performing lead service line replacements to ensure the safety of the water after such replacements. The publication of this standard is a significant development that we would like to use as the basis of a dialogue with the Ohio EPA and could impact the scope of the requirement to provide filters as well as could impact the communication requirements.

In addition to that development, we do note that we also believe the business impact analysis underestimated the cost of providing filters. If Ohio EPA expects utilities to offer and upon request, provide a drinking water treatment unit proven to remove an excess of lead (e.g., a 1- gallon pitcher with filter) to customers in the impacted area at an approximate cost of $70 per device, there is also significant expense to establish the program, distribute them in some manner, and there must be some consideration to help assure that the filters are not used past their expiration and cause additional problems. We believe that the BIA significantly downplays the cost of such a program." (Todd Danielson, Ohio American Water Works Association, Avon Lake Regional Water)

"We propose this [Section (B)] be deleted.

Proposed Rule OAC 3745-81-84(D) requires systems to provide filtration devices to consumers in the impacted area for a period of three months. It is understood that the agency expects PWSs to offer and upon request, provide a drinking water treatment unit proven to remove an excess of lead (e.g., a 1-gallon pitcher with filter) to customers in the impacted area at an approximate cost of $70 per device. However, such a cost still underestimates the indirect costs of developing and administering a program to have sufficient devices in stock if an incident occurs.

Moreover, although the agency cites to USEPA's LCR Revisions White Paper, 2016 for prospective forthcoming federal rule changes to the LCR to justify imposing this requirement, this requirement nevertheless is neither federally-mandated nor required by HB 512. As repeatedly noted, this is another requirement that goes beyond the legislative intent and requirements of HB 512, which again, appear intended to ensure optimal corrosion control and not absolute lead line replacement. Furthermore, Columbus estimates current direct and indirect costs to be in the neighborhood of $1,500,000 annually just for the provision of filter devices, notifications and administration. This is equivalent to a 0.8% increase in the Division of Water budget.

At the same time, at this very moment a federal docket to receive public comment on federal LCR revisions has been opened pursuant to both the Unfunded Mandates Reform Act and Executive Order 13132 entitled "Federalism" which directs federal agencies to consult with elected state and local government officials, or their representative national organizations, when developing regulations and policies that impose substantial compliance costs on state and local governments. While USEPA formalizes what water utilities will be required to

provide, Ohio EPA should not presume that providing water treatment units will be among the finalized requirements and should not leap-frog the process of what the USEPA will actually require. Imposing to sets of requirements, potentially at the same time, could drive up compliance costs prohibitively high. Should an event arise prior to USEPA finalizing its revisions to the LCR, consumers still will be given adequate instruction on flushing and other measures that can be employed to reduce the risk of lead exposure. Therefore, Columbus still maintains that the filtration device mandate should be eliminated, or at least put on hold until such time that USEPA finalizes its revisions to the LCR or Ohio EPA at least examines how much further it wants to go beyond HB512." (Richard Westerfield, Columbus Division of Water)

"A few of the requirements that are not required under HB512 present either challenging implementation issues or may be extremely expensive to implement requiring significant rate increases to the rate payers of the state. GCWW request the notifications required under 3745-81-84(B)(1) and the provision of drinking water treatment units to all consumers in the area impacted by a water main replacement in 3745-81-84(D) be delayed to allow discussion between water utilities and the Ohio EPA on better ways to pursue public health protection that are both achievable and do not have a drastic impact on the water rate payers of the state. We believe that there are more implementable ways to achieve these goals to provide even better health protection which can be fully developed through a constructive dialogue between utilities and the Ohio EPA." (Jeff Swertfeger, Greater Cincinnati Water Works)

Response 16: Given the expectations of HB 512, as well as the additional years required for the lengthy federal rule proposal, finalization, and adoption process, it is not in the best interest of the people of Ohio to delay revisions addressing this threat.

While the standard is not incorporated by reference, Ohio EPA supports and encourages the use of ANSI/AWWA C810: Replacement and Flushing of Lead Service Lines. The standard compliments the new requirements in OAC Rule 3745-81-84.

In Section 4.3 of the standard, Communications and Instructions to Customers, AWWA encourages: "1. advanced notice of planned lead service line replacement projects (45 days prior is recommended); 2. informational point-of-contact for the project; 3. additional notice prior to actual planned work affecting service line (day prior); 4. on-site utility point-of-contact during construction; 5. postconstruction instructions regarding customer flushing, use of a point of- use (POU) filter or bottled water, water sampling, and testing to be completed; 6. clear guidance regarding the increased risk of lead entering the water associated with a partial lead service line replacement condition (if a full-service line replacement was not completed). Customers with partial replacements should avoid consuming their water unless they are using a filter certified for lead removal or they should consume bottled water until sample results show that their lead levels are less than the regulatory guideline."

In the forward, AWWA notes that "water utilities should be planning to communicate lead exposure risks in a proactive and targeted manner not only when lead service lines are repaired or replaced but also when routine maintenance work on water mains may disturb lead service lines".

Proposed OAC Rule 3745-81-84 includes the PWS to consumer communication recommendations mentioned in Section 4.3 of the standard. In addition, the rule addresses the need to communicate risks not only in cases of LSL replacements, but also in instances where maintenance work on water mains may disturb LSLs. For instances of main replacements in areas with LSLs and following partial LSL replacements, PWSs are required to provide POU filters to impacted consumers. By doing so, Ohio EPA is ensuring consumers are protected from particulate lead that could be released due to the physical disturbance of the line or following a partial replacement.

While flushing lines is an important step in mitigating the risk of lead, it does not prevent exposure. Given the expectations of HB 512, as well as the additional years required for the lengthy federal rule proposal, finalization, and adoption process, it is not in the best interest of the people of Ohio to delay revisions addressing this threat any longer. NSF 53 certified filters are the final barrier after the source of contamination, lead pipes, fixtures, plumbing and solder. Lead filters provide consumers with the certainty that the health risk has been eliminated, rather than reduced. In addition, the success of the use of lead filters has been demonstrated in the wake of the Flint, MI water crisis.

In the BIA released for IPR, Ohio EPA provided a conservative estimate of $35 per individual filter. However, during IPR, it was suggested by Greater Cincinnati Water Works (GCWW) that the BIA should also describe and quantile the cost of obtaining filters, distributing filters, and all associated tracking and record keeping costs associated with this program. Ohio EPA agrees that there are costs associated with this program; therefore, to accurately capture the cost, the suggestion of an additional $30 per filter, $65 total per filter, was used for the final BIA. This estimate includes both the cost of the filter and the distribution and administration program. GCWW is the only PWS in Ohio to have piloted a program in which they provide lead filters to consumers with partial lead lines; therefore, Ohio EPA has based cost estimates on this specific program.

Ohio EPA has also removed the requirement to provide filters for full LSL replacements. To further ensure effective implementation of the program, the Agency has decided to delay implementation, except in instances of an ALE, of the requirements in OAC Rule 3745-81-84 (B) through (D) until October 1, 2018. The DDAGW would like to take the time prior to implementation to work with stakeholders on creating an implementation program that can be utilized by PWSs throughout Ohio.

Comment 17: Ohio EPA received the following comment regarding the removal of section (F) of currently effective OAC Rule 3745-81-84, which allowed PWSs required to perform a 7% per year LSL replacement program following an ALE to cease the program after two consecutive monitoring periods below the action level.

"Like the Federal Rule, the proposed version of OAC 3745-81-84 requires a community water system to annually replace seven percent of all the lead service lines in its distribution system when the system exceeds the applicable lead action level. However, unlike the Federal Rule, Ohio EPA removed paragraph (F), which provided an off-ramp for lead service line replacement if the utility came back into compliance.

The deletion of OAC 3745-81-84(F) in the proposed rule could lead to unsustainable compliance costs if utilities were obligated to replace each and every lead service line. In discussions with Cleveland, Columbus, and Cincinnati, their collective costs would exceed $1 billion to replace these lines. Though Ohio EPA does not anticipate this happening, the OAWWA Water Utility Council and others have repeatedly expressed concern about the weight that these few samples collected by untrained individuals has on decision making. We strongly believe that if this comes down to citizens of Ohio needing to pay to improve public health by reducing lead exposure, addressing lead paint, contaminated industrial sites, and other aspects would be much more effective in reducing lead exposure." (Todd Danielson, Ohio American Water Works Association, Avon Lake Regional Water)

"The proposed version of OAC 3745-81-84 requires a public water system to annually replace seven percent of all the lead service lines in its distribution system when the system exceeds the applicable lead action level. The Agency removed paragraph (F) of this rule to ensure than any system with an action level exceedance would be triggered into a 15-year lead service line replacement program. As Ohio EPA is aware, the determination of an action level exceedance relies on an imprecise sampling protocol.

The deletion of OAC 3745-81-84(F) in the proposed rule could lead to unsustainable compliance costs if Columbus was obligated to replace each and every lead service line (Columbus estimates that replacing 30,000 lead service lines would cost ~$150 to $200 million over a fifteen year period). At zero percent interest this replacement program is equivalent to a 7 percent increase in the current budget of the Columbus Division of Water. While rate payers potentially would have to absorb significant rate increases, they would not have a comparable decease in the risk to public health from lead exposure because the system would be ensuring it is providing effective corrosion control and demonstrating as much with sampling results that no longer exceed lead action levels. It is also understood that the agency's purpose in removing paragraph (F) for the effective rule is to expedite the process of removing lead service lines and reduce the consumers' exposure to lead as soon as possible. Retaining paragraph (F), however, still protects public health in that removing lead service lines in the impacted area still will be accomplished as soon as possible while simultaneously demonstrating effective corrosion control technique.

The goal of full removal of lead service lines from community water distribution systems is a matter in which rate payers should have the prerogative to assess, discuss, and agree to allocate the resources necessary to achieve absolute compliance. Accordingly, absent sufficient state and/or federal funding to implement this rule Columbus requests that Ohio EPA retain OAC 3745-81-84 (F) in the proposed rule." (Richard Westerfield, Columbus Division of Water)

"A few of the requirements that are not required under HB512 present either challenging implementation issues or may be extremely expensive to implement requiring significant rate increases to the rate payers of the state. GCWW request the removal of the provision contained in paragraph F of 3745-81-84 which allowed a system to cease replacing lead service lines if the lead results returned to below the action level during each of two consecutive compliance periods be delayed to allow discussion between water utilities and the Ohio EPA

on better ways to pursue public health protection that are both achievable and do not have a drastic impact on the water rate payers of the state. We believe that there are more implementable ways to achieve these goals to provide even better health protection which can be fully developed through a constructive dialogue between utilities and the Ohio EPA." (Jeff Swertfeger, Greater Cincinnati Water Works)

Response 17: The Agency has decided to reinstate paragraphs (F) and (B)(2) of the currently effective OAC Rule 3745-81-84 into the revised OAC Rule 3745-81-84. By doing so, water systems triggered into mandatory LSL replacement following an action level exceedance will have the ability to cease the LSL replacement program after two subsequent, consecutive, 6-month monitoring periods with 90th percentile results below the action level. The reinstatement of these paragraphs will help relieve the financial burden of a water system following an action level exceedance. All systems should note, however, that while corrosion control will remain the primary method in which systems reduce lead levels at the tap, as seen in Washington DC and more recently in Flint MI, the chemical reactions responsible for the formation of the passivating films are easily reversible if they are not maintained. The Agency therefore encourages PWSs to include a long-term lead service line replacement program as a capital improvement in their asset management program required by ORC Section 6109.24.

3745-81-85 Response to lead monitoring results.

Comment 18: "OEPA should not only give public water systems the freedom to use electronic notification; OEPA should mandate electronic notification unless impracticable for the public water system.

In its response to our comments, the OEPA states that "electronic delivery methods are not excluded as acceptable methods for providing notice of results. Public water systems have the freedom to decide which method to use." The OEPA misunderstands the OEC's concern.

In the 21 st century, electronic communication connects people throughout communities in many different ways. To satisfy the two-day notification requirement of HB 512, the new regulations should require at least one of the following forms of electronic notification (where possible) to consumers of PWSs, for both lead action level exceedances and individual tap result notification: E-mail to customers (if they provided an e-mail address with their billable account); Automated phone call to customers (to all phone numbers provided with their billable account); Text message to customers (if they provided a mobile phone number with their billable account).

In the case of a lead action level exceedance, both the e-mail and text message should provide a link/attachment to the public education materials created by the director of the Ohio EPA. In the case of a tap sample result notification, the e-mail and text message could provide a link to a unique page detailing the individual's tap sample results.

The OEC understands that public water systems are already free to choose what methods it uses to inform its consumers, but that is precisely the problem we believe the OEPA should rectify. The easiest and fastest way for public water systems to satisfy the two day notification

requirement set forth in HB 512 is to institute robust electronic notification procedures. The OEPA can get ahead of the game and mandate these requirements so no public water system slips through these notification requirements. If the OEPA has to chase after public water systems because they fail to satisfy the two-day reporting requirement, both the state and local communities will suffer the financial consequences of such tedious administration actions." (Chris Tavenor, Ohio Environmental Council)

Response 18: There are almost 2,000 water systems monitoring for lead and copper in Ohio—populations range from two million to less than ten and systems can be municipalities, mobile home parks, schools, factories, etc. Because Ohio EPA requires consumer notification for each lead and copper sample taken, the number of samples submitted to the Agency, and corresponding consumer notifications, for *each* of these systems can range from 5 to 1000+ in a given year. The Agency reiterates that each PWS knows the best way to notify their consumers of sample results in the required time frame. Some PWSs prefer to hand deliver or send results via mail, rather than electronically, so that they can ensure the results get delivered (rather than getting delivered or ignored). Similarly, public notification following an ALE should be delivered with the consumer audience in mind. By allowing PWSs to choose their delivery method, Ohio EPA is ensuring the notification process remains simple and easy to enforce. Streamlined reporting and an updated internal process has proven effective in ensuring all consumer and public notices are delivered and reported.

Comment 19: "3745-81-80(G)(3) and 3745-81-85 (D): Cleveland Water understands Ohio EPA is focused on requiring some form of Interim Lead Public Notification (ILPN) even though it is not mandated by any federal rule, guidance, HB 512, or ORC 6109.121, to the best of our knowledge.

We continue recommending the agency proceed with ILPN based upon the information below.

- The trigger number should be based on the 10th Percentile of sites available in the approved Sample Monitoring Point ID spreadsheet instead of the minimum number of sites required for compliance. The number of sites allowed could be based upon the approved list at the beginning of the June-September monitoring period.
- PWSs many times have to send out far more sample bottles than required to ensure at least the minimum number of samples are returned. It is out of our control when or if these sample bottles are returned. When these samples do come back, they must be used since they are compliance samples. Prematurely issuing a Public Notice before all of these results are obtained is unfair and does nothing but create panic and distrust.
- As an example, if a PWS has 100 approved sites but is only required to sample from 50 sites for compliance, ILPN should be based upon 10 sites, not 5, since every water system is allowed to take more than the minimum number of required samples provided the samples are approved sites in the monitoring plan. This is not the same thing as "sampling until you are within compliance".
- An unintended consequence of implementing this rule in its current form would be water systems actually collecting fewer samples to try to avoid ILPN that would turn out not to be necessary when all samples are processed. We do not believe that is Ohio EPA's intention, and fewer samples is actually less representative of overall water quality.

If ILPN as proposed by Ohio EPA will still be required, we request the ILPN be limited to the area of concern as determined by the lead map and water quality parameter monitoring results and not be issued to the entire water system until a true action level exceedance occurs. It makes no sense to issue an ILPN' to include communities located 20 miles away from where the actual exceedances occurred." (Alex Margevicius, Cleveland Division of Water)

"Proposed OAC 3745-81-85(A)(3)-Interim Lead Public Notification: Columbus suggests that the interim public notification trigger be a number much greater than 5 since the PWS is permitted to collect more than fifty samples. OAC 3745-81-85(A)(3) also proposes that the PWS shall provide notice to customers at sample taps tested, including consumers who do not receive water bills. In the case of schools, daycares, nursing homes or correctional institutions, legal guardians or power of attorney shall be notified by a method accepted by the director. As stated above, the concepts of "legal guardians" or "power of attorney" should be struck or more rigorously clarified. The City does not maintain any records related to daycare children, nursing home health care power of attorneys, or legal guardians of such. City should not be held liable for the inability to identify all those who conceivably are entitled to notice. A suggestion is to rewrite this section identical to 3745-81-84 (C)(2)." (Richard Westerfield, Columbus Division of Water)

Response 19: The interim public notification requirement released with the proposed rules in IPR has been removed. Ohio EPA mistakenly did not strike "interim" in OAC Rule 3745-81-81; this has been corrected.

ORC Section 6109.121 requires public notification within two days and public education within thirty days of receiving sample results. The Agency will therefore be using current sample results to determine if a water system has an action level exceedance rather than waiting for the end of the monitoring period. This will give PWSs the opportunity to ensure their results are representative of the system prior to the implementation of the extensive federal requirements following an ALE. Because of the statutory requirement and the uncertainty PWSs have regarding the number of samples that will submitted for compliance, Ohio EPA maintains that calculating the 90th percentile in this manner, is the best way to ensure consumers receive this information as quickly as possible.

Public notification is a tool for water systems to notify consumers that were not a part of the original sampling pool of their potential exposure to lead in the drinking water. This allows customers to make informed decisions which can be especially important for at risk population groups like pregnant women and children. Waiting for the end of a monitoring period to issue a lead public notification could add as much as four (or six) months of unknown exposure for these at risk groups, even if the results do not change in that time. By making determinations based upon data received, the Agency is ensuring the public can make informed decisions concerning the health of their families.

Compliance samples for community water systems are, in most cases, taken at single family residences. The requirement to notify legal guardians or power of attorney in OAC Rule 3745-

81-85(A)(3), is in reference to schools, daycares, nursing homes, or correctional institutions that are their own public water system.

3745-81-86 Monitoring requirements for lead and copper in tap water

Comment 20: "OEPA should strengthen testing requirements at schools and daycares that are public water systems. In our previous comments, the OEC called for strengthened testing requirements at schools because such protection was a major undertone of HB512. In response, OEPA states: "At this time, the Agency will not require schools that are public water systems to perform additional monitoring beyond that already required. Please refer to the monitoring requirements and sample site requirements in OAC Rule 3745-81-86. Schools and child-care facilities are welcome to contact their water provider or a certified private lab to get their water tested for lead."

OEPA should further clarify why it has decided not to require further testing by schools and child care facilities. While it is true that OEPA does not have a statutory mandate to strengthen school testing requirements, the General Assembly clearly envisioned that the Agency should do so when it gave the Administrator the authority under ORC 6109.121. The director may require a school or child day-care center that is also an owner or operator of a "nontransient noncommunity water system" to collect additional water samples in identified buildings. To protect our children at the schools they spend most of their waking hours, the OEPA should institute additional reporting requirements or provide a justification for why it has chosen not to protect the health of these students.

This act would supplement the requirement that OEPA must provide information to schools as to where they may receive funding for "fountain and water-service fixture replacement," as required under ORC 6109.121(H).

Furthermore, the OEPA should require all schools and child day-care centers with buildings identified on the section 6109.121(F) map to perform additional tap water samples (preferably testing at every six months). When the OEPA identifies at-risk schools, the Agency should provide information about possible sources of funding for performing such additional tap samples. In addition, whenever the OEPA informs an at-risk school or child day-care center that it needs to perform additional samples, it should once again provide the leadership of the school or child day-care center with information about funding programs that assist with "fountain and water-service fixture replacement."

Finally, OEPA should consider Environment America's report, Get the Lead Out: Ensuring Safe Drinking Water For Our Children At School. While the entire report does a fantastic job of illustrating how Ohio has failed to keep lead out of drinking water at schools, its most important facet is its proactive suggestions to solve the problem now, rather than later. Specifically, Environment America emphasizes that Ohio needs immediate installation of certified filters and the eventual removal of all lead-bearing parts. This is a problem facing Ohio school children now; it's not just a problem that we need to solve at some distant moment in the future.

Furthermore, OEPA should consider instituting a separate lead action level for schools. Children are an incredibly sensitive population when it comes to the health risks of lead, and thus the OEC echoes Environment America's further assertion that a 1 part per billion action level should exist for schools and daycares. Thus, OEPA needs to develop rules that incentivize the pro-active replacement of all lead service lines at schools and daycares, the installation of certified filters, and a 1 part per billion lead action level that will protect drinking water in these important educational institutions." (Chris Tavenor, Ohio Environmental Council)

Response 20: The Director maintains the authority, not only through ORC Section 6109.121, but also through ORC 6109.12, to change a PWSs monitoring schedule. Ohio EPA chose not to require additional monitoring at these facilities through rule because of the requirement in OAC Rule 3745-81-85 for the owner or operator of a NTNC PWS to immediately remove from service all fixtures identified as contributing to lead levels. When a tap in a school or daycare facility tests above 15 ppb for lead, it is removed, and the threat is eliminated.

Ohio EPA posted information on the Lead Plumbing Fixture Replacement Assistance Grant Program on our website and reminds schools and daycares under our jurisdiction of its existence. However, this program is facilitated by the Ohio Facilities Construction Commission, not Ohio EPA and the Agency does not have jurisdiction over schools and daycares that are not themselves PWSs.

The Agency has spearheaded numerous requirements in this rule package that are protective of public health, including several beyond what is required by HB 512 and federal rule. Ohio EPA is working to ensure enforceable and effective measures are being implemented by PWSs across Ohio. Additionally, the Agency is requiring consumer notification for all samples, which includes health effects language for all results, regardless of their value and in the instance of schools and daycares that are PWSs, these notices are sent to the guardians of each student.

Comment 21: "OEPA should go beyond just allowing consumer requested samples; it should create a program designed to assist consumers who wish to voluntarily test their water. In our previous comments, we expressed concern that current voluntary provisions placed the financial burden of voluntary monitoring and analysis of tap water on the consumer rather than the public water system, especially in a public water system that is exceeding actionable lead levels.

In response, OEPA stated that "consumer requested samples are optional and are in addition to the tap water monitoring and water quality parameter monitoring water systems have to do when they exceed the lead action level." While the OEC recognizes that voluntary samples are optional and additional to those required by law, OEPA and public water systems should encourage consumers in a public water system that exceeds the lead action level to actively monitor for lead. In a public water system that has already exceeded the action level, consumers will justifiably have concerns that their water might be inundated by lead.
While public water systems shouldn't have to finance an infinite number of voluntary tests, as that would bankrupt the public water system. A healthy compromise can be developed where public water systems provide financial assistance for the first 25% of customers who

voluntarily participate tap water analysis. While we shouldn't bankrupt public water systems, residents deserve to know if their water has high levels if their public water system as a whole might have high lead levels." (Chris Tavenor, Ohio Environmental Council)

Response 21: In the event of an ALE, water systems are required to offer all customers the opportunity to have their water tested for lead. Ohio EPA and PWSs encourage consumers to take advantage of this opportunity. By offering to test consumers water for lead, especially following an ALE, PWSs increase the effectiveness of their public education program, consumers are able to gain access to reliable water sampling services and are not subject to trial and error in finding reasonably priced, qualified sampling services. A list of certified laboratories can also be found on Ohio EPA's website. However, requiring water systems to pay for the testing would entail a substantial cost to the water system.

Comment 22: "3745-81-86 (D)(4)(c): Cleveland Water will meet one of the three criteria for continuing triennial monitoring for lead and copper tap samples. However, we still request clarification on how the "5 consecutive monitoring periods" was selected as the baseline for determining continuance. This is particularly problematic for water systems on reduced triennial monitoring status, since Ohio EPA only requires 12 years of lead and copper records be retained, as stated in the Response to Comments. This corresponds to four (4) consecutive triennial monitoring periods. We recommend Ohio EPA continue with the new standard of 5 consecutive periods for water quality parameters and consider using the four (4) most recent lead and copper compliance monitoring results for triennial systems consistent with your record keeping requirements." (Alex Margevicius, Cleveland Division of Water)

Response 22: In selecting 5 consecutive monitoring periods as the baseline for qualifying for reduced triennial monitoring, Ohio EPA aims to capture a full compliance history for potential triennial systems. Systems initially moving to triennial are required to meet these requirements at a minimum for two consecutive 6-month monitoring periods, followed by three consecutive annual monitoring periods. Ohio EPA acknowledges that systems who have been on triennial for 5 or more monitoring periods would have data outside the required 12-year record retention time; however, historical data is available for all PWSs on our website.

3745-81-89 Analytical methods.

Comment 23: "The Ohio EPA has inserted additional requirements not mandated by law nor anything that applies to the LCR. For instance, certified laboratories have 60 business days to complete analysis and quality control on a radiological chemical sample. This requirement would begin on June 1, 2018. Also added was a requirement for certified laboratories to report the results to the director and PWSs no later than ten days after analysis is completed. And finally, language was added that all detections of total microcystins in raw and finished water be reported no later than the end of the next business day after analysis is completed.

Important to note is that none of these additions was included in the draft rule that was released for Interested Party Review. So again, requirements are being imposed that are unrelated to HB512 and even are not being afforded ample time to evaluate the implications…

Proposed OAC 3745-89-08(A) requires certified laboratories that they have sixty business days to complete analysis and quality control on a radiological chemical sample beginning June 1, 2018. While OAC 3745-89-08(C)(3) revised the language to require all detections of total microcystins in raw and finished water to be reported no later than the end of the next business day after analysis is completed. Again these requirements go beyond the directive of HB512 and even if they were merited to be discussed at this time, the agency admits that these additions were not included in the draft rule that was released for Interested Party Review. Consequently, no opportunity has been afforded to the public to argue for or against, hear a counter-vailing argument and afford the public a rebuttal. These proposals need shelved to a later date when ample opportunity has been given to separate issues and discuss priority concerns first." (Richard Westerfield, Columbus Division of Water)

Response 23: The purpose of the extensive rule review process, including the public comment period following Original Filing, is to provide a forum for stakeholders to comment on proposed rules. Because these revisions were not included in IPR Ohio EPA took several additional steps to inform laboratories of the additional requirements. In the annual laboratory update letter, laboratories were encouraged to comment on the proposed revisions during this comment period. Laboratories were also included in the public notice sent out when this rule package was originally filed; the public notice specifically pointed out the additions were made after IPR. During this opportunity to comment, no other suggestions or comments were received on these revisions. Ohio EPA also ensured CSI Ohio was made aware of these changes prior to receiving the recommendation to original file.

The purpose of these revisions is to simplify reporting requirements for analyzing and reporting drinking water samples to Ohio EPA; this requirement will not be effective until October 1, 2018. Ohio HB 512 revised the requirements for lead and copper which caused confusion for many drinking water laboratories. By standardizing the requirements for all drinking water samples, Ohio EPA aims to streamline the analyzing and reporting process for drinking water laboratories.

Rules governing harmful algal blooms (HABs), effective April 2016, require the submission of treatment optimization protocols if microcystins are detected in either raw or finished drinking water. Treatment changes can have major effects on corrosion of lead and copper. The requirement for next day reporting for raw water microcystins better aligns with the existing next day reporting requirement for finished water microcystins, as well as the next day reporting requirement for lead and copper required by HB 512.

End of Response to Comments