

# Revisions to the Lead and Copper Rule

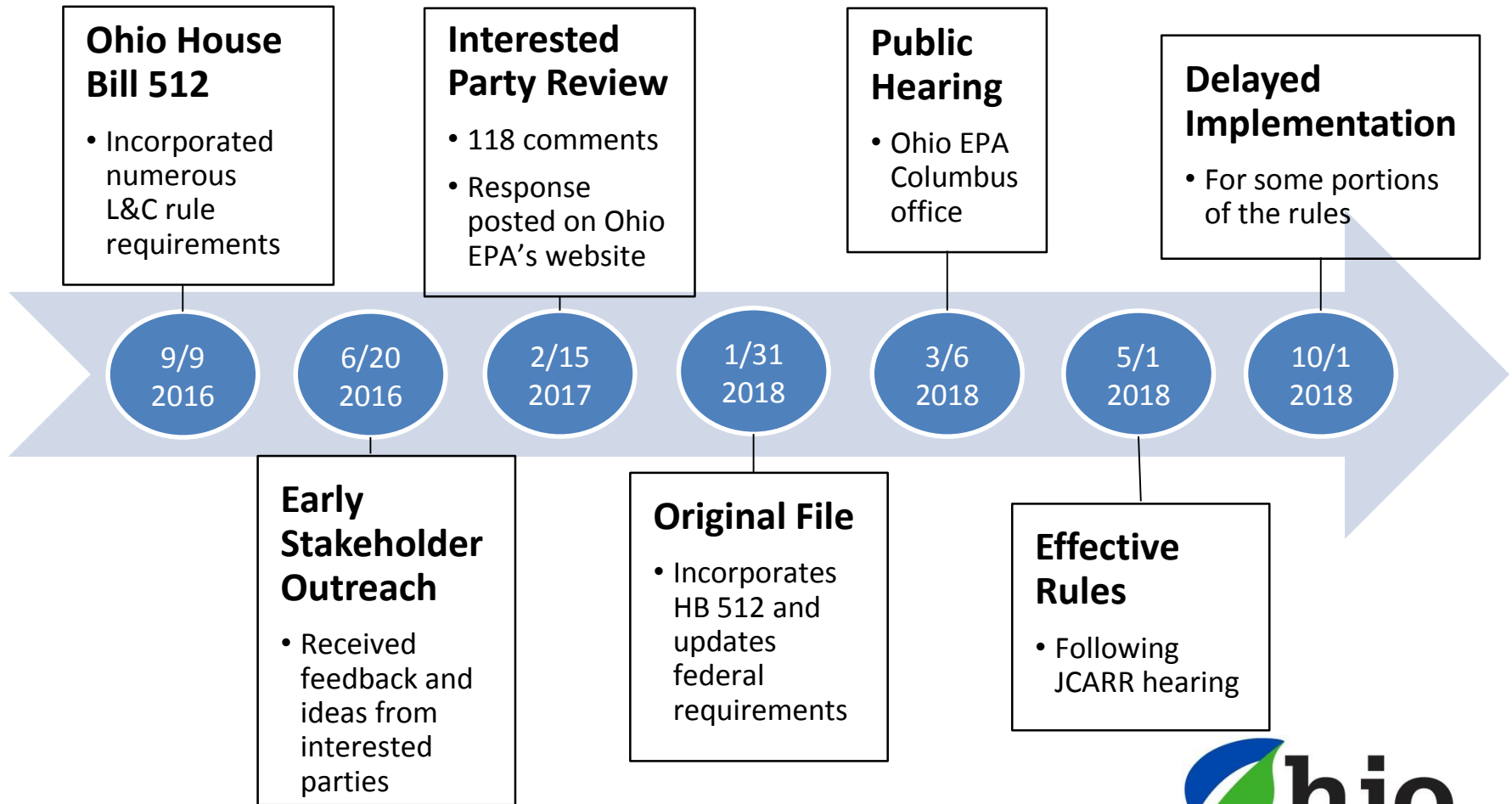
Ohio EPA

Division of Drinking and Ground Water

# Overview

- Timeline
- Rules Affected
- Common Questions
- Monitoring Requirements
- Analysis and Reporting Requirements
- SMP IDs
- Summary
- Questions

# Rule Revision Timeline



# Rules Affected

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

## *Why do PWSs have to sample for lead and copper at consumer taps?*

- Reducing water corrosivity is the primary method for reducing the health risk
- L&C enter drinking water due to the corrosion of service line and household plumbing materials
- Corrosivity of water in contact with service lines and household plumbing could not be measured if taken at the entry point to the distribution system or other PWS-owned locations in the distribution
- Therefore samples are taken at residential taps (also a federal requirement)

*With the change from using paper 5105 forms to electronic SMP IDs, were there any changes to when 90<sup>th</sup> percentiles are calculated?*

- 90<sup>th</sup> Percentiles are now being calculated as results are being reported rather than at the end of the monitoring period.
  - Based on the minimum number of scheduled samples until more than the minimum number of samples has been collected
- Ohio EPA will act on the information we have to protect public health.

# *What are the differences between consumer notice, public notice, and public education?*

## **Lead Consumer Notice (CN)**

- Sample results and information about lead to consumer and owner of sample taps (including, if applicable, parents, guardians, or power of attorney)
- **Two** business days following receipt of sample results
  - Regardless of result, sample type, or sample size
  - Lead **or** copper
- If the lead result is above 15ug/L:
  - Additional info on health screening and blood lead level testing included in consumer notice
  - Send results to board of health
  - Remove fixtures with high lead levels from service (NTNC only)
- **All required information is included in Ohio EPA's CN templates**

# *What are the differences between consumer notice, public notice, and public education?*

## **Lead Public Notice (PN)**

- Initial announcement to all consumers about ALE
- **Two** business days following ALE determination
- Delivery methods: broadcast media, social media, hand-delivery, email, posting
- Content:
  1. Results of tap monitoring including number of samples and 90<sup>th</sup> percentile
  2. Explanation of health effects of lead
  3. Steps to reduce exposure to lead from drinking water
  4. Contact info for PWS
  5. Information on the availability of tap water testing (community PWSs only)
- Repeating the PN:
  - If the PWS decides to sample at additional qualifying sites before the end of the MP, an updated PN is required at the end of the MP
  - Twice yearly for as long as the system has an ALE (community PWSs only)



# *What are the differences between consumer notice, public notice, and public education?*

## **Lead Public Education (PE)**

- Additional information given to all customers following an ALE
- **Thirty** business days following ALE determination
- Community PE Requirements:
  - Deliver printed materials to all bill paying customers
  - Contact at-risk consumers (i.e schools, hospitals, pediatricians)
  - “High lead levels...” notice in all water bills
  - Perform 3 public outreach activities
  - Post information on PWS website (for population >100,000)
- NTNC PE Requirements:
  - Deliver printed materials to all persons served
  - Post informational posters
- **All required information is included in Ohio EPA’s PE templates**

# Monitoring Requirements

- 6 month, (**reduced**) annual or triennial
- Number of samples based on population
  - Can range from 5-100
  - Can be reduced if on annual or triennial monitoring
- Sample sites are based on locations in the PWS with the highest risk for exposure (Tiers)
- SMP ID Spreadsheets
  - Tool for ensuring PWSs are sampling at qualifying locations and have information for required CN
  - HB 512 requires Ohio EPA to give CN to residents if PWS fails to
  - Good idea for PWSs to have more than required number of **unreduced** sample sites listed on SMP ID list
  - Send any SMP ID updates to your District Office

# Monitoring Requirements

## Tier Requirements

- PWS must sample from Tier 1 sites. If not enough Tier 1 then the PWS must take samples from Tier 2 sites. If not enough Tier 2 sites, then PWS can use Tier 3 sites.

Community	Non Transient Non Community
<b>Tier 1: single family structures</b> <ul style="list-style-type: none"> <li>Containing lead pipes or copper pipes with lead solder installed between 1982 and 1988</li> <li>Served by a lead service line</li> </ul>	<b>Tier 1: buildings</b> <ul style="list-style-type: none"> <li>Containing lead pipes or copper pipes with lead solder installed between 1982 and 1988</li> <li>Served by a lead service line</li> </ul>
<b>Tier 2: multi-family structures</b> <ul style="list-style-type: none"> <li>Containing lead pipes or copper pipes with lead solder installed between 1982 and 1988</li> <li>Served by a lead service line</li> </ul>	<b>(Tier 2): buildings</b> <ul style="list-style-type: none"> <li>Containing copper pipes with lead solder installed before 1983</li> </ul>
<b>Tier 3: single family structures</b> <ul style="list-style-type: none"> <li>Containing copper pipes with lead solder installed before 1983</li> </ul>	<b>Tier 3: not applicable for NTNC</b>

**Tier Other (Non-tier):**  
 Representative sites are used if a system does not have qualifying sample sites (e.g. a mobile home park with all PVC piping)



# Requirements for Reduced Triennial Monitoring

- PWSs need to demonstrate they meet one of the following:
  - 90<sup>th</sup> percentile for lead is less than 5 ug/L and 90<sup>th</sup> percentile for copper is less than 0.65 mg/L for 5 consecutive monitoring periods
  - Maintained water quality parameters within the director-approved ranges for 5 consecutive monitoring periods
  - PWS does not own service lines, fixtures, pipe, or solder that contain lead (**Lead Mapping**)
- If a PWS meets criteria, they will need to fill out an application to continue with triennial monitoring.
  - Applications were due April 2, 2018
  - Revised monitoring schedules will be mailed May 25, 2018





John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Craig W. Butler, Director

## Triennial Lead and Copper Monitoring Application

NAME:	DRINKING WATER PROGRAM – COMPLIANCE NOTIFICATION
OH:	DATE:
COUNTY:	SUBMITTED BY:

In accordance with Ohio Revised Code Section 6109.12, every owner or operator of a public water system shall have analyses of the water made at such intervals and in such manner as may be ordered by the environmental protection agency. No water systems are eligible to monitor for lead and copper once every three years ("triennially") without applying to, and receiving written approval from, the director of Ohio EPA.

Application provided herein to request a reduction to triennial monitoring (select at least one for eligibility):

Applicant demonstrates that the water system's tap water lead and copper levels, computed pursuant to OAC Rule 3745-81-80, are less than or equal to 0.005 milligrams per liter and 0.65 milligrams per liter, respectively, for the five most recent consecutive monitoring periods. List the monitoring periods you are using in this application:

Type of Monitoring Period (triennial, annual or 6-month)	Corresponding Dates for Monitoring Period	Lead 90 <sup>th</sup> Percentile	Copper 90 <sup>th</sup> Percentile

Applicant demonstrates that the water system has maintained the range of values for water quality control parameters reflecting optimal corrosion control treatment as designated by the director pursuant to OAC Rule 3745-81-82(F), for the five most recent consecutive monitoring periods. Attach a summary of the water quality parameter data, list the monitoring periods you are using in this application, and give date water quality parameters were established:

Type of Monitoring Period (triennial, annual or 6-month)	Corresponding Dates for Monitoring Period

Date Director established Water Quality Parameters
--

Applicant demonstrates the water system does not own service lines, fixtures, pipe or solder that contains lead. Attach completed verification form.

Signature of Responsible Person \_\_\_\_\_ Date \_\_\_\_\_

Printed Name and Title of Responsible Person \_\_\_\_\_

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Received:	
Reviewed:	
Comments:	



John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Craig W. Butler, Director

## Triennial Lead and Copper Verification Form

### VERIFICATION FORM FOR COMMUNITY AND NON-TRANSIENT NON-COMMUNITY PUBLIC WATER SYSTEMS CLAIMING THEY DO NOT OWN SERVICE LINES, FIXTURES, PIPES OR SOLDER THAT CONTAIN LEAD

PWS NAME:	DRINKING WATER PROGRAM – COMPLIANCE NOTIFICATION
PWS ID: OH	DATE:
COUNTY:	SUBMITTED BY:

In accordance with Ohio Revised Code Section 6109.12, every owner or operator of a public water system shall have analyses of the water made at such intervals and in such manner as may be ordered by the environmental protection agency. No water systems are eligible to monitor for lead and copper once every three years ("triennially") without applying to, and receiving written approval from, the director of Ohio EPA.

To qualify for a reduction to triennial monitoring using the criterion that the water system does not own service lines, fixtures, pipe or solder that contains lead, the owner or operator of a community or non-transient non-community public water system must demonstrate that the water system does not own service lines, fixtures, pipes or solder that contain lead (for additional clarification, see Guidance PWS-04-001 – Guidelines for Lead Mapping in Distribution Systems).

Should a water system apply for a reduction using the criterion that it does not own service lines, fixtures, pipe or solder that contain lead, the water system must verify that historical permit records, local ordinances, distribution maintenance records, information pertaining to installation dates or materials, or other pertinent information has been reviewed. Verify the information reviewed below:

VERIFICATION
<p>This PWS states they do not own service lines, fixtures, pipes or solder that contain lead and has reviewed the following information (select one or more of the following):</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Historical permit records and/or local ordinances</li> <li><input type="checkbox"/> Distribution maintenance records (for example, meter replacement, waterline break repairs)</li> <li><input type="checkbox"/> Information pertaining to installation dates for all service lines (for example, after 1986 when lead service lines were banned)</li> <li><input type="checkbox"/> PWS owned service line material, pipes, fixtures, solder composition is known (for example, all are known to be non-lead)</li> <li><input type="checkbox"/> Other (list): _____</li> </ul> <p>Date of PWS's last lead map update: _____</p>

Signature of Responsible Person \_\_\_\_\_ Date \_\_\_\_\_

Printed Name and Title of Responsible Person \_\_\_\_\_

OHIO EPA USE ONLY	
Received:	
Reviewed:	
Comments:	

# Requirements for Reduced Triennial Monitoring

- Previous versions of rules allowed for reduced monitoring schedules, if certain requirements were met, but only required systems to go back to 6-month and annual monitoring after ALEs or significant treatment changes
- Three years between monitoring periods for systems that displayed possible corrosive water with the potential for lead exposure is not reasonable
- The best way to determine lead exposure from drinking water is through the collection of lead monitoring data

# NEW Analysis and Reporting Requirements

- Established next **business** day reporting requirement following laboratory analysis for:
  - **Lead, copper, (all results)** total microcystins detections in raw water, seasonal startup samples
- Added requirement that for all analytes a complete analysis (including QC) must be performed within 30 business days of receiving the sample
  - Except radiological (60 days)
- Added requirement to report results to Ohio EPA and PWS no later than 10 days following analysis (including QC) for all analytes (does not include MORs)
- Effective October 1, 2018 (**except next day Pb & Cu**)



# NEW Analysis and Reporting Requirements

Receive  
Sample

- For PWS chemical, radiological or microbiological compliance. Process sample and begin analysis.

30 business days  
(60 for rads)

Complete  
analysis

- Analysis completion date must include quality control (QC) checks. (\*\*30 day requirement cannot extend hold time)

10 days

Report

- Submit report to Ohio EPA and PWS (\*\*within 10 days for anything not required next day.)



## Sample Monitoring Point IDs for Lead and Copper

- Unique locations identified for lead and copper monitoring using alpha numeric codes (LC###)
- Associated with specific addresses (or building location) including contact information
- Submitted on a spreadsheet to Ohio EPA
- Updated by PWS as changes occur (SMP IDs don't transfer to new sites)

## SMP ID for Lead and Copper Tips

- Check COC for SMP IDs when receiving samples
- Repeat SMP ID in “Collection Address” field
- Check for PWSs’ SMP IDs in eDWR or website
  - eDWR: “Reference Data” on left side of PWS screen
  - Web: Ohio EPA Reporting Page > Forms and Instructions > “List of PWS State Facility Codes”
- Add new sites as DS000 with address, contact info, and LC### in comments

# QUESTIONS?

- **Lead and copper program questions:** Contact your district office
- **Lab reporting questions:** contact Central Office 614-644-2752
- **Forms, templates, etc.:** <http://www.epa.state.oh.us/ddagw/pws/leadandcopper.aspx>
- **Subscribe to electronic mailing lists:** <https://ohioepa.custhelp.com/>
- John McDaniel [john.mcdaniel@epa.ohio.gov](mailto:john.mcdaniel@epa.ohio.gov)
- Michael Deal [michael.deal@epa.ohio.gov](mailto:michael.deal@epa.ohio.gov)