Regionalization Challenges with Ohio EPA Lead Regulations

Jeffrey Kauffman September 13th, 2019 jkauffman@delcowater.com











Opening Remarks

- Del-Co Water Historic Events
- · Regionalization & Del-Co's Experience
- Lead Review & Ohio EPA Regulations
- Centerburg Acquisition, Meter Replacement
 Project, & Lead Concerns

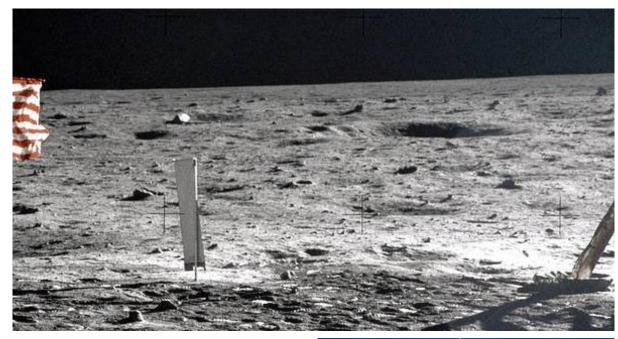
Why Regionalize?

- · Managerial, Technical, Financial Capabilities
- Economies of Scale
- · Regulatory Compliance (MCL, AL, EC)
- Cost Effective & Sustainable
- Better Option for Communities

Regionalization Challenges

- Political Opinions
- Financial Agreement
- · Infrastructure & Assets
- Condition Assessment

Del-Co Historic Events



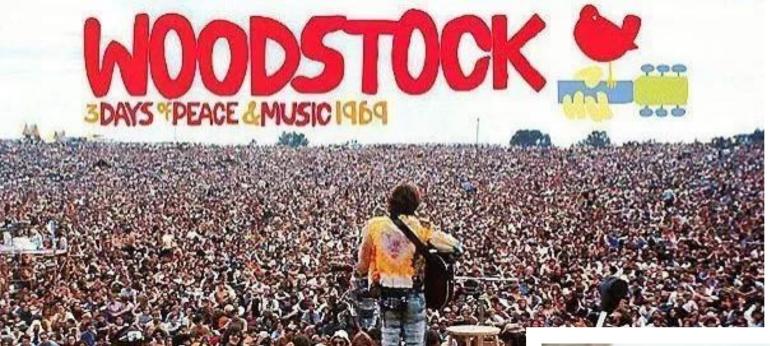




MEN WALK ON THE MOON

'One Small Step for Man, One Giant Leap for Mankind'







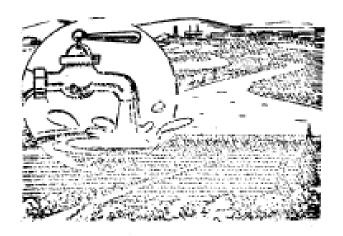








DEL CO WATER COMPANY INC



INVITES YOU TO

WHAT: Public Meeting Monday Evening - MAY 19, 1969 - 8:00 P.M.

WHERE: Olentangy High School

SUBJECT: Rural Water Supply and Distribution for Delaware County.

You will be given the opportunity to become a member of the non-profit corporation. Ask Questions about the proposed project and about the costs to a consumer.

"" YOU ARE URGED TO ATTEND ""

You will not be obligated in any way by attending.



"All the News That's Fit to Print"

The New York Times

LATE CITY EDITION

Weather: Partly cloudy today; cool conight. Fair, pleasant tomorrow. Temp. range: today 65-78; Thursday

VOL. CXXIII. No. 42,566

NEW YORK, FRIDAY, AUGUST 9, 1974

15 CENTS

NIXON RESIGNS

HE URGES A TIME OF 'HEALING'; FORD WILL TAKE OFFICE TODAY

'Sacrifice' Is Praised; **Kissinger to Remain**

By ANTHONY RIPLEY

WASHINGTON, Aug. 8-1 will pledge to you tomorrow Vice President Ford praised and in the future, my best ef-president Nixon tonight for lorts in cooperation, leadership one of the greatest personal and dedication to what's enough crifices for the country and for America and good for the one of the finest personal do-world," he said.

risions on behalf of all of us as The Vice President, who Americans."

Mr. Ford, who will take dest office and disclaimed any loc as the 38th President of intention of seeking it after Mr. fice as the 38th President stillaneone of seeking it after Me. noon tomerow, wowed to corb. Missor's term, will take the oath times Mr. Nisor's foreign polity of office in a private ceremony of State Kristinger had agreed! The will be Mouse of State Kristinger had agreed! Thus will be become the first trailing. The new Administration of the state of t

All day today the signs of

the historic change were in the Vice President Ford meeting with newsmen last night



President Nixon on TV as he announced his resignation

The 37th President Is First to Quit Post

By JOHN HERBERS

Apocial to The New York Times WASHINGTON, Aug. 8-Richard Milhous Nixon, the 37th President of the United States, announced tonight that he had given up his long and arduous fight to remain in office and would resion, effective at noon tomorrow,

At that hour, Gerald Budolph Ford, whom Mr. Nixon nominated for Vice President last Oct, 12, will be sworn in as the 38th President, to serve out the 895 days remaining

in Mr. Nixon's second term-Less that two years after his landslide re-election victory, Mr. Nixon, in a conciliatory address on national

Text of the address will be found on Page 2.

television, said that he was leaving not with a sense of bitterness but with a hope that his departure would start a "process of healing that is so desporately needed in America." He spoke of regret for any "injuries" done "in the course of the events that led to this decision." He acknowledged

that some of his judgments had been wrong. The 61-year-old Mr. Nixon, appearing calm and resigned



Safe Drinking Water Act (SDWA)of 1974

- · Across the country, drinking water quality was uneven;
- · Standards varied widely from state to state, and sometimes even in different areas of the same state.
- The SDWA established the first comprehensive program to eliminate these inconsistencies and set nationwide standards for drinking water quality

The Safe Drinking Water Act

Success in Advancing Public Health Protection

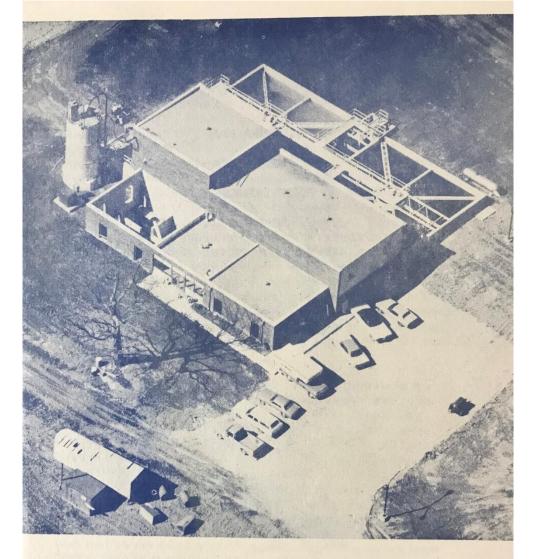
Ooday we helped to ensure that every family in America will have safe, clean drinking water to drink every time they turn on a faucet or stop at a public water fountain. From now on our water will be safer and our country will be healthier for it."

President Bill Clinton's remarks

at the signing of the

Safe Drinking Water Act Amendment of 1996.

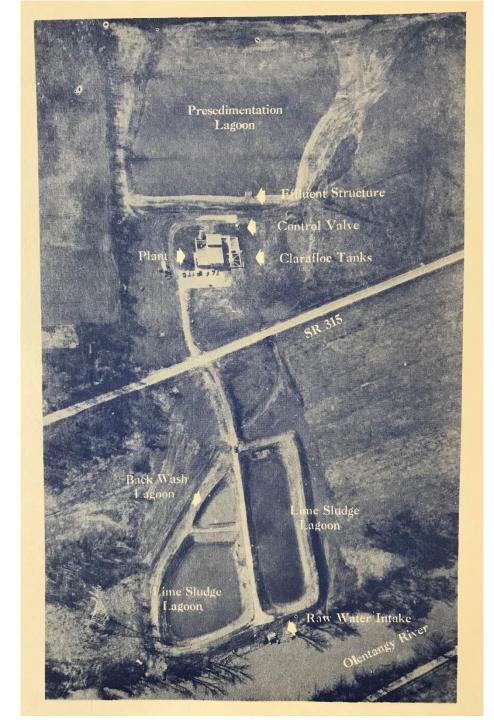




DEL-CO WATER TREATMENT FACILITIES

Delaware County, Ohio

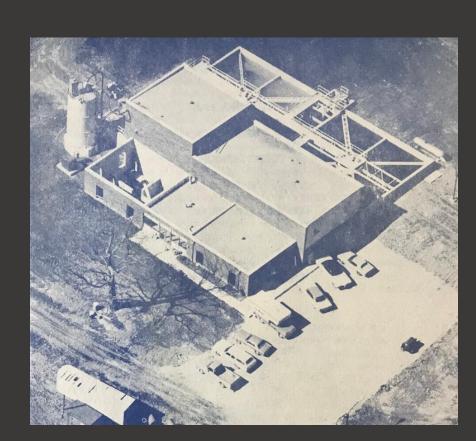
DEDICATION Sunday, August 18, 1974



Where Del-Co Began

Del-Co General Information

- Member-owned Cooperative
- 501 (c) Not-for-Profit Corporation
- · Established in 1969
- · Served 1st customer in 1974
- Initial Employees = 4
- Initial Customers = 2000



Delco West Water Company Initial sign up ends February 28, 1973 at 7 p.m.

Join now and save \$100.00

Fees up to and including February 28, 1973 are: Membership \$10.00, Residential 5/8" Tap \$65.00

Fees after February 28, 1973
Membership \$10.00, Residential 5/8" Tap \$165.00

Office Hours: 8:30 a.m. to 7 p.m. (until 2/28/73)

Delco West Water Company 5810 Columbus Pike (US 23) Delaware, Ohio 43015 Phone 240-548-7746



Lester Stone of FHA, Dean Miller - County Commissioner, Ralph Scott - President of Del-Co, and Ted Woldorf of the Ohio Department of Natural Resources examine approval papers of the \$4\text{ million dollar loan August 17, 1970.}

Del-Co Water Plans to Begin Construction in 1971

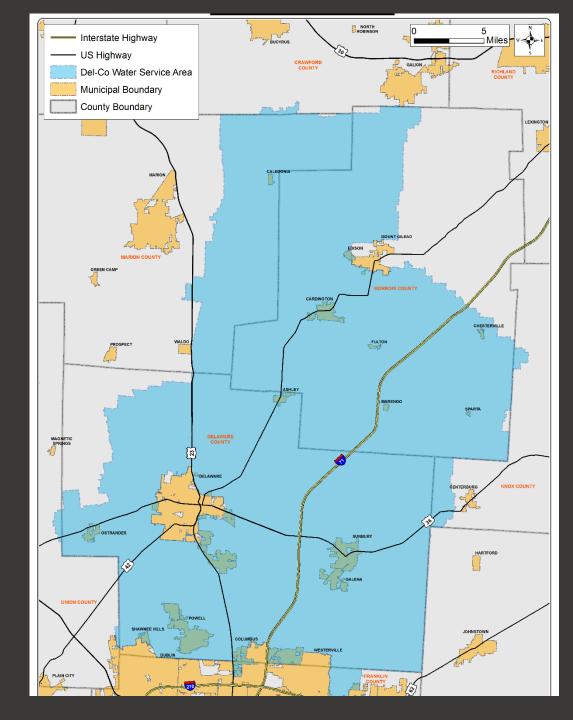
RECEIVES LOAN FROM FARMERS ADMINISTRATION; PLANS PUBLIC MEETINGS FOR TAP FEES, EASEMENTS

Farmers Home Administration approved a \$4,000,000 loan to Del-Co Water Company, Inc., last week for construction of a rural water system in southern Delaware county. According to Del-Co President Ralph E. Scott, the construction is expected to begin in the spring of 1971 and will be completed in 12 to 15 months.

vine, Lester M. Stone, state director of the Farmers Home Administration, Dean Miller, chairman of the county commissioners, Aifred F. Myers, president of the Delaware Chamber of Commerce, Warren Bale, district supervisor of FHA and Arthur F. Woldorf, representative of the Ohio Department of Natural Resources. All except Devine were present at Monday's press

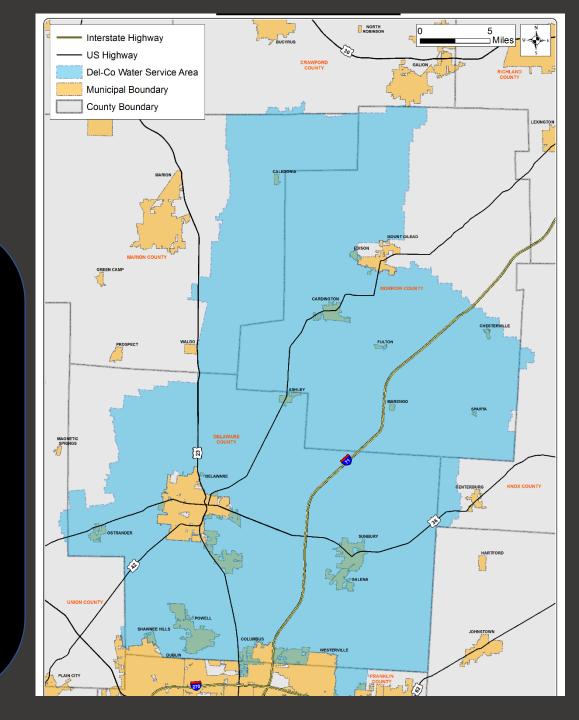
Del-Co Water Service Area

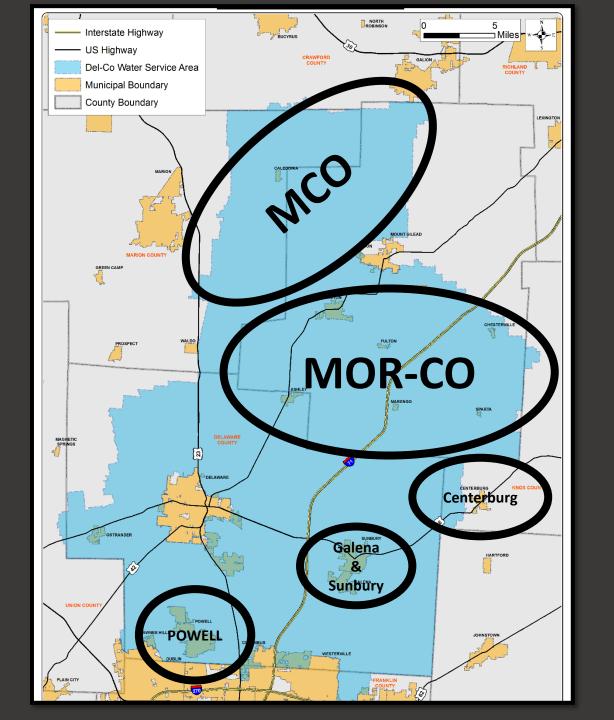
Significant Additions



Significant Additions

Powell Sunbury Galena Centerburg **Morrow County Marion County**





Interstate Highway **US Highway** RICHLAND Del-Co Water Service Area Municipal Boundary County Boundary DELAWARE

Powell

- Early 1980s
- 4,069 ServicesPWS & Dist. System

Interstate Highway ⊐ Miles -**US** Highway RICHLAND Del-Co Water Service Area Municipal Boundary County Boundary DELAWARE COUNTY Galena

Galena

- Early 1990s
- 297 Services
- PWS & Dist. System

Interstate Highway **US Highway** RICHLAND Del-Co Water Service Area Municipal Boundary County Boundary MOR-CO

MOR-CO

- Early 1990s
- Dist. System Only
 - Secured USDA
 Funding

Interstate Highway ⊐Miles -**US Highway** RICHLAND Del-Co Water Service Area Municipal Boundary County Boundary NC CO COMA DELAWARE COUNTY

MCO

- Early 2000s
- Dist. System Only
 - Secured USDA Funding

Interstate Highway ⊐ Miles -**US Highway** RICHLAND Del-Co Water Service Area Municipal Boundary County Boundary DELAWARE Galena

Sunbury

- · 2005
- 1,992 ServicesPWS & Dist. System

Interstate Highway ⊐ Miles -**US Highway** RICHLAND Del-Co Water Service Area Municipal Boundary County Boundary DELAWARE Centerburg

Centerburg

- · 2018
- 650 Services
- PWS & Dist. System

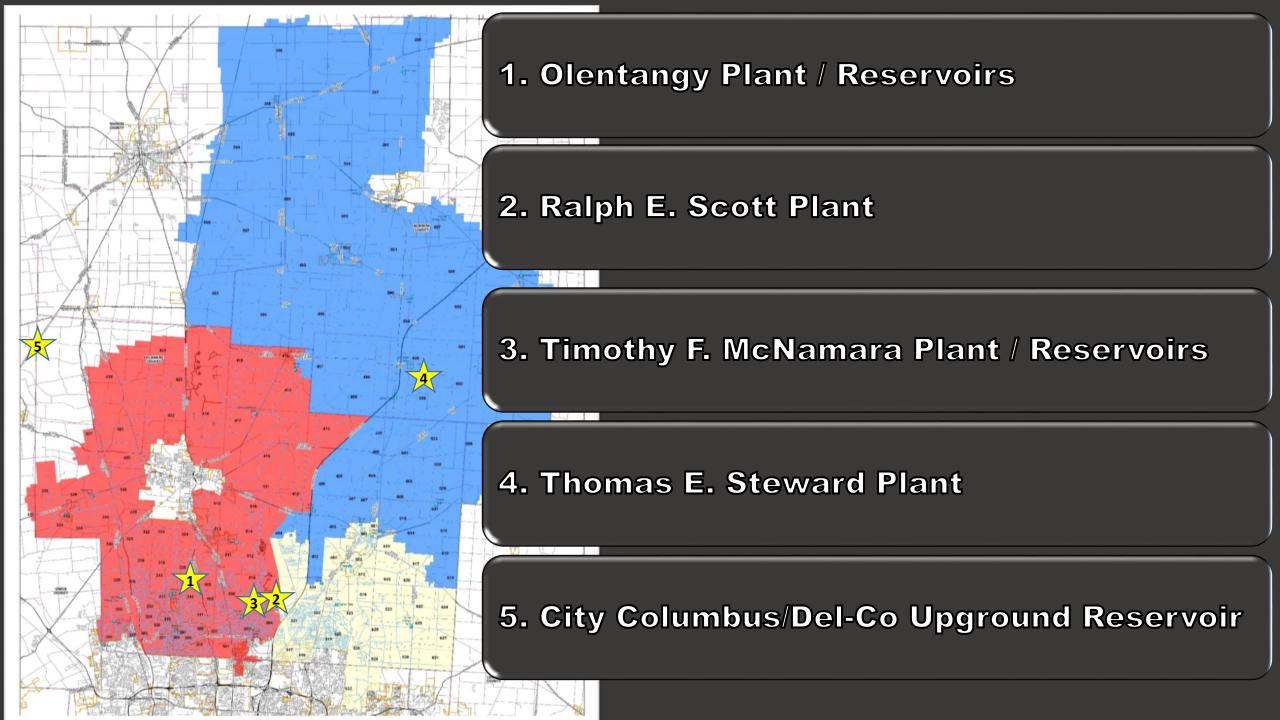
Del-Co Today

Del-Co General Information

- · 7th largest PWS in Ohio
- · Largest 'Rural' Ohio system
- One of largest regional systems in Ohio
- Employees = 100
- **Customers = 50,000**
- Population = 150,000

Del-Co System

- 4 Treatment Plants
- · 827 Sq. Mi. Service Area
- 2000 Miles of Pipeline
- 30 Elevated Tanks
- 18 Booster Stations
- Serve 7 Counties
- 7 Off-stream Reservoirs

















Del-Co's Future Growth



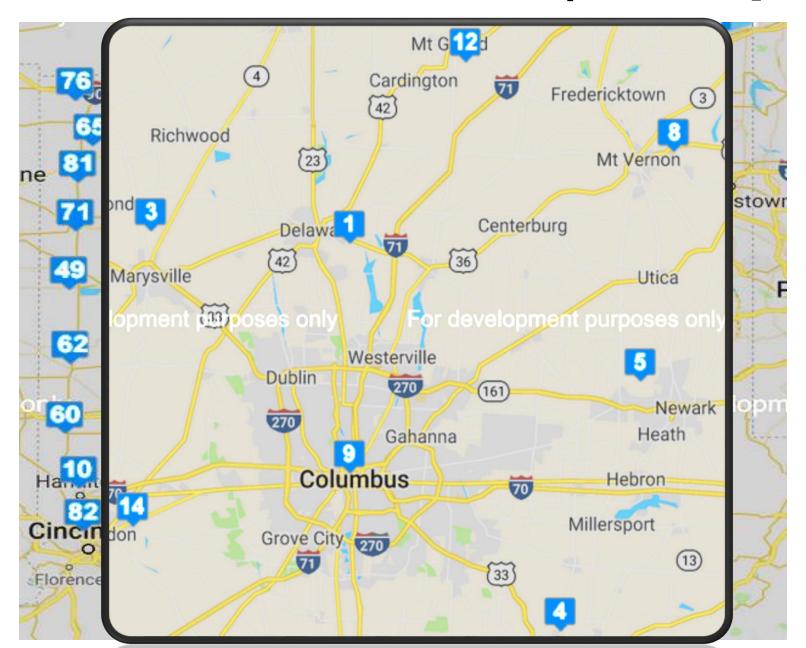
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HOME » NEWS » CENTRAL OHIO POPULATION TO REACH 3 MILLION BY 2050

Central Ohio Population to Reach 3 Million by 2050

December 19, 2018

Ohio Population Growth Rates (2000 – present)



Growth of the Region



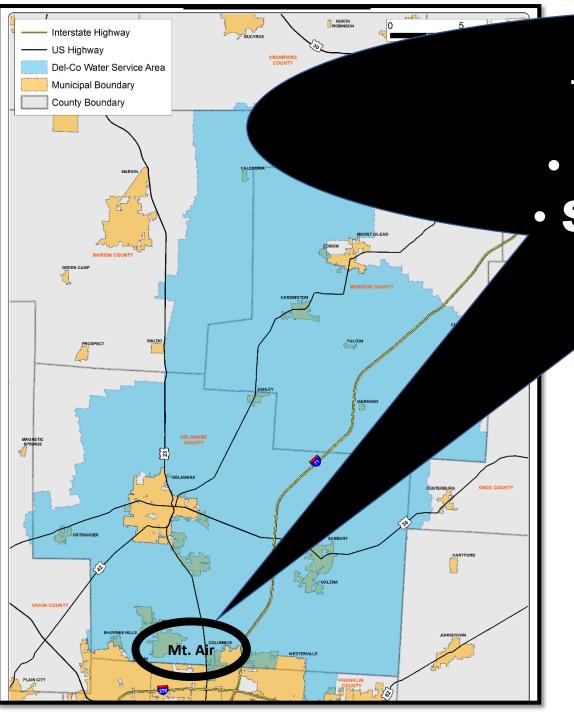
Significant planning efforts



Adding systems (when beneficial)

9

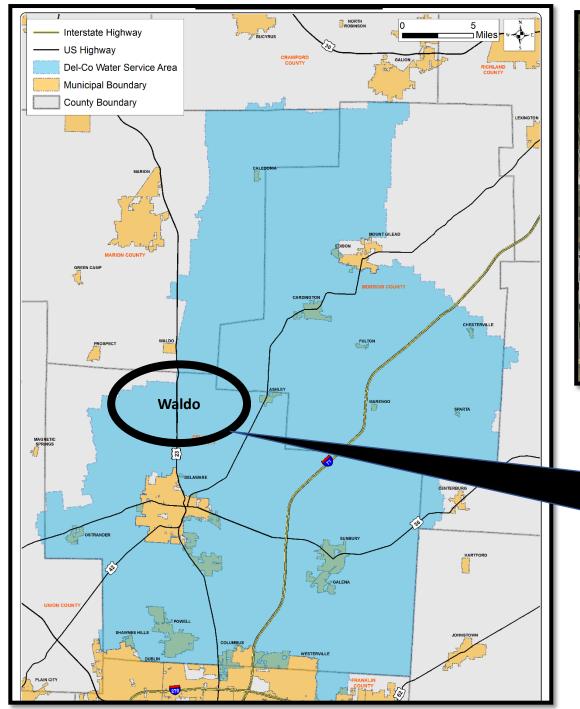
4th largest PWS in Ohio ???

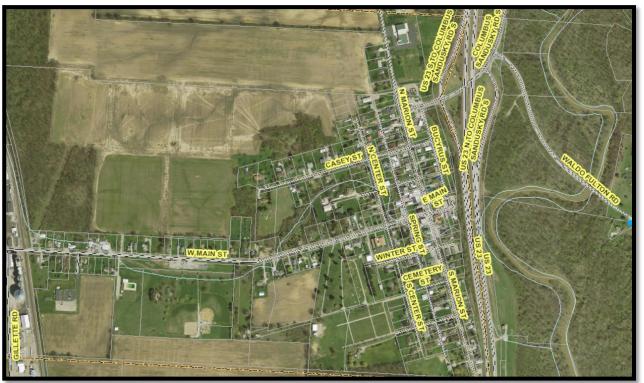


Mount Air

- · 2020 ?
- In Negotiations
- Seeking Funding







Waldo

· 2022 ?

Lead Review

Lead Review

- ·Lead is a Public Health Issue
- ·CDC vs. EPA Perspective
- Challenges with Customer Education

CDC Perspective

- No known safe blood lead concentration
- Cumulative poison with permanent effects
- CDC recommends children and pregnant women use bottled or filtered water if above 15 ppb
- Infants, children and pregnant women most susceptible

EPA Regulations

- USEPA regulation is an Action Level of 15 ppb
- An AL is not an MCL; is not health-based
- An AL exceedance is 'not a violation' and a 'Do Not Drink' notification is not required

Del-Co Lead Review Concerns

- Rules have changed since prior additions
- · Was not a previous concern
- · Always removed any lead (if found)
- · 100% Replacement

Lead - Customer Expectations

Issues are not going away

Expectations have risen

As have response protocols

National & Ohio Lead Issues

National & Ohio Lead Issues



Flint, MI (2014)

Learning disabilities, developm increase amid Flint Water Crisi

by Rachelle Spence | Thursday, August 29th 2019



The Flint Water Crisis' Latest Victim Died Earlier This Year by Detroit Today, Alaina Fruge I Aug. 29, 2019

f 💆 🛎

Sebring, OH (2016)



Pittsburg, PA (2019)

State Attorney General charges PWSA on 161 counts for lead water line violations

Pittsburgh water authority has admitted to failing to notify residents about lead water line replacement and not sampling new lines fast enough. By Janine Faust @JAF18222

lead





Pittsburgh water

By MICHAEL RUBINKAM February 1,

Newark, NJ (2019)



NPR.ORG

Newark's Drinking Water Prob

Officials in the New Jersey city bega

Newark lead water crisis: Group fighting for more bottled water for residents



Chicago, IL (2019)



CHICAGOTRIBUNE.COM

Brain-damaging lead found tested across Chicago, results show

Lightfoot suspends Chicago water meter program



Ohio EPA Lead Rules Review

Del-Co Current Focus

Lead Revisions

Disruption of Service

Guidelines for Repairs & Replacements





Lead and Coppe

The Ohio Legislature amended Ohio and copper for public water systems reviewing standards for lead and cop results, and ensuring public water sys address some of the recent changes, additional resources



Home | About | Divisions and Offices | Do Business | Citizens and Educators

Rules, Laws, Policies and Guidance



The Division of Drinking and Ground Waters (DDAGW) rules were promulgated under U.S. EPA's Safe Drinking Water Act (SDWA). Rules for Ohio public drinking water systems are adopted under Ohio Revised Code (ORC) Section 6109, and rules for Underground Injection Control, under ORC 6111.043. Ohio Administrative Code (OAC) rules administered by DDAGW are located on this page. More information about DDAGW's rule-making process is available under the "DDAGW Rules Process" section below.

Electronic versions of policies and guidance may be viewed by clicking on the appropriate tab. Join a rules electronic mailing list to stay informed about current

rule-making and opportunities to provide comment during the process.

Control of Lead & Copper (3745-81-80 to -90)

- 3745-81-80 (May 1, 2018) Control of Lead and Copper General Requirements
- 3745-81-81 (May 1, 2018) Control of Lead and Copper; Applicability of Corrosion Control Treatment Steps to Small, Medium-size and Large Water Systems.
- 3745-81-82 (July 24, 2009) Control of Lead and Copper; Description of Corrosion Control Treatment Requirements
- 3745-81-84 (May 1, 2018) Control of Lead and Copper Lead Service Line Replacement Requirements
- 3745-81-85 (May 1, 2018) Control of Lead and Copper Public Education,
 Supplemental Monitoring Requirements and Consumer Notification of Results
 - 3745-81-87 (May 1, 2018) Control of Lead and Copper Monitoring Requirements for Water Quality Parameters
 - 3745-81-88 (July 24, 2009) Control of Lead and Copper Monitoring Requirements for Lead and Copper in Water Entering the Distribution System
 - 3745-81-89 (May 1, 2018) Analytical Methods
 - 3745-81-90 (May 1, 2018) Control of Lead and Copper Reporting and Recordkeeping Requirements

Disruption of Service (3745-83-02)

- Chapter 3745-83: Operational Requirements

 - 3745-83-02 (Nov. 1, 2018) Water distribution system disruption of service.

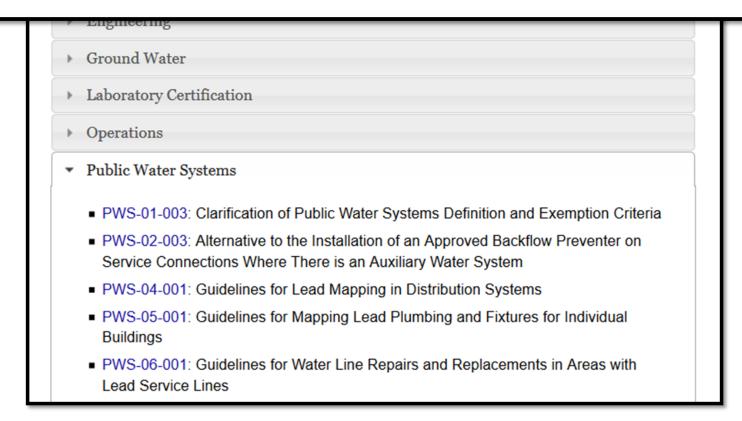
Disruption of Service (3745-83-02)

- (6) In affected areas that are known or likely to contain lead service lines, that experience a disruption of service event, public water systems shall provide public notification as follows:
 - (a) In areas where repairs are conducted in Type 2, 3 and 4 events, the public water system shall provide a notice acceptable to the director.
 - (b) In areas where replacement is conducted, the public water system shall comply with provisions contained in rule 3745-81-84 of the Administrative Code.

Policies & Guidance

Announcements and Resources DDAGW Rules Process Early Stakeholder Outreach

 PWS-06-001: Guidelines for Water Line Repairs and Replacements in Areas with Lead Service Lines





Guidelines for Water Line Repairs and Replacements in Areas with Lead Service Lines

PWS-06-001

Division of Drinking and Ground Waters Issued: November 1, 2018

1.3 Definitions

Below are definitions of terms used throughout this guidance document.

Table 1: Definitions

OAC Rule 3745-83-02

Affected Area (Main Repair)	The portion of the distribution system where the pressure of the system has dropped below 20 pounds per square inch gauge (psig) at ground level.
Main Repair	Any incident that requires the installation of pipe which does not exceed one section of pipe or 20 feet when using fusible pipe material.
Main Replacement	Any incident that requires installation of pipe which exceeds one section of pipe or 20 feet when using fusible pipe material. An emergency main replacement is a disruption of service that requires the replacement of more than one section of pipe.

OAC Rule 3745-81-84

Full LSL Replacement	Replacing both the PWS-owned portion of the LSL and the consumer-owned portion of the service line or replacing the entirety of the portion of the service line made of lead where no lead pipe remains in any portion of the service line.
Impacted Area (Main Replacement)	Any service lines that are moved, replaced, or reconnected to the main during the main replacement.
Impacted Area (LSL replacement)	Buildings, residences, or lines served by the service line being replaced (either partially or fully)
Partial LSL Replacement	Replacing only the portion of an LSL necessary to make the repair and/or reconnection to a service line or the replacement of just the portion of an LSL owned by the water system, where lead pipe remains in any portion of the service line between the water main and the structure.
Main Replacement	Any incident that requires installation of pipe which exceeds one section of pipe or 20 feet when using fusible pipe material. An emergency main replacement is a disruption of service that requires the replacement of more than one section of pipe.

Centerburg Acquisition & Lead Concerns



Centerburg Merger

- Serious discussions began about 10 years ago
- Have been ongoing since
- There was mutual agreement around 2015 that an acquisition was best

Centerburg Lead Research

Discussions with Superintendent

· Review previous LCR analysis

Review Lead Map



Google Custom Search

CEDARVILLE UNIVERSITY

OH2903612

CELINA CITY

OH5400011

CENTERBURG VILLAGE PWS

OH4200012

CENTERVILLE MILL PK/AURORA CO-OP DAYCARE

OH2831012

CENTRAL CHRISTIAN HIGH SCHOOL

OH8533412

nical Analyses on Public Drinking Water

Below is an alphabetical list of all public water systems (PWS) that are required to comply with this new requirement. Maps received by Ohio EPA can be accessed by clicking the link on the public water system name in the chart below. If you have questions about the service lines in your home or business's area, please call the contact listed below for your public water system.



Home Abou

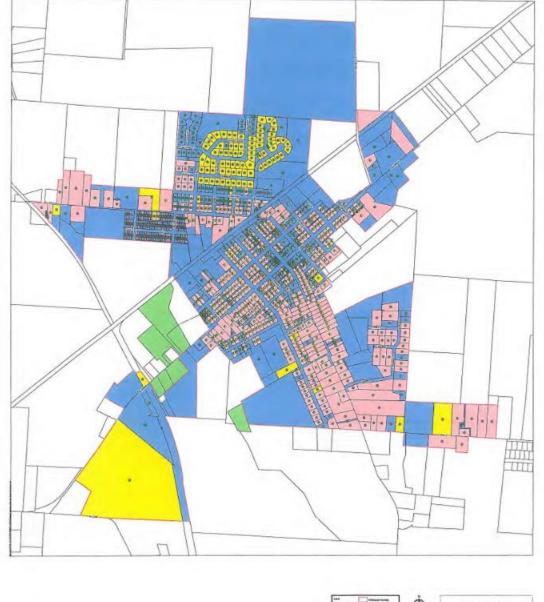
Lead Lines Map

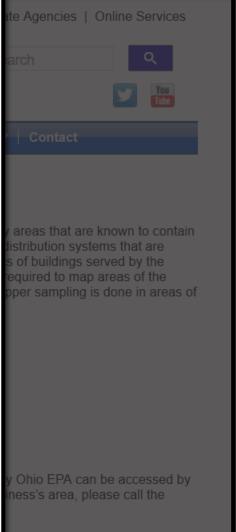
Under a new Ohio law enacted in Jur or likely to contain lead service lines known or likely to contain lead service system that may contain lead solder, system that have solder, fixtures and lead service lines

More Information

- Lead in Drinking Water fact sheet
- Learn About Lead webpage
- Questions and Answers About Lea
- Laboratories Certified to Perform 0

Below is an alphabetical list of all public king the link on the public water sy contact listed below for your public w















Key Provisions Reviewed

- Partial Replacements
- Customer Notifications
- Lead Testing
- Providing Filters

Meter Repair Project

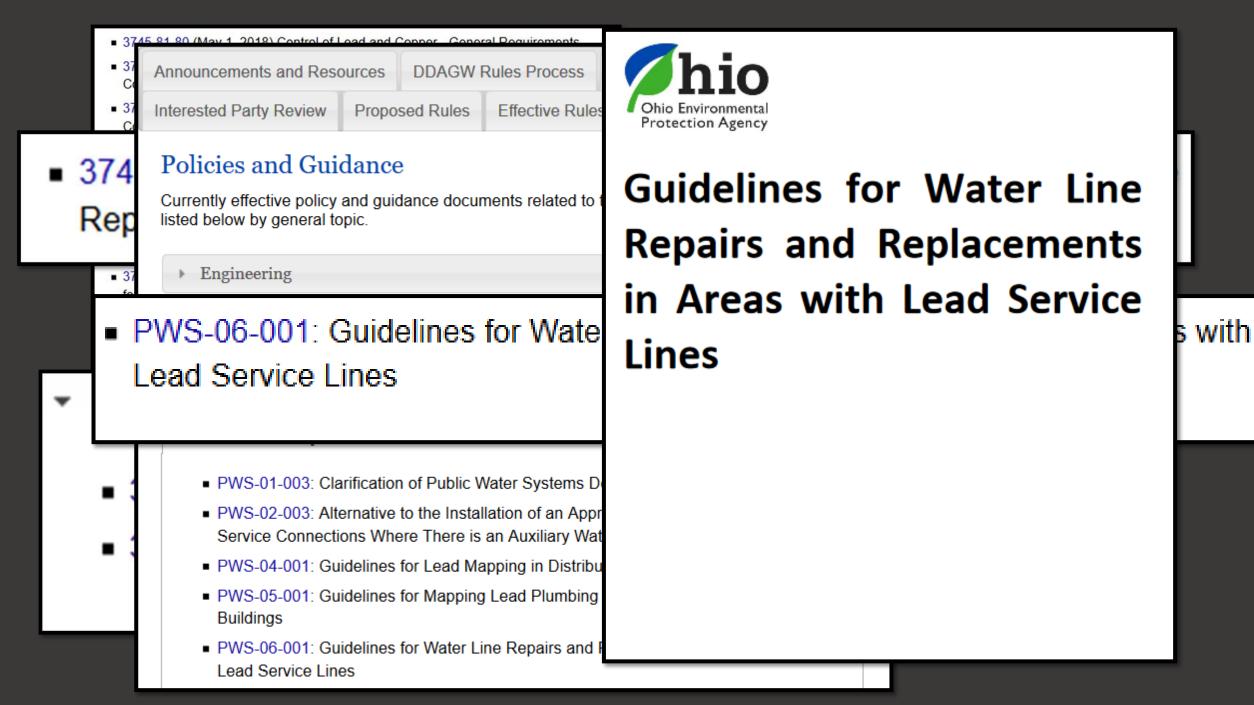
Meter Repair Project

·Replace all meters (650 services)

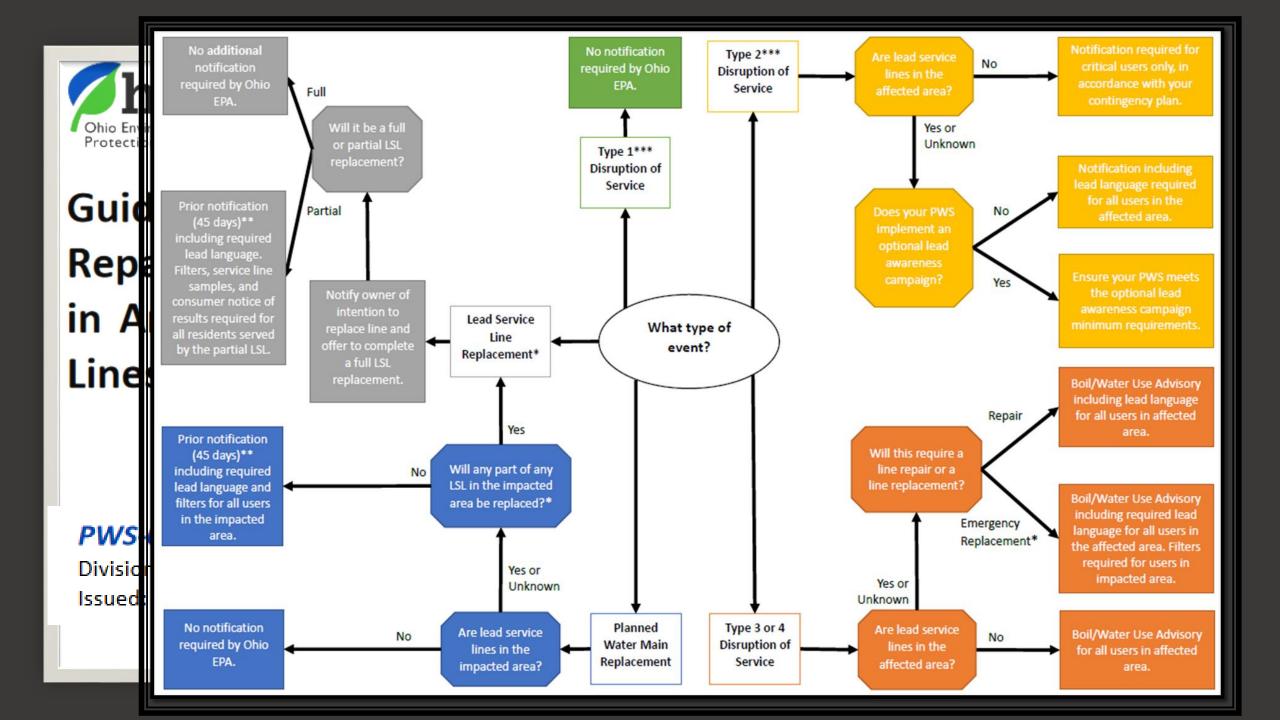
Placement outside of the home

Concerned with LSLs – which regs apply

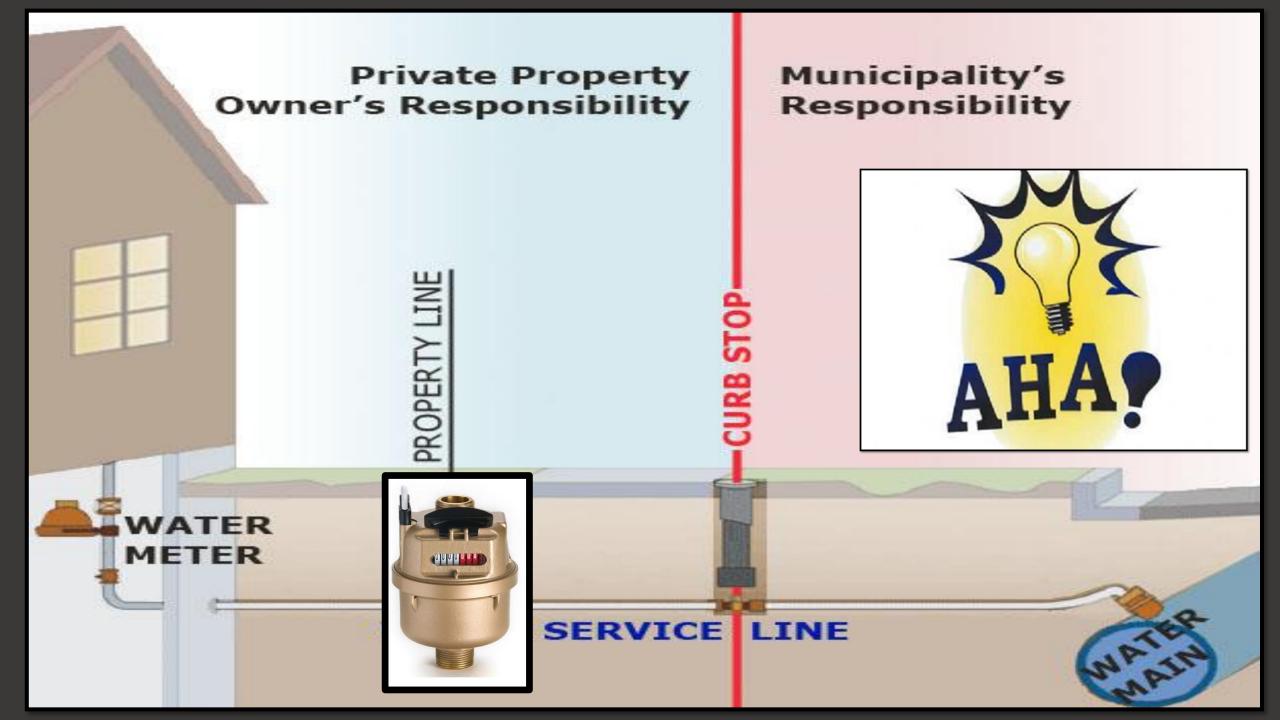
· Contacted OEPA for guidance



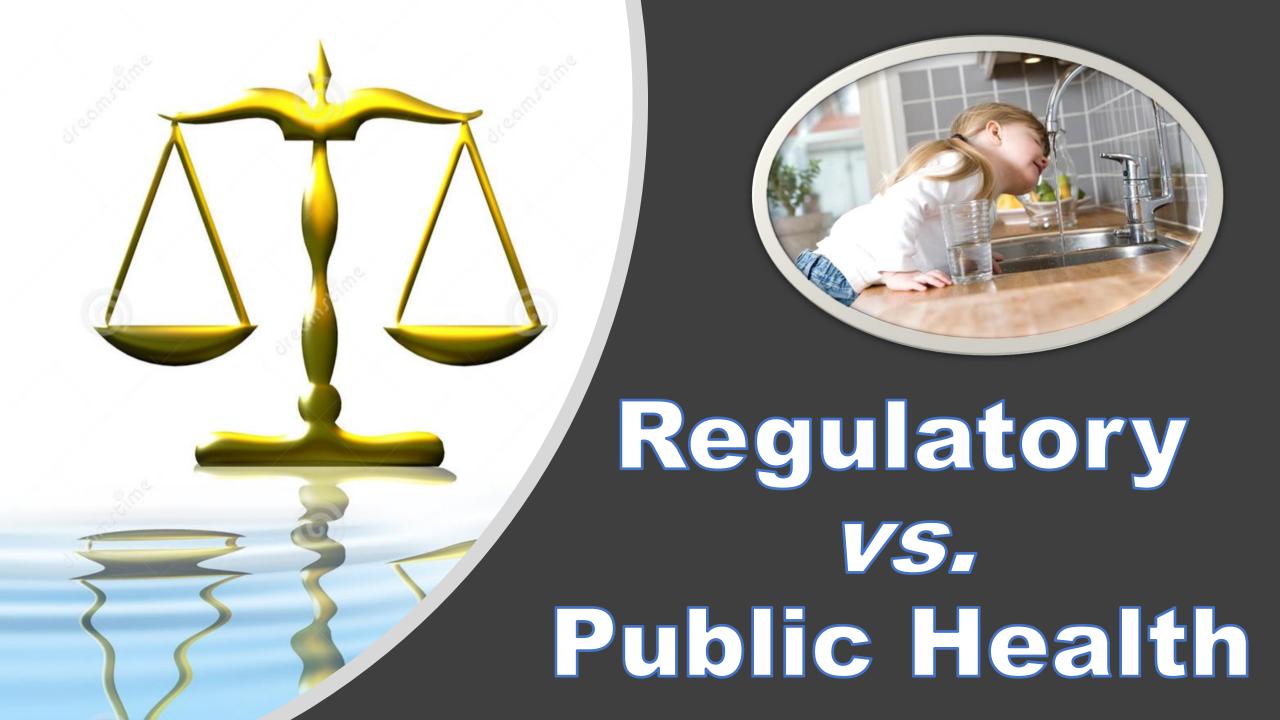












Lead Service Line Response Procedures Village of Centerburg

Contractor

If the contractor installing meter pits inside the Village of Centerburg encounters a service line that is suspected to be lead, they are to do the following:

- Use lead testing swabs to verify if the exposed service line is lead.
- 2. If the service line is positive for lead, contact Del-Co Water immediately. The first contact is the Project Manager, Natalie Linkous at 614-679-0056; the second contact is Rusty Griffith at 740-272-2220.
- 3. Move forward with the installation of the proposed meter pit.
- Notate that the service line is lead on the New Meter Installation Form.

Project Manager

If a service line has been confirmed as lead, perform the following:

- 1. Contact Del-Co Water management immediately. The first contact is the Compliance Manager, Jeff Kauffman at 614-565-8733 (mobile) or 740-548-7746 Ext. 2258; the second contact is Spencer Sheldon at 740-627-1306 (mobile) or 740-548-7746 Ext. 3301
- 2. Confirm that the contractor has notated the lead service line (LSL) on the New Meter Installation Form.

Compliance Manager

If the Compliance Manager is notified of a lead service line, and a partial lead service lin replacement was completed, perform the following:

- Coordinate with GIS Department to indicate locations of existing LSLs and more if there is a larger area where lead is an issue.
- 2. If any areas are determined to contain clusters of LSLs, provide recommendation management if areas should be skipped for outside meter installation.
- 3. Determine necessary response protocols and notifications in accordance with Administrative Code 3745-83-02, Ohio Administrative Code 3745-81-84, and Ol Guidelines for Water Line Repairs and Replacements in Areas with Lead Service

References

Ohio Administrative Code 3745-83-02. Water Distribution System Disruption of Service. https://www.epa.state.oh.us/Portals/28/documents/rules/final/3745-83-02 effective 18.pdf?ver=2018-11-27-115359-193

Requirements. https://www.epa.state.oh.us/Portals/28/documents/rules/final/3745-8 84 Rule AM 5-1-18.pdf

Ohio Administrative Code 3745-81-84. Control of Lead and Copper - Lead Service Line R

References

Ohio Administrative Code 3745-83-02. Water Distribution System Disruption of Service. https://www.epa.state.oh.us/Portals/28/documents/rules/final/3745-83-02 effective 11-1-18.pdf?ver=2018-11-27-115359-193

Ohio Administrative Code 3745-81-84. Control of Lead and Copper – Lead Service Line Replacement Requirements. https://www.epa.state.oh.us/Portals/28/documents/rules/final/3745-81-84 Rule AM 5-1-18.pdf

Ohio EPA. Guidelines for Water Line Repairs and Replacements in Areas with Lead Service Lines. https://epa.ohio.gov/Portals/28/documents/pws/PWS-06-001.pdf

Ohio EPA. Guidelines for Water Line Repairs and Replacements in Areas with Lead Service Lines. https://epa.ohio.gov/Portals/28/documents/pws/PWS-06-001.pdf

SORRY WE MISSED YOU

DELF COMPANY

6658 OLENTANGY RIVER ROAD DELAWARE, OHIO 43015 (740) 548-7746 • (800) 521-6779

OVER FOR DETAILS



Your water service was disrupted today to allow for the installation of a new water meter. We apologize for any inconvenience. During the meter installation, we discovered that you have a lead service line.

This disruption may cause short-term changes in water quality including discolored or cloudy water and/or potentially a temporary increase in lead levels in the drinking water.

As a standard practice the USEPA recommends the following actions to reduce possible lead exposure in drinking water:

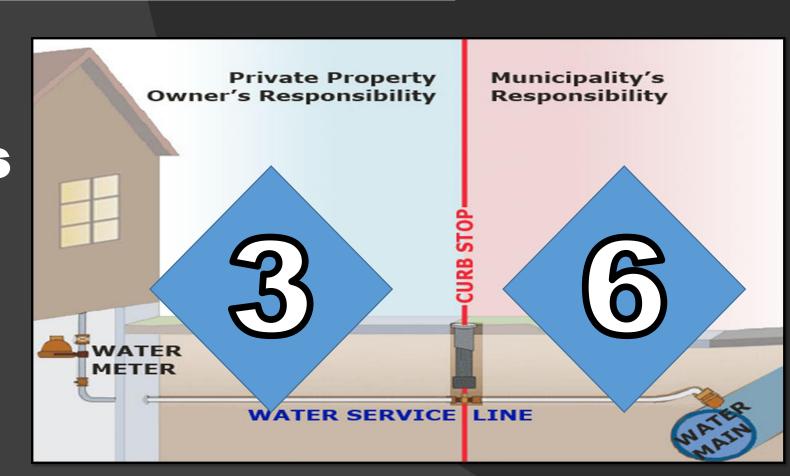
- If water has not been used for several hours, run the tap until there is a noticeable temperature drop. Then, run water for 30 seconds to 3 minutes before using it for drinking and cooking. This helps flush water that may have contained lead that may have leached from plumbing.
- · Use cold water for cooking, drinking, and preparing baby formula. Boiling the water will not reduce lead.
- Clean your faucet aerator regularly.

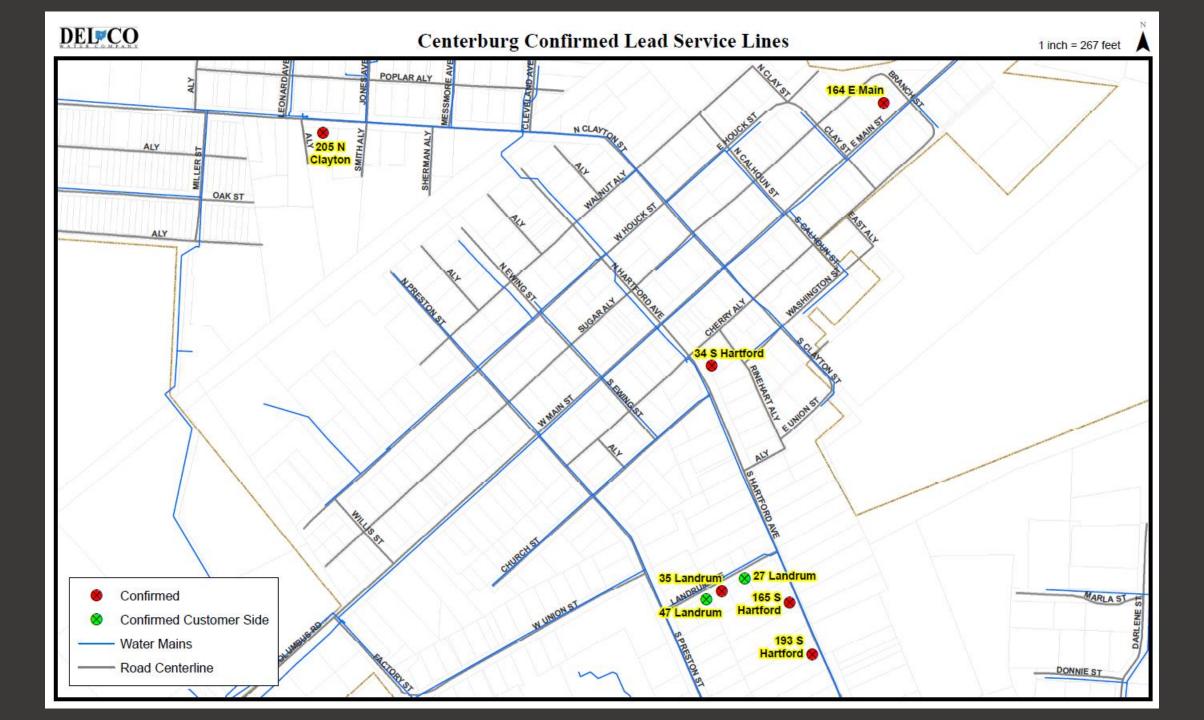
As a precaution, Del-Co Water is offering water filters which are certified to remove lead. We are also offering to test your water for lead. To request a filter and/or testing of your water, or if you have any other questions, please contact Jeff Kauffman or Natalie Linkous at (800) 521-6779. For additional information visit drinktap.org or epa.gov/safewater/lead.

Project Updates

·85 % complete

9 Lead Services





Confirmed Lead Service Lines in Centerburg – Utility owned

1)	205 Clayton Street	Brenda Sue Clark	740-485-9785		
2)	34 S. Hartford Avenue	Alice Ross	740-504-6153	740-398-9848 (Bethany)	Home 740-480-8018
3)	165 S. Hartford Avenue	Robert Rogers	740-263-1063		
4)	193 S. Hartford Avenue	Sarah Johnson	740-625-5174		
5)	35 Landrum Avenue	Gladys Green	740-625-6812		
6)	164 E. Main Street	Angie Webb (Webb's Gas Station)	740-625-6598		

Updated: 9/11/2019

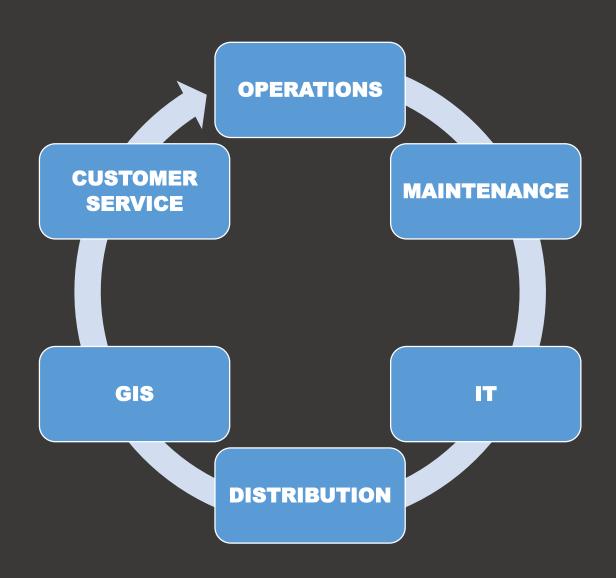
Confirmed Lead Service Lines in Centerburg – Customer owned

1)	27 Landrum Avenue	John & Tara Schoonyan	419-566-4463	740-501-7271
2)	47 Landrum Avenue	Jennifer Kincaid	740-625-7547	
3)	201 W. Main Street	Curtis Jones	740-272-2512	

Next steps

- · Determine replacement options
- Establish notification/response protocols
- Evaluate LCR sampling requirements
- · A possible Awareness Campaign

Acknowledgements



? Questions?

Jeffrey Kauffman September 13th, 2019 jkauffman@delcowater.com



