Kentucky Lead Workgroup Meeting October 26, 2016 1:30 – 3:00 PM EST Kentucky Division of Water 300 Sower Blvd. Frankfort, Kentucky

1. Call Meeting to Order and Roll Call of Membership – Greg Heitzman

2. Introduce Guests – Greg Heitzman

3. Approve Minutes of August 17, 2016 – Greg Heitzman

4. Update from EPA on Tier 1 Sampling Protocol – Peter Goodman & Tom Gabbard

5. Presentation by Training Sub-group – Gary Larimore, George Haynes, Kelley Dearing Smith

6. Review Sub-groups Assignments and Schedule – Greg Heitzman

7. Review Reporting Template – Greg Heitzman

8. Open Discussion for Workgroup

9. Public Comment Period

10. Next Workgroup Meeting, 1:30 PM – November 16, 2016

Drinking Water Advisory Council Lead in Drinking Water (LIDW) Work Group Draft Meeting Minutes October 26, 2016

In attendance: Greg Heitzman, Chair (BWK), Jennifer Burt (DPH), Obe Cox (CCW), Mike Gardner (BGMU), Gary Larimore (KRWA), Ron Lovan (NKYW), Brad Montgomery (ACEC), Justin Sensabaugh (KYAW)

<u>Absent</u>: Bill Robertson (PWWKY), Rengao Song (LWC), Thomas Rockaway (UofL), Kay Sanborn (KYTN-AWWA), Brian Thomas (MWD)

Division of Water (DOW): Tom Gabbard, Asst. Director; Carole Gatalfo, Sarah Gaddis, Todd Ritter, Joe Uliasz

Liaison and Public Attendees: Lane Boldman (KCC), S. Morgan Faulkner (KYOAG-ORI), Melissa Melton (RCAP)

The meeting began at 1:35 p.m. EST.

Call Meeting to Order and Membership Roll Call

Chair Greg Heitzman led the roll call, confirmed a quorum, and introduced guests.

Approve Minutes of August 17, 2016

The workgroup approved the May meeting minutes by consensus.

Training Presentation (Training Sub-Group) - Gary Larimore

Gary Larimore gave a presentation regarding needed training, and the importance of educating the public, on behalf of the Training Sub-Group. The presentation identified critical stakeholders, such as state and federal government entities, health departments, schools, and day care centers, as well as training resources that already exist, how best to disseminate the information and training where it is most needed, and avenues of reaching target audiences. An overview of Louisville Water's "Flush the Line" program and Lead Service Line Replacement programs were included.

During and following the presentation, the group discussed how best to tap into the public education system, using Ohio as an example, available resources to assist utility personnel with customer education, and the challenges faced by non-English speaking customers. Potential training venues include conferences, seminars and workshops, and "tail gate" sessions. The group discussed the need for continued emphasis on corrosion control and water chemistry. Non-certified utility workers need to be properly trained on lead service line identification, but engaging their employers and workers to attend trainings presents many challenges. Training for critical stakeholders exists but tends to be more technical rather than consumer-based.

The group discussed developing a generic information packet for consumers with utility sponsorship and assistance from the state. The Division of Compliance Assistance (DCA) may be a good resource because it often produces booklets and other educational materials for the public and regulated community, and links training to education. There may be some hesitancy from the regulated community

to disseminate information simply because it draws attention to an issue that is not prevalent in Kentucky. Since the DCA may also be able to deflect some of the hesitancy to begin a program, Tom Gabbard will contact Paulette Akers, DCA Director, to discuss the potential for a collaborative education and training program.

Update from EPA on Tier 1 Sampling Protocol - Tom Gabbard

The EPA recently sent a memo regarding Lead & Copper Rule monitoring of drinking water. EPA is receiving feedback that many areas did not have enough Tier 1 sites for dependable, representative sampling. There was also a reminder to document field repair and maintenance as part of the required materials evaluation. The deadline for the Drinking Water Action Plan is April 30, 2017, but EPA indicated that it should be released within a month. The action plan will also be discussed with the Drinking Water Advisory Council.

Review sub-group assignments and Schedule - Greg Heitzman

The group agreed by consensus to cancel the November meeting to accommodate scheduling conflicts. All scheduled sub-group presentations will be pushed back one month. The next meeting will be December 21, 2016 with a presentation from the Finance sub-group.

Open Discussion for Workgroup

There have been no recent discussions regarding the EPA inventory requirement. A recent EPA news release suggested the safety of water filters. ASDWA stated that Brita and Keurig filters were working well at removing lead which was data-supported in a Washington Post article on October 22. There will be a Flint Water Summit in March 2017.

Public Comment Period

There were no comments from public attendees.

Next Workgroup Meeting - December 21, 2016 at 1:30 p.m.

The meeting adjourned at 3:20 p.m. EST.

Drinking Water Advisory Council Lead in Drinking Water (LIDW) Work Group Meeting Minutes October 26, 2016

<u>In attendance</u>: Greg Heitzman, Chair (BWK), Jennifer Burt (DPH), Obe Cox (CCW), Mike Gardner (BGMU), Gary Larimore (KRWA), Ron Lovan (NKYW), Brad Montgomery (ACEC), Justin Sensabaugh (KYAW)

<u>Absent</u>: Bill Robertson (PWWKY), Rengao Song (LWC), Thomas Rockaway (UofL), Kay Sanborn (KYTN-AWWA), Brian Thomas (MWD)

<u>Division of Water (DOW)</u>: Tom Gabbard, Asst. Director; Carole Catalfo, Sarah Gaddis, Todd Ritter, Joe Uliasz

Liaison and Public Attendees: Lane Boldman (KCC), S. Morgan Faulkner (KYOAG-ORI), Melissa Melton (RCAP)

The meeting began at 1:35 p.m. EST.

Call Meeting to Order and Membership Roll Call

Chair Greg Heitzman led the roll call, confirmed a quorum, and introduced guests.

Approve Minutes of August 17, 2016

The workgroup approved the May meeting minutes by consensus.

Training Presentation (Training Sub-Group) – Gary Larimore

Gary Larimore gave a presentation regarding needed training, and the importance of educating the public, on behalf of the Training Sub-Group. The presentation identified critical stakeholders, such as state and federal government entities, health departments, schools, and day care centers, as well as training resources that already exist, how best to disseminate the information and training where it is most needed, and avenues of reaching target audiences. An overview of Louisville Water's "Flush the Line" program and Lead Service Line Replacement programs were included.

During and following the presentation, the group discussed how best to tap into the public education system, using Ohio as an example, available resources to assist utility personnel with customer education, and the challenges faced by non-English speaking customers. Potential training venues include conferences, seminars and workshops, and "tail gate" sessions. The group discussed the need for continued emphasis on corrosion control and water chemistry. Non-certified utility workers need to be properly trained on lead service line identification, but engaging their employers and workers to attend trainings presents many challenges. Training for critical stakeholders exists but tends to be more technical rather than consumer-based.

The group discussed developing a generic information packet for consumers with utility sponsorship and assistance from the state. The Division of Compliance Assistance (DCA) may be a good resource because it often produces booklets and other educational materials for the public and regulated community, and links training to education. There may be some hesitancy from the regulated community

to disseminate information simply because it draws attention to an issue that is not prevalent in Kentucky. Since the DCA may also be able to deflect some of the hesitancy to begin a program, Tom Gabbard will contact Paulette Akers, DCA Director, to discuss the potential for a collaborative education and training program.

Update from EPA on Tier 1 Sampling Protocol - Tom Gabbard

The EPA recently sent a memo regarding Lead & Copper Rule monitoring of drinking water. EPA is receiving feedback that many areas did not have enough Tier 1 sites for dependable, representative sampling. There was also a reminder to document field repair and maintenance as part of the required materials evaluation. The deadline for the Drinking Water Action Plan is April 30, 2017, but EPA indicated that it should be released within a month. The action plan will also be discussed with the Drinking Water Advisory Council.

Review sub-group assignments and Schedule - Greg Heitzman

The group agreed by consensus to cancel the November meeting to accommodate scheduling conflicts. All scheduled sub-group presentations will be pushed back one month. The next meeting will be December 21, 2016 with a presentation from the Finance sub-group.

Open Discussion for Workgroup

There have been no recent discussions regarding the EPA inventory requirement. A recent EPA news release suggested the safety of water filters. ASDWA stated that Brita and Keurig filters were working well at removing lead which was data-supported in a Washington Post article on October 22. There will be a Flint Water Summit in March 2017.

Public Comment Period

There were no comments from public attendees.

Next Workgroup Meeting – December 21, 2016 at 1:30 p.m.

The meeting adjourned at 3:20 p.m. EST.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

WSG 200 Date Signed: October 13, 2016

> OFFICE OF WATER

MEMORANDUM

SUBJECT: Implementation of the Lead and Copper Rule Provisions Related to Sample Site Selection and Triennial Monitoring

FROM: Peter C. Grevatt, Director Office of Ground Water & Drinking Water

TO: Water Division Directors Regions I-X

As part of EPA's on-going oversight responsibilities, the Office of Ground Water and Drinking Water (OGWDW) has worked with the Regions to conduct a thorough review of implementation of the Lead and Copper Rule (LCR). One area that requires additional attention relates to compliance sampling site selection and the use of tier 1 sites by community water systems (CWSs). I ask that you and your primacy agencies ensure that implementation of the LCR is consistent with the rule requirements discussed below and that this information is well-documented. I also request that you and your primacy agencies pay close attention to the documentation the agency will expect to have available during program reviews regarding future primacy agency decisions to approve requests from public water systems seeking to return to triennial monitoring¹ after a lead action level exceedance.

Tier 1 Sample Site Selection

Under the current LCR, the CWSs are required to identify and use tier 1 sites for their compliance monitoring under 40 CFR §141.86. When a system no longer has enough tier 1 sites in its sample pool to meet the minimum number of samples (e.g., due to plumbing changes or lack of homeowner participation), the system must identify other tier 1 sites to add to its sample pool.

¹ Systems serving more than 50,000 persons and small and medium systems with state-defined optimal water quality parameters must receive written approval from the primacy agency to return to reduced monitoring after a lead action level exceedance. 40 CFR § 141,(86)(d)(4)(vi)(B).

Tier 1 sampling sites are defined in the LCR as "single family structures²" that contain "copper pipes with lead solder installed after 1982 or contain lead pipes; and/or served by a lead service line." ³ As required under 40 CFR §141.86(a), all sites used for lead and copper compliance tap sampling must be tier 1 sites unless there are "insufficient tier 1 sampling sites." The phrase "insufficient tier 1 sampling sites" refers to sites in the distribution system. It does not refer to the sites currently in the sample pool.

Under the LCR, CWSs are required to identify a pool of targeted sampling sites that is sufficiently large to ensure the water system can collect the number of samples required in \$141.86(c). The regulations at 40 CFR \$141.86(a) (1) and \$141.42(d) in Subpart E of Part 141. require water systems to develop a materials evaluation to identify the requisite number of tier 1 sites. The regulations at 141.86(a)(2) also state that the system is required to take additional measures "in order to identify a sufficient number of sampling sites" if the materials evaluation is insufficient. Specifically, the regulations state "... the system shall seek to collect such information where possible in the course of its normal operations (e.g., checking service line materials when reading water meters or performing maintenance activities): (i) All plumbing codes, permits, and records in the files of the building department(s) which indicate the plumbing materials that are installed within publicly and privately owned structures connected to the distribution system: (ii) All inspections and records of the distribution system that indicate the material composition of the service connections that connect a structure to the distribution system; and (iii) All existing water quality information, which includes the results of all prior analyses of the system or individual structures connected to the system, indicating locations that may be particularly susceptible to high lead or copper concentrations."

In some cases, materials evaluations may not have been sufficiently robust to meet the targeted sampling site requirements of the rule or they may need to be updated. To ensure that a public water system is able to accurately identify the presence of tier 1 sites, the public water system should periodically update its materials evaluation to capture any recent changes to the available sites for sampling. For example, such updates would be opportune when distribution system maintenance projects occur. Several states have informed us that they are already requiring their public water systems to update their materials evaluations. EPA strongly recommends that public water systems maintain and submit upon request to their primacy agency documentation to confirm that the system periodically updates its materials evaluation including a description of the sources used to update this information.

¹ Where multi-family structures make up more than 20 percent of the structures served by the system, those types of structures may be used instead of single family structures.

¹Congress enacted the Safe Drinking Water Act Amendments of 1986 that included a prohibition on the use of pipe, solder, or flux that are not lead free in potable applications, including public water systems. Existing EPA guidance clarifies that tier 1 sites for solder generally should have ages between 1982 and the effective date of the lead ban in States (42 U.S.C. 300g-6). Lead and Copper Rule Monitoring and Reporting Guidance for Public Water Systems, page 25: Document # EPA 816-R-10-004, March 2010

Eligibility for Triennial Tap Monitoring for Lead after an Action Level Exceedance

Any water system approved for reduced tap monitoring must return to standard monitoring if it exceeds the action level according to 40 CFR §141.86(d)(4)(vi). To return to triennial monitoring, public water systems will need to complete two rounds of 6-month sampling and two years of annual monitoring with 90th percentile results below the action level.⁴ For systems serving more than 50,000 persons and small and medium systems with state-defined optimal water quality parameters, the primacy agency must provide written approval for a system to return to reduced monitoring per 40 CFR §141.86(d)(4)(vi)(B).

EPA Regions should act in their oversight capacity, to clearly communicate the expectation that primacy agencies will critically consider relevant aspects of a water system's LCR program including corrosion control treatment and historical performance before granting triennial monitoring. In addition, where the primacy agency finds that a public water system is lacking in technical, managerial, and financial capacity, the primacy agency could decide to keep the system on an annual LCR monitoring schedule. Regions should communicate the expectation that primacy agencies will be prepared to provide appropriate documentation of the relevant factors taken into consideration when making decisions to approve or disapprove triennial monitoring for those systems subject to primacy agency approval. Regions should also communicate the importance of primacy agencies maintaining existing documentation supporting past decisions to approve a reduced monitoring schedule for systems that are required to obtain state written approval and have previously experienced concerns with lead in drinking water, such as systems that were approved for a reduced monitoring schedule soon after they had reported an action level exceedance. In accordance with 40 CFR §142.14(d)(5), primacy agencies must retain records of their monitoring frequency decisions, including the monitoring results and other data supporting the decision, the primacy agencies' findings based on the supporting data and any additional bases for such decision. Additional primacy agency record keeping requirements specific to the LCR are located at 40 CFR §142.14(d)(8).

EPA Regions should also communicate the expectation that the primacy agency will work with the water system to ensure they are identifying and addressing the root cause(s) of action level exceedances before the system commences or returns to triennial monitoring. For those systems which require written state approval. EPA expects that primacy agencies will be prepared to provide documentation demonstrating that they have reviewed those systems prior to approving a reduced monitoring schedule, to determine whether any additional factors exist that call into question the appropriateness of reduced monitoring, and to revise a system's eligibility as necessary for ensuring public health protection.

⁴ If a system has 90th percentile lead levels of less than or equal to 0.005 mg/L and 90th percentile copper levels of less than or equal to 0.65 mg/L for two consecutive six-month monitoring periods, they may resume triennial monitoring sooner in accordance with 40 CFR 141.86(d)(iv)(A) or (B) and 40 CFR 141.86(d)(4)(v).

Conclusion

EPA Regions, primacy agencies and public water systems should work together to ensure robust implementation of the current LCR. OGWDW will continue to support the Regions in these efforts, including promoting innovative approaches to identify lead service lines and lead components in drinking water distribution systems. Please share these technical recommendations with your primacy agencies' drinking water program directors. If you have any questions, please contact Anita Thompkins at thompkins.anita@epa.gov.

Kentucky Lead Report

FOCUS AREA – PUBLIC HEALTH & LEAD

BACKGROUND INFORMATION:

A brief description of the subgroup topic area, less than 500 words

CURRENT CONDITIONS:

The current state of knowledge on the topic. This section contains the body of knowledge on the topic and should include charts, graphs, and exhibits to assist with communication. Remember the audience is the water industry and the general public, elected officials. This section has variable length, but typically will be 5 to 10 pages, including exhibits.

BEST PRACTICES:

This section is optional, and may include examples of best practices from other utilities across the state or nation, limit to 5 pages, and include exhibits, illustrations.

Resource Needs:

This section includes identification of resources needed to advance the state of knowledge. It may include financial, training, technology, research, legislative and other resource needs.

RECOMMENDATIONS:

This section will include a summary of recommendations (less than 1 page) as follows:

The Kentucky Lead Workgroup provides the following recommendations:

- Support for A
- Training for B
- Technology for C
- Funding for D
- Research for E
- Legislation for F

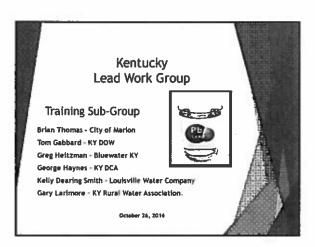
ACKNOWLEDGEMENTS:

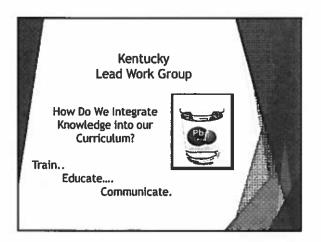
This section includes recognition for the people/resources used for the sub-group work:

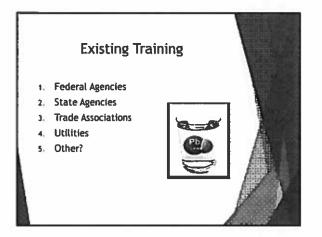
- Name, Credentials, Organization, email
- Greg Heitzman, PE, MBA, BlueWater Kentucky

RESOURCES:

- 1. Title, Author(s), Publication Source, Date, Website
- Kentucky Division of Water Annual Report, Fiscal Year 2010, Commonwealth of Kentucky, Energy and Environment Cabinet, Department for Environmental Protection, Division of Water: http://water.ky.gov

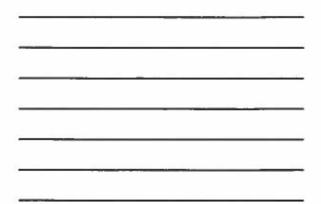


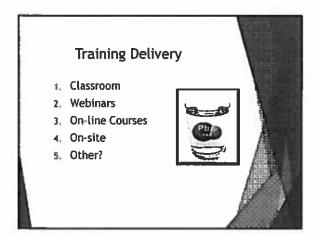


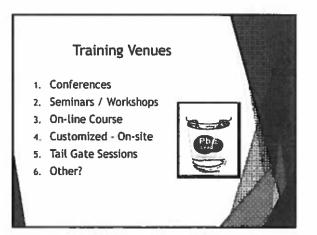


1

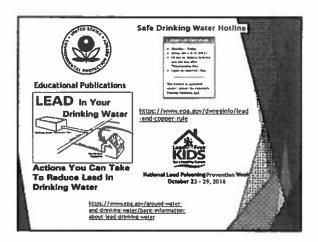


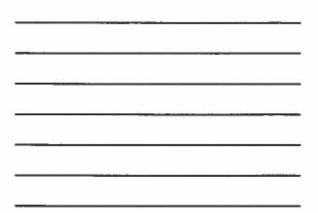


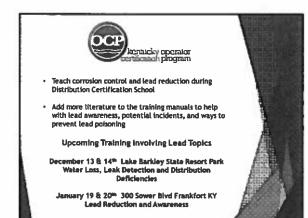




2





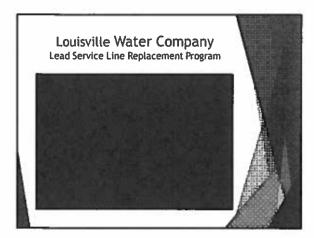


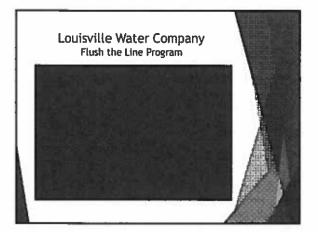
Lead Management ... Three Prong Approach

- 1. Maintain excellent water quality through Corrosion Control
- 2. Focus on Maintaining pipes that deliver water by Eliminating Remaining Lead Service Lines
- 3. Proactive Customer Education concerning lead in water



4





Critical Stakeholders

- 1. Elected Officials
- 2. Management/Decision Makers
- 3. Board Members
- 4. Water Treatment and Distribution Operators
- 5. Customer Service Representatives
- 6. Health Department
- 7. Other?

Take Home Message

- Existing training does a good job covering the compliance aspects of the Lead and Copper Rule.
- Continue emphasis on water chemistry corrosion control (Langelier Saturation Index)
- Continue providing continuing education training at conferences, seminars, etc.
- Focus on Infrastructure Are utility personnel properly trained on identification of lead piping and proper protocols? Hands on Training

Take Home Message

- > Utilities need assistance with public education.
- Enhance training on customer education.
 Properly answering customer questions.
 - How to partner with schools, daycares, health departments, hospitals, nursing homes, etc.
 - > How do you fold that training into what we already do?

Take Home Message

- Develop training to educate critical stakeholders.
- > To properly educate the public stakeholders must be properly trained on how to communicate the message.
- > What is the Message?
 - > Your water is safe to drink!

Chairman

Greg Heitzman, P.E. BlueWater Kentucky 625 Myrtle Street Louisville, KY 40208 Gheitzman@bluewaterky.com Office: 502-568-6342 Cell: 502-533-5073

KRWA Liaison Gary Larimore

3251 Spring Hollow Ave, Bowling Green, KY 42104 g.larimore@krwa.org Cell: 270-535-5921

AWWA Liaison

Kay Sanborn, P.E.

Executive Director KY/TN Section AWWA 3801 Springhurst Blvd. Suite 201 Louisville, KY 40241 <u>executivedirector@kytnawwa.org</u> Phone: 800-665-0175 Cell: 502-550-2992

DOW Liaison

Tom Gabbard, Assistant Director

200 Fair Oaks Drive Frankfort KY 40601 tom.gabbard@ky.gov 502-564-3410 EXT. 4972

AMWA and Large Water System

Ron Lovan, P.E. Northern Kentucky Water District 2835 Crescent Springs Pike Erlanger, KY 41018 <u>RLovan@nkywater.org</u> 859-441-5087

Academic Advisor

Dr. Thomas Rockaway, PhD

University of Louisville Civil Engineering 2301 S. 3rd Street Louisville 40292 <u>rockaway@louisville.edu</u> 502-852-3272

ACEC Brad Montgomery, P.E. GRW Consultants

9710 Bunsen Pkwy Louisville, KY 40299 <u>bmontgomery@grwinc.com</u> 859-229-7395

KMUA and Medium Water System Mike Gardner, P.E.

Bowling Green Municipal Utilities 801 Center St Bowling Green, KY 42101 mgardner@bgmu.com 270-782-4366

Large Water System

Bill Robertson, P.E. Paducah Water Works 1800 N 8th St Paducah, KY 42001 brobertson@pwwky.com 270-444-5550

Medium GW System

Carroll County Water District #1 205 Main Cross St Ghent, KY 41045 <u>ocox@carrollcountywater.com</u> (502) 347-9500

Small Water System Mr. Brian Thomas

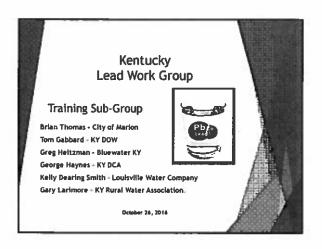
Marion Water Department 217 S Main St #102 Marion, KY 42064 <u>bthomas@marionky.gov</u> Phone: 270-965-2266 Cell: 270-704-0023

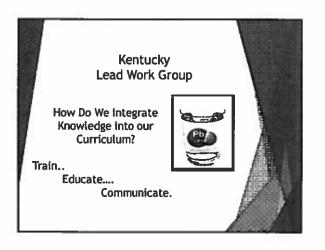
Large Water System Dr. Rengao Song

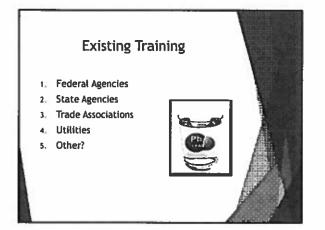
Louisville Water Co. 550 S 3rd St. Louisville, KY 40202 rsong@lwcky.com 502-569-3600 Ext.1880

Department of Public Health

Jennifer Burt, Public Safety Branch 275 E Main Street HS1E-B Frankfort, Kentucky 40621 JenniferA.Burt@ky.gov 502-564-4537 Ext. 4221

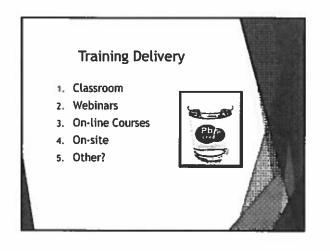








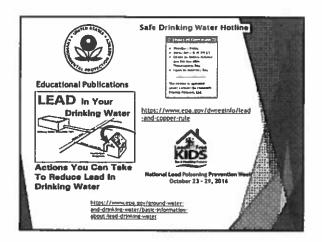
1000			
		1.12	
	100.000		

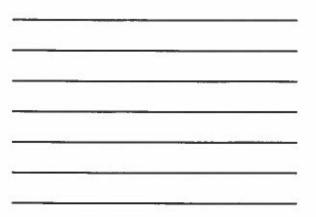


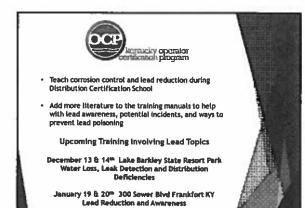


6. Other?



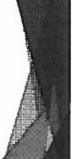


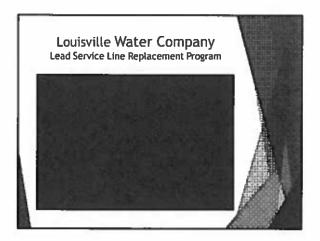


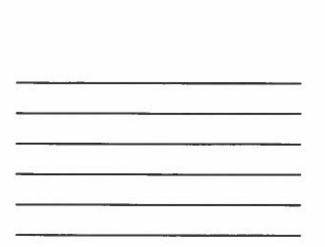


Lead Management ... Three Prong Approach

- 1. Maintain excellent water quality through Corrosion Control
- 2. Focus on Maintaining pipes that deliver water by Eliminating Remaining Lead Service Lines
- 3. Proactive Customer Education concerning lead in water







Critical Stakeholders

Louisville Water Company Flush the Line Program

- 1. Elected Officials
- z. Management/Decision Makers
- 3. Board Members
- 4. Water Treatment and Distribution Operators
- 5. Customer Service Representatives
- 6. Health Department
- 7. Other?



Take Home Message

- Existing training does a good job covering the compliance aspects of the Lead and Copper Rule.
- Continue emphasis on water chemistry corrosion control (Langeller Saturation Index)
- Continue providing continuing education training at conferences, seminars, etc.
- Focus on Infrastructure Are utility personnel properly trained on identification of lead piping and proper protocols? Hands on Training

Take Home Message

- > Utilities need assistance with public education.
- > Enhance training on customer education.
 - > Properly answering customer questions.
 - How to partner with schools, daycares, health departments, hospitals, nursing homes, etc.
 - > How do you fold that training into what we already do?

Take Home Message

- Develop training to educate critical stakeholders.
- To properly educate the public stakeholders must be properly trained on how to communicate the message.
- What is the Message?
 - Your water is safe to drink!



