U.S. Environmental Protection Agency NDWAC LEAD AND COPPER WORKING GROUP

June 22, 2015

Preliminary Report of the Lead and Copper Rule Working Group to the National Drinking Water Advisory Council

WEBINAR SUMMARY

Webinar Objectives/Desired Outcomes:

- Brief NDWAC members on the recommendations and remaining issues under consideration by the LCR Working Group, and
- Identify any major policy questions or considerations that the NDWAC members would like the Working Group to address at their final meeting on June 24-25.

A. Welcome, Webinar Objectives/Agenda, Logistics

Michelle Schutz, Designated Federal Officer for the National Drinking Water Advisory Council (NDWAC or Council), welcomed all to the webinar.¹ She thanked the Lead and Copper Working Group (LCRWG) for their time and diligent work in preparing for this webinar and forthcoming deliberations.² She provided a brief history of the NDWAC, which was created by Congress on December 16, 1974 under the Safe Drinking Water Act (SDWA), and is chartered under the Federal Advisory Committee Act. Thus, meetings are announced and open, materials are publically available, there is a balance of scientific expertise and points of view, meeting summaries are prepared and certified and there is an opportunity for public comment. EPA is accepting written comments through June 29, 2015, which should be emailed to her at Schutz.michelle@epa.gov. The Council will consider these comments during their deliberations.

Jill Jonas, NDWAC Chair, welcomed the public, Council members and the LCRWG. She explained that EPA asked the Council to form a LCRWG in December 2013. From March 2014 through June 2015, the LCRWG will meet seven times to develop advice for the Council as the Council develops their recommendations to EPA on targeted issues for the Lead and Copper Rule (LCR) Long-term Revisions. The objectives of this webinar are for the LCRWG to provide an overview of their discussions to date and for the Council members to share considerations they would like to see addressed in the LCRWG's final report to the Council.

Peter Grevatt, Director, Office of Groundwater and Drinking Water, welcomed the public and NDWAC and LCRWG members. He explained that the LCR is a very important EPA topic and one of the most

¹ See Attachment A for a list of the NDWAC members and the Centers for Disease Control liaison.

² See Attachment B for a list of the LCRWG members.

complicated drinking water rules. The rule fits into a broader effort to reduce lead exposure to children through various media. EPA asked the LCRWG to take on the most fundamental and challenging provisions of the existing LCR and to be creative in developing new approaches that are more efficient in meeting the goals of the rule while maintaining or increasing public health protection. He acknowledged the outstanding efforts of the LCRWG, including in-person meetings, four webinars prior to this one and a dozen smaller sub-group conference calls. He noted their willingness to work cohesively and to listen to different perspectives and consider them in developing recommendations to the NDWAC. The NDWAC in turn will provide recommendations to the EPA Administrator. He encouraged the LCRWG to maintain that focus as they near the end of their process to develop practical, sensitive, healthprotective recommendations for EPA. He thanked all for participating.

Gail Bingham, the facilitator of the LCRWG from RESOLVE, reiterated the purpose of the webinar to brief the NDWAC members on discussions and remaining questions and to understand the questions that NDWAC would like the LCRWG to address. This will allow the report to NDWAC, which will come out later this summer or early fall, to be as complete as possible. Ms. Bingham went through the agenda.³ She introduced the LCRWG presenters for the webinar and the topics they will be presenting. She explained that time has been allotted after each of the four technical presentations and at the end of the webinar for NDWAC members to share perspectives and ask questions. The speakers will try to address any clarification questions, and the LCRWG will respond to questions requiring further discussion in their report. She added that the LCRWG includes a balance and mix of perspectives and that the speakers' views may not reflect EPA or their own group's perspectives. She explained that the webinar includes time for public comment and will conclude with any final reflections from NDWAC members.⁴

B. Introduction: Background and Considerations the LCR Work Group Has Addressed

The two members who serve on both the NDWAC and LCRWG provided the introduction. Marilyn Christian from the Harris County Health Department presented the background and Chris Wiant from Caring from Colorado presented considerations the LCRWG has taken into account and an overview of the draft recommendations under discussion. A summary of each topic is provided below.

1. Background

Ms. Christian explained the composition of the 16-member LCRWG and that she and Chris Wiant serve as liaisons to the NDWAC. At the start of the process, the LCRWG had technical presentations on the state of the science for corrosion control, sample site selection, lead sampling protocol, copper public education (PE) and lead service line replacement (LSLR). She noted that the Group has had great dialogue but that there are still outstanding issues. Ms. Christian provided a brief background on the LCR, which is a treatment technique rule. The actions that must be taken if the lead action level (AL) is exceeded include: PE, source water monitoring and treatment if needed, installation or optimization of corrosion control treatment (CCT) for system serving \leq 50,000 people, and LSLR if treatment cannot bring lead levels at or below the ALs.

³ See Attachment C for a copy of the agenda.

⁴ A recording of the webinar in its entirety is available at <u>https://epa.connectsolutions.com/p4wvtk4fw3a/</u>.

2. <u>Considerations in Preparing the Report/Overview of Recommendations</u>

Mr. Wiant discussed the considerations taken into account by the LCRWG, among which is that there is no safe level of lead. Lead-bearing plumbing materials in contact with drinking water may pose a risk at all times, not just when the AL is exceeded. The most effective remedy is to proactively remove lead sources. He added that sources of lead include service lines and premise plumbing. Thus, elimination of lead materials is a shared responsibility between the public water system (PWS) and their customers. Partnerships and creative financing are needed. A proactive approach to removing lead sources represents a significant departure from the current rule, and will require engaging other partners including state and federal agencies within and outside of drinking water. He noted other considerations including:

- Retaining the LCR as a treatment technique rule.
- Addressing lead and copper separately.
- Recognizing that CCT is complex, dynamic and varies with system conditions. This necessitates a better understanding of the science and unintended consequences.
- Being mindful of what systems can implement and states can oversee.
- Focusing PWS and state resources on actions that achieve the greatest positive health outcomes.

Mr. Wiant also provided an overview of the Group's package of draft recommendations and discussed complementary actions critical to the success of the overall approach. He noted that lead in drinking water is not just an EPA issue. Thus, the full solution requires collaboration with others. EPA has to take a leadership role but critical to a national effort includes:

- EPA's working across all others offices and with other federal agencies on an integrated approach that includes the US Department of Housing and Urban Development (HUD) and the Centers for Disease Control (CDC).
- State and local policies that extend beyond EPA's authority to help LSLR. There is a need to understand these authorities to better provide incentives for LSLR.
- Enhanced corporation with states and LHDs on childhood lead poisoning, such that drinking water is considered as a possible source of lead for at risk children identified through lead poisoning and screening programs.
- Better education of healthcare providers and health departments about health threats from lead in drinking water.
- Financial assistance programs to address environmental justice issues by improving financial assistance for LSLR for low-income customers.
- Engaging experts in community-based risk communication to improve PE approaches.
- Additional research on flushing.
- A national clearinghouse to make sure all available information is made accessible to various audiences in a useful way.

C. Presentations & Discussion: LCR Work Group Recommendations and Remaining Issues

Four LCRWG members provided information on the following topics:

- 1. Lead service line replacement.
- 2. Public education.
- 3. Corrosion control treatment, monitoring and the health action level.
- 4. Copper.

Discussions pertaining to each area are provided in separate subsections below. Each subsection is further divided to provide a summary of each technical presentation (section a) and related questions and comments provided by NDWAC members (section b).

1. Lead Service Line Replacement

a. Technical Presentation

Steve Estes-Smargiasi, with Massachusetts Water Resources Authority, stated that the LCRWG focused on the LSLR as a substantial part of their recommendations. Currently, a PWS is triggered into LSLR only if it has a lead action level exceedance (ALE) after installing treatment. This context does not allow enough time for PWSs to establish an effective outreach or LSLR program. Moreover, PWSs can cease LSLR if they no longer exceed the AL for two consecutive monitoring periods. Customers may not see the need to replace their portion of the LSLs, which can result in partial LSLR (PLSLR) where only the PWS's portion is replaced. Although PLSLR was initially seen as a positive step, the Science Advisory Board evaluated PLSLRs and concluded that they do not reduce lead in the short term and the disturbance results in a temporary increase in lead levels. Thus, the science supports the need for full LSLR to reliably achieve long-term reduction of lead in drinking water.

Mr. Estes-Smargiasi explained that the LCRWG recommends that all systems with LSLs be required to have a long-term LSLR program, with measured progress and a goal to remove all lead in contact with drinking water. He explained that the Group is still working on the approach but it currently includes the following elements:

- Service lines of a certain age are assumed to be lead unless demonstrated otherwise.
- Three-year milestones toward a long-term goal of no LSLs remaining.
- Targeted outreach to customers with LSLs. PWSs must conduct continued outreach on a 3year cycle to those consumers that refused full LSR and when there is a new homeowner.
- Credit for confirming a service line is not lead.
- No credit or penalty for PLSLR.
- If a PWS does not meet the 3-year goal of LSLR, it must increase the amount of outreach and other activities.
- PWSs must develop standard operating procedures (SOPs) for:

- Situations that would result in a disturbance to a LSL (e.g., maintenance or emergency repairs). These situations would require outreach to the customer and risk mitigation steps to deal with spikes in lead levels.
- Coordination with other utilities (e.g., gas company, cable company) that conduct activities affecting water service lines or mains to ensure they are providing similar information to the homeowner.

He discussed the benefits of proactive LSLR that include:

- Removal of the primary source of lead, thereby reducing public health risk and the risk of a system having unexpectedly high lead levels.
- Allowance for adequate planning for LSLR and integration into capital improvement programs.
- Improved LSL inventory and customers awareness of the locations of full LSLs and partial LSLs (PLSLs).
- Public access to LSL information to allow interested parties such as residents, potential home buyers and real estate agencies to make improved risk decisions.
- Improved communication with consumers and public health partners about risk to lead from drinking water. (The Group expressed frustration that some public health partners are more concerned with lead in paint and dust and do not necessarily consider lead in water as a major source. This results in mixed message to customers.)

He noted that the Group believes there will be more success with this approach than the current one; however, they recognize that some customers will not see LSLR as a priority and will not do their part of the replacement. The emphasis is on effective outreach and other activities that escalate over time if systems do not meet 3-year targets, rather than penalties if a customer chooses not to participate.

b. NDWAC Questions/Comments

NDWAC members had the following comments and questions related to LSLR:

- Some NDWAC members raised the issue of cost. Specific comments and questions included:
 - How much did the Group focus on cost? This is a very important issue. From a high level, incentives are based on the health component. Were there discussions around how to boost incentives and reduce costs? In response, Mr. Estes-Smargiasi stated that the Group had talked extensively about LSLR costs including how to free-up other federal dollars. The issue is discussed in the report.
 - Concern about the financial burden (especially for PWSs), the timeline for LSLR and environmental justice because there are so many permutations regarding ownership.
 - Is there assurance that this program will not result in economically disadvantaged communities forced into costly compliance with no corresponding public health improvement? For example, where the LSLs are not resulting in elevated lead levels, in economically disadvantaged communities, where there are no sensitive subpopulations and/or where consumers oppose the mandate.
 - LSLs and low income customers go hand in hand. Where LSLs are on private property, PWSs will have difficulty contributing money towards these replacements. This member

recommended that the Group provide additional consideration on how the LSLR program will be funded including how to best work with HUD.

- Likes the approach but noted that the success of this approach hinges on federal support, especially for low income areas.
- The LSLR program appears to be a massive undertaking and one member was concerned about feasibility.
- Another asked if the recommendations would extend any requirements on the water utility past the property line of the homeowner (the limit of the current rule).
- One member noted that considering recent CDC guidelines on fluoride, if we are not careful consumers across the country will have little confidence in the water supply. Another member questioned if stating that there is no safe level of lead would cause conflict or confusion with customers.
- One member asked that the report include a clear explanation of what constitutes a PLSLR. Would it include a small section of copper pipe added to the end of an LSL to reach something?
- Another questioned the frequently with which sampling will be conducted and the process for notifying renters and homeowners of an ALE.
- Another questioned who is responsible if 100% LSLR is not achieved because some consumers are unwilling to replace LSLs. In response, LCRWG member Tom Neltner indicated that there is no guarantee that a system will meet 100% replacement but it must continue to try. The system might have to wait until the homeowner is willing to replace his/her LSL or sells the property to someone who is.
- A member noted that the report should provide more about the municipalities' responsibility not to use materials, techniques and products that would contribute directly or indirectly to higher lead levels in drinking water.

2. Public Education

a. Technical Presentation

Gary Burlingame, with Philadelphia Water Department, presented the approach for stronger PE requirements. He added that PE and customer outreach is critical to the success of the recommended revisions to the LCR, in part from the shared responsibility between the PWS and its customers because some lead is in premise plumbing. He explained that the materials need to convey the health risks from lead in drinking water, the shared responsibility of the rule, the importance of LSLR and ways to mitigate exposure such as through flushing or a point-of-use (POU) device.

He explained the recommendation that EPA establish a national lead information clearinghouse in consultation with stakeholders and experts in community-based risk communication. The clearinghouse would provide information to the public and PWSs in a consistent way using various media (e.g., videos, written materials) and include:

• Health risk and sources of lead exposure in drinking water.

- How people can get their water and blood lead level (BLL) tested and limitations of these tests.
- Information geared toward homes with LSLs.
- PE and other templates for PWSs.

In addition, the Group is recommending revisions to the Consumer Confidence Report (CCR), and to the LCR to include requirements for ongoing targeted outreach for customers with LSLs, public access to information and outreach to public health partners.

Mr. Burlingame explained the Group's recommendations for revising the CCR language to include:

- Updated public health statements to reflect current understandings and science.
- Clarification that meeting the AL is not an indication of individual household levels.
- The role of the public in protecting themselves from lead exposure.
- A link to the national clearinghouse where the public could get additional information.

b. NDWAC Questions/Comments

NDWAC members had the following comments and questions related to PE:

- One NDWAC member asked if the report will have information on other sources that can be used for PE, such as social media. In response, Mr. Burlingame indicated that the LCRWG draft recommendations include using the latest resources and soliciting risk communication experts' advice on how to ensure PE is done well. This would include social media.
- Another member added that the LCRWG PE piece be part of annual water quality reports as well as other social media.

3. Corrosion Control Treatment, Monitoring and Household Action Level

a. Technical Presentation

Tom Neltner, with the Environmental Defense Fund, presented the topics of corrosion control treatment (CCT), monitoring and the household action level (HAL). Mr. Neltner explained that his presentation addresses what happens before LSLs are replaced.

i. <u>Corrosion Control Treatment</u>

Mr. Neltner presented the following LCRWG recommendations to improve CCT:

- EPA revise the CCT guidance and update it regularly to reflect new science.
- EPA provide increased expert assistance to both PWSs and primacy agencies because the CCT is complicated.
- PWSs should review the updated guidance to determine if their CCT is based on the most current science.
- CCT must be reassessed when a PWS changes treatment or source.

Mr. Neltner explained that the Group has questions and options regarding CCT that they will discuss during the June 24 and 25 LCRWG meeting that include:

- What additional water quality parameters (WQPs) should be monitored and tighter ranges.
- Increased frequency and possibly increased sites for WQP monitoring.
- More rigorous data review and use of control charts or other process control.
- The role of tap sampling to confirm that CCT is minimizing lead at the tap.
- ii. Tap Monitoring

The second part of Mr. Neltner's presentation provided a discussion of the current tap monitoring requirements, issues with the current approach, recommendations for modifying the tap sampling requirements, questions regarding the monitoring requirements and other options and ideas.

He explained that currently tap monitoring requires first-draw, 1-liter samples and a prioritization scheme that is based on lead. There are several issues with the current approach. It may not capture the highest lead levels because the sample is not from a LSL, customers sample inconsistently and properties vary, e.g. in the length of a service line to the tap. In addition, customer recruitment is difficult and labor intensive, sampling is done infrequently (typically once every 3 years during a 4-month period) and sampling is often done at relatively few homes. Further, the implications of sample results for CCT are complicated.

The Group recommends modifying the tap sampling requirements by requiring PWS to test samples at customers' request (customer-initiated samples). The monitoring would be offered through targeted outreach to customers with LSLs and vulnerable populations but would be available to any customer. These results would be used to:

- Inform and empower individual households to reduce risk.
- Report to health officials when monitoring exceeds the HAL (see below).
- Evaluate effectiveness of CCT and guide reassessment.
- Transition to the revised LCR.

The Group has some outstanding questions that include:

- What should be the role of the lead AL if the proposed recommendations are adopted? The current rule requires PE and LSLR in the event of an ALE, but this is no longer applicable since these activities would be required for all systems.
- WQPs are a means to determine if the CCT plan is being implemented correctly. Is tap sampling still needed until LSLs are removed or to confirm a system's CCT is minimizing lead at the tap? How can customer-initiated sampling be used? The linkage among WQPs, tap and CCT are important topics that the Group will be discussing during the June meeting.

The Group is discussing other options and ideas that include:

- Substituting current tap sampling requirements with more rigorous WQP monitoring, customer-requested tap sampling and PWS/primacy agency review of tap sampling for unexpected changes that might warrant follow up.
- Continuing the current tap sampling requirements, with changes to sampling protocols to find the peak lead exposure and to use the lead AL to trigger CCT review (among other actions).
- Revising sample invalidation criteria to incorporate EPA guidance on pre-stagnation flushing, aerator removal, etc.

iii. Household Action level

Mr. Neltner presented the concept of a HAL. He noted that the current lead AL is based on the 90th percentile level of tap samples and considers the system as a whole. He noted that there are situations where the 90th percentile misses homes with very high samples. Although the current rule requires communication to the homeowner, more may be needed. The HAL would be based on the lead concentration necessary to elevate a formula fed infant's BLL to 5 μ g/dL (the CDC's level of concern). If the result of any customer-initiated tap sample is above the HAL, the system would have to notify the health department of that result. This approach is similar to that used by HUD, whereby the housing authorities notify the health department when a child has an elevated BLL.

b. NDWAC Questions/Comments

NDWAC members had the following comments and questions regarding CCT, monitoring, and HAL:

- When talking about HAL and household sampling, one member asked the Group to clarify how recommendations about future sampling compare to current sampling requirements. Specifically, would continued utility sampling dictate when CCT should be implemented (i.e., how does CCT fit in and get initiated)? In response, Mr. Neltner noted that that is one of the Group's central questions.
- Another member questioned if the current in-home monitoring requirement would be repealed or replaced, noted the problems with the current scheme (e.g., unworkable, unreliable, error-prone, and not an indicator of contamination), and indicated that it should be replaced.
- One member noted concern about the notion of unlimited customer-initiated sampling at the expense of the water system. She preferred that the utility would not be required to pay for the sampling or at a minimum, to include some constraints to make it manageable.
- A member indicated that some of the Group's suggestions may be significant enough that they cannot be resolved based on group discussion and may require additional research by EPA or others (e.g., WQPs, sampling protocols, HAL). She suggested that quantitative aspects may need to be included in this research.
- Another member supported the idea of the HAL but did not know how the 5 µg/dL translates to a drinking water level. Mr. Neltner explained that the Group's recommendation is for EPA to calculate this level. Ms. Bingham added that there has been

discussion about using the EPA's integrated exposure uptake biokinetic (IEUBK) model to make the connection.

4. <u>Copper</u>

a. Technical Presentation

Derrick Dennis with the State of Washington explained the Group's approach for having separate requirements for copper. He noted that the monitoring scheme under the current LCR is focused on places where high lead levels are expected to be found (e.g., locations with LSLs, older homes with copper pipes and lead solder). However, higher copper levels generally occur when new copper pipe is installed and before it has a chance to passivate. Passivation time is related to water quality characteristics.

Therefore, the Group recommends that EPA define what is and is not aggressive to copper, ask PWSs to demonstrate that water is not aggressive based on water quality. This could be done with one-time tap sampling at homes with new copper, pipe loop studies or CCT to change water chemistry.

Systems with non-aggressive water would be required to continue to make that demonstration. Those with aggressive water would be required to have an on-going PE program that would focus on new homes at the initiation of service and newly renovated homes or alternatively, educate all customers on how water would react with copper plumbing. In addition, The Group recommends that EPA consider whether and under what circumstances CCT for copper should be required.

b. NDWAC Questions/Comments

NDWAC members provided the following questions regarding copper:

- A NDWAC member agreed that the LCRWG had made a strong case to separate copper from lead, but questioned if the health effects of copper warrant this level of consideration.
- Another asked what water quality trigger will result in require corrosion control for copper and whether this trigger could cause some communities to adopt corrosion control when they have no actual copper issue at the tap.
- Another questioned if the source of copper is solely or primarily from plumbing lines, or if there are other sources.

D. Additional Policy Questions and Consideration for the LCRWG

The NDWAC provided additional policy questions and considerations for the LCRWG. Those that are more general are presented in this section. Those that pertain to specific topics are included previously in Section C.

Several NDWAC members expressed their appreciation to the LCRWG for a thorough and informative presentation and for their efforts and creative out-of-the-box thinking. Several noted that they look forward to receiving the report. Some members indicated that they like the direction of the Group's recommendation but had specific concerns, some of which are noted in Section C. More general comments included the following:

- Some members indicated overall concerns regarding costs and feasibility. Specific comments included:
 - A suggestion for the LCRWG to take a "50,000 foot view" when thinking about costs.
 - Whether the LCRWG considered some combination of SDWA and Clean Water Act (CWA) State Revolving Funds. On the CWA side, related to not adding phosphorus to our surface waters.
 - Need ample consideration for customers and PWSs. All levels of considerations should be explored.
 - Whether the LCRWG considered the costs related to rule implementation over time by taking a more proactive approach.
 - If the Group had conducted a quantitative analysis.
 - If there is any assurance that new public notice and record keeping requirements will not be overly burdensome in small communities with limited resources and result in untended consequences of communities redirecting limited resources to lower priority issues.
- A member noted that there are numerous opportunities for applied research and to use this information to assess the ramification for these options.
- A member indicated that it will be important to be clear on what constitutes violations and who has responsibility for specific requirements.
- The CDC liaison questioned the statement in Slide 7 that there is no safe level of lead and asked if that would create conflict or confusion with customers. A NDWAC member indicated that providing this statement does not provide the public with the needed information of the relative safety of various levels and duration of lead concentrations in drinking water.
- Some members provided the following suggestions regarding the report:
 - A suggestion that the report indicate if it is agreed that tap water is the primary source of lead for those that are not the demographic of drinking formula and young infants.
 - A suggestion to retain the characterization of accomplishments of lead exposure reduction because the public should know this history.
- One member questioned if the recommendations includes and acknowledges that on-site technical assistance is the main source of compliance assistance and education for small and rural communities.

Marilyn Christian and Chris Wiant provided closing thoughts. Ms. Christian underscored the complexity of the LCR and stated that she hopes the NDWAC recognizes all the meetings and discussion that have gone into the Group's recommendation. She asked the other NDWAC members to provide additional questions they may have. Mr. Wiant indicated that he was impressed how fast the NDWAC members picked up on the most complex, controversial and difficult topics faced by the LCRWG. Regarding the process, he thought all the right voices have been at the table and appreciated the respect members have given to each other and their effort to understand perspectives and challenges for various groups (PWSs, public health community and consumers). He concluded by saying he expected the Group to

provide a thoughtful document that takes a major step forward in resolving some of the key issues with the LCR.

E. Public Comment

No member of the public requested public comment.

F. Wrap-up and Adjourn

Ms. Jonas thanked all who joined the call. She expressed her appreciation to EPA for supporting the LCRWG and to the LCRWG for their work. Information from this webinar will be taken into consideration by the LCRWG as they develop their report back to the Council.

ATTACHMENT A

NDWAC LCRWG Webinar - List of NDWAC Members and the CDC Liaison

NDWAC Members Jill Jonas (Chair): Director, Bureau of Drinking Water and Groundwater, Wisconsin Dept. of Natural Resources William Alley, Ph. D.: Director of Science and Technology, National Ground Water Association¹ Jeanne-Marie Bruno: General Manager/Senior Vice-President, Park Water Company Marilyn Christian: Manager, Environmental Health Programs, Harris County Public Health² The Honorable Hilliard L. Hampton II: Mayor of Inkster, Michigan¹ Cathy P. Kellon: Green Infrastructure Program Director, Geos Institute Carrie M. Lewis: Superintendent, Milwaukee Water Works Caryn Mandelbaum, Esq: Staff Attorney, Environment Now Wilmer Melton, III: Director of Public Works, City of Kannapolis James McCauley: Manager, Lower Brule Rural Water System¹ Randy A. Moore: President, Iowa American Water Howard Neukrug: Water Commissioner, City of Philadelphia Sarah Pillsbury, P.G.: Administrator, Drinking Water and Groundwater Bureau, New Hampshire Department of Environmental Services Mark S. Sanchez: Executive Director, Albuquerque Bernalillo County Water Utility Chris Wiant: President & CEO, Caring for Colorado **Centers for Disease Control** Max Zarate-Bermudez, CDC liaison

¹ These NDWAC members were unable to attend the webinar.

² These NDWAC members are also LCRWG members.

ATTACHMENT B

NDWAC LCRWG Webinar - List of LCRWG Members

NDWAC LCR Working Group	
С	hristina Baker: Deputy Public Counsel, Office of the Public Counsel, State of Missouri
Le	eon Bethune: Director, Director of Office of Environmental Health, Boston Public Health Commission
G	ary Burlingame: Laboratory Director, Philadelphia Water
N	1arilyn Christian: Manager, Environmental Health Programs, Harris County Public Health
Ν	1atthew Corson: Manager, Environmental Compliance, American Water
D	errick Dennis: Water Quality Unit Supervision, Office of Drinking Water, State of Washington
St	tephen Estes-Smargiassi: Director of Planning, Massachusetts Water Resources Authority
Y	anna Lambrinidou: Parents for Non-toxic Alternatives
Т	homas G. Neltner: Environmental Defense Fund
Jo	ohn Sasur Jr.: Three Rivers Fire District, Massachusetts
R	obert C. Steidel: Director Department of Public Utilities, City of Richmond Virginia
Ju	ane Swallow: Chief, Division of Water Quality, Rhode Island Department of Health
Ly	ynn Thorp: National Campaigns Director, Clean Water Action
C	hris Wiant: President & CEO, Caring for Colorado
N	se Obot Witherspoon: Executive Director, Children's Environmental Health Network

ATTACHMENT C

U.S. Environmental Protection Agency

NDWAC LEAD AND COPPER WORKING GROUP

June 22, 2015

Call in: [see email for the number – LCRWG and NDWAC members need a passcode]

Webinar Link: https://epa.connectsolutions.com/wateradvisory/

(enter as a Guest – no passcode for the webinar)

Webinar Objectives:

- Brief NDWAC members on the recommendations and remaining issues under consideration by the LCR work group, and
- Identify any major policy questions or considerations that the NDWAC members would like the work group to address at its final meeting on June 24-25.
- 12:15-12:30 Dial into call
- 12:30-12:40 Welcome, Webinar Objectives/Agenda, and Logistics

Welcomes

Michelle Schutz, Designated Federal Officer, NDWAC

Jill Jonas, Chair, NDWAC

Peter Grevatt, Director, Office of Groundwater and Drinking Water

Gail Bingham, facilitator

12:40-12:50 Introduction: Background and Considerations the LCR Work Group Has Addressed

Presentations

- Background (Marilyn Christian, Harris County Health Department)
- Considerations (Chris Wiant, Caring for Colorado)

12:50-2:05 Presentations & Discussion: LCR Work Group Recommendations and Remaining Issues

Presentations [generally 10 min per topic, with 10 min per topic for input from NDWAC members]

- Lead Service Line Replacement (*Steve Estes-Smargiasi, Massachusetts Water Authority*)
- Public Education (Gary Burlingame, Philadelphia Water Department)

- Corrosion Control Treatment, Monitoring and Health Action Level (*Tom Neltner, Environmental Defense Fund*)
- Copper (Derrick Dennis, State of Washington)

Discussion: NDWAC member input on additional policy questions and/or considerations [10 min per topic]

- 2:05-2:15 Public Comment
- 2:15-2:25 Discussion: NDWAC Member Summary Input Additional Policy Questions and Considerations for the LCR Work Group to Address
- 2:25-2:30 Wrap-up and Adjourn