

NATIONAL DRINKING WATER ADVISORY COUNCIL

**RECOMMENDATIONS ON THE
PUBLIC EDUCATION REQUIREMENTS OF THE LEAD & COPPER RULE**

JUNE 2006

NDWAC Recommendations on Public Education Requirements of the Lead and Copper Rule

Table of Contents

Section 1. Executive Summary

Section 2. Introduction

- 2.1 Convening and Membership of the NDWAC's Working Group on Public Education Requirements for the Lead and Copper Rule (WGPE)
- 2.2 WGPE Charge
- 2.3 Summary of the WGPE Deliberation Process

Section 3. Importance of Public Education on Lead in Drinking Water

- 3.1 Background on Lead Exposure
- 3.2 Background on the Lead and Copper Rule's (LCR) Public Education (PE) Requirements
 - 3.2.1 EPA's Short-term Revisions of the LCR
 - 3.2.2 EPA's Decision to Modify PE Requirements

Section 4. WGPE's Proposed Recommendations to the National Drinking Water Advisory Council

- 4.1 Principles of Successful Public Education Programs, Regulations, and Guidance
- 4.2 Expedited Implementation of Public Education Requirements
- 4.3 Recommended Changes to the LCR: Mandatory and Suggested Language, Utility Instructions, and Delivery Methods for Public Education Materials
- 4.4 Recommendations to Encourage Continuous Public Education on Lead in Drinking Water, Including CCR Modifications
- 4.5 LCR Guidance Recommendations
 - 4.5.1 Language Bank
 - 4.5.2 Unusual Circumstances
 - 4.5.3 Partnering with the Community
 - 4.5.4 Partnering with Public Health Officials
 - 4.5.5 Working with the Media
 - 4.5.6 Special Resources for Small Systems and Others Responding to an Action Level Exceedance
 - 4.5.7 Communication During Lead Service Line Replacement Programs

Section 5. Overview of Proposed Recommendations and How They Differ from Current Requirements

- 5.1 Changes to the Mandatory Text of Written Materials
- 5.2 Changes to Reach At-risk Populations
- 5.3 Changes to Help Systems Maintain Communication with Consumers throughout the Exceedance
- 5.4 Changes to the Required Timing of Completion of Public Education Requirements
- 5.5 Changes to Consumer Confidence Reports

Section 6. Proposed Recommendations on Related Issues

- 6.1 Ongoing Public Education Efforts
- 6.2 Providing Sample Results
- 6.3 Evaluating Public Education and Outreach Programs Beyond the LCR
- 6.4 Lead in Plumbing Fixtures
- 6.5 Lead Service Lines
- 6.6 Health Effects Research
- 6.7 Risk Communication

Attachments

- Attachment A. Utility Instructions and Delivery Methods
- Attachment B. Information Recommended for Inclusion in Consumer Confidence Report
- Attachment C. Guidance to Utilities on Working with the Media
- Attachment D. Example Flow Charts for Small Systems

Section 1. Executive Summary

The Lead and Copper Rule (LCR) requires systems that exceed the action level to complete a number of steps, such as delivering public education to alert the public of the exceedance and providing information on steps customers can take to reduce their risk. To ensure that at-risk populations are receiving the necessary information to protect them from exposure to lead, EPA led and supported an in-depth review of the LCR's public education requirements of the LCR.

To support its work on revisions to public education requirements of the LCR, EPA sought to establish an advisory group under the National Drinking Water Advisory Council (hereafter referred to as NDWAC or Council). On June 1, 2005, the NDWAC voted on and approved the formation of a Working Group (WGPE) to provide recommendations on the Public Education Requirements of the Lead and Copper Rule to the NDWAC at its spring 2006 meeting. EPA selected 16 members to represent small, medium, and large utilities; consumers; regulators; public health; and risk communication experts. Four members of the NDWAC served on the WGPE to facilitate the flow of information between the two groups.

WGPE members agreed to consider the mandatory public education language under the LCR and, as time and resources permitted, risk communication issues more broadly. The WGPE agreed to operate by consensus, which was defined as "all can live with the recommendation." Members met in plenary four times: October 5-6, 2005; December 15-16, 2005; February 1-2, 2006; and April 19-20, 2006. All meetings were held in Washington, DC. Members also participated in numerous conference calls to advance draft documents. The WGPE was assisted by a team of EPA staff and RESOLVE facilitators. All work group meetings were open to the public.

On June 20, 2006, the WGPE members who serve on the Council presented the WGPE's report on proposed recommendations for the LCR's public education requirements. These proposals were reviewed and discussed by the NDWAC after which the report was approved unanimously by the Council. Thus, the WGPE's proposed recommendations became the NDWAC's actual recommendations that are sent to EPA's Administrator.

The following is a brief description of the Council's recommendations to the Agency.

- I. Revise the mandatory content of written public education materials, delivery requirements, and timing for public water systems (PWSs) to complete all required activities after a lead action level exceedance
- II. Provide more flexibility in the language or content of written materials to PWSs, so they may tailor the public education message to their community and situation
- III. Use the Public Notification Rule (PNR) as a model of required language, required topics, and templates
- IV. Change delivery requirements, e.g., requiring water systems to send written materials to a wider range of community organizations to better reach at-risk populations

- V. Require PWSs to carry out many additional public education activities, but allow them to choose activities that would be most effective for their customers
- VI. Adopt the above revisions to the public education requirements as soon as feasible. EPA and primacy agencies should exercise administrative flexibility and allow utilities the option of using all new materials recommended even before the date of the regulation
- VII. Ensure that systems maintain communication with consumers throughout the lead action level exceedance by: requiring that information be included with every water bill; providing two press releases a year; and, for larger systems, adding or expanding information on their web sites
- VIII. Empower primacy agencies to give PWSs more time to complete the additional activities and deliver lead education information with water bills, if requested in advance
- IX. Change the Consumer Confidence Report (CCR) requirements to ensure consumers are aware of concerns about lead in drinking water
- X. Review the additional recommendations presented in section 6 of this report

Section 2. Introduction

2.1 Convening and Membership of the WGPE

The Lead and Copper Rule (LCR) requires systems that exceed the lead action level to complete a number of steps, such as delivering public education to alert the public of the lead exceedance and providing information on steps customers can take to reduce their risk. To ensure that at-risk populations are receiving the necessary information to protect themselves from exposure to lead in drinking water, EPA is reviewing the public education requirements of the LCR. (For more on EPA's short-term revisions, please see section 3.2.1.)

To support its work on revisions to the public education requirements of the LCR, EPA sought to establish an advisory group under the National Drinking Water Advisory Council (NDWAC). The NDWAC was established under the Safe Drinking Water Act, as amended (42 U.S.C. 300f et seq.), and provides practical and independent advice, consultation, and recommendations to the Agency on the activities, functions, and policies related to the implementation of the Safe Drinking Water Act. On June 1, 2005, the NDWAC voted on and approved the formation of a Working Group on Public Education (WGPE) to provide proposed recommendations on the Public Education Requirements of the Lead and Copper Rule to the Council at its spring 2006 meeting.

EPA issued a request for nominations for working group members on July 22, 2005. WGPE members were selected based on the expertise and experience needed to provide balanced advice to the NDWAC, and hence to EPA, on issues related to public education under the LCR as well as risk communication in general. Individuals were chosen to represent small, medium, and large utilities; consumers; regulators; public health; and risk communication experts. Four WGPE members also serve on the NDWAC in order to facilitate the flow of information between the two groups.¹

Membership of the work group is as follows:

Brenda Afzal, Community Health Specialist, University of Maryland School of Nursing,
Baltimore, MD

Yone Akagi, Regulatory Compliance Supervisor, Portland Water Bureau, Portland, OR

Jeanne Bailey, Public Affairs Officer, Fairfax Water, Fairfax, VA

Ron Bergman, Chief, Drinking Water Protection Branch, Office of Ground Water and Drinking
Water, US EPA, Washington, DC

Steve Drda, Lead and Copper Rule Manager, Public Drinking Water Program, Nebraska
Department of Health and Human Services, Lincoln, NE

Stephen Estes-Smargiassi, Director of Planning, Massachusetts Water Resources Authority,
Boston, MA

Gregg L. Grunfelder (NDWAC member), Assistant Secretary, Division of Environmental
Health, Washington State Department of Health, Olympia, WA

¹ A fourth WGPE member, Lynn Thorp, was also a NDWAC member at the start of the WGPE process; she completed her term in December 2005, but continued to serve on the WPGE. Ms. Thorp was reappointed to a second term on the Council, which began on June 19, 2006.

Ed Hallock, Program Administrator, Delaware Office of Drinking Water, Dover, DE
Linda Caleb Hazel, Consumer and Educator, Jamaica, NY
Kathy Moriarty, Assistant General Manager, Bangor Water District, Bangor, ME
Shelley Nolan, Water Training Specialist, Montana Rural Water, Havre, MT
Lisa Ragain, Research Associate, Department of Environmental and Occupational Health,
School of Public Health and Health Services, George Washington University, Portland, OR
Perialwar Regunathan (NDWAC member), Regunathan & Associates, Inc., Wheaton, IL
Blanca Surgeon (NDWAC member), Rural Development Specialist, Rural Community
Assistance Corporation, Santa Fe, NM
Lynn Thorp (NDWAC member), National Programs Coordinator, Clean Water Fund,
Washington, DC
Bob Vincent, Environmental Administrator, Bureau of Water Programs, Florida Department of
Health, Tallahassee, FL

2.2 WGPE Charge

The Council's charge for the WGPE was to (1) review the current public education requirements on lead in drinking water to find and define the need for improvements and make recommendations to the NDWAC; (2) develop language for communicating the risk of lead in drinking water and a suggested response to the public; and (3) define the delivery means to the public. The NDWAC established a target date of its spring 2006 meeting to complete these tasks.

The WGPE members agreed with this charge and further defined their goals by agreeing on the following mission to guide their work on drafting recommendations:

The Lead and Copper Working Group on Public Education (WGPE) will consider the mandatory public education program under the Lead and Copper Rule (LCR) and, as time and resources permit, risk communication issues more broadly. The short-term goal of the group is to develop recommendations to revise the mandatory public education program. This may include the development of recommendations on: guiding principles for revising the program; required topics; mandatory and recommended language; guidance; ways to communicate differential risk, including exposure or vulnerabilities, posed by a lead Action Level Exceedance (ALE); and, effective ways to communicate with the consumer, including actions the consumer can take to reduce potential exposure and/or risk.

As time and resources allow, the group could also consider the broader issue of how to communicate health risks to the public. The working group may suggest products that could help utilities communicate with the public, areas for additional research or guidance, or ways to deliver complicated health information in an easy to understand message that will motivate individuals to act to reduce their risk. Upon completion of its review, the Working Group will develop written, proposed recommendations to the NDWAC.

2.3 Summary of the WGPE Deliberation Process

WGPE members met in plenary four times: October 5-6, 2005; December 15-16, 2005; February 1-2, 2006; and April 19-20, 2006. All meetings took place in Washington, DC. Members also participated in numerous conference calls to advance draft documents. The WGPE was assisted

by a team of EPA staff and RESOLVE facilitators. All work group meetings were open to the public.

The WGPE agreed to operate by consensus, which was defined as “all can live with the recommendation.” WGPE preliminary materials were drafted by individuals or small groups and reviewed by conference calls or in-person at meetings. Agreement on final products, however, required consensus of all members.

The WGPE completed its charge in May 2006, and a copy of its draft report to the NDWAC was sent to each member prior to the Council’s meeting on June 20-22, 2006.

Section 3. Importance of Public Education on Lead in Drinking Water

3.1 Background on Lead Exposure

Human exposure to lead has long been an important public health issue. The 1991 Lead and Copper Rule (LCR) is intended to reduce health risks associated with potential exposure to lead in drinking water. Exposure to lead may cause neurological impairment, altered physical development and blood chemistry, and adverse effects on the cardiovascular system. According to health experts, exposure to even small amounts of lead poses a potentially significant health risk, especially in infants and young children. For infants and children, exposure to high levels of lead in drinking water can result in delays in physical or mental development. Although the main sources of exposure to lead are ingesting paint chips and lead-contaminated dust, EPA estimates that 10 to 20 % of human exposure to lead may come from lead in drinking water. Infants who consume mostly formula mixed with tap water can receive 40 to 60 % of their exposure to lead from drinking water.

To regulate lead in drinking water, EPA established a public health goal (known as a MCLG or Maximum Contaminant Level Goal) for lead of zero. In setting enforceable standards (known as MCL or Maximum Contaminant Levels), the Agency must also consider economics and available technology. Lead presents an additional regulatory challenge because its source is frequently from home plumbing, which a water system does not control. Further, while some contaminants like arsenic have predictive models on exposure and the lifetime risk of cancer, comparable risk assessment evaluations are not available for lead.

Thus, rather than setting a MCL for lead, EPA instituted an action level. The action level approach was chosen because water systems do not control many of the sources of lead. Understanding that zero is the public health goal, EPA sought to identify an effective treatment technique and a treatment level at which as much lead as possible could be kept out of drinking water, while also making the program feasible and cost-effective for water systems nationwide. As with all standards setting, EPA had to estimate the cost of the regulation at a particular level and justify the cost of contaminant reduction at that level.

To establish the action level, EPA reviewed information from representative water systems, efficacy of different treatment technologies, and cost effectiveness of these technologies.² EPA identified the action level of 15 µg/L because they expected this was a standard that water systems should be able to maintain through an effective corrosion control program.

As of January 1997, all large systems (serving over 50,000 consumers) must have installed state-approved optimal corrosion control treatment (CCT). EPA also requires monitoring to ensure that the treatment technique is effectively implemented. If more than 10% of household tap samples exceed 15 µg/L, different actions are triggered, depending on the size of the water system. In small systems, an exceedance triggers a requirement for installation of optimized

² EPA gathered data from 39 medium-sized water systems. Approximately 96% of these systems were able to keep in the 90th percentile in the range of 10-20 µg/L. Thus, EPA concluded that 15 µg/L represented the feasible level for public water systems.

CCT, and perhaps additional steps. Large systems must optimize CCT and take other steps such as replacement of lead service lines.

In addition to these steps aimed at reducing the corrosivity of water that reaches household taps, exceeding the action level triggers a public education requirement. Public education on lead in drinking water is important because its source is on both sides of the consumer-utility interface. If CCT does not reduce lead levels below the action level, consumers may need to flush and/or filter their water and take other steps to reduce their exposure.

Public education is an essential part of the LCR because when the water system is not able to prevent all lead from entering drinking water, the consumer can act to reduce exposure. The Public Education (PE) program under the LCR is vital in protecting consumers from exposure to lead in their drinking water.

3.2 Background on the Lead and Copper Rule Public Education Requirements

3.2.1 EPA's Short-Term Revisions of the LCR

The purpose of the Lead and Copper Rule (LCR) is to reduce potential health risks associated with lead by protecting populations from exposure to lead in drinking water. Recent high profile reports of elevated drinking water lead levels in the District of Columbia prompted EPA to initiate a comprehensive national review of the LCR to evaluate the implementation and effectiveness of the rule. The purpose of the review was to ascertain

- if elevated drinking water lead levels were a national problem;
- if a large percentage of the population received water that exceeded the lead action level;
- if a significant number of systems failed to meet the action level;
- if the existing LCR worked well in reducing drinking water lead levels; and
- if the rule is currently being effectively implemented, especially with respect to monitoring and public education requirements.

EPA's comprehensive review consisted of several elements, including a series of workshops designed to solicit issues, comments, and suggestions from stakeholders on particular issues; a review of data to evaluate the effectiveness of the LCR; and a review of the LCR implementation by states and water utilities. As a result of this multi-part review, EPA identified seven targeted rule changes intended to strengthen the implementation of the LCR in the areas of monitoring, customer awareness, and lead service line replacement in the short-term. Some of the regulatory changes identified in EPA's review are meant to clarify provisions that have generated some confusion on the part of water utilities, while other provisions reconsider LCR requirements in light of the recent experiences in the District of Columbia. The short-term changes will be proposed in 2006 and are expected to provide more effective protection of public health through the reduction in lead exposure.

In its review of the LCR, EPA also identified several regulatory changes that will be considered as part of more comprehensive changes to the LCR. These considerations are longer-term as they require additional data collection, research, analysis, and stakeholder involvement to support decisions. The working group believes that the short-term revisions

represent an appropriate and timely vehicle for EPA to implement the public education recommendations of the WGPE.

3.2.2 EPA's Decision to Modify Public Education Requirements

When conducting the national review of the LCR, EPA heard from a variety of stakeholders that the public education requirements of the rule were not as effective as needed. Specific observations were that the PE program is difficult to implement, includes language that is confusing to the public, and uses delivery methods that may not reach all consumers, especially at-risk populations. Many stakeholders believed EPA needed to make improvements to the public education program to ensure the public is informed, empowered, and motivated to act to reduce their exposure to lead in drinking water. While different parties all agreed that the public education requirements should be updated, they did not agree on how to accomplish this change. The NDWAC established a Working Group to assist EPA in determining how to improve public education and thereby ensure consumers have the information required to limit their exposure to lead in drinking water. The WGPE believes that its proposed recommendations can and should be implemented as soon as feasible.

Section 4: WGPE Recommendations

4.1 Principles of Successful Public Education Programs, Regulations, and Guidance

In addressing environmental factors that may pose a risk to people's health, there is a growing expectation from the public that information is shared in a timely and effective way. This allows people to make personal decisions to minimize risks while the issues are being considered and addressed in a comprehensive way by responsible public and private entities. Contaminants like lead present particular challenges in communicating health information in a clear and understandable manner. Lead exposures can come from multiple sources and may cause a broad range of health effects, sometimes taking years to manifest themselves. In addition, lead levels vary so that water system monitoring may not be representative of the lead levels for all consumers. More importantly, the relative contribution and health impacts of lead from drinking water vary with an individual's age, water consumption habits, and other individual circumstances.

Today, the effective communications of health risk information goes well beyond the simple dissemination of data and fact sheets. Effectively communicating information to meet the growing expectations of the public requires clear, thoughtful, well-formulated information to be delivered in a manner that meets the needs of diverse communities. These efforts should not only address our critical health protection goals but also have a significant influence on the public's trust and confidence in the entities involved. Education of the public on all the risks of lead is a multi-entity responsibility with specific roles for federal, state, and local health organizations. However, water systems can and should play an important role in that comprehensive effort. The WGPE identified the following key principles that water utilities should use in all lead public education efforts. EPA should also use these principles in considering and developing modifications to the requirements and guidelines for the lead education component of the Lead and Copper Rule. Additionally, these principles could apply to other public education initiatives.

A public education program on lead in drinking water is successful if the message:

1. Is timely
2. Is concise and clear
3. Meets the communication needs of diverse populations
4. Is compelling and encourages the public to take action to reduce exposure
5. Communicates risk from all sources and methods of exposure, while focused on drinking water; and,
6. Is effective and revised based on evaluation

Public Education requirements and guidance should:

7. Direct and assist the utility to accomplish 1-6 above
8. Provide flexibility for local situations—not all information has to be in every communication piece
9. Equip utilities with tools they need to communicate to consumers
10. Equip utilities with tools to explain the difference between the action level and health risk level
11. Consider different sizes and types of systems; and

12. Offer multiple communication methods.

4.2 Expedited Implementation of Public Education Requirements

Given the substantial benefit to improving lead education, WGPE urges the Council to recommend that EPA and primacy agencies adopt these revisions to the public education requirements as soon as feasible. The WGPE also urges that EPA and primacy agencies use administrative flexibility to allow utilities the option of using the new materials even before the effective date of the regulation.

4.3 Recommended Changes to the LCR: Mandatory and Suggested Language, Utility Instructions, and Delivery Methods for Public Education Materials

The WGPE proposes altering the current required language in the Lead and Copper Rule and giving utilities suggested language for completing their public education materials. They suggest that EPA create a set of Utility Instructions, to include mandatory and recommended language, delivery methods, and other suggestions for utilities to carry out their public education programs.

The WGPE has developed a template format for EPA, which is Attachment A of this report.

4.4 Recommendations to Encourage Continuous Public Education on Lead in Drinking Water, Including CCR Modifications

Currently, public water systems engage in public education about lead under the Lead and Copper Rule (LCR) and Consumer Confidence Report (CCR) rules. When 10% or more of homes sampled for compliance exceed the action level, the LCR requires distribution of a brochure on lead and other actions to increase consumer awareness. The CCR rule requires communicating lead levels and sources of lead whenever lead is observed by the water system. It also includes specific additional language when either 5 or 10% of compliance samples are above the action level. The WGPE is concerned that these requirements do not assure that consumers receive sufficient information and believes that consumers need to understand health effects associated with lead, that lead levels can vary from home to home, that lead in drinking water is primarily from home plumbing, that they can take steps to reduce their exposure, and where they can go to get more information. This situation is unique to lead (and copper) among contaminants regulated under the Safe Drinking Water Act in that the source of exposure is primarily outside the control of the public water system. The WGPE proposes the following to the Council:

1. All PWS should be encouraged to voluntarily develop and implement a lead public education program to inform their consumers of the risks lead poses, especially to vulnerable populations and the potential actions that they can be take to reduce such risks.
2. The CCR rule requirements be modified, as described in Attachment B: Information Recommended for Inclusion in Consumer Confidence Report. The WGPE is recommending modified language for those systems over the action level and for those systems with over 5% of samples above the action level and new language for all other systems detecting lead.

3. EPA should pursue enhanced public education efforts aimed at reducing exposure to lead as described in the attached recommendations for Section 6 of this report.

4.5 LCR Guidance Recommendations

The following suggestions provide recommendations and approaches for EPA to include in guidance manuals. Some may also be appropriate for waterworks and professional associations to act on.

4.5.1 Language Bank

One provision in the current LCR is that utilities must engage in public education and notifications to populations that do not speak English as their primary language. This type of information is crucial for reaching many of the most vulnerable populations. Public education and notification in other languages needs to be addressed. EPA should develop and support a bank of required and recommended templates in languages other than English. Many utilities have developed language-specific materials, and EPA could facilitate the collection and distribution of such materials. Utilities would have a substantial resource to draw on for this effort. Additionally, EPA could work to expand this effort for required and recommended language in other rules, such as the CCR and PNR.

4.5.2 Unusual Circumstances

The WGPE recognizes that there may be unusual circumstances which may require efforts beyond or different than those normally mandated by the LCR PE requirements. The WGPE proposes that EPA guidance to state primacy agencies explicitly provide sufficient flexibility for states to address any unusual education challenges or circumstances particular to individual water systems. This might include identifying appropriate steps to take when lead action level exceedances result from numerous compliance monitoring samples containing very high lead levels.

4.5.3 Partnering with the Community

Creating and sustaining collaborative partnerships in the community supports and promotes utility public education efforts and notification approaches. Several examples of community based lead education programs exist. In addition, there is a large body of research and recommendations for community partnering specific to the water industry. EPA, utilities, professional organizations, public health agencies and primacy agencies should use these tools to advance partnerships at the national, state and local level.

4.5.4 Partnering with Public Health Officials

Collaborating with public health officials is crucial to developing an effective public education and notification effort. In addition to working with water-specific sections of the state and local health agencies, working with maternal and child health, community health and other sections of health agencies can assist in developing materials and outreach efforts in consultation with specific populations. Additionally, working throughout many divisions of a health agency can integrate lead and general drinking water concerns into a holistic

water education program. It also is essential to remember that public health extends beyond agencies and into universities and community based organizations.

4.5.5 Working with the Media

Working with the media is essential to a successful public education and notification program. Though press releases and notifications are mandatory, working beyond the elementary steps enhances the effectiveness and value of a utilities effort. Attachment C provides additional, specific steps for working with the media.

4.5.6 Special Resources for Small Systems and Others Responding to an Action Level Exceedance

The WGPE proposes the following items be included in EPA guidance in a prominent location designated for small systems and in general guidance for all systems.

1. Checklist of required Public Education steps and deadlines.
2. Flow diagram showing sequence of necessary and optional decisions, steps, and deadlines in preparing and executing a Public Education program. (See Attachment D for a small systems example.)
3. Examples or templates of materials intended for specific Public Education purposes (i.e. public service announcement scripts, letters to health care providers or public health officials, ads for print media, etc.)
4. Question-and-Answer sheet of likely questions to be asked by water users, the media, or general public to assist water system personnel in answering such questions. The WGPE recommends that EPA develop a template addressing the following kinds of questions:
 - Why is there lead in my drinking water?
 - What is the water system doing about it?
 - What can I do to make my water safe to drink?
 - What will lead do to me or my family?
 - Does boiling water remove lead?
 - If I boil water for making formula, will it increase or remove lead?
 - Why can't I use hot water from the tap for drinking, cooking, or making baby formula?
 - Will my filter remove lead?
 - My neighbors got their water tested and found lead. Is my water safe/are my test results accurate?
 - Can I get my water tested for lead?
 - Where can I get more information on lead?
 - What do you mean when you say the Action Level has been exceeded?
 - Is there anything else I can do beyond flushing my tap or buying bottled water?

5. Advice to water system operator to immediately inform the water system's decision-making authority (Board, Mayor, Owner, etc.) of the situation and requirements for Public Education.
6. Advice to the water system to designate a specific contact person to answer questions resulting from the lead exceedance and public education efforts.
7. Advice to the water system to disseminate follow-up information to the public when the system returns to compliance.

4.5.7 Communication During Lead Service Line Replacement Programs

Lead service line replacement can be the most visible portion of a lead abatement program. This portion of a lead reduction program provides an opportunity to educate consumers. The WGPE's proposed recommendation is that EPA develop guidance to utilities on enhancing communication efforts specifically tailored to lead service line replacement. Utilities may want to consider training field personnel on working with customers.

Section 5: Overview of Recommendations and How They Differ from Current Requirements

The recommended public education requirements differ in a number of ways from the current requirements of the LCR. The recommendations still require water systems to complete the public education requirement after a lead action level exceedance but change the mandatory content of written materials, delivery requirements, and timing for when systems must complete all required activities. They also change the requirements for the language or content of written materials, giving water systems more flexibility to tailor the public education message to their community and situation. In addition, the recommendations change the delivery requirements in a number of ways. Water systems will be required to send written materials to additional organizations in an attempt to better reach at-risk populations. The recommendations also require the systems to do several additional activities but allow them to pick from a list of activities in order to do what is most effective for their community. The WGPE proposes to require water systems maintain communication with consumers throughout the lead action level exceedance by including information with every water bill, providing two press releases a year, and for larger systems, including information on their website. These proposals allow primacy agencies to give water systems more time to complete the additional activities and deliver lead education information with water bills. Finally, the WGPE proposes to include changes to the Consumer Confidence Report to ensure consumers are aware of concerns about lead in drinking water.

5.1 Changes to the Mandatory Text of the Written Materials

The recommendations require that systems continue to deliver written materials to all customers as well as a number of key organizations. However, WGPE is proposing to change the content of the required written materials. Currently, §141.85 requires written materials to include mandatory language consisting of over 1,800 words describing health effects, lead in drinking water, steps to reduce exposure, and ways to obtain additional information. Under the recommendations, the mandatory language would be much shorter and easier to understand. The mandatory language would address essential topics such as the opening statement and health effects language. Community Water Systems and Non-Transient Non-Community Water Systems would still be required to provide information on other topics, but the system may either use suggested language or their own words to explain these topics. The WGPE recognizes that small systems do not have the resources to create their own language for the required topics, so they suggest EPA provide language in guidance that systems can use to explain all of the required topics in the regulation. The WGPE used the Public Notification Rule as a model of the use of required language, required topics, and templates.

5.2 Changes to Reach At-risk Populations

The WGPE proposes adding organizations to the list of recipients of the public education materials in order to increase the likelihood that the most vulnerable populations will receive the information they need to reduce their exposure to lead in drinking water. The WGPE proposes to add licensed childcare centers, preschools, Obstetricians-Gynecologists and Midwives to the current list of organizations to which a system must deliver information. In addition, WGPE is proposing a new requirement that systems include a cover letter with the printed materials that they send to these organizations to explain the importance of sharing this information with their

customers/patients. This recommendation is designed to help ensure that the information reaches non-bill paying customers.

While it is important for this information to get to all of these organizations, WGPE believes that the local health agencies play an important role in making sure consumers who are most vulnerable receive the information they need to reduce their exposure to lead in drinking water. To assure that local health agencies know about the lead action level exceedance, WGPE suggests requiring that systems directly contact (e.g., phone, in person, etc.) the local health agency rather than simply delivering brochures to this organization. By directly contacting the local health agency, utilities can enlist the health agency’s support in disseminating information on lead in drinking water and the steps that vulnerable populations can take to reduce their exposure.

In addition to using organizations to disseminate information to at-risk populations, WGPE is also proposing that systems complete additional activities from a list of options. System, state, and consumer representatives on the WGPE all agreed that what works in one community does not always work best in another community. In order to make the public education as effective as possible, WGPE proposes giving systems some flexibility in how they deliver their public education materials. The list of additional activities that systems can choose from includes:

Categories	Example Activities
Public Service Announcements	Radio and Television PSAs
Paid Advertisements	Newspaper, transit, or movie theater ads
Display Information in Public Areas	Community and health centers Local sporting events Grocery store Laundromat bulletin boards Libraries Faith-based organizations
Internet	Community listservs Utility Website (if serving <100,000) Post on local government websites Fax network
Public Meetings	Town hall meetings PTA meetings
Delivery to Every Household	Doorknob hangers, mailing to all consumers
Individual Contact with Customers (targeted contact)	Phone trees Calls to individual consumers/households Targeted Mailing to at-risk populations
Provide Materials Directly to Multi-family Homes	
Other Methods Approved by the Primacy Agency	

The recommendations require that systems serving 3,300 people or above be required to do three additional public education activities from one, two, or three of these general categories. Systems serving 3,300 or fewer individuals must do one additional activity from this list.

5.3 Changes to Help Systems Maintain Communication with Consumers throughout the Exceedance

To ensure continued contact with consumers, WGPE suggests requiring systems to include information in or on the water bill as long as there is an exceedance of the lead action level. WGPE recognizes that this requirement can be difficult for some systems that are unable to print messages on their bills, so there is a provision to allow systems to work with their primacy agency to deliver this information in a different way.

Another way that WGPE's proposed recommendations encourage continuous communication with consumers is by requiring systems that serve more than 100,000 people to put the public education information on their websites until the system tests below the lead action level.

Currently, systems that exceed the lead action level must issue a press release. WGPE suggests requiring systems distribute two press releases per year in order to ensure systems are maintaining communication with their customers. The systems must send the press releases to the major newspapers as well as TV and radio stations that reach the population served by the water system. This is another way to inform consumers who do not receive water bills. In response to concerns about small systems' ability to complete this requirement, primacy agencies can waive the press release requirement if there are no media outlets that serve the population served by the system. In addition, WGPE suggests moving the requirement for medium and large systems to provide two Public Service Announcements (PSA) per year to the list of additional outreach activities.

5.4 Changes to the Required Timing of Completion of Public Education Requirements

While the WGPE's proposed recommendations would still require systems to complete most of their public education in 60 days, there is increased flexibility for the primacy agency to allow longer periods of time for completion of the lead education statement printed on or with water bills and the additional activities from the list of options. This ensures systems choose the most effective public education program rather than the fastest.

5.5 Changes to Consumer Confidence Reports

The WGPE suggests modifications to the CCR rule to address two concerns: that lead exposures may be taking place even though the action level is not exceeded and that consumers are not getting sufficient information. Under current regulations, systems must include information on lead levels and sources of lead whenever lead is observed. Specific additional language is required in the case of an exceedance and when 5% of compliance samples are above the action level.

The WGPE developed a new informational statement for the CCR for use in two conditions:

- 1) systems that Exceed the Action Level (10% or more of compliance monitoring samples above the action level of 15 ppb)

2) systems that don't exceed the Action Level but have any observed compliance monitoring samples above the detection level (1 ppb)

The newly-developed language is intended to help consumers understand the health effects associated with lead, that lead levels can vary from home to home, that lead in drinking water is primarily from home plumbing, that they can take steps to reduce their exposure, and where to get more information.

Section 6: Recommendations on Related Issues

Below are recommendations on topics that the WPGE identified as important to public education efforts, but which are not within the Lead and Copper Rule public education regulations (Section 141.85) or guidance.

6.1 Ongoing Public Education Efforts

As described earlier in this report, human exposure to lead has long been an important public health issue and has been associated with a wide range of health effects. Significant progress has been made over the past several years in reducing exposures to lead through actions such as banning the production and use of leaded gasoline and lead based paint, as well as implementation of the Lead and Copper Rule to reduce exposures to lead from drinking water. The proposed recommendations to enhance the Lead and Copper Rule requirements contained in this report will further the progress to reduce human exposures to lead.

In addition to the recommended Lead and Copper Rule enhancements described in this report, the WGPE presents to the Council that additional efforts, as described below, be taken to provide broad public information on lead, the sources of lead, and steps people can take to further reduce their exposures to lead. By implementing these recommended efforts, trends to reduce the adverse health effects of lead in this country will be strengthened.

1) The WGPE proposes that EPA work collaboratively with the Centers for Disease Control and Prevention (CDC) to enhance public education efforts on the health hazards of lead and the steps the public can take to limit their exposures to all sources of lead. EPA and CDC should work together to encourage health agencies – principally through the Association of State and Territorial Health Officials and the National Association of County and City Health Officials - to continue to emphasize and reinvigorate as necessary their overall lead education programs and to ensure that the potential exposure from lead in drinking water is an appropriate and integral component of their efforts.

2) The WGPE proposes that EPA and primacy agencies encourage water utilities to collaborate with their local health jurisdictions in appropriate broad lead education efforts focusing on all exposure routes, even when lead levels in drinking water are below the current Action Level as defined in the federal Lead and Copper Rule.

3) The WGPE proposes that EPA develop a model public education insert for potential inclusion with water utility billing statements that provides basic information on health risks associated with lead and how consumers can best minimize their exposure to all sources of lead. This model insert should be appropriate for use by water utilities when no exceedance of the current Action Level for lead in drinking water has occurred.

6.2 Providing Sample Results

The WGPE supports EPA's proposed regulatory change to require that utilities provide consumers with the results of any regulatory compliance samples taken in their homes in a timely manner and at no cost. The WGPE encourages EPA to provide a template for a

transmittal letter to communicate results.

6.3 Evaluating Public Education and Outreach Programs Beyond the LCR

Public education and outreach are major components of the Safe Drinking Water Act, as amended, and are practiced by many utilities in compliance efforts beyond the LCR. Effective public education is an important aspect of communication between utilities and consumers. Implementing a public education and outreach program can be expensive and time consuming. It is important that the utilities know the effectiveness of such programs. The WGPE proposes that EPA develop a guidance document to help utilities measure and/or evaluate the effectiveness of their public education and outreach programs.

A guidance document “Evaluating Public Education and Outreach Programs” should address whether (see Section 4.1.2, Principles):

- the information is clear, understandable, and timely
- the information reached the intended public
- information conveyed the message adequately to the intended audience
- the information was what the public wanted/needed
- the message had an effect on behavior

This guidance will assist utilities to effectively deliver messages to the public and track or measure the effectiveness of their education and outreach efforts so they can focus their time and resources on the most effective approach. The information from evaluations conducted by different utilities can be incorporated into future guidance documents such as updates to the LCR Public Education Guidance.

6.4 Lead in Plumbing Fixtures

Under the provisions of the Safe Drinking Water Act, brass water service parts (meters, valves, elbows, tail pieces, and other lead-containing plumbing components) are defined as being “lead free” if they contain less than 8% lead. Likewise, end-use brass plumbing fixtures such as faucets can contain up to 8% lead, so long as they meet certain NSF 61 standards.³ These fixtures containing lead can leach lead into drinking water under certain conditions. The WGPE proposes that EPA issue a more stringent definition and standard for “lead free” (based on reexamination of both lead content of these materials and the protocols for determining leaching potential) so that potential for exposures to lead in drinking water can be minimized in the future. For steps in this direction, the WGPE proposes that:

- EPA publish a list of currently available low lead water service parts that utilities can use to minimize potential exposures to lead [i.e. those fixtures containing no more than 0.25% lead, or other fixtures that leach little lead (i.e. complying with the California Safe Drinking Water and Toxic Enforcement Act of 1986, 25249.5)].

³ NSF Standard 61/ANSI Standard 61 - *Drinking Water System Components* establishes minimum requirements for the control of potential adverse human health effects from products that contact drinking water. NSF/ANSI Standard 61 includes criteria for testing and evaluating products to ensure they do not leach contaminants into the water that would be a health concern. See www.nsf.org for more information.

- EPA publish and maintain a list of end-use fixtures (e.g. faucets) that consumers can reliably expect to minimize potential exposures to lead (i.e. these fixtures meet the more stringent California Safe Drinking Water and Toxic Enforcement Act of 1986, 25249.5).
- EPA prioritize research on low lead fixtures to address the following issues that are currently perceived as potential barriers to the broader use of such fixtures:
 - Life cycle and manufacturing performance of new alternative materials
 - Performance, durability, and leaching results from any new alternative materials
 - Potential health affects from alternative materials
- EPA pursue stronger compliance to NSF 61 standard by requiring ALL products in substantial contact with drinking water meet a national standard relative to the potential leaching of lead. Concurrently, EPA should explore, in consultation with NSF and other stakeholders, whether or not revisions are needed to NSF 60/61, to ensure that products perform adequately in a full range of actual drinking water conditions. This is particularly important for fixtures likely to be used in schools and child care facilities.
- unless and until there are national changes in the amount of lead allowed to be present in or to be leaching from brass plumbing fixtures as discussed above, EPA should develop a national program, modeled on the Energy Star program, for low lead fixtures. The program would develop a labeling brand for low lead fixtures, establish criteria for low lead fixtures modeled after the California Safe Drinking Water and Toxic Enforcement Act of 1986 or Lead Contamination Control Act-type standards, and develop model memoranda of understanding for manufacturers of common “end use fixtures” (i.e. faucets, fountains, etc.) which would allow them to use the labeling brand when making products that meet the strictest standards for lead leaching. Further, EPA should develop a national information campaign to be mounted in cooperation with manufacturers, health authorities, and water systems to market the low lead labeling brand and inform the public that there are fixtures available that present a lower risk of exposing the consumer to lead in drinking water.

6.5 Lead Service Lines

Under the Lead and Copper Rule, water utilities may be required to replace lead service lines if test results exceed the action level after installing corrosion control and/or source water treatment. Many have questioned the effectiveness of lead service line replacement programs, and there is little conclusive information on the extent to which replacing lead service lines lowers lead levels at the tap. To further examine the issue, the WGPE supports the recommendations, as presented verbatim, made by the US Government Accountability Office.⁴

⁴ “EPA Should Strengthen the Ongoing Efforts to Ensure that Consumers are Protected from Lead Contamination,” GAO, January 2006, GAO-06-148.

.....USEPA collect and analyze data on the impact of lead service line replacement on lead levels and conduct other research, as appropriate, to assess the effectiveness of lead line replacement programs and whether additional regulation or guidance may be warranted

6.6 Health Effects Research

EPA's ongoing research and determination of health effects of lead in drinking water, which would determine a health advisory, need to be expedited to inform the public education process and to answer baseline questions consistently raised by the public, utilities, agencies, and health providers.

6.7 Risk Communication

The WGPE's proposed recommendations are based on the expertise of its members. As EPA develops its lead public education program, the WGPE suggests that EPA use existing and developing risk communication literature and data to inform the program. Additionally, evaluation of the Public Education program should use risk communication methodology to determine the effectiveness of these recommendations. Further, the WGPE acknowledges that additional research is needed to more effectively communicate.

As EPA conducts research, the WGPE proposes the consideration of the following:

Peer-Reviewed Literature

- Models of lead education and outreach efforts.
- Health education efforts on environmental issues, such as asthma, targeted to similar populations.
- Environmental health evaluation methods in the peer-reviewed literature.

Grey Literature

Grey literature is the body of valuable materials not found in official peer-reviewed literature. However, many of the organizations producing these materials evaluate their effectiveness. Banks of literature exist or are under development on some environmental health topics.

Evaluation

Drinking water communication efforts required by provisions in the Safe Drinking Water Act have not been formally evaluated. EPA should support a comprehensive evaluation of PN/PE language and materials as new rules take effect. Information analyzed from the literature reviews referenced above could then be incorporated to further inform guidance and utility endeavors. Materials should also be evaluated for literacy level.

Risk Perception/Risk Communication/Linguistics

This type of research will provide information on specific vulnerable populations, their practices and preferences. Methods for conducting this type of research include interviews, focus groups, and mental modeling. Linguistics has its own methodology for assessing communication that would greatly enhance drinking water public education and notification efforts.

Case Studies

Case studies are a useful tool for providing insight into the elements that make a particular effort successful. For the water sector, the peer-to-peer aspect of a case study could assist in incorporating successful elements of other utility education and outreach efforts. EPA should develop case studies of utility efforts.

Future Collaborations

Using water sector and public health experience as well as information from the literature reviews and case studies, EPA should work with partners within the Agency, the federal government, state and local agencies, and public groups to identify collaborations for public education.

ATTACHMENT A

Draft Instructions for Utility Who Must Send Out Public Education After Action Level Exceedance

If you (the water system) have a Lead Action Level Exceedance, you must send out a notice to your customers to inform them about the issue within 60 days of the exceedance. Below is an explanation of exactly what must be in this notice, including delivery methods, mandatory topics, and language. In addition to these instructions, attached is a template that includes all of the mandatory topics and language. If you have any questions about what is required, please contact your primacy agency.

DELIVERY OF PUBLIC EDUCATION MATERIALS

Timing

If a water system has a Lead Action Level Exceedance, they must complete the required methods of delivery (listed below) to inform customers of the issue within 60 days of the exceedance.

In the case of a continued lead exceedance, a community water system shall repeat all required tasks every 12 months. In addition, a community water system shall post material on a publicly accessible internet site (if population is greater than 100,000) and provide information on or in each water bill (items A.3 and A.5) so long as system exceeds the action level. The system must also distribute press releases (item A.4) twice annually on a schedule agreed upon with the state primacy agency.

A. Required Methods of Delivery for CWSs

- 1) Deliver required printed material, for example in a brochure, pamphlet, or other printed format, to all bill paying customers.
- 2) Make good faith effort to reach all customers who are most at risk by making the information in the brochure available to the list of prioritized organizations/facilities/providers (*see next page for list*), along with a cover letter or direct contact, explaining health risks and encouraging distribution
 - a. Directly contact local public health agency, as identified by primacy agency, by phone or in-person.
 - b. CWS serving 3300 or fewer persons can limit distribution of printed materials to the list of prioritized organizations/facilities/ providers served by the system that are most likely to be visited regularly by pregnant women and children, unless it is notified by the State in writing that it must make a broader distribution.
- 3) Post required public education material on publicly accessible internet site if system serves a population >100,000.
- 4) Submit press release to newspaper, television, or radio stations with the largest audiences that serve the community served by the water system. The Primacy Agency may waive this requirement for systems serving 3300 or fewer persons as long as system distributes notices to every household served by the system.

5) Provide information on or in each water bill as long as the system exceeds the AL for lead. *Message: [Insert name of water system] found high levels of lead in drinking water in some homes. Lead can cause serious health problems. For more information please call [water system] [or visit www.website].* Message or delivery mechanism can be modified in consultation with primacy agency.

6) CWS must undertake additional public education:

In addition to 1-5 above, systems that serve over 3,300 persons must implement at least **three** activities from one or more categories from the list below. In addition to 1-5 above, CWS serving 3,300 or fewer persons must implement at least **one** activity from the list below. All systems are encouraged to implement additional PE activities.

Categories	Example Activities
Public Service Announcements	Radio and Television PSAs
Paid Advertisements	Newspaper, transit, or movie theater ads
Display Information in Public Areas	Community and health centers Local sporting events Grocery store, Laundromat bulletin boards Libraries Faith-based organizations
Internet	Community listservs Utility Website (if serving <100,000) Post on local government websites Fax network
Public Meetings	Town hall meetings PTA meetings
Delivery to Every Household	Doorknob hangers, mailing to all consumers
Individual Contact with Customers (targeted contact)	Phone trees Calls to individual consumers/households Targeted Mailing to at-risk populations
Provide Materials Directly to Multi-family Homes	
Other Methods Approved by the Primacy Agency	

The primacy agency can allow activities in A.5 and A.6 to extend beyond the 60-day requirement if needed for implementation purposes; however, this extension must be approved in writing by the primacy agency in advance of the 60-day deadline.

B. Required Methods of Delivery for NTNCWSs

- 1) NTNCWSs must deliver the public education materials by posting informational posters on lead in drinking water in a public place or common area in each of the buildings served by the system; and distribute informational pamphlets and/or brochures on lead in drinking water to each person served by the non-transient non-

community water system. The State may allow the systems to utilize electronic transmission in lieu of /or combined with printed materials as long as it achieves at least the same coverage.

Organizations/Facilities/Providers for utilities to target to reach sensitive populations

A water system with a lead action level exceedance is **REQUIRED** to deliver brochures and/or posters to the local offices of the required list of organizations/facilities/providers. EPA suggests that the water system also make the information available to these organizations/facilities/providers in a poster format. In addition, EPA encourages water systems to deliver brochures and/or posters to as many of the list of suggested organizations/facilities/providers as possible.

A. Required to Deliver Brochure to the Following Organizations/Facilities/Providers:

- Local Public Health Agencies – MUST BE DIRECT CONTACT (phone calls, face-to-face, etc). Local public health agencies may provide specific contact list of additional community based organizations serving targeted populations.
- Public/private Schools or School Boards
- Licensed childcare centers
- Pre-schools: public and private
- WIC/Head Starts
- Public/Private Hospitals and clinics
- Pediatricians
- OBGYNs/ Midwives
- Family planning clinics
- Local welfare agencies

B. Recommended to Deliver Brochure to the Following Organizations/Facilities/Providers (for inclusion in guidance):

- Groups which reach at risk populations – Women of child bearing age and children 6 and under
 - Maternity Programs/ Birthing Classes
 - Teen parent programs
 - Parents and teacher organizations
 - Parent support organizations
 - Women’s shelters
 - Family Practice, General Physicians, and Nurse Practitioners
 - Institutes of higher education
 - Local nonprofit health groups
- Groups which reach non-bill payers
 - Citizen Assistance offices in City/County buildings (lobby, brochure racks)
 - Health insurance providers
 - Postings in outlets accepting WIC and other government funding for goods and services.
 - Low income/ HUD housing
 - Community Based Organizations (soup kitchens, faith-based groups, etc.)

Additional Notes to EPA:

Guidance should assist utilities to develop an integrated approach when developing a public education program.

Wherever possible, EPA should provide a template (e.g., TV ad, etc) that can be adapted with more specifics by utilities.

CONTENT OF THE PUBLIC EDUCATION NOTICE

Your notice must include the topic areas in bold below. *Anything in italics under each topic area is required language* while anything in regular text must be covered but you may use either EPA's suggested language or your own words to cover that subject. Please note that, in your printed materials, EPA is not requiring the use of the italic font.

Your notice **MUST** begin with the following opening statement (though you have the option to include a title of the pamphlet or brochure of your choosing):

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

[Insert name of water system] found high levels of lead in drinking water in some homes. Lead can cause serious health problems, especially for pregnant women and children 6 years and under. Please read this notice closely to see what you can do to reduce lead in your drinking water.

Required Topics (NOTE: All required topic section headers – in bold italic – are mandatory.)

1) Your notice must include the topic “**Health Effects of Lead**” and the exact wording in italics below.

Health Effects of Lead

NOTE: The WGPE recommends “Health Effects of Lead” as a required topic, and that the health effects language (to be drafted by EPA) be mandatory for this notice. The WGPE was not able to review specific language drafted by EPA for this notice, nor did the group draft its own consensus language. We encourage EPA to include language on vulnerable populations (e.g. pregnant women, children 6 and under, and the elderly) in this language.

2) You must include the topic “**Sources of Lead,**” and you must cover the following bullet points under this topic. You may use the EPA suggested language below or modify it to meet your local systems circumstances. For instance you do not have to mention lead service lines if your water system does not have any in the distribution system.

Sources of Lead

- What is lead?
- How does lead enter the drinking water?
- Where does the lead in drinking water come from? Include information on home plumbing and service lines that may contain lead.

- What are other important sources of lead in addition to drinking water?

Use of the EPA suggested language below would be responsive to the required topics on lead sources. Below is an example integrating the answers to each of the four required topics listed above.

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. The main sources of lead exposure are lead-based paint and lead-contaminated dust or soil. However, lead can be in some soil, dust, and certain types of pottery, pewter, food, and cosmetics. Other sources include exposure in the work place and exposure from certain hobbies (lead can be carried on clothing or shoes).

[Utility should develop specific language describing condition of the community's source water – e.g., “The source water from XX Reservoir does not contain lead” or “Smallville does not have any lead in its sourcewater or water mains in the street.”] When water is in contact with pipes, (refer to service lines), and plumbing containing lead for several hours, the lead may enter drinking water. Homes built before 1986 are more likely to have plumbing containing lead. New homes may also have lead: even “lead-free” plumbing may contain some lead.

EPA estimates that 10 to 20 percent of a person's potential exposure to lead may come from drinking water. Infants who consume mostly formula mixed with lead-containing water can receive 40 to 60 percent of their exposure to lead from drinking water.

Don't forget about other sources of lead such as lead paint, lead dust and lead in soil. Wash your children's hands and toys often as they can come into contact with dirt and dust containing lead.

3) Your notice must include the topic “**Steps you can take to reduce your exposure to lead in your water.**” You need to cover the bullet points below within this section. You can cover these bullets using your own language or the EPA language suggested below.

What should I do?

Steps you can take to reduce your exposure to lead in your water

You must include a recommendation on running the water to flush out the lead. EPA suggests the following language:

- Run your water for 15-30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours. This flushes lead-containing water from the pipes.

A water system may include a different flushing time in the public education notice if there is representative data that indicate a different flushing time would better reduce lead exposure and the State approves the wording.

Also, your system may want to consider the weather conditions in your area and whether or not the instruction to wait until the water is cold is appropriate for your

area. If it is too warm for water to turn cold, you may want to suggest a consumer flush the water for 15-30 seconds or until it becomes a steady temperature.

You must explain concerns with using hot water and specifically caution against the use of hot water for baby formula. EPA suggests the following language:

- Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water.
- Do not use water from the hot water tap to make baby formula.

You must tell consumers that boiling water does not reduce lead levels. EPA suggests the following language:

- Do not boil your water to remove lead. Boiling water will not reduce lead.

You must discuss other options consumers can take to reduce exposure to lead in drinking water, such as alternative sources or treatment of water.

- You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 1(800) NSF-8010 or www.nsf.org for information on performance standards for water filters.

You must tell consumers how to get their water tested.

EPA suggests the following language:

- Call us at number below to find out how to get your water tested for lead.

You might want to have a separate brochure or info on your web site with information on sampling tap water. Does your system provide this service for free or at a cost? Which labs are certified and do lead testing in your area? Suggest how the testing should be done to get accurate results.

- Learn about other ways to reduce your exposure – see contact information below.

You must discuss lead in plumbing fixtures. EPA suggests the following language:

- New brass faucets, fittings, and valves, including those advertised as “lead-free,” may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 8% lead to be labeled as “lead free.” Consumers should be aware of this when choosing fixtures and take appropriate precautions.

Note to NDWAC: While it would be valuable to have a requirement discussing this difference between low lead and lead free, it is not possible at this point to provide specific recommended language. We recommend that EPA develop guidelines to help consumers choose fixtures. (See recommendations in Section 6.4, Lead in Plumbing Fixtures.)

4) In your notice, you must discuss why lead levels are high and **what is being done** to reduce them. You should discuss each of the bulleted topics below if they apply to your system’s circumstances.

What happened? What is being done?

- Why are there high levels of lead in my drinking water (if known)?

- What are you (the water system) doing to reduce the lead levels in homes in this area?
- Does your system still have lead service lines? How can a consumer find out if their home has one? Is there a program to replace it? Any special incentives?
- Your system may also want to provide information on the history of lead levels in tap samples: have they declined substantially over time? Have they been low and risen recently? Is there a known reason for any change?

5) Your notice must include utility contact information including a phone number and EPA contact information in the mandatory language italicized below so a consumer can easily find more information about lead in drinking water. In addition we recommend including the system's website as well as the phone number and website for your primacy agency (environmental or health department). If you have a local lead program, include their contact information as well.

For more information

- *Call us at [INSERT NUMBER,]. For more information on reducing lead exposure around your home and the health effects of lead, visit EPA's website at www.epa.gov/lead, call the National Lead Information Center at 1-800-424-LEAD, or contact your health care provider.*

You must include the name of your system and the date that the info is being distributed, along with the state water system ID, somewhere on the notice.

This notice is being sent to you by [system]. State Water System ID#: _____. Date distributed:

To be added (as guidance):

Section on Suggested Layout of Brochure. One idea was that utilities use graphics which reinforce the message to catch the attention of households with individuals particularly vulnerable to lead, such as pregnant women, infants, children, or the elderly.

ATTACHMENT B

Information Recommended for Inclusion in Consumer Confidence Report

Condition 1: Systems that Exceed the Action Level (10% or More of Compliance Monitoring Samples Above Action Level of 15 ppb).

In addition to LCR public education and public notification requirements, items 1-7 must be addressed. (Items 2-7 are currently required under the CCR. Item 1 is modified.) The CCR must:

1. Include a short informational statement about lead in drinking water:

“Our system exceeded the lead action level. It is possible that there may be high lead levels in your home as a result of materials in your home plumbing. Lead can cause serious health problems, especially for pregnant women and children 6 and under. If you are concerned about high lead levels in your home’s water, run your water for 15-30 seconds or until it becomes cold [or reaches a steady temperature]¹, and have your water tested. Additional information is available from the National Lead Information Center at 1-800-424-LEAD.”

OR a utility may write its own educational statement, but only in consultation with the Primacy Agency.

2. Be distributed annually to all customers.
3. Include lead 90th percentile result for the most recent round of sampling. *[not intended to change other CCR reporting requirements]*
4. Identify exceedance in table.
5. Include the number of locations that exceeded the lead action level.
6. Define the action level.² *(see footnote for proposed definition)*
7. Identify sources of lead.

¹ Able to tailor to local circumstances.

² NOTE: The WGPE recommends that the definition of “action level,” a required component of the CCR, be changed to be more understandable to the public. The intent of the draft definition, below, is to explain that action levels are a trigger for action and are not intended to be directly related to a specific health outcome. The WGPE recommends that EPA create a definition with this intent in mind, though they recognize that the agency may choose to modify the following language:

“An action level is a concentration of a contaminant which if exceeded triggers treatment or other requirements which a water system must follow. An action level is a trigger for action and is not intended to indicate an adverse health level.”

Condition 2: Systems that Do Not Exceed the Action Level but have Any Observed Compliance Monitoring Samples above the Detection Level (1 ppb)³

Items 1-6 must be addressed. (Items 2-6 are currently required under the CCR. Item 1 is modified.) The CCR must:

1. Include a short informational statement about lead in drinking water:
“While our system did not exceed the lead action level as shown in the table, it is possible that there may be high lead levels in your home as a result of materials in your home plumbing. Lead can cause serious health problems, especially for pregnant women and children 6 and under. If you are concerned about high lead levels in your home’s water, run your water for 15-30 seconds or until it becomes cold [or reaches a steady temperature]⁴, and have your water tested. Additional information is available from the National Lead Information Center at 1-800-424-LEAD.”

OR a utility may write its own educational statement, but only in consultation with the Primacy Agency.
2. Be distributed annually to all customers.
3. Include lead 90th percentile result for the most recent round of sampling.
4. Include the number of locations that exceeded the lead action level.
5. Define the action level.
6. Identify sources of lead.

³ For Condition 2, the WGPE is recommending modified language for those systems over the action level and for those systems with over 5% of samples above the action level and new language for all other systems detecting lead.

⁴ Able to tailor to local circumstances.

ATTACHMENT C

Working with the Media

The WGPE proposes that EPA provide utilities with guidance on working with the media to communicate with the public. Examples include:

Normal Operating Procedures

1. Designate a spokesperson that has been trained in media relations.
2. Identify spokespeople in the community.
3. Establish media and communication protocols. All media inquiries should be directed to the spokesperson.
4. Develop and maintain a relationship with the local media (print and television and radio).
 - a. Meet with local editors of both small and large publications and discuss your mission and goals and brief them on water issues in your area.
 - b. Meet with reporters who are handling water, health or environmental issues.
 - c. Meet with local radio and television/cable news producers.
 - d. Invite the media to your utility for a tour (if appropriate to your utility's policy).
 - e. Give positive feedback. When the media "gets it right" tell them!
 - f. Talk regularly with the media – don't wait until a crisis.
5. Develop and maintain relationships with the local/state public health agency.

Crisis Management

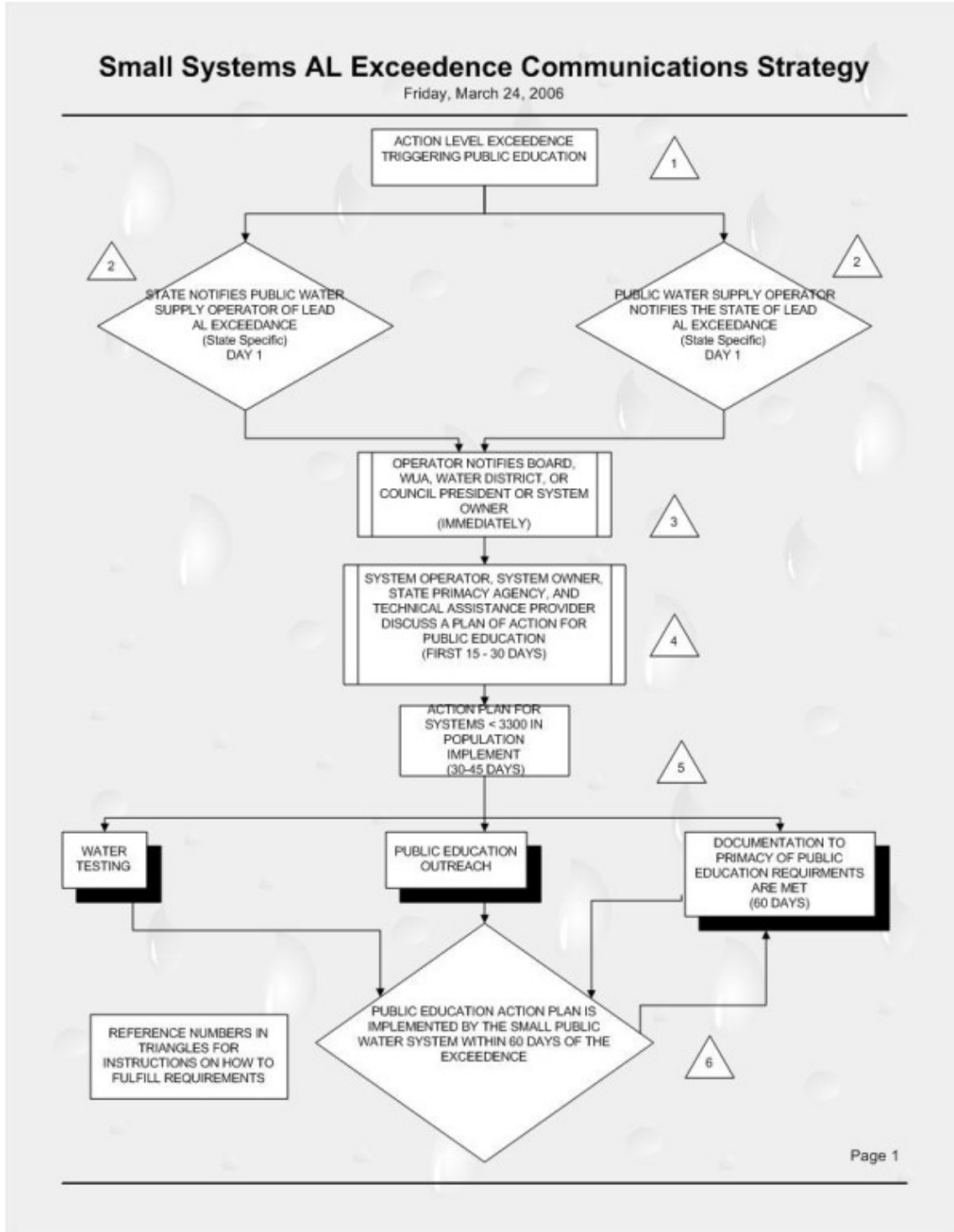
1. Designate a spokesperson that has been trained in media relations.
2. Develop messages in coordination with primacy and public health agencies.
 - a. The message should tell the consumer what the problem is and what they can do about it.
3. Be transparent
4. Control the message by being proactive, not reactive.
5. Create a timely, comprehensive and honest press release and brief the press.
6. Talk to the media on a regular basis during the crisis.
 - a. Provide current, accurate information
 - b. Provide alternative sources (public health agencies, scientific sources, ...)
 - c. Develop a list of experts to go to in times of crisis.
 - d. Don't use jargon.
 - e. Don't get mad.
 - f. Never say "no comment."
 - g. Never say "no," "not," "never," "nothing," "none."
 - h. Anticipate questions. Know the answers. Know what you want to say ahead of time.

7. Your message should be updated on a regular basis (this is dictated by the situation – it could be hourly, daily).
8. Evaluate your efforts after the crisis is over.

ATTACHMENT D

Example Flowcharts to Assist Small Systems

(This is meant as an example of what the WGPE recommends EPA provide as part of their revised guidance to small systems. In its flowcharts, EPA should distinguish between steps which are mandatory and those which are guidance.)



(Instructions on the following page refer to numbered triangles on page 1, above.) Instructions should distinguish between required and suggested steps and should be consistent with the regulation.

1. Your recent round of lead testing results has been analyzed and calculated using the 90th percentile and are in exceedance of the Action Level.
2. If your state computes the 90th percentile, then they will notify the system upon discovering the exceedance. If your water system is responsible for computing the 90th percentile, you must notify the state regulatory authority that your recent round of lead samples is in exceedance of the lead action level.
3. The operator or person in charge is responsible for notifying the decision maker (owner or president of the system) by phone or in person of the exceedance upon notice by the primacy agency or calculating all sample results for the 90th percentile.
4. The system operator or responsible person in charge should consult with the owner or board president, the state primacy agency, and or their technical assistance provider for assistance in implementing an effective education program.
5. A plan of action or effective public education program should be decided upon in consultation with the primacy agency and system owner or board president. A spokesperson or contact person for the community should also be appointed to answer any questions that may arise from a lead exceedance situation.
6. An effective public education action plan must be implemented within 60 days of the exceedance. It should include three categories of requirements. These are:
 1. Providing public education information on lead
 2. Offering water testing to the people you serve, if requested
 3. Providing documentation to the state that shows you met your public education requirements.

An effective plan should also include

1. Who is the designated spokesperson?
2. Who will be in contact with the primacy agency?
3. Who will be notified of the exceedance?
 - a. Required
 - i. At Risk Groups
 - b. Additional Outreach
4. How will you notify the consumer?
 - a. Door to Door
 - b. Separate mailed brochure or template
 - c. Monthly bill
 - d. Newspaper Notice
5. Who will do consumer sampling if requested?
6. What lab should they be sent to?
7. What alternatives will you recommend to the consumer temporarily?
 - a. Bottled Water
 - b. Flushing methods
 - c. Lead Filters

Below are additional flow charts of the three categories of requirements for an effective communications plan to simplify the process.

