

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 141**

[EPA-HQ-OW-2005-0034; FRL-8196-5]

RIN 2040-AE83

**National Primary Drinking Water Regulations for Lead and Copper: Short-Term Regulatory Revisions and Clarifications**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** EPA is proposing seven targeted regulatory changes to the National Primary Drinking Water Regulations (NPDWR) for lead and copper. This proposal strengthens the implementation of the Lead and Copper Rule (LCR) in the following areas: monitoring, treatment processes, customer awareness, and lead service line replacement. These changes will provide more effective protection of public health by reducing exposure to lead in drinking water. The proposed changes do not affect the basic requirements of the LCR, the lead or copper maximum contaminant level goals, or the lead and copper action levels.

**DATES:** Comments must be received on or before September 18, 2006. Under the Paperwork Reduction Act, comments on the information collection provisions must be received by OMB on or before August 17, 2006.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-HQ-OW-2005-0034, by one of the following methods:

- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the on-line instructions for submitting comments.
- E-mail: [OW-Docket@epa.gov](mailto:OW-Docket@epa.gov), Attention Docket ID No. OW-2005-0034.
- Agency Web site: <http://www.epa.gov/edocket>. EDOCKET, EPA's electronic public docket and comment system, is EPA's preferred method for receiving comments. Follow the on-line instructions for submitting comments.
- Mail: Water Docket, Environmental Protection Agency, Mailcode: 4101T, 1200 Pennsylvania Ave., NW., Washington, DC 20460, Attention Docket ID No. OW-2005-0034. Please include a total of three copies. In addition, please mail a copy of your comments on the information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attn:

Desk Officer for EPA, 725 17th St., NW., Washington, DC 20503.

- Hand Delivery: EPA Docket Center, (EPA/DC) EPA West, Room B102, 1301 Constitution Ave., NW., Washington, DC. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

*Instructions:* Direct your comments to Docket ID No. EPA-HQ-OW-2005-0034. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through [www.regulations.gov](http://www.regulations.gov), or e-mail. The [www.regulations.gov](http://www.regulations.gov) Web site is an "anonymous access" systems, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through [www.regulations.gov](http://www.regulations.gov), your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>. For additional instructions on submitting comments, go to Section 1.B of the **SUPPLEMENTARY INFORMATION** section of this document.

*Docket:* All documents in the docket are listed in the [www.regulations.gov](http://www.regulations.gov) index. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material will be publicly available only in hard copy. Publicly available docket materials are available either electronically in [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Water Docket, EPA Docket Center,

EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Water Docket is (202) 566-2426.

**FOR FURTHER INFORMATION CONTACT:** For technical inquiries, contact Jeffrey Kempic, Office of Ground Water and Drinking Water (MC 4607M), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone number: (202) 564-4880. For regulatory inquiries, contact Eric Burneson at the same address; telephone number: (202) 564-5250.

**SUPPLEMENTARY INFORMATION:**

**I. General Information**

*A. Does This Action Apply to Me?*

Entities potentially affected by the Lead and Copper Rule Short-term Regulatory Revisions proposed rulemaking are public water systems (PWSs) that are classified as either community water systems (CWSs) or non-transient non-community water systems (NTNCWSs). Regulated categories and entities include:

Category	Examples of regulated entities
Industry .....	Privately-owned CWSs and NTNCWSs.
State, Tribal, and local governments.	Publicly-owned CWSs and NTNCWSs.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities regulated by this action. This table lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your facility is regulated by this action, you should carefully examine the definition of "public water system" in § 141.2, the section entitled "coverage" of § 141.3, and the applicability criteria in §§ 141.3 and 141.80(a) of title 40 of the Code of Federal Regulations. If you have questions regarding the applicability of this action to a particular entity, consult one of the persons listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

*B. What Should I Consider as I Prepare My Comments for EPA?*

1. Submitting CBI. Do not submit this information to EPA through EDOCKET,

regulations.gov or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to submitting one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket.

Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. Tips for Preparing Your Comments. When submitting comments, remember to:

- i. Identify the rulemaking by docket number and other identifying information (subject heading, **Federal Register** date and page number).
- ii. Follow directions—The agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
- iii. Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
- iv. Describe any assumptions and provide any technical information and/or data that you used.
- v. If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- vi. Provide specific examples to illustrate your concerns, and suggest alternatives.
- vii. Explain your views as clearly as possible.
- viii. Make sure to submit your comments by the comment period deadline identified.

#### Abbreviations Used in This Document

ALE: Action Level Exceedance  
 ANSI: American National Standards Institute  
 CCR: Consumer Confidence Report  
 CCT: Corrosion Control Treatment  
 CFR: Code of Federal Regulations  
 CWS: Community Water System  
 CWSS: Community Water System Survey  
 DDBP: Disinfectants and Disinfection Byproducts Rule  
 EPA: Environmental Protection Agency  
 FTE: Full-Time Equivalents  
 ICR: Information Collection Request  
 LCR: Lead and Copper Rule  
 LCRMR: Lead and Copper Rule Minor Revisions  
 LSL: Lead Service Line  
 LSLR: Lead Service Line Replacement  
 LT2: Long Term 2 Enhanced Surface Water Treatment Rule  
 MCLG: Maximum Contaminant Level Goal

NDWAC: National Drinking Water Advisory Council  
 NPDWR: National Primary Drinking Water Regulation  
 NSF: NSF International  
 NTNCWS: Non-Transient Non-Community Water System  
 O&M: Operation and Maintenance costs  
 OMB: Office of Management and Budget  
 PE: Public Education  
 POE: Point-of-Entry devices  
 POU: Point-of-Use devices  
 RFA: Regulatory Flexibility Act  
 RIA: Regulatory Impact Analysis  
 SBA: Small Business Administration  
 SDWA: Safe Drinking Water Act  
 SDWIS/FED: Safe Drinking Water Information System, Federal Version  
 UMR: Unfunded Mandates Reform Act  
 WQP: Water Quality Parameter monitoring

#### Table of Contents

- I. Summary
- II. Background
  - A. Reason for This Rulemaking
  - B. Regulatory History
  - C. Impacts of This Proposal
- III. Proposed Regulatory Revisions to the Lead and Copper Rule
  - A. Minimum Number of Samples Required
    1. What is EPA proposing?
    2. Why is EPA proposing this clarification?
    3. How does the proposed change differ from the current requirement?
    4. What issues related to this proposed change does EPA request comment on?
  - B. Definitions For Compliance And Monitoring Periods
    1. What is EPA proposing?
    2. Why is EPA proposing this change?
    3. How does the proposed change differ from the current requirement?
    4. What issues related to this proposed change does EPA request comment on?
  - C. Reduced Monitoring Criteria
    1. What is EPA proposing?
    2. Why is EPA proposing this change?
    3. How does the proposed change differ from the current requirement?
    4. What issues related to this proposed change does EPA request comment on?
  - D. Advanced Notification and Approval Requirement for Water Systems That Intend To Make Any Change in Water Treatment or Add A New Source of Water That Could Affect the System's Optimal Corrosion Control
    1. What is EPA proposing?
    2. Why is EPA proposing this change?
    3. How does the proposed change differ from the current requirement?
    4. What issues related to this proposed change does EPA request comment on?
  - E. Requirement To Provide a Consumer Notice of Lead Tap Water Monitoring Results to Consumers Who Occupy Homes or Buildings That Are Tested for Lead
    1. What is EPA proposing?
    2. Why is EPA proposing this change?
    3. How does the proposed change differ from the current requirement?
    4. What issues related to this proposed change does EPA request comment on?
  - F. Public Education Requirements
    1. What is EPA proposing?

2. Why is EPA proposing this change?
3. How does the proposed change differ from the current requirement?
4. What issues related to this proposed change does EPA request comment on?
- G. Reevaluation Of Lead Service Lines Deemed Replaced Through Testing
  1. What is EPA proposing?
  2. Why is EPA proposing this change?
  3. How does the proposed change differ from the current requirement?
  4. What issues related to this proposed change does EPA request comment on?
- H. Request For Comment On Other Issues Related To The LCR
  1. Plumbing component replacement
  2. Point of use and point of entry treatment
  3. Site selection in areas with water softeners and POU treatment units
  4. Water Quality Parameter Monitoring
- I. State Implementation
  1. How Do These Regulatory Revisions Affect A State's Primacy Program?
  2. What does a State have to do to apply?
  3. How are Tribes affected?
- J. Limitations To Public Comment on the Lead and Copper Rule
- K. Proposed Effective Dates
- IV. Economic Analysis
  - A. Direct Costs
  - B. Overall Cost Methodologies and Assumptions
  - C. Direct Costs Associated with Regulatory Change III.A
  - D. Direct Costs Associated with Regulatory Change III.B
  - E. Direct Costs Associated with Regulatory Change III.C
  - F. Direct Costs Associated with Regulatory Change III.D
  - G. Direct Costs Associated with Regulatory Change III.E
  - H. Direct Costs Associated with Regulatory Change III.F
  - I. Direct Costs Associated with Regulatory Change III.G
  - J. Summary of National Average Annual Direct Costs
  - K. Total Upfront Costs to Review and Implement Regulatory Changes
  - L. Indirect Costs
  - M. Benefits
- V. Statutory and Executive Orders
  - A. Executive Order 12866: Regulatory Planning and Review
  - B. Paperwork Reduction Act
  - C. Regulatory Flexibility Act
  - D. Unfunded Mandates Reform Act
  - E. Executive Order 13132: Federalism
  - F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments
  - G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks
  - H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
  - I. National Technology Transfer and Advancement Act
- VI. References

## II. Background

### A. Reason for This Rulemaking

The purpose of the Lead and Copper Rule (LCR) is to protect populations from exposure to lead and copper in drinking water and reduce potential health risks. Recent high profile incidences 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. EPA began the review to determine the following: were drinking water lead levels elevated nationally; did a large percentage of the population receive water that exceeded the Lead Action Level; did a significant number of systems fail to meet the action level; how well has the existing LCR worked to reduce drinking water lead levels; and has the rule implementation been effective especially with respect to monitoring and public education requirements. EPA gathered the information for the review through a series of stakeholder workshops in late 2004; an evaluation of monitoring data; and an evaluation of LCR implementation by States and water utilities.

As a result of the national review and workshops, EPA released a Drinking Water Lead Reduction Plan in March 2005 which identified nine actions to improve implementation of the rule. EPA has consolidated several of the Plan's actions into the seven proposed changes described in section III of this proposal. These changes to the rule are intended to strengthen in the short-term the implementation of the LCR in the areas of monitoring, treatment processes, customer awareness, and lead service line replacement. Some of the regulatory changes identified in EPA's review clarify the intent of the original LCR for provisions that may not have been sufficiently clear, while others revise LCR requirements in light of the recent experiences in the District of Columbia and elsewhere. The changes proposed are expected to enhance protection of public health through a reduction in lead exposure.

EPA has also identified a number of issues that will be considered for future revisions to the rule. These issues require additional data collection, research, analysis and/or stakeholder involvement to support decisions. The issues include, but are not limited to, requirements for consecutive systems, monitoring, and lead service line replacement requirements. This proposal does not amend the portion of the regulations related to copper, however provisions addressing copper

will be considered for future revisions to the rule. EPA will propose any future regulatory changes under a separate regulatory action.

### B. Regulatory History

EPA promulgated maximum contaminant level goals (MCLGs) and NPDWRs for lead and copper in 1991 (56 FR 26460, June 7, 1991d). The goal of the LCR is to provide maximum human health protection by reducing lead and copper levels at consumers' taps to as close to the MCLGs as is feasible. To accomplish this goal, the LCR establishes requirements for community water systems (CWSs) and non-transient non-community water systems (NTNCWSs) to optimize corrosion control in their distribution systems and conduct periodic monitoring.

The rule requires systems to optimize corrosion control to prevent lead and copper from leaching into drinking water. Large systems serving more than 50,000 people were required to conduct studies of corrosion control and install state-approved optimal corrosion control treatment by January 1, 1997. Small and medium systems are required to optimize corrosion control when monitoring at the consumer taps shows action is necessary.

To assure corrosion control treatment technique requirements are effective in protecting public health, the rule also established an Action Level (AL) of 15 ppb for lead and 1300 ppb for copper in drinking water. Systems are required to monitor a specific number of customer taps, based on the size of the system. If lead concentrations exceed 15 ppb in more than 10% of the taps sampled, the system must undertake a number of additional actions to control corrosion and inform the public about steps they should take to protect their health.

The LCR has four main functions: (1) Require water suppliers to optimize their treatment system to control corrosion in customers' plumbing; (2) determine tap water levels of lead and copper for customers who have lead service lines or lead-based solder in their plumbing system; (3) rule out the source water as a source of significant lead levels; and (4) if action levels are exceeded, require the suppliers to educate their customers about lead and suggest actions they can take to reduce their exposure to lead through public notices and public education programs. If a water system, after installing and optimizing corrosion control treatment, fails to meet the Lead Action Level, it must begin replacing the lead service lines under its ownership.

EPA proposed minor revisions to the LCR (LCRMR) in 1996 (60 FR 16348, U.S. EPA, 1996b) and finalized these minor revisions on January 12, 2000 (65 FR 1950, U.S. EPA, 2000a). These minor revisions streamlined the requirements of the LCR to promote consistent national implementation and reduce the reporting burden on affected entities. These minor revisions also addressed the areas of optimal corrosion control demonstrations, lead service line replacement requirements, public education requirements, monitoring requirements, analytical methods, reporting and recordkeeping requirements, and special privacy considerations. The LCRMR did not change the action levels, MCLGs, or the rule's basic requirements.

### C. Impacts of This Proposal

This proposal will further strengthen protection of the public from exposure to lead and copper via drinking water by enhancing the implementation of the LCR in the areas of monitoring, customer awareness, and lead service line replacement. This action also clarifies the intent of some unclear provisions in the LCR. The regulatory revisions proposed today impose costs associated with State and system review of the regulatory changes, State review of system-level changes to treatment plans, system reporting and monitoring, and public education. EPA has estimated the economic impacts for each of the regulatory changes, which will have direct and indirect costs associated with them. A detailed description of these impacts is provided in Section IV, Economic Analysis, of this proposal and in the Economic Analysis support document.

## III. Proposed Regulatory Revisions to the Lead and Copper Rule

This section describes the proposed clarifications and revisions to the Lead and Copper Rule. This section also describes issues and potential changes the Agency is requesting comment upon. Sections A through G describe changes proposed and alternatives for which the Agency is requesting comment. Section H describes several potential changes for which the Agency is soliciting comment.

### A. Minimum Number of Samples Required

#### 1. What Is EPA Proposing?

EPA proposes to clarify the number and location of samples required for the smallest systems in § 141.86(c) of the LCR. The 1991 LCR established a minimum number of sites required for

lead and copper tap monitoring based on system population size. EPA's proposal maintains five samples per monitoring period as the minimum number of samples required for systems serving fewer than 100 people.

## 2. Why Is EPA Proposing This Clarification?

EPA is proposing this clarification to reduce confusion with respect to this provision of the rule. EPA considered the issue of sample size extensively in the 1991 rule. EPA considered all concerns regarding the number of samples that should be taken and explained the rationale for the number of samples in the Preamble to the 1991 Final Rule. Due to the high variability in lead and copper levels, EPA explained that it was necessary to take more samples than required in other rules in which the variability is not as high. In the 1991 preamble, EPA also recognized the fact that sampling all households was not feasible and sought to balance this concern with the need for more samples to capture variability among lead levels. Specifically, the preamble stated: "EPA believes that the number of samples required in the final rule sufficiently accounts for the variability in lead and copper levels, and reflects system-wide contaminant level distributions." (56 FR 26460 at 26523, U.S. EPA, 1991b); "The requirements of the final rule seek to strike a balance between the competing needs of ensuring the representativeness of sampling results and ensuring that the sampling requirements are reasonable and implementable by public water systems." (56 FR 26460 at 26524, U.S. EPA, 1991b).

In the preamble to the 1991 Rule, EPA also addressed concerns about the high costs to small systems of implementing the minimum number of samples requirement as follows: "EPA understands commenter's concerns with the potentially high costs of sampling for small systems but believes the increased number of samples is necessary to ensure that lead and copper levels are reasonably well represented." (56 FR 26460 at 26524, U.S. EPA, 1991d); "For most systems, collecting more samples will be far less expensive than undertaking corrosion control or source water treatment, which they could otherwise be required to install based on an inappropriately small sample size." (56 FR 26460 at 26524, U.S. EPA, 1991d).

In the preamble to the 2000 minor revisions, EPA revisited the question of the appropriate number of samples. The 2000 preamble clarified that even if a system did not have enough high-risk

sites to meet the minimum number of samples, the system must take the required minimum number of samples. The 2000 Preamble again explains EPA's rationale for choosing the minimum number of samples, stated as follows: "The number of samples specified for initial monitoring, follow-up monitoring and reduced monitoring was established to sufficiently account for variability of lead and copper at taps while at the same time being reasonable for a system to implement." (65 FR 1950 at 1970, U.S. EPA, 2000a).

Even with the explanations in the 1991 and 2000 preamble, there continues to be some confusion about the minimum number of samples required. EPA hopes to clarify this issue further with these revisions. In the 1991 rule, the term "site" is used to refer to the number of samples collected. However, there has been confusion as to whether site refers to taps or samples. EPA is proposing additional regulatory language to clarify that water systems with fewer than five taps must sample all taps at least once and repeat sampling at some taps in order to collect the minimum number of samples required. EPA believes this approach will provide an accurate representation of the lead level. Because lead levels may change over time, EPA believes this sampling approach will give a system the most accurate picture of its water quality. EPA further defines the taps in this clarification to be "taps used for human consumption" in order to ensure that samples are taken from taps which would pose the highest risk for exposure to lead, rather than from a tap which is not used for drinking, such as an outside hose bib or utility sink.

## 3. How Does the Proposed Change Differ From the Current Requirement?

The proposal does not alter current requirements. This is a clarification of the minimum number of samples requirement and does not represent a change in rule requirements or EPA policy.

## 4. What Issues Related to This Proposed Change Does EPA Request Comment On?

While EPA is proposing to retain the five-sample minimum, EPA is also soliciting comment on an alternative which would specify that NTNCWSs with fewer than five taps used for human consumption would only be required to collect one sample per available tap used for human consumption. Under this alternative, the highest sample value would be compared to the action level, rather than an average of the two highest results.

EPA is requesting comment: (1) On whether this alternative provides equal or greater protection than the proposed change, (2) on whether the alternative sampling requirement should be allowed only when the State determines that the system's historical monitoring data demonstrate the system is reliably and consistently below the action level.

EPA consulted with representatives of five State drinking water programs in the development of this proposal. The representatives of the State drinking water programs disagreed with the proposed clarification to the regulations described in Section III.A2 above. The State representatives proposed this alternative change to the regulatory language. State drinking water program representatives have argued that, while it may make sense to collect a minimum number of samples for larger community water systems (CWSs) so that there would be relative confidence in the results being representative of the system as a whole (due to variability), this does not apply to a system where 100 percent of the available taps are being tested. These State drinking water program representatives provided the following four reasons for their support of the alternative approach in lieu of this proposed clarification.

First, sampling at 100 percent of available taps will provide a high level of confidence that the sample results are representative of levels in the system, since the whole universe of available sampling sites is being sampled during each monitoring period.

Second, in the event that a system with fewer than five taps has only one single tap that exceeds the action level, taking a total of five samples can easily result in the system not having an Action Level (AL) exceedance (and therefore not needing to solve a lead problem), because the 90th percentile is calculated by averaging the two highest samples when there are five samples. When a system takes fewer than five samples, a single sample above the AL would be considered an AL exceedance under the alternative to this proposal.

Third, sampling each tap at systems that have fewer than five better represents variation over time in these systems than does the sampling for larger systems, since the same sites are sampled repeatedly (every monitoring period). Larger CWSs frequently have to change monitoring locations because consumers do not allow the system employees access to their homes on a repeated basis. Monitoring at 100 percent of the same sites over time (at NTNCWSs) would catch any changes in plumbing materials introduced over

time, as well as account for any variability at these sites over time.

Fourth, the alternative option would continue to provide robust protection for the most vulnerable populations, such as schools and childcare facilities, since all taps would be sampled. For example, if a preschool has a tap that exceeds the Lead Action Level, teachers would know not to use that tap to provide water to children for consumption, and the system would be required to address that issue immediately.

EPA requests comment upon the alternative option including the four reasons described above and any other information that should be considered in evaluating this alternative to the proposed change.

### *B. Definitions for Compliance and Monitoring Periods*

#### 1. What Is EPA Proposing?

EPA is proposing a number of clarifications throughout the LCR to clearly explain when compliance and monitoring periods begin and end.

#### 2. Why Is EPA Proposing This Change?

EPA is proposing clarifications regarding monitoring and compliance periods in order to clarify the meaning of these terms and to address two issues. The term "compliance period" is defined in § 141.2 as a three-year calendar year period within a nine-year compliance cycle. The term "monitoring period" refers to the specific period within the compliance period in which a water system must perform the required monitoring (e.g., June-September).

The first issue concerns the timing of actions following a lead or copper action level exceedance. For systems on reduced monitoring, they must monitor either once during each calendar year or once during each three-year compliance period. The monitoring period is from June to September or some other four-month period during normal operation when the highest lead levels are most likely to occur. Under the current regulations, some systems have been uncertain about when a system is determined to have exceeded the action level and the corresponding deadlines for completing corrosion control studies, lead service line replacement and public education (e.g., end of December or the end of September for systems monitoring June to September). This change would clarify that the system would be determined to be exceeding the action level as of the date on which the monitoring period ended (e.g., on September 30). This

clarification is intended to ensure that the system and the State begin actions to reduce exposure, such as corrosion control, public education for lead and/or lead service line replacement, as soon as possible. The deadlines for completing these follow-up activities would be calculated from the date the system is determined to be exceeding the action level (end of the monitoring period).

The second issue concerns the timing of samples that should be taken during the three-year compliance period for systems on triennial monitoring. This proposal would require samples to be taken during four consecutive months within the compliance period, not over multiple years. This requirement would assure that States and systems have an accurate assessment of the effectiveness of corrosion control. Under this requirement, samples will need to be taken during four consecutive months, during the three-year period. For most systems, this will mean monitoring during June to September during one of the three years in the three-year compliance period. For systems where the State has approved some other four-month period, all samples must be taken during that four-month period. Sampling during a short, fixed time period will allow the system to more accurately evaluate the effectiveness of the corrosion control treatment than would collecting the same number of samples over a three year period.

We are also proposing that systems on triennial monitoring be required to conduct their monitoring every three years. Systems would therefore not be allowed to monitor during Year 1 of the first compliance period and during Year 3 of the second compliance period because that would mean five years would have passed between monitoring rounds. A similar change is also proposed for small systems with monitoring waivers to ensure that they monitor every nine years.

#### 3. How Does the Proposed Change Differ From the Current Requirement?

EPA is proposing clarifications of the terms, "monitoring period" and "compliance period." EPA also proposes to revise a number of sections in the LCR to more precisely specify when the "start date" for the compliance calendar occurs. These changes clarify existing language rather than changing any requirements of the rule. These clarifications will ensure that corrosion control, public education, and/or lead service line replacement are started in a timely fashion in order to reduce exposure to lead. EPA also proposes revisions that will make it

clear when systems may begin reduced monitoring as well as when they need to resume more frequent monitoring. Again, EPA is not changing requirements but rather making sure the current requirements are clear and are consistently implemented.

EPA is also proposing that systems on triennial monitoring must monitor during one four-month period (called the "monitoring period"). EPA is further proposing that systems on triennial monitoring monitor every three years, so that the start of the next round of monitoring is based on the previous round of monitoring. Systems would not be allowed to monitor in Year 1 of one round of one three-year compliance period and Year 3 of the next three-year period, since that would allow five years between rounds of monitoring. This same approach would also be applied to the nine-year cycles for systems with a monitoring waiver.

#### 4. What Issues Related to This Proposed Change Does EPA Request Comment On?

EPA is requesting comment on the clarifications throughout the rule regarding the terms monitoring period and compliance period. EPA also requests comments on other sections of the LCR that may need modification to clarify when actions are required to begin or be completed. In addition, EPA requests comment on the appropriateness of requiring systems on reduced monitoring to take all of their required samples during one four-month period in order to evaluate the effectiveness of the corrosion control treatment.

### *C. Reduced Monitoring Criteria*

#### 1. What Is EPA Proposing?

EPA is proposing to disallow water systems that exceed the Lead Action Level from initiating or remaining on a reduced lead and copper monitoring schedule based solely on the results of their water quality parameter monitoring. This proposed change would modify the reduced monitoring provisions in § 141.86(d)(4), specifically subsections (ii), (iii) and (iv). These sections discuss when small and large water systems may reduce the required number of lead and copper samples in accordance with paragraph (c) of § 141.86.

#### 2. Why Is EPA Proposing This Change?

EPA is proposing this change because the Agency believes that reduced monitoring should only be permitted in instances in which it has been demonstrated that corrosion control

treatment is both effective and reliable. Compliance with water quality parameters alone may not always indicate that corrosion control is effective.

Monitoring lead levels is particularly critical for systems that are exceeding the Lead Action Level for several reasons. One reason is that it will assist systems in evaluating the effectiveness of corrosion control treatment. The 1991 LCR intended to allow systems eligibility for reduced monitoring even if they exceeded the lead or copper action level if they could demonstrate their corrosion control treatment was effective by meeting the State-designated water quality parameters. However, as shown by the events in the District of Columbia and as stated above, compliance with water quality parameters alone may not always indicate that corrosion control is effective, especially after a treatment or source change. Continued exceedance of the Lead Action Level may indicate that a particular method of corrosion control treatment is not effective for a particular system and this data may assist this system in finding a better alternative treatment. In addition, a system must know if it continues to exceed the Lead Action Level after installing corrosion control treatment in order to determine how long its lead service line replacement requirements remain in effect. Continued understanding of the range of lead levels detected within the system can also help the system implement an effective public education program.

Secondly, primacy agencies may gain a more accurate picture of what lead levels in drinking water currently exist in their States. Many systems within States share water sources, have similar treatment technologies, and have similar materials in their distribution systems. States and other primacy agencies with knowledge of effective corrosion control for one system may be able to aid other systems within their jurisdiction in lowering lead levels in water. Having a more accurate characterization of lead levels in drinking water that exceeds action levels will also allow States and systems to better inform consumers and, thereby, create greater confidence in their efforts to reduce lead levels.

### 3. How Does the Proposed Change Differ From the Current Requirement?

In addition to monitoring lead and copper levels at households, systems that exceed the lead and copper action level are required to monitor for water quality parameters established by the State. These water quality parameters include pH, alkalinity, and other

parameters that reflect the method used to control the corrosivity of the water (e.g., phosphate levels). States establish acceptable ranges for these parameters for individual systems that must be maintained to assure compliance with the rule. Currently a system that meets the water quality parameter requirements is eligible to reduce the frequency of its lead and copper monitoring even if the system is currently exceeding the action levels. The proposed revision would limit the eligibility of reduced monitoring to only those systems meeting the Lead Action Level.

Currently, paragraph (4) of § 141.86(d) contains provisions for when water systems may reduce the monitoring frequency and the number of required lead and copper samples for systems of various sizes under both standard and reduced monitoring. Under subparagraph (ii) of this section, any water system that meets the water quality parameters specified by the State under § 141.82(f) for two consecutive six-month monitoring periods may reduce their monitoring to once per year and reduce the number of samples in accordance with paragraph (c) of § 141.86 with written approval from the State. Under subparagraph (iii) of this section, any water system that meets these water quality parameters for three consecutive years of annual monitoring may reduce the monitoring frequency to once every three years with written approval from the State. The Agency is proposing to require that these systems must also meet the Lead Action Level over the specified time period as a criterion for reduced monitoring. For example, under subparagraph (ii) a system would have to meet the Lead Action Level and the State water quality parameters for two consecutive six-month monitoring periods in order to be eligible, with written approval from the State, to reduce its monitoring frequency to once per year and reduce the number of samples required in accordance with § 141.86(c). This proposed change will also require systems currently on reduced monitoring schedules that exceed the Lead Action Level during any four consecutive month monitoring period to resume sampling the standard monitoring number of sites under § 141.86(c) each consecutive six-month monitoring period.

It should be noted that subparagraph (i) of § 141.86(d)(4) allows small- or medium-size water systems to reduce monitoring to once per year after meeting both the lead and copper action levels for two consecutive six-month monitoring periods. Subparagraph (iii)

of the same section allows small- and medium-size systems to reduce monitoring from annually to once every three years after meeting both the lead and copper action levels for three consecutive years. The Agency is not proposing to change either of these requirements. Small- and medium-size systems that meet both the lead and copper action levels may still reduce monitoring in the manner described in these sections without State approval.

### 4. What Issues Related to This Proposed Change Does EPA Request Comment on?

EPA requests comment on the proposal to disallow water systems that are above the Lead Action Level from initiating or maintaining a reduced monitoring schedule based solely on the results of their water quality parameter monitoring.

EPA did consider requiring that all systems meet both the lead and the copper action levels as criteria for eligibility for reduced monitoring. However, the Agency determined that copper issues should be considered as part of longer term revisions to the rule. EPA also believes that adding the copper action level requirement could impose a large monitoring increase on some small and medium systems that are currently limited in their ability to reduce copper below the action level (i.e., high alkalinity ground waters). For these systems, the States currently have flexibility in the existing rule to limit systems from proceeding to reduced lead and copper tap monitoring. Under subparagraphs (ii) and (iii) of § 141.86(d)(4), a State may review and revise its determination to allow a system to proceed with reduced monitoring when the system submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling becomes available.

#### *D. Advanced Notification and Approval Requirement for Water Systems That Intend To Make Any Change in Water Treatment or Add a New Source of Water That Could Affect the System's Optimal Corrosion Control*

##### 1. What Is EPA Proposing?

EPA is proposing to amend § 141.81(b)(3)(iii), § 141.86(d)(4)(vii), § 141.86(g)(4)(iii), and § 141.90(a)(3) to require water systems to obtain prior approval by the State primacy agency to add a new source of water or change a treatment process prior to implementation. The proposed regulatory language allows as much time as needed for water systems and States to consult before making those

changes. In addition to allowing this type of State discretion, EPA is currently developing a revised simultaneous compliance guidance document that can be used by the State to identify those situations where optimal corrosion control can be affected by changes in treatment or source water.

## 2. Why Is EPA Proposing This Change?

In the 2000 revisions to the LCR, EPA published in the **Federal Register** a requirement that water systems notify the State primacy agency of the addition of a new source or treatment change no later than 60 days after implementing the change (65 FR 1950 at 1977, U.S. EPA, 2000a). When water systems make changes in their source water or treatment processes there could be unintentional effects on the water system's optimal corrosion control. The goal of this provision was to ensure that a water system maintained optimal corrosion control following changes in water quality resulting from a change in source or treatment process by providing the primacy authority an opportunity to review the change and its possible impacts on corrosion control. An example of change in treatment would be a switch in disinfectant.

EPA now believes that this provision may not be adequate to ensure continued optimal corrosion control because the primacy agency review comes too late in the process. If a water system notifies the State primacy agency of changes that have already been made that could result in leaching of lead from plumbing components such as service lines, there may be little opportunity to minimize any anticipated problems with corrosion or prevent leaching from occurring. For this reason, EPA believes that such changes in treatment should be reviewed and approved by the State before they are implemented. Also, EPA believes that this proposed requirement would fit well into the existing State program plan review and approval requirements that are part of the State's primary enforcement responsibilities described in § 142.11(a)(2)(v).

## 3. How Does the Proposed Change Differ From the Current Requirement?

Under the current requirement, water systems must simply provide written notification to the State within 60 days after the change in treatment or source has been made. This proposed regulatory revision requires that the notice of change be given in advance, and the State must approve the change. This gives water systems the opportunity to consult with their States

and identify any measures that may be necessary to avoid or minimize potential problems with corrosion control. It also allows the State to design a monitoring program upfront, for those situations where it is necessary to ensure that corrosion control is being maintained adequately after the change has been made.

## 4. What Issues Related to This Proposed Change Does EPA Request Comment on?

Although EPA believes the proposed regulatory revision is the best approach to address potential problems with corrosion control when treatment/source changes are made, EPA requests comment on a number of issues related to the proposal. First, EPA also considered the alternative of simply requiring advance notification to the State at least 60 days before the change. However, EPA decided to propose both prior notice and approval for two reasons. The first reason is that EPA could not determine a period for advance notice that would be appropriate for all changes; in some cases 60 days would be unnecessary (e.g., emergency changes to chemical feed systems) and in some cases it would be grossly insufficient (e.g., major system improvements such as installation of ion-exchange treatment). The second reason is that several States pointed out that they already require approval of such changes and thought such approval was necessary to ensure that optimal corrosion control would be maintained. EPA requests comment on the advanced notice (without approval) alternative and if commenters favor the alternative, EPA requests that commenters address the issue of how much time to provide (e.g., 60 days or another time period).

The second issue on which the Agency would like public comment is what the phrase "addition of a new source" should mean for systems that mix water sources. For example, a water system can mix source water by going from 100% surface water to 50% ground water and 50% surface water on either a permanent or temporary (e.g., seasonal) basis. In this case, the mixing of source waters might or might not be considered an addition of a new source under the regulation. Similarly, a system may change the proportion of two sources such as moving from 75% ground water and 25% surface water to 25% ground water and 75% surface water. These changes could also affect the water chemistry in a way that could impact corrosion control. From time to time, water systems may switch entirely from one source to another, such as going from 100% surface water to 100%

ground water. EPA requests comment on (1) whether and when such changes should require prior approval and, (2) if approval should not be required for all such changes, what criteria should be used to distinguish these kinds of changes in source water from the source water changes that might affect corrosion control and need prior approval. Specifically, EPA requests public comment on whether the words "source change" should replace "addition of a new source" to describe a broader range of scenarios where source waters are changed in some way (e.g., mixing of source waters in different proportions) or if EPA should describe in more detail in rule or preamble language or guidance which types of changes require prior State approval.

## *E. Requirement To Provide a Consumer Notice of Lead Tap Water Monitoring Results to Consumers Who Occupy Homes or Buildings That Are Tested for Lead*

### 1. What Is EPA Proposing?

EPA is proposing to amend the public education requirements described in § 141.80 (g) and add a new notification requirement at § 141.85(d) that will require water systems to provide consumers who occupy homes or buildings that are part of the utility's monitoring program with testing results when their drinking water is tested for lead.

### 2. Why Is EPA Proposing This Change?

Although some utilities may provide customers with the results of analyses conducted to meet requirements of the regulations, utilities are not currently required by EPA to notify occupants of the lead levels found in their drinking water. While samples are primarily collected to evaluate the effectiveness of corrosion control or to evaluate the corrosivity of the utility's water across the entire service area, the results of lead monitoring can provide useful information to the occupants of the household from which the samples were taken. Occupants can evaluate the results of lead tests for their drinking water and use that information to inform any decisions they might make to take action to reduce their exposure to lead in drinking water.

### 3. How Does the Proposed Change Differ From the Current Requirement?

There are currently no provisions in the regulation that require water utilities to notify occupants of results of routine monitoring conducted to comply with the LCR. Community water systems

must collect samples from between five and 100 households to evaluate lead and copper concentrations. Non-transient, non-community water systems (including some schools that operate their own water system) must also collect samples. This proposed rule change would require systems to provide written notification to occupants of the households no later than 30 days after the utility learns the results for the samples collected from that household and to post or otherwise notify occupants of non-residential buildings of the results of the lead testing. This would include staff and parents of students for schools that are tested as non-transient non-community water systems.

While there are no current requirements associated with notification of results of routine monitoring in the LCR, there are requirements for utilities to provide notice to homeowners when their water is tested in carrying out partial lead service line replacement. Section 141.84(d)(1) requires that utilities test water within 72 hours after the completion of partial replacement of a lead service line. The utility must report the results of the analysis to the owner and the resident(s) served by the line within 3 business days of receiving the results. Utilities must provide the information by mail or by other methods approved by the State. In instances where multi-family dwellings are served by the line, the water system has the option to post the information at a conspicuous location. This provision is not affected by the proposed rule change.

The proposed language would require utilities to provide consumers (owners or occupants) at locations that were tested during routine tap monitoring pursuant to § 141.86 with a consumer notice of the tap monitoring results as soon as practical, but no later than 30 days after the utility learns of the results. The notice must contain an explanation of the health effects of lead, list steps consumers can take to reduce exposure to lead in drinking water, provide contact information for the utility, include the Maximum Contaminant Level Goal (0 (µg/L), the action level (15 (µg/L) and an explanation of what these values mean. The results must be provided by mail or other methods approved by the State.

EPA selected thirty days as the timeframe for notifying consumers of results because it is consistent with the notification time frame for a Tier 2 Public Notice and because it would better allow utilities sufficient time to generate a large number of notices for

mailing at one time. The purpose for including the MCLG and the action level is to give consumers context as to their level of exposure in comparison to the goal and standard established for lead in drinking water. The MCLG is the level at which no known adverse health effects occur (with an adequate margin of safety) and the action level is the concentration of lead that States and systems use to determine if systems must install corrosion control treatment if they have not already done so, or if they must begin public education and lead service line replacement.

#### 4. What Issues Related to This Proposed Change Does EPA Request Comment On?

EPA seeks comment on several specific elements associated with the proposed requirements. Is 30 days sufficient time to provide notification, or is a shorter or longer time frame appropriate? Is it appropriate to include the MCLG and the action level and a brief explanation of their significance, or is there some other information that systems should or could be asked to provide that would be more useful to consumers in determining whether their tap monitoring results warrant further action to protect household members, especially children, from lead exposure through drinking water?

Additionally, during development of the proposal, it was suggested that this provision would cause an undue burden on non-transient non-community water systems. EPA believes it is important to include non-transient non-community systems because many of them are schools or childcare facilities, which provide water to the population more susceptible to lead exposure. Given the flexibilities included in the proposal related to means of delivery, EPA seeks comment on whether this provision would cause an undue burden to non-transient non-community water systems.

#### F. Public Education Requirements

##### 1. What Is EPA Proposing?

EPA is proposing to change the public education requirements of the Lead and Copper Rule (LCR) in the Code of Federal Regulations at § 141.85. The proposal would still require water systems to deliver public education materials after a Lead Action Level exceedance. EPA is proposing to change, however, the content of the message to be provided to consumers, how the materials are delivered to consumers, and the timeframe in which materials must be delivered. The changes to the delivery requirements

include additional organizations that systems must partner with to disseminate the message to at-risk populations as well as changes to the media used to disseminate information to ensure that it reaches consumers when there is an action level exceedance.

In addition to the changes to § 141.85 for the LCR, EPA is also proposing a change to § 141.154(d) for the Consumer Confidence Report (CCR) rule, which requires community water systems to send an annual report to billed customers containing information relevant to the quality of the drinking water provided by the system (63 FR 44512, August 19, 1998, U.S. EPA 1998a). EPA is proposing to change the CCR rule to require all community water systems that detect lead in their compliance monitoring samples to include information about the risks of lead in drinking water in the report on a regular basis.

##### 2. Why Is EPA Proposing This Change?

EPA is proposing to change the public education requirements of the LCR in order to improve compliance and ensure that consumers receive the information they need to appropriately limit their exposure to lead in drinking water. Because the sources of lead are frequently within the home and reduction of lead in drinking water is the responsibility of both the public water systems and the consumer, EPA wants to ensure that information is delivered and that it is meaningful and useful to the consumer.

EPA identified compliance as an important issue during its review of LCR implementation. Based on EPA's review of state files, over 40 percent of water utilities did not conduct the required public education; therefore the at-risk population did not get information they needed to reduce their exposure from lead in drinking water (Lead and Copper Rule State File Review: National Report, EPA, March 2006a) EPA believes the changes in this proposal better ensure that at-risk populations receive information quickly and are able to act to reduce their exposure. EPA also believes water systems will be better able to comply with these proposed requirements.

During EPA's national review of the LCR, many stakeholders stated that the public education requirements needed improvement. In September 2004, EPA held an expert workshop to discuss the public education requirements of the rule. A number of concerns were raised at this workshop about the effectiveness of the existing public education language and requirements. Workshop

participants stated that the mandatory language in the rule is too long, cumbersome, and complex to convey to the general public an understanding of the risk posed by lead in drinking water and an appropriate course of action. Public education must put the risk in context and convey to the public the appropriate sense of urgency for consumers to act to reduce exposure. In addition, workshop members called for public education messages to be tailored to those who are at highest risk for lead exposure. Many participants stated that the mandatory language and delivery requirements in the current rule were ineffective in providing useful and timely information to the public. (Summary from Public Education Workshop, U.S. EPA, 2004a).

In order to address these concerns, the National Drinking Water Advisory Council (NDWAC), EPA's advisory body on the Safe Drinking Water Act, formed a working group to consider possible revisions to the public education requirements. The charge for the NDWAC Working Group was to (1) review the current public education requirements for lead in drinking water to make recommendations for improvements; (2) develop recommended revised language for communicating to the public the risk of lead in drinking water and how affected persons should respond; and (3) review and make recommendations for changes to the means of delivery of lead information to the public (70 FR 54375, U.S. EPA, 2005).

The NDWAC Working Group met in person four times between October 2005 and April 2006. The Working Group was comprised of 16 individuals representing an array of backgrounds and perspectives. Collectively, these individuals brought into the discussion the perspectives of State drinking water agencies, environmental and consumer groups, drinking water utilities, small system advocates, State health officials, and risk communication experts.

The NDWAC Working Group raised a number of concerns with the public education requirements of the LCR that are consistent with the concerns expressed at the 2004 workshop. The NDWAC Working Group recommended that the rule be modified to better ensure that information reaches the most vulnerable populations (e.g., pregnant women, infants and young children) or their caregivers. They also recommended changes to ensure that these consumers received information in a more timely manner and continued to receive information throughout any exceedance. They also recommended changes to ensure that the information

is easy to understand and effective in informing affected consumers and encouraging parents or other caregivers to take actions to reduce exposure of infants and children to lead. In addition, the NDWAC Working Group recommended changes to make sure critical information reaches not only bill paying customers, but those consumers who live in apartments and other housing where residents do not receive bills.

Finally, the NDWAC Working group was also concerned about the amount of time it may take to test water, get back the results, calculate the 90th percentile, and finally send out public education materials. They were concerned that an individual could be drinking water with high lead levels for months before knowing of the problem. As a result, they recommended changes to increase the timeliness of public education on lead in drinking water.

The NDWAC recommendations are, in part, modeled after the public education information under two existing EPA rules, the CCR rule and the Public Notification Rule (65 FR 25982, U.S. EPA, 2000b). The NDWAC recommendations form the basis for the changes to § 141.85 proposed in this rulemaking.

### 3. How Does the Proposed Change Differ From the Current Requirement?

The public education requirements in this proposal differ in a number of ways from the current requirements of the LCR. This proposal still requires water systems to complete the public education requirement after a Lead Action Level exceedance, but changes the mandatory content of written materials, delivery requirements, and timing of when systems must complete all required activities. This proposal also changes 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. EPA believes these changes will make the public education program more effective. In addition, this proposal changes 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. This proposal also requires the systems to do several additional activities but allows them to pick from a list of activities in order to do what is most effective for their community. This proposal requires that water systems maintain communication with consumers throughout the Lead Action Level exceedance by including information

with every water bill; provide two press releases a year; and for larger systems, include information on their Web site. This proposal allows primacy agencies to give water systems more time to complete the additional activities and deliver water bills. Finally, this proposal includes changes to the Consumer Confidence Report to ensure consumers are aware of concerns about lead in drinking water.

#### a. Changes to the Mandatory Text of the Written Materials

This proposal requires the system to continue to deliver written materials to all customers as well as a number of key organizations. However, EPA 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 how to obtain additional information. Under this proposal, 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 EPA's suggested language or their own words to explain these topics. EPA believes that this format will result in more effective public education materials.

EPA does recognize that small systems do not have the resources to create their own language for the required topics, so EPA will provide language in guidance that systems can use to explain all of the required topics in the regulation. For example, EPA is giving systems more flexibility in the language they use for flushing instructions, yet for systems that do not have data to identify clear flushing instructions, EPA will suggest flushing times to share with customers.

#### b. Changes To Better Reach At-Risk Populations

EPA is proposing to add organizations to the list of recipients of the public education materials in order to increase the likelihood that the most vulnerable populations or their caregivers will receive the information they need to reduce their exposure to lead in drinking water. EPA is proposing 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, EPA 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 proposal is designed to help ensure that the information reaches non-bill paying customers; these customers may be reached through these organizations if the organizations are provided with the necessary information and encouraged to share the task of improving public awareness.

While it is important for this information to get to all of these organizations, EPA 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. In order to make sure the local health agencies know about the Lead Action Level exceedance, EPA is proposing to require systems to 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, EPA is also proposing that systems complete additional activities from a list of options. The list of additional activities that systems can choose from includes:

- Public Service Announcements
- Paid advertisements such as newspaper or transit ads
- Information displays in public areas such as grocery stores
- Using the internet or email to disseminate information
- Public meetings
- Delivery to every household (not just bill paying customers)
- Individual contact with customers such as door hangers
- Provide materials directly to multi-family homes and institutions
- Other methods approved by the primacy agency

This proposal requires that systems serving 3,300 people or above be required to do three additional public education activities from the list of possible items and systems serving 3,300 or fewer individuals must do one additional activity from this list. The system must work in consultation with the primacy agency to ensure the content of each of these additional activities is appropriate. EPA is

proposing that a system can choose three items from one, two, or three of these general categories. For instance, a system can do a series of paid advertisements if that is the most effective way to reach the target populations in their community.

System, State and consumer representatives on the NDWAC Working Group 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, EPA is proposing to give systems some flexibility in how they deliver their public education materials. They are still required to disseminate information to people served by their system, but they have some flexibility in how they complete their program. For instance, a large system in an urban area may choose to use a public service announcement and paid advertisements to reach consumers, while a system in a rural area may find the best way to reach customers is through displaying information in frequently visited public areas or public meetings.

In the current regulation, small systems are able to limit their distribution to only those facilities and organizations frequented by the most vulnerable populations. While systems serving less than 500 people may do this without approval from the state, systems serving 501–3,300 may limit their distribution if they receive written approval from the state. This proposal changes this so that all small systems serving 3,300 or fewer people may limit their distribution to only those places frequented by the most vulnerable populations without written approval from the state.

#### c. Changes To Help Systems Maintain Communication With Consumers Throughout the Exceedance

In order to ensure continued contact with consumers, EPA is also proposing that systems include information in or on the water bill as long as there is an exceedance of the Lead Action Level. EPA 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 this proposal encourages continuous communication with consumers is by requiring systems with a population greater than 100,000 to put the public education information on their Web site. Under the proposal, this information must remain on the Web site until the system tests below the Lead Action Level.

Currently, systems that exceed the Lead Action Level must issue a press release. EPA is proposing to require that 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 and TV and radio stations which serve the population served by the water system. This is another way to reach consumers who do not receive water bills. In response to concerns about small systems' ability to complete this requirement, in this proposal, primacy agencies can waive the press release requirement if there are no media outlets that specifically target the population served by the system. In addition, this proposal removes the requirement for medium and large systems to provide two Public Service Announcements (PSA) per year.

#### d. Changes to the Required Timing of Completion of Public Education Requirements

While this proposal 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 water bill delivery and the additional activities from the list of options. This proposal would allow more time so that a system could align its billing cycle with the public education requirements. EPA understands that many systems have a billing cycle which may begin within the 60 days time frame but not all customers would be billed at the same time. The primacy agency may allow the system to include information with their regular billing cycle even if this means some customers receive this part of the public education program a bit later than the 60-day window. In addition, EPA is proposing to allow the system to work with the primacy agency on a schedule to complete the additional items such as PSAs or advertisements. This is intended to encourage systems to pick the items from this list that will be most effective and will reach the most vulnerable populations rather than the items that are easiest and quickest to complete. In order to make sure that the public education program is effective, the primacy agency may allow the system to take a bit longer to complete these more complicated items. The system must still complete all other aspects of the public education program, such as delivering materials to organizations that work with at-risk populations, posting information on their Web site and submitting press releases within the 60 days. This will

ensure that customers receive some information as quickly as possible.

#### e. Changes to Consumer Confidence Reports

The NDWAC suggested changes to the CCR rule to address the concern that materials may not be delivered immediately and therefore vulnerable populations may drink water with high levels of lead for months before knowing of the risk. Under current regulations, all water systems that detect lead above the action level in more than five percent of the homes sampled must include a short informational statement about lead in drinking water in their CCR. In this action, EPA is proposing that all Community Water Systems who detect lead above the method detection limit of 0.001 mg/L in their compliance monitoring samples provide information in their annual CCR on lead in drinking water. This approach is consistent with the CCR rule requirements for the other inorganic contaminants in § 141.151, which is also based on the method detection limit. This short statement will help to ensure that all vulnerable populations or their caregivers receive information on how to reduce their risk to lead in drinking water at least once a year. In addition, the NDWAC recommended changes to the language in the informational statement to make the risk of lead in drinking water clear as well as to include basic steps on how to reduce exposure to lead in drinking water and where to go for more information. EPA is proposing these changes in this rule.

#### 4. What Issues Related to This Proposed Change Does EPA Request Comment on?

EPA is asking for comment on the proposed revisions to the public education requirements under the Lead and Copper Rule. In particular, EPA requests comment upon revisions to the mandatory language for written materials. EPA requests comment on the flexibility provided in the requirements for the content of written public education materials. EPA also requests comment on the shortened mandatory language and suggested language for other required topics. Do commenters believe this revised language is clearer and will be easier for consumers to understand? Is the proposed health effects language and information on steps consumers can take to reduce lead exposure useful to consumers? Should the language also indicate that exceedence of the action level at the 90th percentile tap reading does not mean that all consumers are exposed to elevated levels of lead? Do commenters have any concerns about compliance

with the proposed content requirements? Should EPA require systems to submit their written materials to primacy agencies before distributing them? EPA also requests comment on whether or not systems should be required to modify their public education materials if the primacy agency determines it is not consistent with the mandatory language.

The mandatory language includes a section on contacts for more information. This section includes a requirement for the system to include how to contact both the system and EPA. EPA requests comment on whether there should be a mandatory requirement to include the contact information for the State drinking water primacy agency. EPA is aware that a number of States adopt EPA drinking water regulations by reference and these States would not be able to insert a requirement for systems to provide State contact information. Would States who adopt by reference face a challenge encouraging customers to contact their office under the current proposal?

EPA also seeks comment on the delivery requirements for the public education message. Will the changes to the delivery requirements make the public education program more effective at reaching the most vulnerable populations? Are there other delivery mechanisms EPA should consider? EPA is also interested in any studies or information commenters have on ways to reach the populations of concern.

The delivery requirements in this proposal expand on the requirement that systems deliver public education materials to certain organizations such as schools, pediatricians, childcare centers, etc. EPA requests comment as to how a system that exceeds the Lead Action Level should determine to which of these organizations it must deliver materials. Should the system deliver materials to only organizations that are served by that system, all organizations in the county or other local government jurisdiction, or all organizations that provide service to the population served by the water system?

EPA is proposing that Community Water Systems consult with the primacy agency to ensure the information they disseminate as part of the additional activities under § 141.85(b)(2)(vi) is appropriate. EPA is interested in whether commenters believe this is too great a burden on the primacy agency. Should EPA determine the required content for these additional activities? If EPA should make this determination, do commenters have suggestions for what the content should be?

EPA is interested in whether commenters agree that some water systems will need more than 60 days to complete delivery of water bills which include the public education information and the additional activities from the list (e.g., PSAs, paid advertisements, etc.)

EPA also requests comment on whether this proposal adequately addresses the concerns of small systems. Many small systems have limited resources and limited technical capabilities. Will these systems be able to complete the requirements, and if so, will this make for an effective public education program in their communities?

EPA also requests comment on the proposed modifications to the CCR rule requirements for lead. First, EPA requests comment on requiring systems that detect any lead to include language in their consumer confidence report. This requirement would be triggered for systems detecting lead above the method detection limit of 0.001 mg/L. EPA is interested in whether commenters think the criterion should be detecting lead above the practical quantitation level of 0.005 mg/L, or above some other level that may be more relevant for consumers in determining whether they should take any further action?

Second, EPA requests comment as to whether the CCR is an effective way to reach the targeted populations before there is a major problem in a water system. Are there other vehicles for reaching these individuals that EPA should consider?

Third, EPA requests comment upon the content of the informational statement to be included in the CCR for systems that detect lead or exceed the Lead Action Level. EPA requests comment on whether this language would be effective in raising the targeted populations' awareness of the effects of lead in drinking water and steps they can take to minimize exposure to lead. In particular, EPA notes that the proposed language is essentially the same whether the system has exceeded the action level or not. Should EPA develop language that communicates a greater urgency about taking further action in situations where the action level has been exceeded than in situations where it has not? EPA also notes that the language focuses on the household plumbing as the potential sources of lead in drinking water. EPA requests comment as to whether other potential sources of lead (e.g., service lines) should be identified for the consumer.

### G. Reevaluation of Lead Service Lines Deemed Replaced Through Testing

#### 1. What Is EPA Proposing?

EPA is proposing to require water systems to reevaluate lead service lines classified as “replaced” through testing if they resume lead service line replacement programs. This would only apply to a system that had (1) initiated a lead service line replacement program, then (2) discontinued the program, and then (3) subsequently resumed the program. When resuming the program, this system would have to reconsider for replacement any lead service lines previously deemed replaced through the testing provisions in § 141.84(c) during the initial program. This proposed change would add a subsection to the lead service line replacement requirements in § 141.84(b) to include provisions for systems resuming lead service line replacement programs.

#### 2. Why Is EPA Proposing This Change?

Lead service line replacement is intended as an additional step to reduce lead exposure when corrosion control treatment is unsuccessful. The provision in § 141.84(c), which allows systems to leave in place an individual lead service line if the lead concentration in all service line samples from that line is less than or equal to 0.015 mg/L, is intended to maximize the exposure reduction achieved per service line replaced by avoiding the disruption and cost of replacing lines that are not leaching high levels of lead. However, samples taken from a lead service line pursuant to § 141.84(c) cannot predict future conditions of the system or of the service line. Systems can discontinue a lead service line replacement program by meeting the Lead Action Level for two consecutive 6-month monitoring periods. Therefore, EPA is proposing that these systems reconsider any lines previously determined to not require replacement if they exceed the action level again in the future and resume the lead service line replacement program.

#### 3. How Does the Proposed Change Differ From the Current Requirement?

A system that exceeds the action level must replace at least seven percent of its lead service lines each year until it is under the action level for two consecutive 6-month monitoring periods. Currently, a system is not required to replace an individual lead service line if the lead concentration in all service line samples from that line are less than or equal to 0.015 mg/L. The proposed revision would continue to allow systems to determine if a lead service line does not require

replacement in this manner. However, the proposal would not allow systems to consider such lines as permanently removed from the replacement program. This rule change would apply to a system that (1) exceeds the action level, (2) tests out one or more service lines, (3) brings lead levels below the action level for two consecutive 6-month monitoring periods and discontinues replacing lead service lines, and (4) later exceeds the action level again. That system would have to reinitiate lead service line replacement considering all lead service lines including those that had previously tested out of the replacement program under § 141.84 (c). The system would divide the updated number of remaining lead service lines by the number of remaining years in the initial lead service line replacement program to determine the number of lines that must be replaced per year. Systems resuming lead service line replacement programs as detailed above would not have 15 years from the date of recommencement and, thus, would not be able to restart the “clock” for their lead service line replacement program. Such systems would have to consider the number of years remaining as 15 minus the number of years they had completed in their initial replacement program (*i.e.*, a system resuming after conducting two years of replacement has 13 years in which to complete the program). In 1991, EPA established the maximum replacement schedule of 15 years for all systems. This was because the Agency believed that if systems were allowed to replace lead service lines as part of normal maintenance, it may take as long as 50 years before all of the problematic lead lines were replaced in some systems. EPA believed that it was necessary to accelerate the rate at which systems would otherwise replace lead service lines in order to ensure that public health is adequately protected (56 FR 26460 at 26507–26508, U.S. EPA, 1991d). Therefore, the Agency believes that systems that are exceeding the action level should have no more than 15 years to replace all of their lead service lines, as intended by the current rule.

#### 4. What Issues Related to This Proposed Change Does EPA Request Comment on?

EPA requests comment on the proposal to require water systems to reevaluate lead service lines classified as “replaced” through testing if they resume lead service line replacement programs.

### H. Request for Comment on Other Issues Related to the Lead and Copper Rule

The following subsection describes additional issues related to the Lead and Copper Rule for which the Agency is considering changes to regulations.

#### 1. Plumbing Component Replacement

Some water systems may choose to replace plumbing fixtures, pipes, and components to greatly reduce the amount of lead or copper in tap water to a level below the action level. Generally this approach only applies to water systems that have 100% ownership over the plumbing infrastructure; some schools and other institutions can fall into this category. The Agency believes that this type of strategy can be cost-efficient and a more effective way to address corrosion of lead and copper. EPA is requesting comment as to whether plumbing replacement should be specifically defined as a corrosion control technique, or explicitly identified as an alternative to corrosion control optimization for small and medium systems.

Small water systems can use fixture replacement with existing provisions of the lead and copper rule to become optimized. Under § 141.81(b)(1), a small or medium-size system is deemed to have optimized corrosion control if the system meets the lead and copper action levels during each of two consecutive six-month monitoring periods conducted in accordance with § 141.86. Thus, non-transient, non-community water systems, where 100% of the plumbing fixtures and components are directly controlled by the system, could replace them and be optimized once the system met the action level for two consecutive six-month monitoring periods.

Although water systems (typically non-transient non-community water systems) can replace pipes, fixtures and plumbing components to meet the lead or copper action level, this method of compliance is not specified in the LCR as a corrosion control technique. When a system exceeds the action level, it must initiate the treatment steps under § 141.81(e) that require the evaluation of corrosion control options and the recommendation of optimal corrosion control treatment. The current regulations could be read to require a small or medium system to perform evaluations of the corrosion control techniques listed in § 141.82(c)(1), even when the system is planning to replace plumbing components and is thus unlikely to install such corrosion control treatment. However, EPA

believes that there is sufficient flexibility under the current rule for systems that replace plumbing to qualify as optimized under § 141.81(b)(1) without having to undertake an unnecessary evaluation of corrosion control options. Under Section 141.81(e)(2), after an initial action level exceedance, the system has 12 months (or two monitoring periods) before the State makes a determination about requiring a corrosion control study. The plumbing replacement option, as a practical matter, is limited to small or medium non-transient, non-community water systems; under Section 141.81(e)(2)(ii), where the State does not require a system to conduct a corrosion control study, a system has 24 months after the action level exceedance (or four monitoring periods) before the State specifies optimal corrosion control treatment. As a result, very small water systems could replace the plumbing and conduct monitoring to demonstrate that the system is below the action level for two consecutive six-month monitoring periods within this 24-month period, although to do this, they would have to complete the plumbing replacement within 12 months of exceeding the action level. The Agency is requesting comment on whether there is enough existing flexibility under the current rule for very small systems to optimize using plumbing replacement or whether EPA should consider defining plumbing replacement as a corrosion control technique or as an alternative to corrosion control for small and medium systems. In particular, the Agency requests comment on whether 12 months is sufficient time for a small or medium system to replace plumbing components. If EPA were to allow States to specify plumbing replacement as a treatment option for small and medium systems, the systems would then have 24 months to complete the replacement, rather than the 12 months that they effectively have under the current rules.

EPA believes that there are a number of questions that would need to be resolved before listing plumbing component replacement as a corrosion control technique or an alternative to corrosion control. What materials should be used for replacement materials, since "lead-free" products still contain lead? What components would be replaced—just end-point devices such as faucets or would it also include in-line devices, such as valves and water meters? What would be the enforceable water quality parameters for this alternative to corrosion control? How would excursions from the optimal water quality parameters be measured?

If these techniques are listed under § 141.81(c)(1) as corrosion control techniques, would all systems need to evaluate them as part of the corrosion control study? For systems that fail to meet the action level, would the State still need to specify the minimum pH values, even though the system may not be adjusting pH?

## 2. Point of Use and Point of Entry Treatment

Another strategy for reducing the lead or copper levels below the action level would be the use of point of use (POU) or point of entry (POE) devices. As with plumbing replacement, EPA is requesting comment as to whether use of POU or POE devices should be specifically defined as a corrosion control technique, or explicitly identified as an alternative to corrosion control optimization for small systems.

Both POU and POE devices are identified in the Safe Drinking Water Act (SDWA) as potential compliance technologies for small systems. In addition, the SDWA also lists a number of requirements for POU and POE devices if they are used as compliance technologies. These include: (1) POU and POE devices shall be owned, controlled and maintained by the public water system or by a person under contract to a public water system to ensure proper operation and maintenance and compliance with the treatment technique; (2) POU and POE devices must be equipped with mechanical warnings to ensure that customers are automatically notified of operational problems; and (3) if the American National Standards Institute (ANSI) has issued product standards applicable to a specific type of POU or POE treatment unit, individual units of that type shall not be accepted for compliance with a treatment technique requirement unless they are independently certified in accordance with such standards. The NSF/ANSI drinking water treatment unit standards do cover lead removal, so devices would need to be certified against one of the following standards: NSF/ANSI 53 Reduction Claims for Drinking Water Treatment Units—Health Effects, NSF/ANSI 58 Reduction Claims for Reverse Osmosis Drinking Water Treatment Systems, or NSF/ANSI 62 Reduction Claims for Drinking Water Distillation Systems.

One limitation with POE devices is that there can still be lead-containing plumbing after the POE device. Faucets, solder joints, etc. could still contribute high lead levels, so this approach may not be successful if the water is corrosive.

EPA believes that small systems can use POU devices, if they meet the SDWA requirements discussed above for their use, to comply with the lead and copper rule under existing provisions of the rule. Under § 141.81(b)(1), a small or medium-size system is deemed to have optimized corrosion control if the system meets the lead and copper action levels during each of two consecutive six-month monitoring periods conducted in accordance with § 141.86. Thus, small water systems where POU devices are installed and meet the SDWA requirements could be optimized once the system met the action level for two consecutive six-month monitoring periods after their installation at all sites.

Although small water systems can use POU devices to meet the lead or copper action level, this method of compliance is not specified in the current LCR as a corrosion control technique. As a result, the same issue arises as discussed above with respect to plumbing replacement. The current regulations could be read to require a small system to perform evaluations of the corrosion control techniques listed in § 141.82(c)(1) even when the system is planning to install POU devices (in accordance with all applicable requirements of the SDWA) and is thus unlikely to install such corrosion control treatment.

EPA believes that there may be sufficient flexibility under the current rule for systems that use POU devices to qualify as optimized under § 141.81(b)(1) without having to undertake an unnecessary evaluation of corrosion control options. However, EPA recognizes that the same timing issue as discussed above for plumbing replacement may be a concern. Specifically, systems would effectively have only 12 months to install the POU devices at all required taps in order to be able to demonstrate two consecutive six-month monitoring periods where the action level was not exceeded, before the end of the 24-month deadline for installing corrosion control treatment. The Agency is requesting comment on whether there is enough existing flexibility under the current rule for small systems to optimize using POU devices or whether EPA should define POU devices as a corrosion control technique, or as an acceptable alternative to corrosion control for small systems, which would have the effect of giving systems 24 months rather than 12 months to install such treatment.

EPA believes that there are a number of questions that would need to be resolved before listing POU as an alternative to corrosion control. What

would be the enforceable water quality parameters for this alternative to corrosion control? How would excursions from the optimal water quality parameters be measured? If these techniques are listed under § 141.81(c)(1) as corrosion control techniques, would all systems need to evaluate them as part of the corrosion control study? For systems that fail to meet the action level, would the State still need to specify the minimum pH values, even though the system may not be adjusting pH?

### 3. Site Selection in Areas With Water Softeners and POU Treatment Units

The previous section discussed the use of POU or POE devices on a system-wide basis to remove lead and/or copper. However, many homes have whole house (point-of-entry) water softeners or treatment units at the kitchen tap (point-of-use), even though the system is not installing and maintaining these units. Section 141.86(a)(1) states that sampling sites may not include faucets that have point-of-use or point-of-entry treatment devices designated to remove inorganic contaminants. EPA requests comment upon whether the LCR should be amended to allow lead and copper tap samples to be collected at taps that have POU/POE devices under certain conditions.

Households may have reverse osmosis POU units that are capable of removing a number of contaminants, including lead and copper. These devices are typically installed with a separate tap at the kitchen sink. In systems where POU devices are not owned, controlled and maintained by the water systems, these sites could be included and still meet the requirements of § 141.86(a)(1) because samples could be taken from the regular untreated tap at the kitchen or a sample could be taken from an untreated bathroom tap. Since POU devices have not been installed system-wide, samples should not be taken from a POU treated tap at these sites.

Some areas of the country may find that the prevalence of POE water softeners restricts the ability of the water system to find homes where these units are not installed. This scenario is discussed in EPA's "Lead and Copper Rule Guidance Manual Volume 1: Monitoring" that was published in September 1991. Figure 3-2 in that manual described preferred sampling pool categories for targeted sampling sites. Category F.2 was listed as an exception case for water systems that only have sites where water softeners have been installed. This situation has been observed in the mid-western

United States. The guidance states that these systems should select the highest risk sites (newest lead solder or lead service lines) and monitor at those locations even though the water softener is present.

The Agency is requesting public comment on whether the Lead and Copper Rule should be amended to allow sampling at locations with POU/POE devices used to remove inorganic contaminants in exceptional cases (such as systems with high prevalence of water softeners), and if so, how high risk sites in these locations should be identified. EPA specifically requests comment on whether the Agency should codify the guidance provision discussed above.

### 4. Water Quality Parameter Monitoring

The Agency requests comment on requiring systems to synchronize required water quality parameter sampling with lead and copper tap sampling. This would allow systems the ability to associate changes in water quality parameter levels with lead and copper levels and help systems monitor the effectiveness of their corrosion control program. EPA is aware of one State that has been instructing water systems with corrosion control treatment programs to collect water quality parameter samples during the same week the systems collect lead and copper tap samples. This State has observed that elevated lead levels have been frequently associated with low corrosion inhibitor or orthophosphate residuals in the distribution systems, and occasionally with low pH.

Under the current rule, systems that have installed and operate corrosion control treatment per Section 141.82(c)(1) and 141.82(g) must monitor water quality parameters per Section 141.87(d). The number of water quality parameter tap samples depends on the population size served by the water system as detailed in 141.87(a)(2) and 141.87(e)(1). The frequency of water quality parameter monitoring at taps in the distribution system ranges from twice every six months to twice every three years as described in 141.87(e). Systems required to monitor for water quality parameters must also collect one sample for each applicable water quality parameter at each entry point to the distribution system every two weeks.

Water quality parameters are designated by the State primacy agency under 141.82(d). They typically include pH, alkalinity, and corrosion inhibitor residual. These parameters will vary based on the type of corrosion control a system installs and the State may designate additional parameters.

EPA is requesting comment upon a modification that would not increase the number of samples a system would be required to take, but would synchronize sampling they are required to do under the current rule. Large systems would be required to take their required lead and copper samples at the same time they take their required water quality parameter samples. Small and medium systems would be required to take their water quality parameter samples at the same time as their lead and copper samples required by Section 141.81(c) during the compliance period following the monitoring period in which they exceeded the lead or copper action level and all subsequent monitoring periods in which they are scheduled to take both water quality parameter and lead and copper tap samples.

Currently, if a small or medium system has an action level exceedance, they are required to take water quality parameter samples within the same six-month period according to Section 141.87(d). EPA is not requesting comment on whether to require these systems synchronize water quality monitoring with lead and copper monitoring under this circumstance. The Agency is only requesting comment on whether to require these small and medium systems to synchronize water quality monitoring and lead and copper monitoring during the compliance period following the circumstance described in Section 141.87(d) and all subsequent monitoring periods in which they are scheduled to take both water quality parameter and lead and copper tap samples.

The Agency requests comment on including this potential modification in the final rule. EPA requests comment on what, if any, added burden it may present to water systems. The Agency also requests comment on the appropriate time frame for synchronizing water quality parameter monitoring with lead and copper monitoring. Should systems be required to take water quality parameter and lead and copper samples on the same day or within the same week within a monitoring period? What are the practical constraints associated with different time frames?

#### *I. State Implementation*

States with approved primacy programs under 40 CFR part 142 subpart B must revise their programs to adopt any changes to the Lead and Copper Rule that are more stringent than their approved program. The primacy revision crosswalk table issued after the rule is final will list all the provisions

that States must adopt to retain primacy. those that the Agency believes to be more stringent requirements.

TABLE III.1.—REVISIONS IN THIS PROPOSAL

CFR citation	Is the requirement more stringent?	Revision
§ 141.80 (a)(2)	No	Technical correction that deletes effective dates of the LCR which no longer apply.
§ 141.80(g)	Yes	PWSs will be required to provide consumers with the results of lead testing who are located at sites that are part of the utility's monitoring program.
§ 141.81(b)(3)(iii), § 141.86(d)(4)(vii), § 141.86(g)(4)(iii), § 141.90(a)(3).	Yes	States must approve new sources or changes in water treatment before PWS implementation.
§ 141.81(e)(1)	Yes	Clarifies end of the tap sampling and timing for PWS recommending optimum corrosion treatment.
§ 141.81(e)(2)	Yes	Clarifies end of the monitoring period and timing for State requiring corrosion control studies.
§ 141.81(e)(2)(i), § 141.81(e)(2)(ii)	Yes	Clarifies end of the monitoring period and timing for State specifying optimum corrosion control treatment.
§ 141.83(a)(1)	Yes	Clarifies end of the source water monitoring period and timing for recommending source water treatment to the State.
§ 141.84(b)(1)	Yes	Clarifies beginning of the first year for lead service line replacement.
§ 141.84(b)(2)	Yes	Requires updating inventory and yearly replacement of lead lines when resuming lead service line replacement program.
§ 141.90(e)(2)(ii)	Yes	Clarifies resumption of line replacement.
§ 141.85	Yes	New public education requirements that replace the ones that exist in the current rule. New requirement that allows PWS to use alternative flushing time language in public education material. New requirement for PWS to target specific audiences for increased awareness. New requirement for PWS to provide a notice to consumers who are part of the utility's lead testing program with sampling results.
§ 141.88 (b), § 141.90(a)(1), § 141.90(e)(1), § 141.90 (e)(2)	Yes	Clarifies end of the monitoring period.
§ 141.86(c)	No	Requires NTNCWS to collect a specified number of samples.
§ 141.86(d)(4)(i), (ii), (iii), § 141.86(d)(4)(vi)(B)(1), § 141.86(g)(4)(i), § 141.87(e)(2)(ii), § 141.88(d)(1)(i), § 141.88(d)(1)(ii).	Yes	Clarifies sample collection periods for reduced monitoring.
§ 141.86(d)(4)(vi)(A)	Yes	Specifies time period to resume standard tap water monitoring.
§ 141.86(d)(4)(vi)(B)	Yes	Specifies time period to resume water quality parameter monitoring.
§ 141.86(d)(4)(ii)	Yes	Clarifies monitoring frequency.
§ 141.81(b)(3)(iii), § 141.86(d)(4)(vii), § 141.86(g)(4)(iii), § 141.90(a)(3).	Yes	Requires systems to notify State prior to making changes in treatment or adding new sources.
§ 141.87(d), § 141.87(e)(2)(i)	Yes	Clarifies time period for water quality parameter monitoring.
§ 141.154 (d)(1)–(3)	Yes	PWS must include a statement about lead, health effects language and ways to reduce exposure in CCRs, if the water system detects any level of lead above the method detection limit of 0.001 mg/L in their drinking water. Flexibility is given to PWS to write its own educational statement, but only in consultation with the Primacy Agency.
§ 141.90 (f)(1), § 141.90 (f)(1)(i)	Yes	Revised public education program reporting requirements based on amendments to § 141.85.

1. How Do These Regulatory Revisions Affect a State's Primacy Program?

States must revise their programs to adopt any part of the proposal which is more stringent than the approved State program. Primacy revisions must be completed in accordance with 40 CFR 142.12 and 142.16. States must submit their revised primacy application to the Administrator for approval. State requests for final approval must be submitted to the Administrator no later than two years after promulgation of a

new standard unless the State requests and is granted an additional two-year extension.

For revisions of State programs, § 142.12 requires States to submit, among other things, “[a]ny additional materials that are listed in § 142.16 of this part for a specific EPA regulation, as appropriate (§ 142.12(c)(1)(ii)).” For the proposed revisions to the lead and copper rule, EPA believes that requirements in § 142.12(c) will provide sufficient information for EPA review of

the State revision. The side-by-side comparison of requirements required in § 142.12(c)(1)(i) will consist of sections revised to adopt the changes required for the revised lead and copper rule and any other revisions requested by the State. Because the rule consists of changes to an already approved federal NPDWR in primacy States, EPA believes that the State's existing statutes and regulations will already have received extensive legal review. Under § 142.12 (c)(3), EPA can request supplemental

information as necessary for a specific State submittal on a case-by-case basis. Therefore, the Agency plans to waive the Attorney General's statement required in § 142.12(c)(1)(iii), as allowed by § 141.12(c)(2). The Agency requests comment on whether the Attorney General's statement or any other documentation is necessary to approve revisions to State programs resulting from the rule.

2. What Does a State Have To Do to Apply?

To maintain primacy for the Public Water System Supervision (PWSS) program and to be eligible for interim primacy enforcement authority for future regulations, States must adopt this proposal, when final. A State must submit a request for approval of program revisions that adopt the regulations and implement those regulations within two years of promulgation unless EPA approves an extension under § 142.12(b). Interim primacy enforcement authority allows States to implement and enforce drinking water regulations once State regulations are effective and the State has submitted a complete and final primacy revision application. To obtain interim primacy, a State must have primacy with respect to each existing NPDWR. Under interim primacy enforcement authority, States are effectively considered to have primacy during the period that EPA is reviewing their primacy revision application.

3. How Are Tribes Affected?

At this time the Navajo Nation has primacy to enforce the PWSS program. EPA Regions implement the rules for all the other Tribes under section 1451(a)(1) of SDWA.

J. Limitations to Public Comment on the Lead and Copper Rule

EPA requests comment on the seven specific regulatory changes proposed today to revise the national primary drinking water regulations for lead and copper, as well as several related issues. Please note that the Agency is not proposing to revise the Lead Action

Level or any major component of lead drinking water regulations. EPA is not reopening the entire Lead and Copper Rule, but rather is requesting comment on the rule changes and related issues specifically discussed in this proposal. In this rulemaking, the Agency will not consider comments that address other aspects of drinking water regulations for lead and copper.

K. Proposed Effective Dates

Section 1412 (b)(10) of the Safe Drinking Water Act, requires that a proposed national primary drinking water regulation (and any amendments) take effect on the date that is three years after the date of promulgation, unless the Administrator determines that an earlier date is practicable. EPA is proposing that the revisions take effect three years after the promulgation of the final rule. Because several of the provisions in this rule would likely not require three years for implementation the Agency is considering whether to make some of these regulatory changes effective in less than three years after the date of publication of the final rule. Specifically, EPA requests comment on whether it would be practicable to implement the following changes and clarifications in this proposal to the Lead and Copper Rule within 60 days of the date of publication of the final rule:

- Section III.A. Minimum Number Of Samples Required
- Section III.B. Definitions For Compliance And Monitoring Periods
- Section III.E. Requirement To Provide A Consumer Notice Of Lead Tap Water Monitoring Results To Consumers Who Occupy Homes Or Buildings That Are Tested For Lead
- Section III.F. Public Education Requirements

The requirements described in Section III.A (minimum number of samples clarification) is merely a clarification of existing regulatory text and does not change the stringency of the rule. In Section III.B (compliance and monitoring period clarification) there are changes that clarify existing text of the rule as well. The requirements described in Section III.E

(the consumer notice) and Section III.F (public education requirements) are some of the most important in this proposal. Those requirements are critical to the explanation of lead exposure from drinking water and communication of health effects to the public; and while they add requirements to the rule, systems are not likely to need three full years to implement the new requirements.

The Agency requests comment on whether these regulatory revisions should have effective dates of sixty days after the publication of the final rule and if not, what timeframes are practicable. The Agency also requests comment on whether any of the other proposed revisions in this rule should have an effective date earlier than three years after publication of the final rule.

IV. Economic Analysis

This section describes the estimates of annual costs for the seven proposed regulatory changes to utilities and States, including costs associated with administrative, monitoring, sampling, reporting, and notification activities. One-time, upfront costs of rule review and rule implementation are also described. There are two types of annual costs that may result from the rule changes—direct and indirect. Direct costs are from those activities that are specified by the rule change, such as costs for additional monitoring or distribution of consumer notices. A second type of cost may also result when systems and States use the information generated by directly-related rule activities to modify or enhance practices to reduce lead levels. These indirect costs, and related health risk reductions, are not quantified for the purposes of this analysis, but are described qualitatively in Section IV.K of this proposal and in Chapter 5 of the Economic Analysis (Economic and Supporting Analysis Short Term Regulatory Changes to the Lead and Copper Rule, U.S. EPA, 2006b). Table IV.1 summarizes the expected direct and indirect cost impacts for the seven regulatory changes.

TABLE IV.1.—SUMMARY OF DIRECT AND INDIRECT IMPLICATIONS OF THE LCR SHORT TERM RULE CHANGES

Rule change	Direct cost implications	Indirect cost and health risk implications
Regulatory Change III.A (Number of samples)	Minimal, unquantified	Yes.
Regulatory Change III.B (Monitoring Period)	Minimal, unquantified	None.
Regulatory Change III.C (Reduced Monitoring Criteria)	Yes	Yes.
Regulatory Change III.D (Advanced Notification and Approval)	Yes	Yes.
Regulatory Change III.E (Consumer Notice of Lead Results)	Yes	Yes.
Regulatory Change III.F (Public Education)	Yes	Yes.
Regulatory Change III.G (Reevaluation of Lead Service Lines)	Yes	Yes.

### A. Direct Costs

The proposed revisions will result in direct costs to utilities and States from activities that are specified by the rule change, including administrative, monitoring, sampling, reporting, and notification activities. These costs will result in an increase in the overall costs associated with the LCR.

The most recent cost estimates to utilities and States of the LCR can be found in the 2004 Information Collection Request for Disinfectants/Disinfection Byproducts, Chemical, and Radionuclides Rules (Information Collection Request for Disinfectants/Disinfection Byproducts, Chemical, and Radionuclides Rules, U.S. EPA 2004b). The 2004 ICR estimates administrative burden and costs associated with the LCR for systems and States. System costs are estimated for community water systems and non-transient non-community water systems to perform the following activities: monitoring for water quality parameters, tap sampling of lead levels for action level compliance, review of sample data, including the calculation of lead and copper 90th percentile levels, submission to the State of monitoring data and any other documents or reports, and recording and maintaining information. In addition, some systems must submit corrosion control studies, recommend and submit information regarding the completion of corrosion control treatment (CCT) or source water treatment installation, conduct public education, or conduct LSL monitoring, notification, and replacement. In the 2004 ICR, for the LCR requirements to CWSs and NTNCWSs, the average annual respondent cost was estimated to be \$57.9 million and the burden was estimated to be 1.72 million hours for reporting (including lead service line replacement reporting), recordkeeping, and public education activities of the LCR. For States, the annual cost and burden incurred by primacy agencies for activities associated with the lead and copper regulation were estimated to be \$6.8 million and 0.21 million hours, respectively.

### B. Overall Cost Methodologies and Assumptions

As part of its comprehensive review of the Lead and Copper Rule, EPA collected and analyzed new data on various aspects of LCR implementation. When available and appropriate, this new information is used in estimating costs. If new information was not

available about a cost item or assumption, previous analyses of LCR requirements were reviewed to determine if a suitable estimate was available. The 1991 RIA, the 1996 RIA Addendum, and the various Information Collection Requests were all used as sources of information and assumptions.

For the rule revisions that clarify rule language, if the costs associated with those activities were included in the original LCR cost estimates as presented in the 1991 RIA, those costs are not included in this analysis.

### C. Direct Costs Associated With Regulatory Change III.A

Regulatory change III.A clarifies EPA's intent that a minimum of 5 samples must be taken when conducting compliance monitoring. If a system has fewer than the minimum number of sites required for sampling, then those systems will have to collect multiple samples on different days from the same site so that the total number of samples per monitoring period is 5.

Although some systems may have to increase the number of samples taken in response to this clarification, there is very limited available data on the number of these systems and on the frequency with which they conduct lead and copper monitoring. Because of lack of data, EPA has not quantified the costs associated with Regulatory Change III.A. In EPA's best judgment, these costs would be minimal.

### D. Direct Costs Associated With Regulatory Change III.B

Regulatory Change III.B clarifies the meaning of "monitoring period" and "compliance period," addressing in particular the date on which actions are triggered by an exceedance and the timing of samples under triennial monitoring. Based on the rule change, if a system exceeds the action level during a monitoring period, non-compliance starts at the end of the monitoring period (for most systems on September 30). Under the previous language, it was not clear whether non-compliance began at the end of the calendar year (December 31) or at the end of the monitoring period (September 30).

As a result of the rule change, activities triggered by an action level exceedance could begin three months earlier (i.e., at the end of September versus the end of December), but the duration of these activities would not likely be longer. The net result is a change in the timing of activities, with

a difference of three months having a negligible, if any, impact on costs.

Regulatory Change III.B also requires that systems on reduced monitoring, such as triennially or once every nine years, must take all compliance samples within the same calendar year during the June–September monitoring period. Under previous LCR regulatory language, a system could collect compliance samples over multiple calendar years, as long as they were taken during the June–September time frame and during the three-year compliance period. Since this rule change does not alter the number of samples to be taken, but the timing of samples, the direct cost impact is expected to be minimal.

### E. Direct Costs Associated With Regulatory Change III.C

#### 1. Activities Resulting From Regulatory Change

As a result of Regulatory Change III.C, utilities that have 90th percentile LCR monitoring samples that exceed the Lead Action Level, and are currently on reduced monitoring, will be required to resume standard monitoring schedules for monitoring lead at taps. In addition to monitoring activities, utilities will have to meet reporting requirements to the State/Primacy agency. State/Primacy agencies will be required to review utility monitoring reports.

#### 2. Costs to Utilities

The direct costs to utilities, summarized in Table IV.3, are estimated to be \$2.4 million annually including \$2.2 million in labor costs and \$0.2 million in materials costs. Detailed estimates are provided in the Economic Analysis, Appendix C (Economic and Supporting Analysis Short Term Regulatory Changes to the Lead and Copper Rule, Appendix C, U.S. EPA 2006b).

The systems that will incur costs under this regulatory change are those systems that exceed the Lead Action Level and that had been on reduced monitoring. The number of systems EPA estimates to exceed the Lead Action Level each year is 995 as shown in Table IV.2. This estimate is based upon 2003 Lead Action Level exceedances reported by States to EPA's Safe Drinking Water Information System for systems serving more than 3300 people. EPA used this data to estimate that 1.4 percent of systems (including system serving fewer than 3300 people) will exceed the action level each year.

TABLE IV.2.—SYSTEMS OVER THE ACTION LEVEL SINCE 2003

	1<3,300	3,300<50,000	>50,000	Total
Number of systems above Action Level since 2003 .....	884	97	14	995
Total number of systems .....	64,382	7,388	819	72,589
Percent of systems with monitoring results since 2003 over AL .....	1.4	1.3	1.7	1.4

<sup>1</sup> The Estimate for systems <3,300 is based upon data from systems >3,300.

Source: For medium and large systems, January 2005 Summary of Lead Action Level, [http://www.epa.gov/safewater/lcrmr/lead\\_data.html](http://www.epa.gov/safewater/lcrmr/lead_data.html); for small systems, Summary, Lead Action Level exceedances for public water systems subject to the Lead and Copper Rule (For data through September 13, 2004).

The number of systems on reduced monitoring was estimated using state responses to the EPA survey on LCR implementation (State Implementation of the Lead and Copper Rule. U.S. EPA 2004d). States provided estimates of the percent of systems on reduced LCR monitoring. Based on this data, 91 percent of systems are on reduced lead and copper monitoring. This analysis assumes that systems that are likely to exceed the action level, and are on reduced monitoring, are likely to exceed at the same rate as all systems. Therefore, we assume that 91 percent of the systems estimated as likely to exceed the action level are on reduced monitoring, and will therefore incur costs due to regulatory change III.C. This assumption is conservative, because systems that are likely to have exceedances are less likely to be on reduced monitoring in the first place.

For the number of additional monitoring events, it is assumed that each utility will conduct 5 additional monitoring events in each three year period by switching from a reduced monitoring schedule (triennial) to standard tap monitoring (semi-annual). While reduced monitoring could refer to either monitoring once every year or once every three years, it is not possible to distinguish, from the state responses to the EPA survey, between systems monitoring once every year and systems monitoring once every three years. This analysis assumes that all systems on reduced monitoring are on a one sample every three years schedule, a conservative assumption that might slightly over-estimate costs. Likewise, the number of samples collected in each monitoring period will change when the utility switches from reduced monitoring to standard monitoring. Thus, a system that was on reduced monitoring, but is placed on regular monitoring after an Action Level exceedance under regulatory change III.C, will incur an additional 5 monitoring events over a 3 year period (6 monitoring events in three years under regular monitoring instead of 1 monitoring event in three years under

reduced monitoring), with an increased number of samples collected in each event. The required number of samples varies by system size, with the smallest systems (serving less than or equal to 100 people) required to take 5 samples per monitoring event under both standard and reduced monitoring, and the largest systems (serving > 100,000 people) required to take 100 samples per monitoring event under standard monitoring, and 50 samples per monitoring event under reduced monitoring.

3. Costs to States

Regulatory Change III.C will require State/Primacy agencies to review utility monitoring reports as a result of resuming standard monitoring schedules. The direct costs to State/ Primacy agencies is estimated to be \$77,000 annually including \$76,000 in labor costs and \$1000 in materials costs, as summarized in Table IV.3. Detailed estimates are included in the Economic Analysis, Appendix C (Economic and Supporting Analysis Short Term Regulatory Changes to the Lead and Copper Rule, Appendix C, U.S. EPA, 2006b).

TABLE IV.3.—SUMMARY OF ESTIMATED DIRECT COSTS TO SYSTEMS AND STATE/PRIMACY AGENCIES ASSOCIATED WITH REGULATORY CHANGE III.C

	Annual labor	Annual materials	Total annual
Costs to Systems:			
Reporting .....	\$56,000	\$1000	\$57,000
Tap Monitoring .....	2,157,000	214,000	2,371,000
Total System Costs .....	2,213,000	215,000	2,428,000
Costs to State/Primacy Agencies:			
Review Costs .....	76,000	1000	77,000
Total State Costs .....	76,000	1000	77,000

F. Direct Costs Associated With Regulatory Change III.D

1. Activities Resulting From Regulatory Change

Regulatory Change III.D requires water systems to obtain prior approval by the State primacy agency to add a new source of water or change a

treatment process prior to implementation. The current requirement is that systems notify States about changes in treatment or additions of new sources within 60 days of a change or addition. The proposed regulatory language allows as much time as needed for water systems and

States to consult before a proposed change is approved.

New system activities will include the preparation of the corrosiveness implications of treatment or source changes prior to the change and a letter to the state. New State/Primacy agency activities will include review of the system data on the corrosiveness

implications of a treatment or source change prior to a change, preparation of conclusions and coordination with utilities. The estimated costs to the affected systems and State/primacy agencies are summarized in Table IV.4.

## 2. Costs to Utilities

The direct costs to utilities range from \$474,000 to \$733,000 annually. These direct costs are strictly labor costs; materials costs are expected to be negligible. Estimates are summarized in Table IV.4. Detailed estimates are provided in Appendix D (Table 6.1) of the Economic Analysis (Economic and Supporting Analysis Short Term Regulatory Changes to the Lead and Copper Rule, Appendix D, U.S. EPA, 2006b).

In order to estimate the cost of this provision to utilities, information is needed on the number of systems that will change a treatment or add a source annually, as well as the number of systems that are located in States that already have a review and approval requirement. Systems located in these States will not incur additional costs under this provision.

Many States already have a review and approval process for treatment or source changes. In 2004, as part of a review of the implementation of LCR requirements by States, EPA asked State programs a number of questions about how they implement different aspects of the LCR. Included were the following questions: "How do systems notify the State of treatment changes? Does the State require that systems provide information about potential effects of treatment changes on corrosion control?"

14 States indicated that they currently have a review and approval process for treatment changes. Another nine States have a process that requires a permit for treatment changes and an additional eight States review submissions of engineering plans for proposed changes. Although not a review and approval process focused specifically on the impact of a change on corrosion control, the permitting and plan review processes are comprehensive enough that they should include corrosion issues. For the purposes of this analysis, two estimates were used of the number of States that already have a review and approval process that would include information on corrosion issues: 14 States for a high end of the cost range and 31 States for a low end. Under the alternative in which only the 14 States with explicit review and approval are excluded from the count, 53,372 systems (of 72,213 CWSs and NTNCWSs) may incur costs for the

regulatory change. Under the alternative in which States with permitting and plan review are also excluded from the count, 27,615 systems may incur costs for this regulatory provision.

An estimate is also needed of the number of systems that will change a treatment or add a source annually, in order to estimate the cost of this provision to utilities. Treatment changes over the next several years are likely, as systems will be faced with new regulatory requirements, including changes to comply with the already promulgated Arsenic Rule and the upcoming Long Term 2 Surface Water Treatment Rule and the Stage 2 Disinfectants/Disinfection Byproducts Rule. EPA estimated the number of systems that would undertake treatment changes for the following new regulatory requirements:

- Arsenic—4,100 systems (Data source: Arsenic in Drinking Water EA, pp. 6–25, 6–27;
- LT2—2,968 systems (Data source: June 2003 draft EA, pp. 6–23, 4–23);
- Stage 2 D/DBP—1,824 systems (Data source: July 2003 draft EA, pp. 6–35, 6–30).

Together, these regulatory requirements are estimated to cause 8,892 systems to institute a treatment change, although not all of these treatment changes will affect corrosion control. Also the compliance periods for these regulations varies. For example, the Stage 2 and LT2 treatment changes are projected to take place within a 6 year compliance period for large systems (with the possibility of 2-year extension) and 8 years for small systems (with the possibility of 2-year extension). To account for these expected treatment changes, and to account for treatment changes unrelated to the arsenic, LT2, and Stage 2 rules, EPA assumed (based on the projected rule-related treatment changes and expert judgment) that approximately 20% of the systems affected by the LCR will institute a treatment change in the next ten years. It is assumed that these changes occur uniformly over that 10-year period, so that approximately one-tenth of these systems (or 2 percent of the total) institute a treatment change each year.

Using the 2 percent estimate, 1,067 (53,372 × .02) systems each year would report a treatment change or source addition and incur costs in that year in States currently not covered by an explicit review and approval program. The estimate for the number of systems is 552 if States with a permitting or plan approval process are also excluded.

EPA anticipates that systems will incur additional costs under this rule

change as systems and States more carefully review and consider possible corrosion impacts of treatment changes or source additions. The activities and burden associated with the review and approval process are expected to vary based on the size and complexity of a system, and the nature of the change or source addition. In the absence of information on the current prevalence of these activities, EPA has used the best professional judgment to estimate the range of potential activities and associated costs resulting from the review and approval process. All systems, regardless of size or complexity, are assumed to undertake additional activities related to data collection and evaluation, preparation of a submittal to the State, and coordination with the State. For small systems or systems making relatively simple changes, considering the corrosion impacts of the change may be a rather basic process of reviewing water quality data and previous lead monitoring results. For these systems, additional effort will be incurred by system staff in coordination with State personnel to assemble water quality parameter and lead data and evaluate the potential impacts. EPA estimates the burden for this additional effort at 7.5 hours per system, at an average cost of \$201 per system. For larger or more complex systems making major treatment changes, activities would be more extensive, including conducting engineering studies to evaluate impacts on corrosion control. Based on best professional judgment, EPA estimates that between 10 percent and 20 percent of medium and large systems may need to conduct additional engineering studies on corrosion impacts at a cost of \$20,000. To some extent, systems may already evaluate the impacts of treatment or source changes on corrosion. EPA has considered these current activities in estimating the portion of systems that would require an engineering study.

## 3. Costs to States

The direct costs to State/Primacy agencies are estimated to range from \$153,000 to \$328,000 annually. These direct costs are strictly labor costs; materials costs are expected to be negligible. Estimates are summarized in Table IV.4. Activities that States will undertake include review of system data, preparation of conclusions and letter to systems, and coordination with utilities. Because the level of effort associated with these activities is expected to vary based on the complexity of the change and the type of submittal (amount and type of

information), EPA included a range on State review from 4 to 8 hours.

Those States incurring additional costs due to regulatory change III.D are those that do not already have a review and approval process which considers the corrosion control implications of treatment changes. All States currently review treatment or source changes within 60 days after the change. However, some States are already reviewing and issuing approval before

such changes are made. Based on the State program responses to the EPA questions on the implementation of LCR requirements (on existing review and approval processes), the analysis assumes either that 14 States have existing explicit review and approval processes or that 31 States have existing review and approval processes (if permit and plan review processes are also counted). The remaining States under each alternative will incur costs

under this regulatory change as they review and approve changes before they are made, rather than simple review after the change has been made.

For the States that will incur new costs, new State/Primacy agency activities will include review of the system data on the corrosiveness implications of a treatment or source change prior to a change, preparation of conclusions and coordination with utilities.

TABLE IV.4.—ESTIMATED DIRECT COSTS TO SYSTEMS AND STATE/PRIMACY AGENCIES ASSOCIATED WITH REGULATORY CHANGE III.D

	Annual cost— low estimate <sup>1</sup>	Annual cost— high estimate <sup>2</sup>
Costs to Systems:		
Reporting .....	\$474,000	\$733,000
Total System Costs .....	474,000	733,000
Costs to State/Primacy Agencies:		
Review Costs .....	153,000	328,000
Total State Costs .....	153,000	328,000

<sup>1</sup> 10 percent medium and large systems conduct engineering study and 4 hours for State review.

<sup>2</sup> 20 percent medium and large systems conduct engineering study and 8 hours for State review.

G. Direct Costs Associated With Regulatory Change III.E

1. Activities Resulting From Regulatory Change

Regulatory Change III.E will require CWSs to provide written notification to each owner/occupant of the lead level found in the tap sample collected for LCR compliance monitoring. Compliance for NTNCWSs will be determined by their circumstances, and may consist of posting a notice on community bulletin boards or web sites. While State primacy agencies may review sample customer letters/notices from each utility for each monitoring period, such a review is not required by the regulatory change and thus is not considered a direct cost of the regulatory change. Supporting calculations and information regarding costs to utilities and States associated with this regulatory change are included in the Economic Analyses, Appendix E (Economic and Supporting Analysis

Short Term Regulatory Changes to the Lead and Copper Rule, Appendix E, U.S. EPA, 2006b).

2. Costs to Utilities

The direct costs to utilities for compliance with Regulatory Change III.E are summarized in Exhibit 4 and estimated to be \$1,028,000 annually including \$894,000 in labor costs and \$134,000 in materials costs for envelopes and postage. This is based on 310,510 notices being provided to customers each year, with estimated associated labor. Detailed estimates are provided in the Economic Analysis, Appendix E-2 (Economic and Supporting Analysis Short Term Regulatory Changes to the Lead and Copper Rule, Appendix E, U.S. EPA, 2006b).

In order to estimate the additional costs associated with regulatory change III.E, an estimate is needed of the number of systems that already notify customers of tap monitoring results.

Based on feedback from participants in workshops and interactions with States, some systems already notify customers of monitoring results. These systems would not incur costs under the proposed regulatory change. This analysis uses information from the State survey (State Implementation of the Lead and Copper Rule. U.S. EPA, 2004) to develop an estimate of the number of systems that currently notify customers of tap sampling results. Of 72,213 CWS and NTNCWSs (per 2004 SDWIS/Fed data) subject to the LCR, approximately 11 percent of these systems are estimated to already notify owner/occupants of tap sample results. Therefore, this regulatory change will apply to the remaining 89 percent of systems.

3. Costs to States

No new costs to States are assumed. States are not required to review the notification letter or notice.

TABLE IV.5.—SUMMARY OF DIRECT COSTS ASSOCIATED WITH REGULATORY CHANGE III.E

	Annual labor	Annual materials	Total annual
Costs to Systems:			
Customer Notice of Lead Results Costs .....	\$894,000	\$134,000	\$1,028,000
Total System Costs .....	894,000	134,000	1,028,000

*H. Direct Costs Associated With Regulatory Change III.F*

Regulatory Change III.F changes the public education requirements of the Lead and Copper Rule (LCR) in § 141.85. Water systems would still be required to deliver public education materials after a Lead Action Level exceedance, but the text of the message to be provided to consumers, how the materials are delivered to consumers, and the timeframe in which materials must be delivered would change. The changes to the delivery requirements include additions to the list of organizations systems must partner with to disseminate the message to at-risk populations as well as changes to the media used to ensure water systems reach consumers when there is an action level exceedance.

In addition to the changes to § 141.85 of the LCR, revisions will be made to § 141.154(d) of the CCR rule (40 CFR 141, Subpart O) which requires community water systems to send an annual report to billed customers containing information relevant to the quality of the drinking water provided by the system. EPA is proposing to change the CCR rule to require all community water systems that detect lead to include information about the risks of lead in drinking water on a regular basis.

1. Activities Resulting From Regulatory Change

(a) Changes to the mandatory text of the written materials.

(a)(1) Customer Notification: Deliver brochures to all bill-paying customers within 60 days.

The brochure will include a section on “What happened? What is being done?” to be developed by each water system. Mandatory language will address essential topics such as the opening statement and health effects language. The mandatory language will be shorter and easier to understand than the language that is currently used. EPA will develop suggested language.

(b) Changes to better reach at-risk populations.

(b)(1) Brochures will be delivered to additional organizations, with a cover letter.

The organizations to be added to the list of required recipients of the brochures will increase the likelihood that the most vulnerable populations or their caregivers will receive the information they need to reduce their exposure to lead in drinking water. These organizations will include licensed childcare centers, preschools and Obstetricians-Gynecologists and Midwives. Also, local public health agencies will be contacted by phone.

(b)(2) Systems will perform additional activities.

Systems serving more than 3,300 will be required to implement three or more activities from a list of possible activities. Systems serving fewer than 3,300 will be required to implement one activity from the list. A list of nine possible activities follows (including a general “other methods” because the

primacy agency may also approve other methods). An estimate of the annual cost of each identified activity is given in Table IV.6.

(i) Public Service Announcement: Production of a radio PSA includes developing a script for the spot and then producing an audio of the spot.

(ii) Paid advertisement.

(iii) Information display in public areas: Posting a notice at a local grocery store or laundromat.

(iv) Internet: Email contact with all customers.

(v) Public Meetings: For systems serving fewer than 3,300, system representatives would bring up the issue for discussion at an existing town meeting. For systems serving over 3,300, a separate public meeting would be held. This activity includes making logistical arrangements, preparing a 30–45 minute presentation, attending the meeting, and doing follow-up activities such as meeting notes.

(vi) Delivery to every household: Delivery to every postal address, either through mail or distribution of flyers.

(vii) Targeted individual contact with customers: Especially vulnerable customers, such as pregnant women and children, would be individually contacted.

(viii) Materials to be provided directly to multi-family homes and institutions.

(ix) Other methods approved by the primacy agency.

TABLE IV.6.—ANNUAL COST PER SYSTEM ESTIMATE FOR ADDITIONAL ACTIVITIES TO BETTER REACH AT-RISK POPULATIONS

System size category	i. Public service announcements	ii. Paid advertisements	iii. Display in public areas	iv. Internet notification	v. Public meetings	vi. Delivery to every household	vii. Targeted contact	viii. Materials directly to multi-family & institutions	Average per system all activities
25–100 .....	\$95	\$105	\$23	\$23	\$45	\$7	\$34	\$12	\$43
101–500 .....	95	105	25	24	45	30	34	14	47
501–3,300 .....	95	180	106	26	45	166	36	26	85
3.3K–10K .....	95	180	108	384	800	435	42	66	264
10K–50K .....	1,400	850	556	526	2,200	1,114	64	247	870
50K–100K .....	1,400	5,000	1,111	526	2,900	2,448	135	771	1,786
>100K .....	1,400	5,000	3,330	912	5,000	3,874	548	4,311	3,047

Details of how these unit costs were calculated are provided in Appendices H–6 through H–20 of the Economic Analysis for the rule.

(b)(3) Review activities for States.

States will review the language in the utility’s notice to consumers to make sure the utility is including the required information. States will also consult with each system with an action level exceedance. States will no longer be required to approve a waiver for notifications for each system that

exceeds the Lead Action Level that serves a population of 501–3,300.

(c) Changes to help systems maintain communication with consumers throughout the exceedance.

(c)(1) Every water bill will contain a message about lead while a system is exceeding the action level.

(c)(2) Post brochure on Web site if system serves >100,000 people.

(c)(3) Public service announcements and press releases.

The requirement to send public service announcements (PSAs) to TV stations and radio stations every six months while a system has an Lead Action Level exceedance will be cut to once every year. The PSA must be sent to five TV stations and five radio stations. A press release will still have to be submitted to newspapers, TV stations and radio stations.

(d) Changes to the required timing.

No cost impact.

(e) Changes to Consumer Confidence Report.

(e)(1) Inclusion of an informational statement on CCR for all systems.

Systems that detect lead in their drinking water will have to include an informational statement about lead in their CCR. Currently, only those systems with more than five percent of their sites above the Lead Action Level must include an informational statement in their CCR.

2. Costs to Utilities

The direct costs to utilities as a result of Regulatory Change III.F are estimated to be \$780,500. The annual system labor cost is estimated to be \$759,500, with the annual system materials cost \$21,000. Estimates of costs associated with each activity are given in Table IV.7. Detailed estimates of costs to utilities are provided in the Economic Analysis, Appendix F (Economic and Supporting Analysis Short Term

Regulatory Changes to the Lead and Copper Rule, Appendix F, U.S. EPA, 2006b). The costs for the CCR component may be overstated because EPA does not have specific data to determine the percentage of systems that will not detect lead. Thus, we have assumed that all systems will detect lead in their water, which may lead to an overstatement of the cost estimates shown in Table IV.7. In addition, the requirement to provide information about lead in the CCR would be new only for systems that currently detect lead below the action level in 95% or more of their sites, since systems in which the 95th percentile result is above the action level are already required to provide such information. However, EPA does not have data on such systems. Rather, EPA has data on the (smaller) number of systems that currently detect lead below the action level in 90% of their sites, and has subtracted this value from the universe

of systems to estimate the number of systems that would incur new costs under this requirement. Thus, there are two factors contributing to a possible overestimate in the national cost for the CCR statement. The first factor is that assuming all systems will detect lead overestimates the number of systems that will actually detect lead, because some systems do not detect any lead. The second factor is that underestimating the current baseline of systems that currently detect lead at the 95th percentile level, by using data on systems that detect lead at the 90th percentile level (a smaller number of systems), overestimates the remaining number of systems that do not currently report lead information in their CCR. EPA's estimate assumes that 52,257 additional systems would have to provide information about lead in their CCR each year, with additional associated labor of 0.25 hours per system per year.

TABLE IV.7.—SUMMARY OF PRELIMINARY COSTS TO SYSTEMS DUE TO LCR PUBLIC EDUCATION PROPOSED CHANGES

Activity	Requirement	Annual labor	Annual materials	Total system cost
<b>a. Changes to the Mandatory Text of the Written Materials</b>				
III.F(a)(1) .....	Customer Notification .....	\$84,900	\$0	\$84,900
<b>b. Changes to Better Reach At-Risk Populations</b>				
III.F(b)(1) .....	Notify Additional Organizations .....	18,700	21,400	40,100
III.F(b)(2) .....	Additional Activities i–viii .....	275,100	0	275,100
III.F(b)(2) .....	Consult with State on Activities .....	14,400	0	14,400
<b>c. Changes to Help Systems Maintain Communication With Consumers Throughout the Exceedance</b>				
III.F(c)(1) .....	Customer Bills .....	43,300	0	43,300
III.F(c)(2) .....	Post on Web site .....	100	0	100
III.F(c)(3) .....	PSAs and Press Releases .....	–3,000	–500	–3,500
<b>d. Changes to the Required Timing</b>				
No cost impact				
<b>e. Changes to Consumer Confidence Report</b>				
III.F(e)(1) .....	CCR Statement .....	325,900	0	325,900
<b>Total Costs to Systems for PE Requirements (III.F)</b>				
Total .....	.....	759,500	\$21,000	780,500

Note: Totals may not add due to rounding.

3. Costs to States

The direct costs to States as a result of Regulatory Change III.F are estimated to be \$50,600. These costs are the

annual state labor costs; no materials cost is expected. These costs are given in Table IV.8. Detailed estimates of costs to States are provided in the Economic Analysis, Appendix F (Economic and

Supporting Analysis Short Term Regulatory Changes to the Lead and Copper Rule, Appendix F, U.S. EPA, 2006b).

TABLE IV.8.—SUMMARY OF PRELIMINARY COSTS TO STATES DUE TO LCR PUBLIC EDUCATION PROPOSED CHANGES

	Annual labor	Annual materials	Total annual
III.F Costs to States:			
Review and consultation .....	\$50,600	\$0	\$50,600
III.F Total State Costs .....	50,600	0	50,600

*I. Direct Costs Associated with Regulatory Change III.G*

1. Activities Resulting From Regulatory Cchange

Under this proposed change, utilities that have 90th percentile LCR samples that exceed the Lead Action Level will need to identify all lead service lines (LSL) that had previously been determined to be replaced via sampling. If a LSL was previously “tested out” or determined to be replaced by sampling, the sample previously collected from the LSL had a lead level less than the Lead Action Level. These utilities would be affected by Regulatory Change III.G if they exceed the action level again and renew a LSL replacement program. These utilities must put these “tested out” LSLs back into their inventory of lead service lines that could be considered for replacement. To estimate the impact of this change, we assume these formerly “tested out” LSLs will be retested, and that some of them will exceed the Lead Action Level. The primary activities as a result of this regulatory change include collecting and analyzing samples from these LSLs. Replacement of lines that were previously tested out may also occur as a result of this change.

2. Costs to Utilities

The direct costs to utilities as a result of Regulatory Change III.G are estimated to be \$97,000 annually, which includes \$87,000 in labor costs and \$10,000 in materials costs. Detailed estimates of costs to utilities are provided in the Economic Analysis, Appendix F (Economic and Supporting Analysis Short Term Regulatory Changes to the Lead and Copper Rule, Appendix F, U.S. EPA, 2006b). Estimating the costs to utilities requires an estimate of the number of systems who have been involved in a lead service line replacement program, the number of systems likely to discontinue such a program due to low tested lead levels, and the fraction of those systems likely to subsequently exceed the action level and restart their lead service line replacement program.

In the responses to the 50 state survey on lead implementation (State

Implementation of the Lead and Copper Rule U.S. EPA, 2004), 11 States responded that at least one system in their state has been involved in a lead service line replacement program. Six States provided sufficient information to derive a number of systems within that State required to perform lead service line replacement—a total of 28 systems. Based on an average of five systems per State for the six States that provided data, we assume that the remaining five States have five systems, plus one system for DC (which did not respond to the survey) for a total of 54 systems that have been required to perform lead service line replacement.

Because there is not sufficient information to determine how many of 54 systems suspended their lead replacement programs, and later restarted the programs due to an exceedance, we assumed the worst case scenario that all of these systems suspended their lead replacement programs and that the rate of subsequent exceedance was the same as for the universe of systems subject to the LCR, as shown in Table IV.2. Thus, we assume that 1.4 percent of the 54 systems or 1 system will exceed the Action Level and be triggered back into lead service line replacement each year.

EPA does not have information on the number of systems using the test out provisions rather than physically replacing lines, so this approach is conservative because it assumes that all systems in a lead service line replacement program are using the test out provisions. Systems removing lead service lines are not impacted by this change. While the rate at which systems are triggered back into lead service line replacement might be higher than the initial rate, it is offset by the conservative assumptions regarding systems using the test out provisions and the universe of systems that would stop their lead service line replacement program and later resume it because of this change.

Replacement of lines that were previously tested out may also occur as a result of this change. EPA cannot quantify the costs associated with this change for a number of reasons. As noted above, EPA does not have

information on the number of systems and the number of lines that have been previously tested out and could be impacted by this change. This difficulty is further compounded by the fact that some lines may have been replaced as part of the ongoing utility replacement programs. In the 1991 final regulatory impact analysis, EPA cited an AWWA survey that produced an estimate of 1 percent of lead service lines being replaced per year as part of ongoing utility replacement programs. After promulgation of the rule, many systems modified their ongoing utility replacement programs to replace lead lines at a higher rate.

Where lines would have to be replaced, the unit cost of replacement is measured in \$ per foot of line being replaced. The 1991 final regulatory impact analysis provided a range of \$26 to \$51 per foot, depending upon system size, as the unit cost for lead service line replacement. Using the Engineering News Record Construction Cost Index, updated estimates would range from \$41 per foot for small systems to \$80 per foot for large systems. The length of the lead service line owned by systems will also vary, which will affect costs.

The derivation of the number of lead service lines per system and the number of lines to be retested are based on several assumptions. Since EPA does not know the number of years that the system was on the lead service line replacement program before meeting the AL, a conservative assumption was made that all lines were either tested or physically replaced. EPA estimated that the one system impacted by this change is a large system with 21,467 lead service lines. The percent of lead service lines tested out rather than replaced is estimated at 76 percent based on one year of data from DC WASA. It is likely that the estimates of the proportion of lines that are tested out rather than replaced is high because the 76 percent test out was during an initial year of replacement when a system is more likely to be able to test out lines rather than replace them. The time required to physically replace lines also leads to a higher percentage of test outs in the first year at DC WASA. We do not know the remaining years in the lead service line

replacement program, therefore, we assumed that 76 percent of lead service lines will need to be retested over a 15 year period. The resulting number of lead service lines that are assumed to be retested each year is 1,088.

3. Costs to States

No direct costs are expected for State/Primacy agencies as a result of

Regulatory Change III.G. The State/Primacy Agencies will review utility Lead Service Line replacement program annual reports but these costs were captured previously in the Final Regulatory Impact Analysis of National Primary Drinking Water Regulations for Lead and Copper, April 1991 (Final Regulatory Impact Analysis of National

Primary Drinking Water Regulations for Lead and Copper, U.S. EPA, 1991b).

J. Summary of National Average Annual Direct Costs

The estimates of annual direct costs for the proposed regulatory changes are presented in Table IV.9.

TABLE IV.9.—SUMMARY OF ANNUAL DIRECT COSTS TO SYSTEMS AND STATES FROM ALL PROPOSED REGULATORY CHANGES <sup>1</sup>

Regulatory change	Annual direct costs to systems				Annual direct costs to states	Total annual direct costs
	Reporting	Monitoring	Consumer notice	Total		
III.A .....	.....	.....	.....	.....	.....	.....
III.B .....	.....	.....	.....	.....	.....	.....
III.C .....	\$56,000	\$2,371,000	.....	\$2,428,000	\$77,000	\$2,505,000
III.D Low .....	474,000	.....	.....	474,000	153,000	627,000
III.D High .....	733,000	.....	.....	733,000	328,000	1,061,000
III.E .....	.....	.....	\$1,027,000	1,027,000	.....	1,027,000
III.F .....	.....	.....	780,000	780,000	51,000	831,000
III.G .....	.....	97,000	.....	97,000	.....	97,000
Total Low .....	530,000	.....	.....	4,805,000	281,000	5,086,000
Total High .....	789,000	2,468,000	1,807,000	5,064,000	456,000	5,520,000

Notes: 1. Totals may not add due to rounding.

K. Total Upfront Costs to Review and Implement Regulatory Changes

1. Activities Resulting From Regulatory Change

Systems and State/Primacy Agencies will incur one-time upfront costs associated with reviewing and implementing the overall LCR regulatory changes. For systems, activities include reviewing the rule changes and training staff. For States/Primacy Agencies, activities include regulation adoption, program development, and miscellaneous training.

2. Total Costs to Utilities

Direct costs to utilities are estimated to be \$8.1 million as summarized in Table IV.8. Detailed estimates of costs to utilities are provided in the Economic Analysis Appendix G (Economic and Supporting Analysis Short-Term Regulatory Changes to the Lead and Copper Rule, Appendix G, U.S. EPA, 2006b). Direct costs to utilities are based solely on labor; no materials costs are expected for these one-time upfront costs.

3. Total Costs to States

Direct costs to the States are estimated to be \$0.7 million as summarized in Table IV.10 and detailed in Appendix G of the Economic Analysis (Economic and Supporting Analysis Short-Term Regulatory Changes to the Lead and Copper Rule, U.S. EPA, 2005b, Appendix A). Similar to one-time costs for utilities, these direct costs are based solely on upfront labor costs. Fifty-seven state primacy agencies will review and implement these LCR revisions.

TABLE IV.10.—SUMMARY OF ONE-TIME DIRECT COSTS ASSOCIATED WITH RULE REVIEW AND IMPLEMENTATION

	One time labor costs
Costs to Systems:	
Review & Communication .....	\$8,076,000
Total System Costs .....	8,076,000
Costs to State/Primacy Agencies:	
Regulation Adoption .....	730,000
Total State Costs .....	730,000
Total Rule Implementation Costs .....	8,806,000

L. Indirect Costs

Previous sections focused on the direct costs of the proposed rulemaking, costs resulting from activities specified

by the rule change, such as costs for additional monitoring or distribution of consumer notices. A second type of cost, an indirect cost, may also result when systems and States use the

information generated by the rule-required activities to modify or enhance practices to reduce lead levels. Indirect costs may also result if systems or States decide to undertake additional

information-gathering activities not required by the rule.

The proposed revisions will require some systems to generate new information which, in some cases, may be provided to States and customers. The information that is generated may suggest lead and copper risks that would not otherwise have been discovered (or such risks might be discovered sooner than otherwise). Upon obtaining this information, a system itself, the State, or some of the system's customers may take actions to address these risks, incurring the costs of those actions. For example, a system may redesign a planned treatment change following State review of the planned change. Or a system may replace a lead service line that was previously "tested out." System customers, upon receiving notification of the lead content of their tap samples, may take some action, and in the process, incur a cost.

It is both difficult to project what the content will be of the information generated pursuant to the regulation, and difficult to predict how systems and individuals might act in response to the new information generated as a result of these regulatory changes. Because of the uncertainty in tracing the linkages from the regulation to new information to exposure prevention measures, EPA is unable to quantify the indirect costs that might ensue from these regulatory changes.

It is also possible that some additional information-gathering activities may result from the rule. For example, a system may decide to undertake a new study of the corrosion implications of a rule change. Or a state may decide to review sample system customer letters of notification to owner/occupants about the lead levels found in their collected tap samples. These activities would also result in indirect costs associated with the rule.

#### M. Benefits

The intent of this proposed rulemaking is to improve implementation of the lead and copper regulations by clarifying monitoring requirements, improving customer awareness, and modifying the lead service line test out procedure. The proposed revisions do not affect the action levels, corrosion control requirements, line replacement requirements, or other provisions in the existing rule that directly determine the degree to which the rule reduces risks from lead and copper.

However, the increase in administrative activities that will result from the revisions will result in the

generation of new information (e.g., more monitoring data, some of which may show exceedances), and may prompt some systems or individuals to respond to this new information by taking measures to abate lead and copper exposures and thus reduce the associated risk. Also, the requirement that treatment changes be approved by the primacy agency prior to implementation will provide an additional opportunity to identify possible adverse impacts due to treatment changes, which may lower the risk to consumers. Because the precise impact of these proposed revisions on the behavior of individuals and systems is not known, EPA has not quantified the changes in health benefits associated with these proposed revisions. EPA does expect that overall benefits from the LCR will increase, as a result of the indirect effect of the revisions on the actions of individual consumers and systems.

### V. Statutory and Executive Order Reviews

#### A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866, [58 **Federal Register** 51735 (October 4, 1993)] the Agency must determine whether the regulatory action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may: (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, OMB has notified EPA that it considers this a "significant regulatory action" within the meaning of the Executive Order. EPA has submitted this action to OMB for review. Changes made in response to OMB suggestions or recommendations are documented in the public record.

#### B. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* The Information Collection Request (ICR) document prepared by EPA has been assigned EPA ICR number XXXX.XX.

##### 1. Need for the Information Collection

EPA requires current information on lead and copper contamination to be provided to consumers and States. Recent highly publicized incidences of elevated drinking water lead levels prompted EPA to review and evaluate the implementation and effectiveness of the LCR on a national basis. As a result of this multi-part review, EPA identified seven targeted rule changes that clarify the intent of the LCR and enhance protection of public health through additional information gathering and public education. Consumers and States will use the information collected as a result of the short-term revisions to the LCR to determine the appropriate action they should undertake. The rule revisions described in Section III of this proposal are intended to improve the implementation of the LCR, and do not alter the original maximum contaminant level goals or the fundamental approach to controlling lead and copper in drinking water.

Section 1401(1)(D) of the SDWA requires that regulations contain "criteria and procedures to assure a supply of drinking water which dependably complies with such maximum contaminant levels, including accepted methods for quality control and testing procedures to insure compliance with such levels and to insure proper operation and maintenance of the system \* \* \*." Furthermore, Section 1445(a)(1) of the SDWA requires that every person who is a supplier of water "shall establish and maintain such records, make such reports, conduct such monitoring, and provide such information as the Administrator may reasonably require by regulation to assist the Administrator in establishing regulations \* \* \*, in determining whether such person has acted or is acting in compliance. \* \* \*." In addition, Section 1413(a)(3) of the SDWA requires States to "keep such records and make such reports \* \* \* as the Administrator may require by regulation."

Section 1412(b) of the SDWA, as amended in 1996, requires the Agency to publish maximum contaminant level goals and promulgate NPDWRs for

contaminants that may have an adverse effect on the health of persons, are known to or anticipated to occur in PWSs, and, in the opinion of the Administrator, present an opportunity for health risk reduction. The NPDWRs specify maximum contaminant levels or treatment techniques for drinking water contaminants (42 U.S.C. 300g-1). Section 1412(b)(9) requires that EPA no less than every 6 years review, and if appropriate, revise existing drinking water standards. Promulgation of the LCR implements these statutory requirements.

2. Burden Estimate

The universe of respondents for this ICR is comprised of the 52,838 CWSs and 19,375 NTNCWSs, for a total of

72,213 systems, and 57 State primacy agencies. Table V.1 presents a summary of total burden and costs for the ICR period of 2006-2008.

The annual system burden is estimated at 107,924 hours in 2006, 107,924 hours in 2007, and 107,924 hours in 2008. The annual system costs are projected at \$2.7 million in 2006, \$2.7 million in 2007, and \$2.7 million in 2008.

The annual State burden is estimated at 5,928 hours in 2006, 5,928 hours in 2007, and 5,928 hours in 2008. The annual State costs are projected at \$243,226 in 2006, \$243,226 in 2007, and \$243,226 in 2008. These annual costs reflect the costs to systems and States for the first three years after rule promulgation and consist of the one-

time direct costs for rule review and implementation. Upon the effective date of the rule, three years after rule promulgation, EPA estimates annual costs to systems for all proposed regulatory revisions ranging from \$4.8 to \$5.1 million and annual costs to States for all proposed regulatory revisions ranging from \$281,000 to \$456,000. A detailed discussion of these costs is presented in Section IV of this notice.

3. Bottom Line Burden Hours and Costs

The total burden and costs for the three year compliance period of 2006 to 2008 is summarized in Table V.1. The total burden and costs for each regulatory change is explained in the ICR document for this proposed action.

TABLE V.1.—SUMMARY OF THE BURDEN AND COSTS FROM 2006-2008 FOR THE PROPOSED REGULATORY CHANGES

Respondent	Number of respondents	Burden (hours) 2006-2008	Cost (in \$millions) 2006-2008
PWSs .....	72,213	323,772	\$8.1
State .....	57	17,784	0.73
Total .....	72,270	341,556	8.8

The estimates of the annual burden and costs from 2006 to 2008 are summarized in Table V.2.

TABLE V.2.— A SUMMARY OF THE ANNUAL BURDEN AND COSTS FROM 2006-2008 FOR THE PROPOSED REGULATORY CHANGES

Respondent	2006		2007		2008	
	Burden (hours)	Cost (in \$millions)	Burden (hours)	Cost (in \$millions)	Burden (hours)	Cost (in \$millions)
PWSs .....	107,924	2.7	107,924	2.7	107,924	2.7
State .....	5,928	0.24	5,928	0.24	5,928	0.24
Total .....	113,852	2.94	113,852	2.94	113,852	2.94

Burden and costs are the same in all three years as it is assumed that the one-time costs to prepare for rule implementation will be spread over the three year period prior to compliance with the regulatory changes.

4. Burden Statement

For the ICR period of 2006 through 2008 associated with the short-term revisions to the LCR, the average burden for systems to implement the proposed requirements of the short-term LCR revisions is estimated to be 1.49 hours per system per year. The average annual cost to systems is expected to be \$37.28 per system per year. System burden includes time to read and understand the rule requirements and communicate

those requirements to system personnel and management. The average burden for State agencies is estimated to be 104 hours per State per year. This burden includes the time to inform systems of the requirements, and perform primacy related activities. The estimated annual State cost is estimated to be \$4,267 per State per year.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and

maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9. To comment on the Agency's need for this information, the accuracy of the

provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques. EPA has established a public docket for this rule, which includes this ICR, under Docket ID number 2005-0034. Submit any comments related to the ICR for this proposed rule to EPA and OMB. See ADDRESSES section at the beginning of this proposal for where to submit comments to EPA. Send comments to OMB at the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW., Washington, DC 20503, Attention: Desk Office for EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after July 18, 2006, a comment to OMB is best assured of having its full effect if OMB receives it by August 17, 2006. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the

Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

The RFA provides default definitions for each type of small entity. Small entities are defined as: (1) A small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any "not-for-profit enterprise which is independently owned and operated and is not dominant in its field." However, the RFA also authorizes an agency to use alternative definitions for each category of small entity, "which are appropriate to the activities of the agency" after proposing the alternative definition(s) in the Federal Register and taking comment. 5 U.S.C. 601(3)-(5). In addition, to establish an alternative small business definition, agencies must consult with SBA's Chief Counsel for Advocacy.

For purposes of assessing the impacts of this proposal on small entities, EPA considered small entities to be public water systems serving 10,000 or fewer persons. As required by the RFA, EPA proposed using this alternative definition in the Federal Register (63 FR 7620, February 13, 1998), requested public comment, consulted with the Small Business Administration (SBA), and finalized the alternative definition in the Consumer Confidence Reports regulation (63 FR 44511, August 19, 1998). As stated in that Final Rule, the alternative definition is applied to this regulation as well.

After considering the economic impacts of this proposed rule on small entities, EPA certifies that this action will not have a significant economic impact on a substantial number of small entities. The small entities directly regulated by this proposed rule are small public water systems serving 10,000 or fewer people on an annual basis. We have determined that 68,286 small systems will experience an impact from .004 percent to .13 percent of their revenues (see section V.C.10). Table V.4 provides a summary of these small systems, by size category and system type.

TABLE V.4.—THE NUMBER OF SMALL SYSTEMS AFFECTED BY THE PROPOSED CHANGES

Size	CWS	NTNCWS	Total small
<100	13,766	9,548	23,314
101-500	16,240	6,997	23,237
501-1,000	5,914	1,925	7,839
1,001-3,300	8,298	795	9,093
3,301-10,000	4,707	96	4,803
Total	48,925	19,361	68,286

However, not all of these small entities will be affected and incur direct costs for all of the proposed rule changes. In many cases, only a relatively

small subset of these systems will have to change practices to comply with the rule changes. Table V.5 provides an estimate of the number of small systems

that will incur direct costs for each of the proposed rule changes.

TABLE V.5.—THE NUMBER OF SMALL SYSTEMS AFFECTED BY EACH REGULATORY CHANGE

Regulatory change	Small systems impacted per year
Regulatory Change # III.A	Not Quantified.
Regulatory Change # III.B	None—Clarifications of definitions with no direct cost impact.
Regulatory Change # III.C	854.
Regulatory Change # III.D	1,009.
Regulatory Change # III.E	60,735.
Regulatory Change # III.F	49,337.
Regulatory Change # III.G	1.

1. Activities and Costs Associated With Rule Changes for Small Systems

EPA has estimated the burden and costs associated with the proposed rule changes as described in the Economic

Analysis support document. The basis for many of these input values and assumptions are described in detail in the Economic Analysis, Section 4. The

following summarizes the costs estimated for small systems.

2. One-Time Activities

All small systems subject to the Lead and Copper Rule will be expected to incur some costs to read the proposed rule changes and communicate requirements as necessary. The level of effort associated with these activities could range from 4–8 hours for all small systems. The average cost per system for these activities is estimated at \$105, for a total cost of \$7,193,000 for all 68,286 small systems. This assumes an hourly fully loaded labor cost for small system employees ranging from \$22.70 to \$26.83 (see Appendix B of the Economic Analysis for derivation).

3. Activities for Regulatory Change III.C

Under Regulatory Change III.C, all systems that exceed the Lead Action Level are triggered into regularly scheduled lead tap monitoring. Additional costs are associated with taking lead samples more frequently and reporting the results to States. EPA estimates that 854 small systems exceed the Action Level each year. Changing from reduced tap monitoring to a regular tap monitoring schedule would result in an average cost increase of \$2,092 per year per system. Total costs for all small systems are estimated at \$1,786,000 per year.

4. Activities for Regulatory Change III.D

Small systems that are changing treatment or adding a source would incur additional costs under Regulatory Change III.D to prepare data in support of proposed treatment changes or source addition, submit the data to the State for review, and coordinate with the State during the review. These activities are estimated to take an additional 7.5 hours per system for each treatment change or source addition. The cost for each small system that is changing treatment or adding a source is estimated at \$201. The total cost for

small systems is estimated at \$203,000 per year.

5. Activities for Regulatory Change III.E

Most small systems are expected to incur additional costs under Regulatory Change III.E when they are required to notify consumers of tap monitoring results. The activities associated with notifying customers vary based on the type and size of the system. The average cost for small systems to notify customers is estimated at approximately \$14 annually. This estimate assumes one labor hour to prepare a customer notification letter per system and \$0.43 in material costs per sample for CWSs. EPA assumed one labor hour for NTNCWSs, with negligible material costs. It is important to note that the majority of small systems are assumed to meet the Lead Action Level and are assumed to be on triennial monitoring. Therefore, this requirement will only affect them once every three years. The total cost to small systems is estimated at \$878,000.

6. Activities for Regulatory Change III.F

Different provisions of Regulatory Change III.F apply to different subsets of systems. Most small Community Water Systems will incur costs to include a statement on lead on the CCR, at an average cost of \$6 per system, based on the assumption of 0.25 hours to add an informational statement on lead to the CCR. Small Non-Transient Non-Community Water Systems that exceed the Lead Action Level will incur costs to modify their public notification language, at an average cost per system of \$83. Small Community Water Systems that exceed the Lead Action Level will incur costs from a variety of public education activities, at an average cost per system of \$348. The total cost for small systems is estimated at \$517,000.

7. Activities for Regulatory Change III.G

Regulatory Change III.G applies to systems that have “tested out” lead service lines as part of a lead service line replacement program and then re-exceed the Action Level. For the purposes of subsequent lead service line replacement efforts, the previously “tested out” lines would go back into the inventory for possible re-testing and/or replacement. Only a handful of systems are expected to be in this situation, estimated at one system per year. There is no evidence that small systems would be triggered into this regulatory change cost any more frequently than other systems. If this system were a small system, a lower number of lead service lines would be replaced or tested out than was assumed in the Economic Analysis. The average number of service connections per system for systems serving fewer than 10,000 is 289. For the purposes of the Regulatory Flexibility Analysis we assume that all 289 of these service connections are lead service lines. The resulting cost per system for the retesting is estimated at \$1,311 per year for a small system based on the approach described earlier in the Economic Analysis for Regulatory Change III.G. The percent assumed to be tested out rather than replaced is estimated at 76 percent based on one year of data from DC WASA. This means that 76 percent of the 289 service connection lines would need to be retested over a 15 year period.

8. Total Small System Costs

Table V.6 summarizes the estimated annual costs associated with all proposed regulatory changes after those changes have been implemented. An additional \$7,193,000 in one-time rule implementation costs will also be incurred during the three year period prior to implementation of the changes.

TABLE V.6.—TOTAL SMALL SYSTEM COSTS

	Annual labor	Annual materials	Total annual
Regulatory Change #III.A .....	.....	.....	.....
Regulatory Change #III.B .....	.....	.....	.....
Regulatory Change #III.C .....	\$1,625,000	\$162,000	\$1,787,000
Regulatory Change #III.D .....	203,000	.....	203,000
Regulatory Change #III.E .....	779,000	99,000	878,000
Regulatory Change #III.F .....	513,000	4,000	517,000
Regulatory Change #III.G .....	1,178	133	1,311
<b>Total .....</b>	<b>3,121,000</b>	<b>265,000</b>	<b>3,386,000</b>

### 9. Average Costs Per Small System

The average compliance cost for all small systems covered by the LCR for the proposed rule change is minimal: \$50 per system in annual costs. However, there is a fairly wide range in the costs that a system could face. All systems will incur a \$105 one-time cost, but the additional annual costs could be as low as \$0 for small systems that already notify customers of tap monitoring results and who do not detect lead in their compliance sampling. Systems that do not already notify customers of results will incur a cost of \$14 per year. Systems that detect any level of lead above the method detection limit of 0.001 mg/L in their compliance sample will incur a cost of \$6 per year to include a statement in their CCR. The roughly 1.5 percent of systems that are making a treatment change or source addition would incur an additional \$201 in the year they make the change.

At the high end, the roughly 1.4 percent of small systems that exceed the Action Level would incur an additional \$2,440 per year. Under the assumptions in the Economic Analysis, only .0015 percent of systems (1 per year) could possibly incur both the additional tap monitoring costs and lead service line testing costs after an Action Level exceedance, at a total cost of \$1,311 per year. If a system incurred all annual costs, the total would be \$3,972 per year.

### 10. Measuring Significant Impact of Rule Costs

The costs to small systems are first compared against average revenues for small systems from all revenue sources. Small systems can be one of three types of small entities—small businesses, small governments, or small non-profits. In the Economic Analysis for the final Stage 2 Disinfectants and Disinfection Byproducts Rule, EPA calculates the average revenues from all revenue sources for small systems serving fewer than 10,000 for each of the small entity types and then estimates a weighted average revenue from all revenue sources based on the proportion of small systems in each type of entity (U.S. EPA 2005c). The weighted average revenue from all revenue sources for small systems is estimated at \$3 million per year.

Using the average cost of the regulatory changes for small systems, the one-time implementation costs represent roughly 0.004 percent of annual revenues from all revenue sources. The \$50 average annual costs represent 0.002 percent of average

annual revenues from all revenue sources. Roughly 1.4 percent of the systems would incur annual costs of \$2,440, which is approximately .082 percent of revenues from all sources. Only 1 system could face the maximum annual costs of \$3,972. This maximum cost is approximately 0.13 percent of annual revenues from all sources.

In summary, the costs for the average small system due to the regulatory changes are estimated to be less than 1 percent of revenues (0.002 percent). In addition, fewer than 100 systems (1 system per year) are expected to experience economic impacts of approximately 0.13 percent of the revenue.

Based on this analysis, EPA has concluded that the proposed rule changes will not have a significant impact on a substantial number of small entities.

Although this proposed rule will not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this rule on small entities by considering several alternatives to the proposed regulatory changes that could minimize impact to small systems while still meeting the objectives of the rule.

### 11. Regulatory Changes III.A

These changes clarify the original intent of the LCR that very small NTNCWSs serving 100 persons or fewer take a minimum of five samples for each sampling period, even if the system has fewer than five sampling locations. EPA is requesting comment on an option suggested by a work group comprised of representatives from EPA's regional offices and several States that would limit the number of samples these systems would have to take to one for each location (*i.e.*, tap). Taking fewer than five samples for each monitoring event would reduce the monitoring burden for small systems. However, as explained in the preamble to the proposed regulatory changes, EPA believes that taking fewer than five samples for a system would likely compromise the statistical objectives of monitoring for lead and copper.

### 12. Regulatory Change III.C

Regulatory Change III.C requires systems that have exceeded the Lead Action Level to resume tap monitoring for lead on a regular, rather than reduced, schedule. Originally, EPA had considered extending this requirement to both lead and copper monitoring. Based on suggestions from the work group to minimize impacts on small systems, EPA limited the requirement to only Lead Action Level exceedances.

### 13. Regulatory Change III.E

Regulatory Change III.E requires systems to provide lead monitoring results to consumers. The work group discussed including copper monitoring results in the notification, but deferred that suggestion for future consideration, thereby limiting the increase in burden for small systems. Section H of this proposal also provides some important clarifications of alternatives to corrosion control for small systems.

We continue to be interested in the potential impacts of the proposed rule on small entities and welcome comments on issues related to such impacts.

### D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

EPA has determined that this rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any one year. The total upfront costs of this action to States and public water systems are estimated at \$8.8 million, with estimated annual costs to States and public water systems ranging from approximately \$5.1 to \$5.5 million. Systems and State/Primacy agencies will incur one-time upfront costs associated with reviewing and implementing the overall LCR regulatory changes. For systems, activities include reviewing the rule changes and training staff. For States/Primacy agencies, activities include regulation adoption, program development, and miscellaneous training. Systems and States will also incur annual costs consisting of the costs to implement the regulation. Annual costs to systems include the costs of reporting, monitoring, and public education. Annual costs to States consist of the costs of reviewing water system information. Thus, this proposal is not subject to the requirements of sections 202 and 205 of the UMRA.

EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments. The regulation applies to all owners/operators of public water systems, not uniquely to those owners/operators that are small entities, and, for most systems, requires minimal expenditure of resources. Since these regulatory revisions affect all system sizes and the impact on the average small system will be 0.13 percent of revenues, the regulatory revisions to the LCR are not subject to the requirements of section 203 of UMRA.

Nevertheless, in developing this rule, EPA consulted with State and local officials (including small entity representatives) early in the process of developing the proposed regulation to permit them to have meaningful and timely input into its development. EPA held five workshops in 2004–2005 to elicit concerns and suggestions from stakeholders on various issues related to lead in drinking water. These workshops covered the topic areas of simultaneous compliance, sampling protocols, public education, lead service line replacement, and lead in plumbing. Expert participants from utilities, academia, state governments, consumer and environmental groups, and other stakeholder groups participated in these workshops to identify issues, propose solutions, and offer suggestions for modifications and improvements to the

LCR. These workshops are described in greater detail in the Economic Analysis for this proposed rule.

The Agency has developed fact sheets that describe requirements of the short-term regulatory revisions and clarifications to the LCR. These fact sheets are available by calling the Safe Drinking Water Hotline at 800–426–4791.

#### *E. Executive Order 13132: Federalism*

Executive Order 13132, entitled “Federalism” (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.” “Policies that have federalism implications” are defined in the Executive Order to include regulations that have “substantial direct effects on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of Government.”

This proposed rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. The rule is consistent with, and only makes revisions to, the requirements under the current national primary drinking water regulations for lead and copper. The existing rule imposes requirements on public water systems to ensure that water delivered to users is minimally corrosive, remove lead service lines and provide public education where necessary to ensure public health protection. This proposed rule does not make any significant changes to these requirements but makes revisions and clarifications to the rule’s requirements to enhance the efficiency and effectiveness of current requirements.

Nevertheless, EPA did consult with State and local officials early in the process of developing the proposed regulation as described in section V.D, Unfunded Mandates Reform Act. Several States also participated in EPA’s workgroup that developed this proposal.

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicits comment on this proposed rule from State and local officials.

#### *F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments*

Executive Order 13175, entitled “Consultation and Coordination with Indian Tribal Governments” (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.”

This proposed rule does not have tribal implications as specified in Executive Order 13175. It does not significantly or uniquely affect the communities of Indian tribal governments, nor does it impose substantial direct compliance costs on those communities. The provisions of the proposed rule apply to all community and non-transient non-community water systems. tribal governments may be the owners or operators of such systems, however, nothing in this proposal’s provisions uniquely affects them. EPA therefore concludes that this proposed rule does not significantly or uniquely affect the communities of Indian tribal governments. Thus, Executive Order 13175 does not apply to this rule. EPA specifically solicits additional comment on this proposed rule from Tribal officials.

#### *G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks*

Executive Order 13045: “Protection of Children from Environmental Health Risks and Safety Risks” (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be “economically significant” as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This proposed rule is not subject to the Executive Order because it is not economically significant as defined in Executive Order 12866. This proposed rule does not change the core LCR requirements in place to assure the protection of children from the effects of lead in drinking water, rather the proposed changes will improve the implementation of these provisions. Moreover, EPA believes that this

proposal is consistent with Executive Order 13045 because it will further strengthen protection to children from exposure to lead and copper via drinking water, as this proposal enhances the implementation of the LCR in the areas of monitoring, customer awareness, and lead service line replacement. This proposal also clarifies the intent of some unclear provisions in the LCR. These changes are expected to ensure and enhance more effective protection of public health through the reduction in lead exposure.

*H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use*

This rule is not a “significant energy action” as defined in Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 FR 28355 (May 22, 2001)) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The rule provides clarifications and modifications to the existing LCR rule language only.

This proposed rule does not affect the supply of energy as it does not regulate power generation. The public and private utilities that will be affected by this proposed regulation do not, as a rule, generate power. The proposed revisions to the LCR do not regulate any aspect of energy distribution as the utilities that are regulated by the LCR already have electrical service. Finally, these regulatory revisions do not adversely affect the use of energy as EPA does not anticipate that a significant number of drinking water utilities will add treatment technologies that use electrical power to comply with these regulatory revisions. As such, EPA does not anticipate that this rule will adversely affect the use of energy.

*I. National Technology Transfer and Advancement Act*

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (“NTTAA”), Public Law 104–113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB,

explanations when the Agency decides not to use available and applicable voluntary consensus standards.

The proposed rule may involve voluntary consensus standards in that it requires additional monitoring for lead and copper in certain situations, and monitoring and sample analysis methodologies are often based on voluntary consensus standards. However, the proposed rule does not change any methodological requirements for monitoring or sample analysis, only, in some cases, the required frequency and number of samples. Also, EPA’s approved monitoring and sampling protocols generally include voluntary consensus standards developed by agencies such as the American National Standards Institute (ANSI) and other such bodies wherever EPA deems these methodologies appropriate for compliance monitoring.

**VI. References**

The public docket is available as described at the beginning of this document. The following references are referred to in this document and are included in the public docket:

- U.S. EPA. 1988. Regulatory Impact Analysis of Proposed National Primary Drinking Water Regulations for Lead and Copper (Draft). Prepared by Wade Miller Associates, Inc. (June 1, 1988).
- U.S. EPA. 1990. Variability of Household Water Lead Levels In American Cities.
- U.S. EPA 1991a. Final Information Collection Request for National Primary Drinking Water Regulations for Lead and Copper. April, 1991.
- U.S. EPA 1991b. Final Regulatory Impact Analysis of National Primary Drinking Water Regulations for Lead and Copper. April, 1991.
- U.S. EPA. 1991c. Memorandum from Jeff Cohen to the Record on Required Number of Samples (May 6, 1991).
- U.S. EPA. 1991d. **Federal Register**. Vol 56, No. 110. Maximum Contaminant Level Goals and National Primary Drinking Water Regulations for Lead and Copper; Final Rule (Fri. Jun. 7, 1991), 26460–26564. [56 FR 26460].
- U.S. EPA. 1996a. Regulatory Impact Analysis Addendum EPA 812–B–96–002, January 1996.
- U.S. EPA. 1996b. **Federal Register**. Vol 60, No. 72 Maximum Contaminant Level Goals and National Primary Drinking Water Regulations for Lead and Copper (Apr. 12, 1996), 16348–16371. [72 FR 16348].
- U.S. EPA. 1998a. **Federal Register**. Vol 63, No. 160 National Primary Drinking Water Regulations: Consumer Confidence Reports (Aug. 19, 1998), 44512–44536. [63 FR 44512].
- U.S. EPA. 1999a. Information Collection Request: National Primary Drinking Water Regulations for Lead and Copper. June 1999. EPA ICR Number: 1912.01.

- U.S. EPA. 2000a. **Federal Register**. Vol 65, No. 8 National Primary Drinking Water Regulations for Lead and Copper; Final Rule (Wed. Jan. 12, 2000), 1950–2015. [65 FR 1950].
- U.S. EPA. 2000b. **Federal Register**. Vol 65 No. 87 National Primary Drinking Water Regulations: Public Notification Rule (Thurs. May 4, 2000), 25982–26049. [65 FR 25982].
- U.S. EPA. 2002. Lead and Copper Monitoring and Reporting Guidance for Public Water Systems. February, 2002.
- U.S. EPA. 2004a. Expert Panel Workshop Public Education Under the Lead and Copper Rule and Drinking Water Risk Communication Summary. September 14–15, 2004. Hilton Philadelphia Airport, Philadelphia, PA ([http://www.epa.gov/safewater/lcrrm/lead\\_review.html](http://www.epa.gov/safewater/lcrrm/lead_review.html)).
- U.S. EPA. 2004b. Information Collection Request for Disinfectants/Disinfection Byproducts, Chemical, and Radionuclides Rules, OMB Control Number: 2040–0204, EPA Tracking Number: 1896.03. September, 2004.
- U.S. EPA. 2004c. Information Collection Request for Disinfection Byproducts, Chemical, and Radionuclides Rules, OMB Control Number: 2040–0204, EPA Tracking Number: 1896.03. Appendix H, page H–43, table entitled “Tap Monitoring for Lead & Copper-Monitoring, Burden, and Cost Assumptions.” September, 2004.
- U.S. EPA. 2004d. State Implementation of the Lead and Copper Rule. July, 2004.
- U.S. EPA. 2004e. Summary Lead Action Level Exceedances for Public Water Systems Subject to the Lead and Copper Rule. September 13, 2004.
- U.S. EPA. 2005. **Federal Register**. Vol. 70, No. 177 National Drinking Water Advisory Council’s Working Group on Public Education Requirements of the Lead and Copper Rule Meeting Announcement (Wed. Sept. 14, 2005), 54375. [70 FR 54375].
- U.S. EPA. 2006a. Lead and Copper Rule State File Review: National Report. March, 2006.
- U.S. EPA. 2006b. Economic and Supporting Analysis Short Term Regulatory Changes to the Lead and Copper Rule. May, 2006.

**List of Subjects in 40 CFR Part 141**

Environmental protection, Chemicals, Indians—lands, Intergovernmental relations, Radiation protection, Reporting and recordkeeping requirements, Water supply.

Dated: July 6, 2006.

**Stephen L. Johnson,**  
*Administrator.*

For the reasons set forth in the preamble, title 40, chapter I, part 141 of the Code of Federal Regulations is proposed to be amended as follows:

**PART 141—NATIONAL PRIMARY DRINKING WATER REGULATIONS**

1. The authority citation for part 141 continues to read as follows:

**Authority:** 42 U.S.C. 300f, 300g-1, 300g-2, 300g-3, 300g-4, 300g-5, 300g-6, 300j-4, 300j-9, and 300j-11.

2. Section 141.80 is amended by removing and reserving paragraph (a)(2) and by revising paragraph (g) to read as follows:

**§ 141.80 General Requirements**

\* \* \* \* \*

(g) *Public education requirements.* Any system exceeding the Lead Action Level shall implement the public education requirements. Pursuant to § 141.85, all water systems must provide a consumer notice of lead tap water monitoring results to persons served at the sites that are tested.

\* \* \* \* \*

3. Section 141.81 is amended as follows by:

- a. Removing the first sentence in paragraph (b)(3)(iii) and adding in its place the following two sentences,
- b. Revising the last sentence in paragraph (e)(1);
- c. Revising the first sentence in paragraph (e)(2);
- d. Revising paragraph (e)(2)(i); and
- e. Revising paragraph (e)(2)(ii).

**§ 141.81 Applicability of corrosion control treatment steps to small, medium-size and large water systems.**

\* \* \* \* \*

- (b) \* \* \*
- (3) \* \* \*
- (iii) \* \* \*

Any water system deemed to have optimized corrosion control pursuant to this paragraph shall notify the State in writing pursuant to § 141.90(a)(3) of any upcoming change in treatment or addition of a new source. The State must review and approve the addition of a new source or change in water treatment before it is implemented by the water system.

\* \* \* \* \*

- (e) \* \* \*
- (1) \* \* \*

A system exceeding the lead or copper action level shall recommend optimal corrosion control treatment (§ 141.82(a)) within six months after the end of the monitoring period during which it exceeds one of the action levels.

(2) *Step 2:* Within 12 months after the end of the monitoring period during which a system exceeds the lead or copper action level, the State may require the system to perform corrosion control studies (§ 141.82(b)). \* \* \*

(i) For medium-size systems, within 18 months after the end of the monitoring period during which such system exceeds the lead or copper action level.

(ii) "For small systems, within 24 months after the end of the monitoring

period during which such system exceeds the lead or copper action level."

\* \* \* \* \*

4. Section 141.83(a)(1) is revised to read as follows:

**§ 141.83 Source water treatment requirements.**

\* \* \* \* \*

(a) \* \* \* (1) *Step 1:* A system exceeding the lead or copper action level shall complete lead and copper source water monitoring (§ 141.88(b)) and make a treatment recommendation to the State (§ 141.83(b)(1)) no later than 6 months after the end of the monitoring period during which the lead or copper action level was exceeded.

\* \* \* \* \*

5. Section 141.84 is amended as follows by:

- a. Redesignating paragraph (b) as (b)(1);
- b. Revising the last sentence in the newly designated (b)(1) and adding two sentences to the end of the paragraph;
- c. Adding paragraph (b)(2); and
- d. In paragraph (f), revise "(b)" to read "(b)(2)".

**§ 141.84 Lead service line replacement requirements.**

\* \* \* \* \*

(b)(1) \* \* \* The first year of lead service line replacement shall begin on the date after the monitoring period in which the action level was exceeded under paragraph (a) of this section. If monitoring is required annually or less frequently, the end of the monitoring period is September 30 of the calendar year in which the sampling occurs. If the State has established an alternate monitoring period, then the end of the monitoring period will be the last day of that period.

(2) Any water system resuming a lead service line replacement program shall update its inventory of lead service lines to include those sites that were previously determined not to require replacement through the sampling provision under paragraph (c) of this section. The system will then divide the updated number of remaining lead service lines by the number of remaining years in the program to determine the number of lines that must be replaced per year (7 percent replacement is based on a 15-year replacement program, so, for example, systems resuming after conducting two years of replacement would divide the updated inventory by 13).

\* \* \* \* \*

6. Section 141.85 is revised to read as follows:

**§ 141.85 Public education and supplemental monitoring requirements.**

A water system that exceeds the Lead Action Level based on tap water samples collected in accordance with § 141.86 shall deliver the public education materials contained in paragraph (a) of this section in accordance with the requirements in paragraph (b) of this section. Water systems that exceed the Lead Action Level must sample the tap water of any customer who requests it in accordance with paragraph (c) of this section. All water systems must provide a consumer notice of lead tap water monitoring results to persons served by the water system at sites that are tested, as specified in paragraph (d) of this section.

(a) *Content of written public education materials.*—(1) *Community water systems and Non-transient non-community water systems.* Water systems must include the following elements in printed materials (such as brochures and pamphlets) in the same order as listed below. In addition, paragraphs (a)(1)(i)–(ii) and (a)(1)(vi) must be included exactly as written except for the text in brackets in these paragraphs for which the water system must include system-specific information. Any additional information presented by a water system must be consistent with the information below and be in plain language that can be understood by lay people.

(i) *Opening Statement.* IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER. [INSERT NAME OF WATER SYSTEM] found high levels of lead in drinking water in some homes/buildings. 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.

(ii) *Health effects of lead.* Lead can cause serious health problems if too much enters your body. It can cause damage to the brain and kidneys and can decrease the number of red blood cells (a risk factor for anemia). The greatest risk is to infants, young children, and pregnant women. Small amounts slow down normal mental development in growing children and alter the development of other organs and systems. The effects of lead on the brain are associated with lowered IQ in children. Adults with kidney problems and high blood pressure are more likely to be affected by low levels of lead than the general population. Lead is stored in the bones allowing it to be released even after exposure stops. The presence in

bone increases the concern for exposure at all points of the life cycle.

(iii) *Sources of Lead.* (A) Explain what lead is.

(B) Explain possible sources of lead and how lead enters drinking water. Include information on home/building plumbing and service lines that may contain lead.

(C) Discuss other important sources of lead exposure in addition to drinking water (e.g., paint).

(iv) *Steps you can take to reduce your exposure to lead in drinking water.* (A) Encourage running the water to flush out the lead.

(B) Explain concerns with using hot water and specifically caution against the use of hot water for baby formula.

(C) Explain that boiling water does not reduce lead levels.

(D) Discuss other options consumers can take to reduce exposure to lead in drinking water, such as alternative sources or treatment of water.

(v) What happened and What is being done?

(A) Explain why there are high levels of lead in the system's drinking water (if known).

(B) Discuss what the water system is doing to reduce the lead levels in homes/buildings in this area.

(vi) For More Information. Call us at [INSERT YOUR NUMBER], or visit our web site at [INSERT YOUR WEB SITE HERE IF APPLICABLE]. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at [www.epa.gov/lead](http://www.epa.gov/lead), call the National Lead Information Center at 1-800-424-LEAD, or contact your health care provider.

(2) *Community water systems.* In addition to including the elements specified in paragraph (a)(1) of this section, community water systems must:

(A) Tell consumers how to get their water tested.

(B) Discuss lead in plumbing components and the difference between low lead and lead free.

(b) *Delivery of public education materials.* (1) In communities where a significant proportion of the population speaks a language other than English the system must also provide the public education materials in the appropriate language(s).

(2) A community water system that exceeds the Lead Action Level on the basis of tap water samples collected in accordance with § 141.86, and that is not already conducting public education tasks under this section, must, within 60 days after the end of the monitoring period in which the exceedance occurred:

(i) Deliver printed materials meeting the content requirements of paragraph (a) of this section to all bill paying customers.

(ii) Make a good faith effort to contact all customers who are most at risk by delivering materials that meet the content requirements of paragraph (a) of this section to the following organizations along with a cover letter that encourages distribution by the organization to all its potentially affected customers or users.

(A) Local Public Health Agencies—The water system must deliver materials that meet the content requirements of paragraph (a) of this section to the local public health agencies and must directly contact (by phone or in person) the local public health agencies. The local public health agencies may provide a specific contact list of additional community based organizations serving targeted populations.

(B) Public and private schools or school boards.

(C) Licensed childcare centers.

(D) Public and private pre-schools.

(E) Women Infants and Children (WIC) and Head Start programs.

(F) Public and private hospitals and medical clinics.

(G) Pediatricians.

(H) Obstetricians-Gynecologists and Midwives.

(I) Family planning clinics.

(J) Local welfare agencies.

(iii) Provide information on or in each water bill as long as the system exceeds the action level for lead. The message on the water bill must include the following statement exactly as written with the addition of the system's name and Web site: [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 [INSERT NAME OF WATER SYSTEM] [or visit (INSERT YOUR WEB SITE HERE)]. The message or delivery mechanism can be modified in consultation with the State.

(iv) Post material meeting the content requirements of paragraph (a) on the water system's Web site if the system serves a population greater than 100,000.

(v) Submit press release to newspaper, television and radio stations.

(vi) In addition to paragraphs (b)(2)(i)–(v) of this section, systems must implement at least 3 activities from one or more categories listed below. The content of these activities must be determined in consultation with the State.

(A) Public Service Announcements.

(B) Paid advertisements.

(C) Display Information in Public Areas.

(D) Internet such as emails to customers.

(E) Public Meetings.

(F) Delivery to every household.

(G) Individual contact with customers (targeted contact).

(H) Provide materials directly to all multi-family homes and institutions.

(I) Other methods approved by the State.

(vii) For systems that are required to conduct monitoring annually or less frequently, the end of the monitoring period is September 30 of the calendar year in which the sampling occurs, or, if the State has established an alternate monitoring period, the last day of that period.

(3) As long as a system exceeds the action level, it must repeat the activities described in paragraph (b)(2) of this section as described in (b)(3)(i)–(iv) of this section.

(i) A community water system shall repeat the tasks contained in paragraphs (b)(2)(i)(ii) and (vi) of this section every 12 months.

(ii) A community water system shall repeat tasks contained in paragraph (b)(2)(iii) of this section with each billing cycle.

(iii) A community water system serving a population greater than 100,000 shall post material on a publicly accessible internet site pursuant to (b)(2)(iv) of this section.

(iv) The community water system shall repeat the task in (b)(2)(v) of this section twice every 12 months on a schedule agreed upon with the state. The State can allow activities in (b)(2)(iii) and (b)(2)(vi) of this section to extend beyond the 60-day requirement if needed for implementation purposes; however, this extension must be approved in writing by the State in advance of the 60-day deadline.

(4) Within 60 days after the end of the monitoring period in which the exceedance occurred (unless it already is repeating public education tasks pursuant to paragraph (b)(5) of this section), a non-transient non-community water system shall deliver the public education materials specified by paragraph (a) of this section as follows:

(i) Post informational posters on lead in drinking water in a public place or common area in each of the buildings served by the system; and

(ii) 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 system to utilize electronic transmission in lieu

of or combined with printed materials as long as it achieves at least the same coverage.

(iii) For systems that are required to conduct monitoring annually or less frequently, the end of the monitoring period is September 30 of the calendar year in which the sampling occurs, or, if the State has established an alternate monitoring period, the last day of that period.

(5) A non-transient non-community water system shall repeat the tasks contained in paragraph (b)(4) of this section at least once during each calendar year in which the system exceeds the Lead Action Level.

(6) A water system may discontinue delivery of public education materials if the system has met the Lead Action Level during the most recent six-month monitoring period conducted pursuant to § 141.86. Such a system shall recommence public education in accordance with this section if it subsequently exceeds the Lead Action Level during any monitoring period.

(7) A community water system may apply to the State, in writing, (unless the State has waived the requirement for prior State approval) to use only the text specified in paragraph (a)(1) of this section in lieu of the text in paragraphs (a)(1) and (a)(2) of this section and to perform the tasks listed in paragraphs (b)(4) and (b)(5) of this section in lieu of the tasks in paragraphs (b)(2) and (b)(3) of this section if:

(i) The system is a facility, such as a prison or a hospital, where the population served is not capable of or is prevented from making improvements to plumbing or installing point of use treatment devices; and

(ii) The system provides water as part of the cost of services provided and does not separately charge for water consumption.

(8) A community water system serving 3,300 or fewer people may limit certain aspects of their public education programs as follows:

(i) With respect to the requirements of paragraph (b)(2)(vi) of this section, a system serving 3300 or fewer must implement at least one of the activities listed in that paragraph.

(ii) With respect to the requirements of paragraph (b)(2)(ii) of this section, a system serving 3300 or fewer people may limit the distribution of the public education materials required under that paragraph to facilities and organizations served by the system that are most likely to be visited regularly by pregnant women and children.

(iii) With respect to the requirements of paragraph (b)(2)(v) of this section, the State may waive this requirement for

systems serving 3300 or fewer persons as long as system distributes notices to every household served by the system.

(c) *Supplemental monitoring and notification of results.* A water system that fails to meet the Lead Action Level on the basis of tap samples collected in accordance with § 141.86 shall offer to sample the tap water of any customer who requests it. The system is not required to pay for collecting or analyzing the sample, nor is the system required to collect and analyze the sample itself.

(d) *Notification of results—(1) Reporting requirement.* All water systems must provide a consumer notice of lead tap water monitoring results carried out to meet requirements under § 141.86 to all persons served by the water system at the sampling sites in § 141.86(c).

(2) *Timing of notification.* A water system must provide the consumer notice as soon as practical, but no later than 30 days after the system learns of the tap monitoring results.

(3) *Content.* The consumer notice must include the results of lead tap water monitoring for the tap that was tested, an explanation of the health effects of lead, list steps consumers can take to reduce exposure to lead in drinking water and contact information for the water utility. The notice must also provide the maximum contaminant level goal and the action level for lead and the definitions for these two terms from § 141.153(c)(1).

(4) *Delivery.* The consumer notice must be provided to all persons served at the site by mail or other methods approved by the State. The system must provide the notice to all customers, including consumers who do not get water bills.

7. Section 141.86 is amended as follows:

a. In the introductory paragraph of (c), adding a sentence after the third sentence;

b. In paragraph (d)(4)(i) add as the last sentence;

c. Revising paragraph (d)(4)(ii);

d. Revising paragraph (d)(4)(iii);

e. Revising paragraph (d)(4)(iv)(A);

f. Revising paragraph (d)(4)(vi)(B);

g. In paragraph (d)(4)(vi)(B)(1) adding as the last sentence;

h. Removing the first sentence in paragraph (d)(4)(vii), and adding in its place the following two sentences;

i. In paragraph (g)(4)(i) adding as the last sentence; and

j. Revising paragraph (g)(4)(iii).

**§ 141.86 Monitoring requirements for lead and copper in tap water.**

\* \* \* \* \*

(c) \* \* \* A non-transient non-community public water system that serves 100 people or less and that does not have enough drinking water taps meeting the sample site criteria of § 141.86(a) to reach the required number of sample sites listed in § 141.86(c) must collect at least one sample from each tap and then must collect additional samples from those taps on different days during the monitoring period to meet the required number of sites.

\* \* \*

\* \* \* \* \*

(d) \* \* \*

(4) \* \* \*

(i) \* \* \* This sampling shall begin during the calendar year immediately following the end of the second consecutive six-month monitoring period.

(ii) Any water system that meets the Lead Action Level and maintains the range of values for the water quality control parameters reflecting optimal corrosion control treatment specified by the State under § 141.82(f) during each of two consecutive six-month monitoring periods may reduce the frequency of monitoring to once per year and reduce the number of lead and copper samples in accordance with paragraph (c) of this section if it receives written approval from the State. This sampling shall begin during the calendar year immediately following the end of the second consecutive six-month monitoring period. The State shall review monitoring, treatment, and other relevant information submitted by the water system in accordance with § 141.90, and shall notify the system in writing when it determines the system is eligible to commence reduced monitoring pursuant to this paragraph. The State shall review, and where appropriate, revise its determination when the system submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling becomes available.

(iii) A small or medium-size water system that meets the lead and copper action levels during three consecutive years of monitoring may reduce the frequency of monitoring for lead and copper from annually to once every three years. Any water system that meets the Lead Action Level and maintains the range of values for the water quality control parameters reflecting optimal corrosion control treatment specified by the State under § 141.82(f) during three consecutive years of monitoring may reduce the frequency of monitoring from annually to once every three years if it receives

written approval from the State. Samples collected once every three years shall be collected no later than every third calendar year. The State shall review monitoring, treatment, and other relevant information submitted by the water system in accordance with § 141.90, and shall notify the system in writing when it determines the system is eligible to reduce the frequency of monitoring to once every three years. The State shall review, and where appropriate, revise its determination when the system submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling becomes available.

(iv) \* \* \*

(A) The State, at its discretion, may approve different period for conducting the lead and copper tap sampling for systems collecting a reduced number of samples. This sampling shall begin no later than the six-month period beginning January 1 of the calendar year following the reduced monitoring exceedance. Such a period shall be no longer than four consecutive months and must represent a time of normal operation where the highest levels of lead are most likely to occur. For a non-transient non-community water system that does not operate during the months of June through September, and for which the period of normal operation where the highest levels of lead are most likely to occur is not known, the State shall designate a period that represents a time of normal operation for the system. This sampling shall begin during the calendar year immediately following the end of the second consecutive six-month monitoring period for systems resuming annual monitoring and during the three-year period following the end of the third consecutive calendar year of annual monitoring for systems resuming triennial monitoring.

(B) Any water system subject to the reduced monitoring frequency that fails to meet the Lead Action Level during any four-month monitoring period or that fails to operate at or above the minimum value or within the range of values for the water quality parameters specified by the State under § 141.82(f) for more than nine days in any six-month period specified in § 141.87(d) shall conduct tap water sampling for lead and copper at the frequency specified in paragraph (d)(3) of this section and collect the number of samples specified for standard monitoring for water quality parameters within the distribution system in accordance with § 141.87(d). This standard tap water sampling shall begin

no later than the six-month period beginning January 1 of the calendar year following the water quality parameter excursion. Such a system may resume reduced monitoring for lead and copper at the tap and for water quality parameters within the distribution system under the following conditions:

(1) \* \* \* This sampling shall begin during the calendar year immediately following the end of the second consecutive six-month monitoring period.

\* \* \* \* \*

(vii) Any water system subject to reduced monitoring frequency under paragraph (d)(4) of this section shall notify the State in writing in accordance with § 141.90(a)(3) of any upcoming change in treatment or addition of a new source. The State must review and approve the addition of a new source or change in water treatment before it is implemented by the water system.

\* \* \*

\* \* \* \* \*

(g) \* \* \*

(4) \* \* \*

(i) \* \* \* Samples collected every nine years shall be collected no later than every ninth calendar year.

\* \* \* \* \*

(iii) Any water system with a full or partial waiver shall notify the State in writing in accordance with § 141.90(a)(3) of any upcoming change in treatment or addition of a new source. The State must review and approve the addition of a new source or change in water treatment before it is implemented by the water system. The State has the authority to require the system to add or modify waiver conditions (e.g., require recertification that the system is free of lead-containing and/or copper-containing materials, require additional rounds(s) of monitoring), if it deems such modifications are necessary to address treatment or source water changes at the system. \* \* \*

8. Section 141.87 is amended as follows by:

- a. Revising the first sentence in paragraph (d);
b. Revising paragraph (e)(2)(i); and
c. Adding as the last sentence of (e)(2)(ii).

§ 141.87 Monitoring requirements for water quality parameters.

\* \* \* \* \*

(d) Monitoring after State specifies water quality parameter values for optimal corrosion control. After the State specifies the values for applicable water quality control parameters reflecting optimal corrosion control

treatment under § 141.82(f), all large systems shall measure the applicable water quality parameters in accordance with paragraph (c) of this section and determine compliance with the requirements of § 141.82(g) every six months with the first six-month period to begin on either January 1 or July 1, whichever comes first, after the State specifies the optimal values under § 141.82(f). \* \* \*

(e) \* \* \*

(2) \* \* \*

(i) Any water system that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the State under § 141.82(f) during three consecutive years of monitoring may reduce the frequency with which it collects the number of tap samples for applicable water quality parameters specified in this paragraph (e)(1) of this section from every six months to annually. This sampling begins during the calendar year immediately following the end of the monitoring period in which the third consecutive year of six-month monitoring occurs. Any water system that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the State under § 141.82(f), during three consecutive years of annual monitoring under this paragraph may reduce the frequency with which it collects the number of tap samples for applicable water quality parameters specified in paragraph (e)(1) of this section from annually to every three years. This sampling begins no later than the third calendar year following the end of the monitoring period in which the third consecutive year of monitoring occurs.

(ii) \* \* \* Monitoring conducted every three years shall be done no later than every third calendar year.

\* \* \* \* \*

9. Section 141.88 is amended as follows by:

- a. Revising paragraph (b);
b. Adding a sentence to the end of paragraph (d)(1)(i);
c. Revising paragraph (d)(1)(ii);
d. Revising paragraph (e)(1) introductory text; and
e. Revising paragraph (e)(2) introductory text.

§ 141.88 Monitoring requirements for lead and copper in source water.

\* \* \* \* \*

(b) Monitoring frequency after system exceeds tap water action level. Any system which exceeds the lead or copper action level at the tap shall collect one source water sample from each entry point to the distribution

system no later than six months after the end of the monitoring period during which the lead or copper action level was exceeded. For monitoring periods that are annual or less frequent, the end of the monitoring period is September 30 of the calendar year in which the sampling occurs, or if the State has established an alternate monitoring period, the last day of that period.

\* \* \* \* \*

(d) \* \* \*

(1) \* \* \*

(i) \* \* \* Triennial samples shall be collected every third calendar year.

(ii) A water system using surface water (or a combination of surface and groundwater) shall collect samples once during each calendar year, the first annual monitoring period to begin during the year in which the applicable State determination is made under paragraph (d)(1) of this section.

\* \* \* \* \*

(e) \* \* \*

(1) A water system using only ground water may reduce the monitoring frequency for lead and copper in source water to once during each nine-year compliance cycle (as that term is defined in § 141.2) provided that the samples are collected no later than every ninth calendar year and if the system meets one of the following criteria:

\* \* \* \* \*

(2) A water system using surface water (or a combination of surface water and ground water) may reduce the monitoring frequency in paragraph (d)(1) of this section to once during each nine-year compliance cycle (as that term is defined in § 141.2) provided that the samples are collected no later than every ninth calendar year and if the system meets one of the following criteria:

\* \* \* \* \*

10. Section 141.90 is amended as follows by:

- a. Adding a sentence to the end of paragraph (a)(1);
- b. Revising paragraph (a)(3);
- c. Revising paragraph (e)(1);
- d. Revising paragraph (e)(2) introductory text;
- e. Revising the last sentence of paragraph (e)(2)(ii);
- f. Revising paragraph (f)(1) introductory text; and
- g. Revising paragraph (f)(1)(i).

**§ 141.90 Reporting requirements.**

\* \* \* \* \*

(a) \* \* \* (1) For monitoring periods with a duration less than six months, the end of the monitoring period is the last date samples can be collected

during that period as specified in §§ 141.86 and 141.87.

\* \* \* \* \*

(3) At a time specified by the State, or if no specific time is designated by the State, then as early as possible prior to the addition of a new source or any change in water treatment, a water system deemed to have optimized corrosion control under § 141.81(b)(3), a water system subject to reduced monitoring pursuant to § 141.86(d)(4), or a water system subject to a monitoring waiver pursuant to § 141.86(g), shall send written documentation to the State describing the change. The State must review and approve the addition of a new source or change in water treatment before it is implemented by the water system.

\* \* \* \* \*

(e) \* \* \*

(1) No later than 12 months after the end of a monitoring period in which a system exceeds the Lead Action Level in sampling referred to in § 141.84(a), the system must submit written documentation to the State of the material evaluation conducted as required in § 141.86(a), identify the initial number of lead service lines in its distribution system at the time the system exceeds the Lead Action Level, and provide the system's schedule for annually replacing at least 7 percent of the initial number of lead service lines in its distribution system.

(2) No later than 12 months after the end of a monitoring period in which a system exceeds the Lead Action Level in sampling referred to in § 141.84(a), and every 12 months thereafter, the system shall demonstrate to the State in writing that the system has either:

(i) \* \* \*

(ii) \* \* \* In such cases, the total number of lines replaced and/or which meet the criteria in § 141.84(c) shall equal at least 7 percent of the initial number of lead lines identified under paragraph (1) of this section (or the percentage specified by the State under § 141.84(e)).

\* \* \* \* \*

(f) \* \* \* (1) Any water system that is subject to the public education requirements in § 141.85 shall, within ten days after the end of each period in which the system is required to perform public education in accordance with § 141.85(b), send written documentation to the State that contains:

(i) A demonstration that the system has delivered the public education materials that meet the content requirements in § 141.85 (a) and the

delivery requirements in § 141.85(b); and

\* \* \* \* \*

11. Section 141.154 is amended by revising paragraph (d) introductory text, paragraph (d)(1) and (d)(2) to read as follows:

**§ 141.154 Required additional health information.**

\* \* \* \* \*

(d) Systems that detect any level of lead above the method detection limit of 0.001 mg/L in their drinking water pursuant to monitoring under § 141.86 must do one of the following:

(1) Include a short informational statement about the special effects of lead on children if the system's 90th percentile level is at or below the Lead Action Level. The statement must include the following information: "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 30 seconds to 2 minutes before using tap water and have your water tested. Additional information is available from the National Lead Information Center at 1-800-424-LEAD." The system may write its own educational statement, but only in consultation with the Primacy Agency.

(2) Include a short informational statement about the special effects of lead on children if the 90th percentile sample is above the Lead Action Level. The statement must include the following information: "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 30 seconds to 2 minutes before using tap water and have your water tested. Additional information is available from the National Lead Information Center at 1-800-424-LEAD." The system may write its own educational statement, but only in consultation with the Primacy Agency.

\* \* \* \* \*