Drinking Water Lead Reduction Plan - EPA Activities to Improve Implementation of the Lead and Copper Rule

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EPA is announcing its plan for actions the Agency will undertake in response to its review of the Lead and Copper Rule. Our year-long evaluation did not reveal a national problem comparable to the situation observed in the District of Columbia in 2004. However, based on the information derived from our review we have identified opportunities to improve and clarify specific areas of the rule and our guidance materials. In an effort to improve implementation, we will initiate several actions in 2005 with a goal towards completing them later this year or next year. We will address a number of additional actions over a longer time frame because they require additional information collection and/or research. EPA will add elements and actions to this plan as needed to respond to the results of any further research, analysis and evaluation.

What are the basic requirements for the Lead and Copper Rule?

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, continues to fail to meet the lead action level, it must begin replacing the lead service lines under its ownership.

Large systems serving more than 50,000 people were required to conduct studies of corrosion control and to install the state-approved optimal corrosion control treatment by January 1, 1997. Small and medium sized systems are required to optimize corrosion control when monitoring at the consumer taps shows action is necessary.

What has been the focus of EPA's review?

Since early 2004, EPA has conducted a wide-ranging review of implementation of the Lead and Copper Rule to determine if there is a national problem related to elevated lead levels comparable to that experienced by the District of Columbia. Our review placed a focus on determining if the existing rule is being effectively implemented by states and local communities and on identifying where additional guidance or changes to the regulation are needed to improve implementation. During the year we:

- collected and analyzed lead concentration data and other information required by the regulations
- carried out a review of implementation in states
- held four expert workshops to further discuss elements of the regulations, and
- worked to better understand local and state efforts to monitor for lead in school drinking water, including a national meeting to discuss challenges and needs.

What did EPA find in its review?

The Agency found that the framework for the rule, which is focused on controlling corrosion, has been effective in lowering lead levels in drinking water since it was issued in 1991. More than 96% of utilities subject to the regulations were below the 15 ppb action level for all monitoring periods since 2000. A June 2004 review of SDWIS data found that, in 2003, monitoring results from only 88 of 2,758 utilities serving more than 3,300 people exceeded the action level. Our review of implementation did, however, identify some areas in which there was confusion about the existing regulations. We partially addressed some of these issues by releasing guidance in November 2004 on requirements related to monitoring and management of samples. Several additional issues are addressed through the regulatory revisions we are proposing and others will be addressed through renewed oversight of state programs. Participants attending workshops we held to discuss several areas of the regulations also raised pertinent issues that can affect the effectiveness of the regulations. While some of these issues are addressed in the Plan we are releasing today, others will require additional data collection to support decisions on specific actions.

What is EPA going to do in response to the results of the review?

We are going to initiate an effort to make several targeted changes to the regulations and significantly revise two guidance documents. We expect to complete the process needed to both complete the guidance documents and propose regulatory revisions in late 2005 or early 2006. We are continuing to review implementation at the state and utility level and will maintain oversight efforts to ensure that the rule is being carried out effectively. We will continue to work with partners to promote research in key areas, and on efforts to protect children from lead (including partnerships between utilities and schools to test for lead). We will also convene an additional expert workshop in mid-2005 to discuss issues associated with the lead content of plumbing fittings and fixtures.

What guidance documents will EPA revise?

We will revise and expand two guidance documents for completion in 2005. The 1994 guidance on Lead in Drinking Water in Schools and Non-Residential Buildings will be revised to focus on schools and child care facilities and to incorporate needs identified by stakeholders during a December 2004

national meeting. We will also update a 1999 guidance on Simultaneous Compliance, to support the Stage 2 Disinfection Byproducts Rule. The guidance will be enhanced to discuss in greater depth potential effects of treatment changes on maintaining corrosion control in a distribution system.

How will EPA address issues associated with monitoring?

As noted earlier, EPA released guidance in November 2004 to clarify some existing requirements of the regulations. To address confusion about sample collection we will revise the regulations to clarify language in the regulation that speaks to the number of samples required and the number of sites from which they should be collected. We will also modify definitions for a monitoring period and compliance period and make it clear that all samples must be taken within the same calendar year. Finally, we will revisit provisions relating to criteria for reduced monitoring to reconsider allowing large systems above the action level to reduce tap monitoring based solely on the results of their water quality parameter monitoring.

How will EPA address issues associated with treatment processes?

As noted earlier, EPA will significantly revise its existing guidance on simultaneous compliance matters. To further address concerns that utilities may not adequately consider the effects of treatment changes on corrosion control, we will propose to change the rule to require that a PWS notify the state of treatment changes 60 days prior to a treatment change, rather than 60 days after such a change. This will allow the state to provide input on the utility's decision to make treatment changes and to require additional monitoring, if the state determines that additional monitoring is needed.

How will EPA address issues associated with customer awareness?

One of the significant concerns in the District of Columbia was that homeowners were not notified of the results of tap monitoring that took place in their homes. While most utilities indicate that they provide the results of monitoring to customers, there is no requirement in the regulations. To address this issue, we will propose changes to the regulation to require that utilities provide occupant notification of the results of monitoring to detect lead in drinking water. This would include homeowners who participate in tap monitoring programs and parents, students, and staff at schools that are required to monitor for lead in drinking water because they are also a regulated water utility.

We will also seek changes to the regulations to permit states to allow utilities to modify the tap flushing directions to address local circumstances (e.g., 10 minute flushing recommendation for DC). We will provide guidance to states and utilities to help them determine an appropriate flushing time to recommend to customers.

How will EPA address issues related to lead service line replacement?

The current regulations allow a utility to consider a lead service line that tests below the action level as "replaced" for the purposes of compliance. We are proposing to revise the rule to indicate that a

line that tests out cannot be considered permanently replaced, such that if a subsequent treatment change caused the system to exceed the action level, the line would have to be reevaluated.

Are there additional issues that EPA will review over a longer time frame?

Yes. We have also identified a number of issues that we will continue to review as part of potential, more comprehensive revisions to the rule. The issues require additional data collection, research, analysis and/or full stakeholder involvement to support decisions. The issues include, but are not limited to, revision of mandatory public education language, requirements for consecutive systems, and broader revisions to monitoring and lead service line replacement requirements. EPA will provide additional information on these issues in the future as additional analyses are completed.