December 2, 2013

Dr. Peter Grevatt, Director
Office of Ground Water and Drinking Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N. W.
Mail Code: 4601M
Washington, DC 20460

Re: Applicability of *Reduction of Lead in Drinking Water Act* to Fire Hydrants

Dear Dr. Grevatt:

The American Water Works Association, Association of Metropolitan Water Agencies, National Association of Water Companies and National Rural Water Association are committed to the goal of the *Reduction of Lead in Drinking Water Act*. We share the goal of protecting people against lead exposure that affects public health. We appreciate EPA's ongoing efforts to resolve our concerns about EPA's recent interpretation extending applicability of the statute to fire hydrants in the final *Frequently Asked Questions* on the Act, response to Question 5, Oct. 22, 2013. As we have pointed out in previous correspondence the plain text of the statute does not address hydrants, and the legislative history makes clear that Congress intended to mirror the laws in three states, none of which extends lead-free requirements to hydrants. It is not reasonable to presume that members of Congress would have had hydrants in mind when crafting P.L. 111-380.

In addition, the strong attendance in EPA's webinar last Monday and the timing of this interpretation clearly illustrates that this inclusion has significant consequences for hydrant manufacturers, water works supply distributors, and drinking water systems. Comments by webinar speakers clearly illustrate that the October 22 FAQ has created a significant disruption in the hydrant market, with millions of dollars of projected financial losses nationally. Further, while presenting a costly and unexpected hurdle, the comments did not demonstrate that lead exposure from the use of hydrants as emergency supplies is a real risk warranting inclusion under P.L. 111-380.

Thank you for your commitment to clarify the Agency's position before January 4. Given the information provided during the webinar (see attached observations) we respectfully ask that the Agency clarify that hydrants are exempt from P.L. 111-380. We urge you to: (1) withdraw FAQ, Question 5 and the associated response; and (2) reconsider the Agency's premise for its current response to FAQ, Question 5, by preparing a FAQ response describing hydrants as exempt from compliance with P.L. 111-380.

We greatly appreciate your attention to this matter. Please feel free to contact any of the signatories to this letter to discuss this issue further.

Sincerely,

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Deputy Executive Director
American Water Works Association

Michael Deane
Executive Director
National Association of Water Companies

(for) Josh Abel
Federal Relations Coordinator
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Observations from
Webinar: *Reduction of Lead in Drinking Water Act* – Fire Hydrants
U.S. Environmental Protection Agency, November 25, 2013

The observations provided below summarize our interpretation of the issues discussed during the November 25 webinar. Though the issue of a longer transition period is discussed at length, we believe the issues raised in regard to making this transition represent significant costs and disruptions that are not warranted given the lack of any appreciable health benefit from a transition to lead-free fire hydrants. Thus, our position remains that a fire hydrant exemption from P.L. 111-380 requirements is the most prudent course of action.

What is the frequency and duration of potable water uses of fire hydrants?

The infrequent nature with which hydrants are used can best be appreciated when put into context. Available estimates are that between 12.5 and 15 million hydrants are currently installed in the United States.

Community water systems do not anticipate using hydrants for potable supplies. Many of the water systems representatives that spoke on the webinar indicated that they had not found it necessary to use a hydrant to provide water to consumers. When other timely options do not exist, use of a fire hydrant may be necessary. These situations were largely limited to:

1. Temporary connections for a single structure to assure water supply for fire protection and sanitation; some water provided may be used for drinking and cooking. These situations are typically less than a day in duration.
2. Temporary supplies for transient events where there are not established facilities, like street festivals, marathons, and similar community events where water intake is a minor fraction of overall long-term consumption. While these events may last up to several days, little water is provided at these transient events.
3. Temporary bypasses for infrastructure repair in order to provide continuous water service to groups of customers while a construction project is underway. This practice assures fire service (sprinkler systems), sanitation, and water for drinking and cooking. Typical construction practice is to advise the affected homes that a construction activity is ongoing (and such activity is clearly visible in the streetscape).

In the instances when hydrants are utilized as described above, standard operating procedures require that the hydrant is flushed and disinfected prior to being out in service, and once in use there is little opportunity for stagnate conditions associated with elevated levels of lead in drinking water.

The responses received from the webinar are consistent with an informal survey of AWWA member utilities both in terms of the types and durations of events during which hydrants may be used to provide potable water. A fourth situation was described on the webinar that occurs but is not relevant to the FAQ, the use of hydrants for construction and landscaping projects, street maintenance, and other similar purposes by private entities. In these instances, access is controlled through permitting processes and permittees are provided water for specific applications. The transfer and storage methods used by these permittees are not appropriate for water that may be consumed; these are not potable water applications.

What are the challenges of converting the existing manufacturing processes and the supply chains to lead free hydrants in the open position?

The comments made during the webinar clearly illustrate the need for a three-year implementation schedule as envisioned in P.L. 111-380. Each member of the supply chain has its own unique challenges to overcome and taken together, the cumulative challenge associated with transition is greater than a simple summation of each individual perspective's concerns. Concerns expressed on the webinar included sufficient time to:

1. Select materials and make design decisions that are compliant with relevant AWWA Standards and MSS Standards. Acquire or confirm that existing approvals remain valid for standards like UL Standards and FM Approvals. Compliance with all four of these standards is essential in the United States.
2. Test parts made with replacement lead-free alloys for actual function and durability.
3. Conduct third-party testing of replacement components for compliance with lead-free requirements. Time will be required to manufacture and deliver samples of replacement components (or entire assemblies) to third-party testing facilities to determine lead content by weight and account for the wetted surface of replacement components.
4. Clarify appropriate NSF 61 marks for hydrants. Implementing the current marking strategy currently relies on consistency between protocols used for compliance with California's lead-free standard and the national standard. There is also the issue of whether dry-barrel hydrants would need an NSF 372 mark in "open-position."
5. Transition to new procurement specifications. Only after there is a clear basis for development of a procurement specification will water systems be able to take steps to transition to new specifications from those used currently. Because water systems are most often public agencies, there will be state law and local ordinance restrictions limiting how these agencies undertake this transition including adherence to appropriate sunlight provisions. Procurement requirements could conceivably require re-bidding of current contracts for hydrant orders.

6. Many water systems maintain specific specifications to assure reliability and compatibility with fire-fighting equipment in the communities they serve. Some of these specifications require specific test protocols, inspection of sample hydrants, etc. Distributors will need to demonstrate compliance with these local requirements and accrue sufficient stockpiles of compliant hydrants to meet delivery requirements.
7. Manufacturers, distributers, and water systems must work within financial budgets. Disposing of hundreds of thousands of dollars of inventory is a severe financial shock. Similarly, it appears that, at least in the near-term, lead-free hydrants (and to an even greater extent, retrofitting of existing hydrants in inventory) will be more expensive than current models.
8. Revise fees for developers and others that purchasing hydrants through the water utility. With increases in the price of hydrants, new fee structures will need to be implemented with associated public approval processes, where water systems assure compatible hydrants by requiring developers to obtain hydrants through the utility.

Despite the best efforts of hydrant manufacturers to move toward compliance with P.L. 111-380, only a few of these steps have been undertaken since October 22. Most of these activities are dependent on other actions in the list. With each step requiring months to implement, the total time required to transition easily approaches the three-year transition period envisioned in P.L. 111-380.

What are the concerns with utilizing low lead brass on the upper portions of hydrants and the impacts on the reliability of the hydrants for fire protection?

Manufacturers, distributors, and water systems are painfully aware of instances in the past where seemingly small changes led to substantial problems in the field. Changes in designs, alloys, even greases, used in hydrants have led to in-the-field retrofit campaigns encompassing hundreds of thousands of hydrants. These situations arose when changes were made in a thoughtful way with adequate time for testing. Without first-hand knowledge of the changes being made to comply with P.L. 111-380 it is not possible to make informed projections of what problems might be incurred, but the risks include but are not limited to:

1. Brittleness leading to failure to function or breakage during use,
2. Brittleness leading to shortened effective life of installed hydrant inventory and thus increased probability that a hydrant will not be in working order when needed,
3. Delay in delivery to market due to a need to change castings, or
4. Delay in delivery to market due to a need to more extensively retool production lines to handle the new alloys.

How much time is necessary to transition to hydrants compliant with P.L. 111-380?

If fire hydrants are not exempt from lead-free requirements, we believe that a full three-year transition period as envisioned in P.L. 111-380 is appropriate. This period is sufficiently long for an orderly transition to hydrants constructed using alternative alloys. It is also a sufficiently long period for utilization of existing inventories of hydrants and hydrant parts at water systems, in distributors' yards, and at manufacturers' facilities. During the webinar speakers explained that current inventories included:

1. A diverse array of hydrant models, many of which have been tailored to specific utility specifications.
2. Specific types of hydrants that have particular regional appeal (e.g., use of wet-barrel hydrants are largely limited to California and Hawaii).
3. Parts and hydrants are designed for a range of bury depths, not all of which will be immediately useful.
4. Salvaged hydrant components which are as valuable as new hydrant components to water systems with installations of models that are no longer manufactured or supported.

Utilizing data compiled by EPA in its 2006 Community Water System Survey and the State Drinking Water Information System, in combination with information on hydrants collected in AWWA's WaterStat's database and information from water systems, it is clear that the value nationally of the inventories of hydrants held by utilities approaches and likely exceeds $100 million. There would also be inventories at distributors and additional inventories of salvaged hydrant components. Taken together the value of existing hydrant inventories is substantial. Use of retrofit kits may reduce this loss for at least some models of hydrants but it will not be an inexpensive solution in its own right, nor a solution for all hydrant models or salvaged hydrant components.

P.L. 111-380 was expressly drafted in a way that moved materials used in the delivery of potable water toward a new lower lead level in a way that minimized economic harm, allowed for overcoming technical challenges, and would inform but not interfere with the marketplace.