LCR EPA revision of HQ-OW 2017-0300 Comments April 12, 2021

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EPA was correct to move to withdraw and revise the LCR revision published in January 2021. It was poorly conceived, not well supported by the science, very expensive, not cost effective, and it does not get to the root of the reasons why the 30 year old LCR has not been fully implemented.

Questions that were not addressed and resolved:

Why has the LCR not been fully implemented? Why have some of the States not exercised their legal responsibilities and required compliance in some of their communities?

Is it because of costs, lack of technical expertise, lack of technical assistance, lack of understanding, monitoring difficulties, or lack of health concern and therefore low priority, since national blood lead reductions have been greater than 95% since the 1976-1980 NHANES II and banning lead paint elimination of leaded gasoline and elimination of some other lead containing products. Those matters were not adequately addressed in the January LCR, but their answers should have formed the basis for any modifications that might be included in a revised regulation.

-15 ug/L on first draw stagnant samples from higher risk locations is an appropriate benchmark for excessively corrosive water. Some people mistakenly compare that screening procedure action level with the WHO, EU 10 ug/L and Canadian 5 ug/L. They are not relatable; the LCR is more protective than those recommendations, partly because it is an enforceable regulation. The EU level is supposed to reflect water that people drink and it allows flushing taps and running water samples. A running water sample could easily be collected so it would never exceed a 10 or 15 ug/L action level. It could be more difficult to avoid exceeding 5 ug/L where lead plumbing is in the house, still exists in parts of Europe. The EPA LCR value is intended to be a worst case corrosion indicator based on worst case stagnant water sampling, not water that is routinely consumed. It is the logical approach for protecting against lead in drinking water.

-The revised regulation should more strongly point out that corrosion control is the more significant corrective action than service line replacement. It deals with all sources of lead: tap high lead brass, old galvanized home plumbing, old high lead solder, and the service line. And importantly, it can be implemented much more rapidly, in months for the entire community versus than multiyear service line identifications and replacements in individual homes.

-How does EPA plan to deal with situations where the cause of lead in water is old galvanized iron pipe in old domestic plumbing? Washington DC found that most high lead values occurred simultaneously with high iron, which related to galvanized iron pipe in the home.

-While reviewing the revised LCR, EPA should immediately demand implementation and compliance with existing LCR while figuring out if and what needs to be changed to simplify it. It should convene the state regulators and technologists to determine what has retarded compliance all these years.

-Moving from 7% to 3% service line replacement in the event that corrosion control is inadequate, is irrational, if there is a risk to be abated.. The 7% rate should be retained.

-The additional reporting requirements will be very expensive and perhaps take resources away from corrosion control. They would be unnecessary if the States enforced the original LCR.

-It is difficult to know how reasonable the cost benefit analysis in the January LCR is. Does it take into consideration the drastic declines of child blood leads that have occurred over the years, as demonstrated by the recent CDC publication of data to 2016? The BLs are even somewhat lower now. Does it differentiate drinking water blood lead contributions from the numerous other contributors? Even in Flint, according to CDC there was a slight increase of 2% of the children from below 5 ug/dL, to above 5ug/L, but no increase to the very small number above 10 ug/dL (it actually was slightly reduced).

-With knowledge of the causes of the non-compliance the revised regulation could be tailored to simplify the implementation and reduce the very high implementation costs.

-It is important to 'find and fix ' specific homes where high levels are detected during monitoring. They should not be treated as OK if the community value does not exceed the 15 ug/L first draw 90th percentile numbers.

-Regarding corrosion control vs service line replacement, it is easy to argue politically, but it is also misleading, incomplete, very slow, and very expensive. If the water is not corrosive to lead containing materials, lead exposure will be controlled, and lead service lines will be eliminated by attrition and when major water mains are being repaired.

-The 5th liter sampling is arbitrary and cannot work in many cases of different length service lines. Five liters would be about 16 meters of slightly less than 1 inch ID pipe. Old tuberculated pipe in old homes, where the likely problems are, is probably smaller volume, so the appropriate length is very site specific.. The traditional practical way of locating a water sample from pipe in the ground is to run the water at a tap until a change of temperature is detected.

-One operating method that has been problematic and could be fixable has been recruiting enough single home occupants to agree to do the first draw monitoring in the morning. Washington, DC had the experience of having to find at least twice as many homes to agree to participate, but then it has to scrape to have a sufficient number to actually do the sampling in their homes. The other problem is that it is not known if they all follow the sampling directions. The data are no better than the proper sampling procedure. Samples should be collected by trained personnel so that the data are interpretable. Another compliance approach to consider is to establish some lead service line pipe loops and monitor them to determine changes in the water’s corrosivity.

-Keeping and enforcing the 15ug/L action level and dropping mention of the pseudo 10 ug/L level is the appropriate way to go now. That extra number makes it appear that there are two regulations and would add to the implementation confusion.

-Small water systems are the most likely to have the greatest implementation difficulties. EPA and States must find specific support procedures to assist them.

-Corrosion control is the logical dominant, cost effective and quickest mitigation approach, service line replacement can be done selectively where corrosion control is not adequate. Corrosion control works and it is quick, and not expensive, and even has peripheral benefits. Washington DC has done it successfully by adding s few milligrams per liter of phosphate. That is about 1 pound of phosphate in 225,000 liters of water. They take it out at the wastewater plant and produce a very nutritious soil amendment and fertilizer that farmers and landscapers love.

-Universal accelerated service line replacement is generally a political rather than public health matter, exacerbated by the misunderstood past Flint situation that was caused by the malfeasance of the State of Michigan regulators. Corrosion control, when needed, is a broad technically feasible and successful solution. It covers all of the lead in all of the community water plumbing sources and it can be implemented much more rapidly.

-A logical and practical way to make lead abatement automatic would be to include it in the existing requirements that apply to lead paint abatement at the time of real estate transfers, as well as to landlords in rental properties. In that way it would be financed by the beneficiaries.

EPA should take advantage of this opportunity and rethink the January LCR and make it sensible and workable and cost effective.

Thank you for the opportunity to provide comments.

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