

## SAB review of proposed LCR May 11,2020

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My name is Joseph Cotruvo. I was Director of EPA's Drinking Water Standards Division when the original LCR was proposed, but had moved to Director of the Risk Assessment Division in Toxics before the LCR was promulgated. I can give you a sense of the thinking that went into the Rule's design, and a few suggestions on a path forward.

The LCR has now been in effect for almost 30 years. It has had some successes (e.g. Washington, DC) but it has not been fully implemented in all regulated communities in all of that time. **Why not** is the key question that should be specifically addressed in detail by this proposed adjustment. Unfortunately, that question was not directly addressed.

The LCR was uniquely designed to address the very complex challenge of the multiple sources of lead solder, lead service line, and leaded brass contact in plumbing, and the variability and unpredictability of potential exposure house by house and by use patterns over time. After much internal debate in the agency, it was decided that the best health and exposure reduction course was to force additional corrosion control, and ultimately lead service line replacement faster than attrition, where corrosion control was not sufficient. A surrogate relatively worst case corrosion indicator approach and action level were concluded to be the most comprehensive decision rule, and it applies to water that is not supposed to be consumed. The rule required 1 liter stagnant first draw (6 hr minimum) samples, minimum number of samples was population based, locations were to be weighted to likely worst case areas based upon plumbing factors, and the 90<sup>th</sup> percentile of required results less than 15 ug/L Pb and 1.3 mg/L Cu was the determinant.

Some governments have an MCL type regulatory approach for lead. However, they apply to water that is commonly consumed, i.e. running water samples, not stagnant samples. That would significantly reduce the likelihood of detecting high values.

Why has the LCR not been fully implemented? Are economics of compliance, complex technical problems that require case-by-case study and choices, lack of EPA technical support, lack of corrosion management expertise in the industry, lack of federal subsidies, or lack of consensus on significance and priorities among some states or communities?

Corrosion control is the key beneficial requirement. Lead service line replacement is a partial solution. Obtaining a valid inventory of remaining lead service lines is appropriate. The original sampling was designed to address lead from brass faucets and a run of lead soldered joints. So an appropriate monitoring adjustment by adding a second sample attempting to hit the service line water would be appropriate. Ultimately placing lead service lines in the same category as old lead paint and radon, and requiring assessment and mitigation as a factor in real estate transfers would be effective and also allocate the costs to the buyer and seller, rather than the entire community. For advice to the public, drinking, cooking with, and baby formula first draw water should not occur, and the same for water from the hot water tap.