

Remarks to EPA Regarding Public Education Requirements of the Lead and Copper Rule Improvements

Submitted January 2024 by Elin Betanzo, President and Founder of [Safe Water Engineering, LLC](#)

- ❖ It is critical that all outreach and education materials required in the Lead and Copper Rule Improvements are factual, scientifically defensible, and easy for any reader to understand.
- ❖ EPA stated in the 1991 LCR, "lead and copper levels at the tap can be highly variable...due to many factors including the amount of lead and copper in the resident's plumbing or in the PWS's distribution system . . . temperature, age of plumbing components, chemical and physical characteristics of distributed water..."
- ❖ The LCRI clearly states that "particulate lead can be highly variable, depending upon changes in pressure and flow volume, velocity, and/or direction, particulate release is not captured consistently in any individual sample." This is a quote from Mike Shock's research from 1990.
- ❖ We have known since 1990 that a LCR sample result does not indicate the risk of exposure to lead in drinking water at a single tap. The LCR Public Education language has been incredibly misleading for its entire history. Despite our knowledge, at this moment, the second step on the EPA web page entitled "[Find out if lead is in your drinking water](#)" is to have your water tested for lead.
- ❖ Scientific research consistently demonstrates that one time lead samples are not sufficient to claim that "water is safe" or that there is no lead in the water. Sheldon Masters published research in 2016 that it would take 100s of samples to reach the conclusion that water is safe.
- ❖ Further, the LCRR and LCRI have no provisions to sample at high-risk copper sites. There is no requirement to collect data that can support claims that water is "safe" for copper.
- ❖ Because LCR outreach is not scientifically defensible, I am constantly put in the position of having to correct people's understanding of lead in water based on what they've read from required materials from EPA and their primacy agency.
- ❖ To support implementation of the Michigan Lead and Copper Rule revisions, I worked with University of Michigan faculty in the schools of public health, engineering, and public policy to develop [a set of fully cited FAQs that do provide the facts about lead in drinking water](#). Our work provides data and explanations for the essential information the LCR omits about lead in drinking water. We had full support of UM faculty, one of the premier public research universities in the country, and we prepared information that consistently points out the inconsistencies and gaps in the messaging required by EPA.
- ❖ Having the highest-ranking state university and [national football champions](#) correct EPA is NOT the way to build trust and confidence in public drinking water.
- ❖ Messaging that is based on science must be clear about who needs to be aware of the risk of lead in drinking water: Anyone with a lead, galvanized or unknown service line and lead in their premise plumbing. When the true limitations of sampling and flushing are clearly communicated, it becomes obvious that [certified lead reducing filters](#) are and should be promoted as the most reliable and effective precautionary measure available at this time.