



May 4, 2020

Dr. Thomas Armitage, Designated Federal Officer (DFO)  
EPA Science Advisory Board (1400R)  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue NW, Washington, DC 20460  
via email: [armitage.thomas@epa.gov](mailto:armitage.thomas@epa.gov)

Dear Dr. Armitage,

We provide these comments for consideration by the EPA Science Advisory Board (SAB) in their review of EPA's *National Primary Drinking Water Regulations: Proposed Lead and Copper Rule Revisions*. We urge the SAB to consider aspects of the Proposed Revisions where EPA's proposal missed the mark in terms of achieving significant public health risk reduction given the information available to them. We draw your attention to several examples.

**In our comments on the Proposed Revisions, we argued that EPA should require water systems to cover the cost of replacement regardless of ownership or whether the line is located under private or public property.** Research demonstrates that requiring building or homeowners to cover part of the cost of lead service line placement will disparately impact low income people and people of color. Research supports this approach.

1. The environmental justice review commissioned by EPA as part of the rulemaking process found that low-income and minority populations are more likely to live in older housing that has LSLs, which when present are the largest source of lead in drinking water. The review found that some of the proposed LCR revisions would benefit all populations equally. However, the environmental justice review also found that LCR provisions that presume customers must pay for things, including covering part of the cost of LSLs, will leave low-income people with disproportionately higher health risks.<sup>1</sup> EPA notes this finding in the proposed LCR preamble, but determines that as a whole the

---

<sup>1</sup> Abt Associates, *Environmental Justice Analysis for the Proposed Lead and Copper Rule Revisions*, October 22, 2019, Docket No. EPA-HQ-OW-2017-0300-0008

proposed LCR meets the intent of *Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*.<sup>2</sup> This Executive Order requires incorporation of environmental justice into federal agency missions and requires agencies to determine if their actions “... have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples.”<sup>3</sup> EPA appears to argue that because the majority of the benefit of the proposed LCR revisions come from the improved corrosion control provisions and since there are federal and state funding sources to cover these costs, the potential disparate impact of requiring customers to cover part of the cost of LSL replacement does not present disproportionate risk to low-income and minority populations. However, this report itself demonstrates the potential for inequitable distribution of benefit, which is not consistent with the intent of the 1994 Executive Order. We argue that the potential for the benefits of full LSL replacement to be inequitably distributed is not consistent with the intent of the 1994 Executive Order on Environmental Justice.

2. Recent research confirms the risk of health inequity when home or building owners are required to contribute to the cost of full replacement. *Lead Pipes and Environmental Justice: A Study of Lead Pipe Replacement in Washington DC*, a March 2020 report published by the Environmental Defense Fund and American University, found that DC Water’s replacement program, which required customers to contribute to the cost of full replacement, had the unintended consequence of disproportionately impacting low-income and minority neighborhoods.<sup>4</sup>

**EPA should do more to prevent partial lead service line replacements.** EPA asked the SAB to review existing scientific data and evaluate the effectiveness of partial lead service line replacements in reducing water lead levels. In 2011, the SAB found that available data was not adequate to fully answer this question. The SAB did conclude that data does not demonstrate that partial replacements reliably reduce water lead levels and that they can increase lead exposure

---

<sup>2</sup> Executive Order 12898 (59 FR 7629, February 16, 1994), <https://www.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice>

<sup>3</sup> *Federal Register*, p. 61,740

<sup>4</sup> *Lead Pipes and Environmental Justice: A Study of Lead Pipe Replacement in Washington DC*, Environmental Defense Fund and American University, March 2020

for days, months, or even longer.<sup>5</sup> EPA's proposal reflects this finding that partial replacements do not reliably reduce lead at the tap, and may increase them in several ways, but stops short of solving the problem. EPA should prohibit partial lead service line replacements during routine maintenance, with provisions for temporary waivers for special circumstances where customers refuse to work with the water system or to grant access to the property. A prohibition on partial replacements except in emergencies and special circumstances, with a goal of virtually eliminating this practice, would be consistent with the public health protection goals of the LCR and with the SAB's findings on this issue.

**EPA did not appropriately consider the available information about low level lead exposure and adult cardiovascular disease (CVD) and did not quantify the benefits of reducing this health outcome.** We urge the SAB to consider comments to EPA on the *Proposed Revisions* from the Environmental Defense Fund (EDF). EDF estimated that consideration of CVD deaths would significantly increase the benefit of EPA's proposal. If EPA required full replacement of all lead service lines, it would result in more than \$205 billion on societal benefits from reduced CVD deaths.<sup>6</sup> Quantifying the benefits of reduced death from CVD, an exercise that can be accomplished with existing EPA resources, demonstrates the benefits of maximum reduction of lead at the tap including through nationwide full replacement of lead service lines.

Thank you for the opportunity to comment on review of the Proposed Revisions to the Lead and Copper Rule.

Lynn Thorp  
National Campaigns Director

---

<sup>5</sup> <https://www.epa.gov/sdwa/science-advisory-board-evaluation-effectiveness-partial-lead-service-line-replacements>

<sup>6</sup> Environmental Defense Fund, *Comments regarding cardiovascular disease benefits from proposed revisions to the Lead and Copper Rule in the National Primary Drinking Water Regulations*, February 12, 2020