Before the Environmental Protection Agency
WASHINGTON, D.C. 20240

In Re: Petition for Rulemaking Governing Data Collection)
Under the Lead and Copper Rule)

To the Administrator of the Environmental Protection Agency:

Petition for Rulemaking

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Jeff Ruch
Executive Director
Public Employees for Environmental Responsibility
962 Wayne Ave, Suite 610
Silver Spring, MD 20910
Tele: 202.265.7337

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SUMMARY

This petition, filed by Public Employees for Environmental Responsibility (PEER), requests that the Environmental Protection Agency (EPA) take cost-effective steps to strengthen its oversight of the Lead and Copper Rule (LCR) to better prevent exposure of the public, especially children and pregnant women, to lead in drinking water.

In 2017, the Government Accountability Office (GAO) issued a report[1] recommending that the EPA improve its ability to identify water systems that might pose a higher likelihood for having reported violations of the LCR, and thus, significantly enhance its oversight of such water systems. Specifically, the GAO recommended that

- The Assistant Administrator of EPA's Office of Water should require states to report available information about lead pipes to EPA's Safe Drinking Water Information System (SDWIS/Fed) or a future redesign such as SDWIS Prime database;
- The Assistant Administrator of EPA's Office of Water should require states to report all 90th percentile sample results for small water systems to EPA's SDWIS/Fed (or a future redesign such as SDWIS Prime) database; and
- The Assistant Administrator of EPA's Office of Water and the Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance should develop a statistical analysis that incorporates multiple factors—including those currently in SDWIS/Fed and others such as the presence of lead pipes and the use of corrosion control—to identify water systems that might pose a higher

[1] U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-17-424, DRINKING WATER: ADDITIONAL DATA AND STATISTICAL ANALYSIS MAY ENHANCE EPA'S OVERSIGHT OF THE LEAD AND COPPER RULE, (2017).

likelihood for violating the LCR once complete violations data are obtained, such as through SDWIS Prime.

The GAO recommended that EPA incorporate these steps in its planned revision of the LCR. However, the EPA has repeatedly delayed its promulgation date for this revision, now slated for completion in February 2020.[2] In light of those delays, this petition urges EPA to obtain this data now both to better protect public health but also to inform its efforts to revise the LCR.

PETITION FOR RULEMAKING

Currently, 40 C.F.R. § 142.15, Reports by States, provides, in relevant part:

> Each State which has primary enforcement responsibility shall submit to the Administrator the following information:
>
> …
>
> (c) Special reports—
>
> …
>
> (4) States shall report quarterly, in a format and on a schedule prescribed by the Administrator, the following information related to each system's compliance with the treatment techniques for lead and copper under 40 CFR part 141, subpart I during the preceding calendar quarter. Specifically, States shall report as follows:
>
> [Sections (4)(i) and (ii) deal with reports prior to January 14, 2002]…
>
> (iii) For all reports submitted on or after January 14, 2002, States shall report the PWS identification number of each public water system identified in paragraphs (c)(4)(iii)(A) through (F) of this section.
>
> (A) For each large and medium-size public water system, all 90th percentile lead levels[3] calculated during each monitoring period specified in § 141.86 of this

[2] EPA, NATIONAL PRIMARY DRINKING WATER REGULATIONS FOR LEAD AND COPPER: REGULATORY REVISIONS (Spring 2018), https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=201804&RIN=2040-AF15.

[3] "90th percentile sample results" is a term that appears a lot; in layman's terms, it means that, in essence, no more than ten percent (10%) of the samples for lead or copper can be above the "action level"—that is, the level the EPA set as the point where corrective and preventative measures kick in.

chapter, and the first and last day of the monitoring period for which the 90th percentile lead level was calculated;

(B) For each small public water system, the 90th percentile lead level calculated during each monitoring period in which the system exceeds the lead action level, and the first and last day of each monitoring period in which an exceedance occurred;

PEER proposes that EPA:

1. Amend 40 C.F.R. § 142.15 (4)(iii)(B), to remove the phrase "in which the system exceeds the lead action level"; this would require reporting of all 90th percentile lead levels calculated by small public water systems, rather than the ones that are already exceed the threshold.

2. Amend 40 C.F.R. 141.42(d) from

"(d) Community water supply systems shall identify whether the following construction materials are present in their distribution system and report to the State:
Lead from piping, solder, caulking, interior lining of distribution mains, alloys and home plumbing.
Copper from piping and alloys, service lines, and home plumbing.
Galvanized piping, service lines, and home plumbing.
Ferrous piping materials such as cast iron and steel.
Asbestos cement pipe.
In addition, States may require identification and reporting of other materials of construction present in distribution systems that may contribute contaminants to the drinking water, such as:
Vinyl lined asbestos cement pipe.
Coal tar lined pipes and tanks."

To

"(d) Community water supply systems shall identify whether the following construction materials are present in their distribution system and report to the State:
Lead from piping, solder, caulking, interior lining of distribution mains, alloys and home plumbing.
Copper from piping and alloys, service lines, and home plumbing.
Galvanized piping, service lines, and home plumbing.
Ferrous piping materials such as cast iron and steel.
Asbestos cement pipe.

In addition, States may require identification and reporting of other materials of construction present in distribution systems that may contribute contaminants to the drinking water, such as:

Vinyl lined asbestos cement pipe.

Coal tar lined pipes and tanks.

(e) In the course of this material evaluation, community water supply systems shall report the presence of the above materials to the SDWIS/Federal or subsequent equivalent federal databases:

(i) Lead from piping, solder, caulking, interior lining of distribution mains, alloys and home plumbing.

(ii) Copper from piping and alloys, service lines, and home plumbing."

3. Amend 40 C.F.R. § 141.86(a)(2), where it cross references § 141.42(d), from

"A water system shall use the information on lead, copper, and galvanized steel that it is required to collect under § 141.42(d) of this part [special monitoring for corrosivity characteristics] when conducting a materials evaluation…"

To

"A water system shall use the information on lead, copper, and galvanized steel that it is required to collect under § 141.42(d) of this part [special monitoring for corrosivity characteristics] when conducting a materials evaluation…and shall, in the course of conducting its materials evaluation, report its findings to the SDWIS/Fed or current equivalent federal system as it would be required to report to the State under § 141.42(d)-(e)…"

Arguments in Support of Petition

I. CONGRESS AUTHORIZED THE ADMINISTRATOR OF THE EPA TO PROMULGATE REGULATIONS TO IMPLEMENT THE SAFE DRINKING WATER ACT

The Safe Drinking Water Act was enacted in 1974 to protect the quality of drinking water in the United States; as a part of this, the EPA promogulated the National Primary Drinking Water Regulations, 40 C.F.R. § 141.1, *et al*. as well as the National Primary Drinking Water Regulations Implementation found at 40 C.F.R. § 142. Implemented in 1991, the Lead and Copper Rule is part of the larger Primary Drinking Water Regulations; recognizing the

substantial threat to human health posed by lead and copper contamination of the water supply, the LCR set up several protocols and standards to combat the problem. An "action level" (AL) for each contaminant (0.015 mg/L of lead and 1.3 mg/L of copper) was established; exceeding this action level was a trigger for further requirements under the LCR.[4][5]

As the rule currently stands, small water systems (comprising 58,000 of 68,000 water systems subject to the LCR[6]) are only required to report the AL exceedances to the SDWIS/Fed database; although reporting *all* sample results that do not exceed the AL is "encouraged and will be accepted"[7], it is not required. The GAO report places heavy emphasis on this data gap:

> "Because it does not have complete 90th percentile sample results on small water systems, EPA does not have information on how such systems are managing the reduction of lead in their drinking water…[b]y requiring, [in a revised LCR], that states report all 90th percentile sample results for small systems…EPA would have data to track changes in lead levels over time among small systems and would be better positioned to assist states in early intervention for small water systems that are near the lead action level where appropriate."[8]

By altering 40 C.F.R. § 142.15 (4)(iii)(B) and 40 C.F.R. § 141.86(a)(2), the EPA can best implement GAO's first "Recommendation for Executive Action" as outlined in their 2017 report.[9] Requiring states to report available lead service lines (LSLs) information to the EPA SDWIS/Fed or its planned SDWIS Prime successor would allow for *proactive*, not *reactive* measures for elevated lead levels in small water systems.

[4] EPA, EPA 816-F-08-018, LEAD AND COPPER RULE: A QUICK REFERENCE GUIDE, (2008).
[5] Determining an AL exceedance relies on the 90th percentile level of samples: in essence, if 10% or more of the samples exceed the AL, then it is considered to be an AL exceedance for purposes of the LCR's other measures.
[6] *See* DRINKING WATER, *supra* note 1, at 29.
[7] *Id.*
[8] *Id.* at 29-30.
[9] *Id.* at 41.

Being able to track and monitor trends before an AL exceedance is recorded would mean that the EPA could better provide resources and assistance to small water systems before another Flint-like drinking water crisis occurs.

II. THE GAO REPORT FINDS SEVERAL MAJOR GAPS IN DATA USEFUL FOR PREVENTING ANOTHER FLINT-LIKE CRISIS

A. EPA Does Not Have the Necessary Data It Needs from Small Water Systems

One of the most notable conclusions the GAO reached is the utter lack of information available to EPA for purposes of developing approaches to prevent another Flint; "most states are not submitting data to the SDWIS/Fed database on water systems' use of corrosion control as required by the LCR", a 2006 GAO recommendation, and furthermore, "[t]he LCR does not require states to submit data to EPA's SDWIS/Fed database on all 90th percentile sample results for small water systems, only to provide sample results that exceed the lead action level"—in essence, meaning that EPA only hears once a problem has already arisen, making it nearly impossible to *prevent* such issues.[10]

Collecting data on the presence of lead pipes and LSLs within the water infrastructure was a requirement of the 1991 initial iteration of the LCR, so as to locate and identify regions or systems that might be especially vulnerable to high lead or copper concentrations, therefore marking them as requiring specific, targeted sampling programs.[11] Even prior to the 1991 LCR, a 1980 regulation, 40 C.F.R. § 141.42(d), also required water systems to identify, in part, if lead from piping, caulking, solder, lining, alloys, and home plumbing fixtures was present in the distribution system and pass that information along to the state.[12] However, there are evident

[10] *Id.* at 40.
[11] *Id.* at 26.
[12] *Id.*

disconnects in the regulatory structure: the LCR does not require the states to report this information to the EPA's SDWIS/Fed database, leading to a critical information gap.[13]

Following the Flint, Michigan water crisis, EPA asked states to create their own public local or state databases on LSLs in February 2016; however, five months later, EPA noted in a letter that while some states successfully acted as EPA requested, many states identified issues with identifying LSLs.[14] In response to the letter, 37 states indicated that they were or were planning on fulfilling the EPA request, with another four "considering" it; nine states, however, said they would not do so because of the issues involved in identifying LSLs. 13 states also further noted that the LCR *does not require* states to maintain information about LSLs, much less provide the information to the public.[15]

The current reporting system does not give EPA the necessary information on small water systems to prevent another Flint-like disaster. Small water systems are less likely to have the capacity (be it technical, financial, or managerial) to undertake actions to ensure safe drinking water; EPA's Office of Inspector General has noted as much, and EPA's own website mentions that small water systems face unique obstacles in providing safe drinking water. To combat these problems, the Safe Drinking Water Act (SDWA) *requires* that EPA assist states in ensuring that water systems obtain and continue to upkeep the technical, financial, and managerial capacity to do so, and *authorizes* EPA to provide technical assistance to small water systems.[16] But the states have not been required to submit to EPA the 90th percentile sample results that the small water systems report to them. Although *voluntary* reporting is encouraged,

[13] *See id.*
[14] *Id.* at 26-27.
[15] *Id.* at 27.
[16] *Id.* at 29.

only a little over thirty-four percent (34%) of the 58,000 small water systems have done so.[17] The GAO interviewed officials in the ten regional EPA offices, who said that the lack of 90th percentile sampling results from small water systems keeps EPA from observing such systems in SDWIS.[18] The proposed rulemaking change to 40 C.F.R. § 142.15 (4)(iii)(B) would require states to report all small water system 90th percentile sample results to the SDWIS database, giving EPA access to data to better track changes in lead levels among small systems, and allowing EPA to react in an earlier and more effective manner when lead levels approach problematic thresholds in small water systems.[19]

B. The New LCR Revisions Would Benefit from EPA Having the Data It Needs to Accurately Model and Predict Future Flint-Like Problem Areas

EPA officials with SWDA responsibilities interviewed by GAO indicated that having the recommended data "would give the agency a more complete national picture of lead in drinking water."[20] This enhanced understanding would both strengthen the enforcement of the current LCR and inform EPA efforts to complete its proposed LCR revisions.

Further, the GAO found in June 2011 that EPA had not been able to conduct the "comprehensive and routine" audits to verify data to ensure it had current knowledge of how complete the data states provided to the SDWIS was. (The GAO at the time recommended these audits resume; the GAO notes that as of October 2016, EPA reported it has not conducted another such audit).

[17] *Id.*
[18] *Id.* at 29.
[19] *Id.* at 29-30.
[20] *Id.* at 29.

It seems that EPA progress in strengthening the LCR is hobbled by the lack of comprehensive and reliable data on how the regulated water systems operate. Rather than waiting until its Notice of Proposed Rulemaking for the LCR Revisions, PEER urges that EPA take the long overdue steps now to ensure that it has adequate information to both proactively enforce the LCR but also determine how best to frame LCR revisions.

III. THE FLINT WATER CRISIS ILLUSTRATES THE NEED FOR PROMPT ADOPTION OF THESE RULES

These regulatory changes are critical and necessary to ensure that EPA has the tools it needs so as to provide an appropriate approach to the scourge of lead and other contaminants in Americans' drinking water, particularly in smaller communities. Further, by giving it the full picture of small water systems' lead levels, EPA can see when a system or region is starting to experience trouble and act before lead levels reach Flint-crisis-proportions. Similarly, by requiring reporting of LSLs to EPA, states and communities advance their own best self-interests by giving EPA a better sense of any given water system should a problem arise.

A new Flint-style water crisis could be prevented with these two datasets in hand because EPA will be on notice that a problem is growing before it becomes a health disaster. The agency would also have a better picture as to where and how the problem propagates. Knowing which sections have LSLs means EPA could target and help implement mitigation measures much more efficiently and rapidly.

The GAO report finds that "[t]he discovery of drinking water contaminated with toxic levels of lead in…Flint…renewed awareness about the danger that lead poses to public health when it enters drinking water….[A]ccording to estimates in an April 2016 study, there are at least 6.1 million homeowner- and water system-owned pipes with lead that deliver drinking

water to…5 to 7.5 percent of the nation's population."[21] Furthermore, the report notes that Flint was not the first time in "recent history" that lead contamination gave rise to concern.

The GAO had previously reported on these same shortcomings in the LCR twelve years ago.[22] As with the 2017 GAO report, EPA conceded the need to obtain this data but failed to act. Through this petition, PEER urges EPA to delay no longer and act now.

More recently, in July of 2018, EPA's own Office of Inspector General released a report criticizing EPA's management of Flint for wholly inadequate enforcement of existing LCR provisions.[23] The report charges that EPA's Regional Administrator for Region 5 (which includes Flint, Michigan) was not given adequate information, and what information was conveyed failed to underline the gravity of the situation, delaying EPA intervention.[24]

Making these proposed revisions now is not just a good idea, it is a *fundamental necessity* to ensure the continued viability of the Lead and Copper Rule, lest the regulations fail to fulfill the goals Safe Water Drinking Act again and another Flint occurs.

CONCLUSION

Lead exposure via drinking water is an urgent public health issue. As it stands currently, the LCR leaves EPA woefully uninformed and accordingly unprepared to step in so as to prevent another unacceptable Flint-like situation; relying on voluntary reporting of LSLs and only requiring 90th percentile reporting in small water systems already exceeding the action level means that EPA is kept entirely in the dark until the disaster is already beginning to unfold.

[21] *Id.* at 1.
[22] *Id.* at 3-4.
[23] EPA OFFICE OF INSPECTOR GENERAL, EPA Report No. 18-P-0221, MANAGEMENT WEAKNESS DELAYED RESPONSE TO FLINT WATER CRISIS 15 (2018).
[24] *Id.* at 21-22.

EPA is approaching yet another self-announced target date for beginning its process for revising the LCR. However, it does so with incomplete and inadequate data despite the repeated findings by GAO and acknowledgements by the agency. Having this data would enable EPA to better understand how systems are operating and, in turn, how best the LCR could be strengthened.