ORAL ARGUMENT NOT YET SCHEDULED

No. 21-1019 (consolidated with Nos. 21-1020, 21-1076)

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

NEWBURGH CLEAN WATER PROJECT, et al.,
Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,
Respondents.

On Petition for Review of a Rule of the
United States Environmental Protection Agency

INITIAL OPENING BRIEF OF PETITIONERS NEWBURGH CLEAN WATER PROJECT, NAACP, SIERRA CLUB, UNITED PARENTS AGAINST LEAD, AND NATURAL RESOURCES DEFENSE COUNCIL

Suzanne Novak
Marissa Lieberman-Klein
48 Wall Street, 15th Floor
New York, NY 10005
(212) 845-7376

Counsel for Petitioners Newburgh Clean Water Project, NAACP, Sierra Club, and United Parents Against Lead

Adeline S. Rolnick
Aaron Colangelo
Erik D. Olson
Natural Resources Defense Council
1152 15th Street NW, Suite 300
Washington, DC 20005
(202) 289-6868

Counsel for Petitioner Natural Resources Defense Council

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Additional counsel listed on following page

Nanding Chen
Natural Resources Defense Council
111 Sutter Street, 21st Floor
San Francisco, CA 94104
(484) 362-8970
nchen@nrdc.org

Counsel for Petitioner Natural Resources Defense Council

CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Pursuant to D.C. Circuit Rule 28(a)(1), Petitioners Newburgh Clean Water Project, NAACP, Sierra Club, United Parents Against Lead, and Natural Resources Defense Council certify as follows:

(A) Parties

The Petitioners are Newburgh Clean Water Project, NAACP, Sierra Club, and United Parents Against Lead (No. 21-1019); the Natural Resources Defense Council (No. 21-1020); and the State of New York, State of California, State of Illinois, State of Maryland, State of Minnesota, State of New Jersey, State of Oregon, Commonwealth of Pennsylvania, State of Wisconsin, and the District of Columbia (No. 21-1076). The Respondents are the United States Environmental Protection Agency and Michael S. Regan, Administrator of the United States Environmental Protection Agency. The Intervenor is the American Water Works Association.

(B) Ruling under review

The consolidated petitions for review challenge the Environmental Protection Agency's final rule titled "National Primary Drinking Water

Regulations: Lead and Copper Rule Revisions," published at 86 Fed. Reg. 4198 (Jan. 15, 2021).

(C) Related cases

There are no other cases involving the same underlying agency rule pending review in this Court or any other.

/s/ Adeline S. Rolnick
Adeline S. Rolnick

RULE 26.1 DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 26.1 and Circuit Rule 26.1, Petitioners Newburgh Clean Water Project, NAACP, Sierra Club, United Parents Against Lead, and Natural Resources Defense Council certify that each is a non-governmental corporation with no parent corporation and no publicly held company holding 10 percent or more of its stock.

Newburgh Clean Water Project is a grassroots community organization dedicated to ensuring that residents of Newburgh, New York have access to drinking water free from PFAS, lead, and other contaminants.

The NAACP is a civil rights organization whose mission is to secure the political, educational, social, and economic equality of rights in order to eliminate race-based discrimination and ensure the health and well-being of all persons.

Sierra Club is a national nonprofit organization dedicated to the protection and enjoyment of the environment.

United Parents Against Lead is a non-profit corporation committed to the protection of children from lead and other environmental hazards.

The Natural Resources Defense Council is a national nonprofit organization dedicated to improving human health and the quality of the human environment and to protecting the nation's endangered natural resources.

/s/ Adeline S. Rolnick
Adeline S. Rolnick

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GLOSSARY OF ABBREVIATIONS

Act	Safe Drinking Water Act
EPA	U.S. Environmental Protection Agency
ppb	parts per billion
µg/L	micrograms per liter

INTRODUCTION

Lead in drinking water is a serious threat to human health. Even low-level lead exposure impairs infants' and children's brain development, leading to attention disorders, impaired intellectual development, and other harms. Lead is also associated with cardiovascular disease and damaged kidney function in adults. The recent crisis in Flint, Michigan revealed the disaster that can result when pregnant women, infants, and children are exposed to high lead levels in tap water. There is no safe level of lead.

Lead primarily enters drinking water when water corrodes lead service lines—the pipes connecting a water main to a house. It is impossible to protect adequately against lead contamination without removing lead service lines. As long as lead lines remain in use, water systems must perennially treat their water to minimize its corrosive effects.

Under the Safe Drinking Water Act, the Environmental Protection Agency must protect the public from exposure to lead in drinking water. In 2021, EPA published long-overdue revisions to its decades-old standard for lead. In revising the standard, EPA violated the law,

squandered an opportunity to make much-needed improvements, and rolled back existing health protections. EPA's new rule fails to protect people's health.

EPA arbitrarily defied the Safe Drinking Water Act's mandate to set a health-based, enforceable limit on lead in tap water—called a maximum contaminant level—which Congress required unless it is not feasible to ascertain levels of lead in water. And the complex "treatment technique" EPA adopted instead of setting a health-based limit arbitrarily rejected feasible, health-protective, and widely supported improvements. First, EPA failed to mandate complete replacement of all lead service lines. Indeed, despite arguments from state regulators, health experts, water utilities, and EPA's own advisors that doing so is essential to protect health, EPA did not even consider or analyze the option. Second, EPA cut in half the rate at which water systems with high lead levels must replace their lead service lines, never analyzing whether it was feasible to maintain the current rate. Third, EPA refused to lower the level of lead contamination at which water systems must take the most protective measures to reduce health harm, disregarding extensive evidence that it was feasible to do so.

EPA's rule arbitrarily fails to prevent adverse health effects to the extent feasible, as required by the Safe Drinking Water Act. The Court should vacate and remand the challenged portions of the rule.

STATEMENT OF JURISDICTION

Petitioners seek review of EPA's final rule titled "National Primary Drinking Water Regulations: Lead and Copper Rule Revisions," 86 Fed. Reg. 4198 (Jan. 15, 2021). The Safe Drinking Water Act grants this Court jurisdiction to review the challenged rule. 42 U.S.C. § 300j-7(a). Petitioners timely filed the petitions for review in Case Nos. 21-1019 and 21-1020 on January 15, 2021, within 45 days of the date of the rule's promulgation. *Id.*; 86 Fed. Reg. at 4198 (JA).

STATUTES AND REGULATIONS

Pertinent statutes and regulations are reproduced in a separate addendum.

STATEMENT OF THE ISSUES PRESENTED

1. Whether EPA arbitrarily refused to set a maximum contaminant level for lead in drinking water, without justifying why it is infeasible to ascertain levels of lead in water.

2. Whether EPA arbitrarily failed to promulgate a treatment technique for lead in drinking water that prevents health harm to the extent feasible, by: (a) refusing to mandate complete replacement of lead service lines by all water systems, (b) slowing down the lead service line replacement rate for medium and large water systems that exceed a designated level of lead in the water, and (c) failing to lower the level of lead contamination at which water systems must take certain protective measures to reduce health harm.

STATEMENT OF THE CASE

I. Lead in drinking water threatens people's health

There is no safe level of lead in drinking water. 86 Fed. Reg. at 4259 (JA__). "Even low level lead exposure" causes devastating harm to children and others. *Id.* at 4205, 4231 (JA__). Lead exposure is especially dangerous for fetuses, formula-fed infants, and young children; it presents serious risks to their brains and nervous systems

and can cause learning disabilities, attention disorders, shorter stature, and impaired hearing. *Id.* at 4205-06, 4231, 4259 (JA__). Children's bodies absorb more lead than adults', and children's brains are more sensitive to lead's pernicious effects. *Id.* at 4205 (JA__). For adults, lead exposure may increase blood pressure and hypertension, impair kidney function, and cause death from cardiovascular diseases, including fatal heart attacks. JA__ [2017-0300-1768_at_D-2—D-7]. Lead exposure is also linked to developmental and reproductive harm, including delayed puberty and decreased fertility. JA__ [2017-0300-1768_at_D-8]. As EPA has summarized: "Lead is a highly toxic pollutant that can damage neurological, cardiovascular, immunological, developmental, and other major body systems." 86 Fed. Reg. at 4259 (JA__).

The harm from lead exposure is not distributed equitably: minority and low-wealth populations are disproportionately exposed to lead in drinking water. *See* State Pet'rs' Br. Statement § B. The Flint, Michigan drinking water crisis is a painful example of the toll lead-

contaminated drinking water can take on an entire community. JA__ [2017-0300-1124_at_1-4].

Lead service lines are "the greatest contributor of lead in drinking water." 86 Fed. Reg. at 4226 (JA__). A lead service line typically has two sides: a portion on public property running from the water main to the property line, and a portion on private property running from the property line to the dwelling. JA__ [2017-0300-0010_at_14]. Service lines are sometimes owned entirely by water systems; depending on local law, the portion on private property may be owned by the individual homeowner. JA__ [2017-0300-0010_at_4]; 86 Fed. Reg. at 4215 (JA__). An estimated six to ten million homes in the United States receive tap water through lead service lines, providing water to at least 15 million people. 86 Fed. Reg. at 4199 (JA__); JA__ [2017-0300-0145_at_3]; JA__ [2017-0300-0074_at_9].

II. The Safe Drinking Water Act requires EPA to protect the public from lead in drinking water to the extent feasible

Under the Safe Drinking Water Act, EPA must protect the public from contaminants in drinking water, including lead. *City of Portland v. EPA*, 507 F.3d 706, 709 (D.C. Cir. 2007); 42 U.S.C. § 300g-1(b)(2); 48

Fed. Reg. 45,502, 45,511 (Oct. 5, 1983). To do so, EPA must first set a "maximum contaminant level goal," the level of a contaminant "at which no known or anticipated adverse effects on the health of persons occur." 42 U.S.C. §§ 300 g-1(b)(2)(A), (b)(4)(A). Then, EPA must set an enforceable health-based limit called a "maximum contaminant level." *Id.* §§ 300g-1(b)(4)(B), 300f(3). This limit must be as close to the maximum contaminant level goal as feasible, unless certain statutory exceptions are met. *Id.* § 300g-1(b)(4)(B).

EPA may avoid setting this enforceable limit only if it is "not economically or technologically feasible to ascertain the level of the contaminant" in water. *Id.* §§ 300g-1(b)(7)(A); 300f(1)(C). If EPA does make that finding, it may establish a "treatment technique" instead, which is a prescribed practice or set of practices to control the amount of a contaminant. *Id.* § 300g-1(b)(7)(A); *e.g.*, 86 Fed. Reg. at 4207. Any treatment technique must "prevent known or anticipated adverse effects on the health of persons to the extent feasible." 42 U.S.C. § 300g-1(b)(7).

A maximum contaminant level or treatment technique is "feasible" if it is achievable "with the use of the best technology,

treatment techniques and other means which the Administrator finds . . . are available (taking cost into consideration)." *Id.* § 300g-1(b)(4)(D). As interpreted by this Court and by EPA, "feasible" means "technically possible and affordable," *City of Portland*, 507 F.3d at 712, "by large metropolitan or regional public water systems," 86 Fed. Reg. at 4206 (JA__) (quoting legislative history).

III. EPA promulgates a complex rule without a health-based standard for lead

EPA first promulgated interim regulations for lead in drinking water in 1975, setting a maximum contaminant level of 50 parts per billion (ppb).[1] 40 Fed. Reg. 59,566, 59,570 (Dec. 24, 1975). Yet starting in 1991, EPA has declined to set a health-based maximum contaminant level for lead, instead promulgating a complex treatment technique. *See* 56 Fed. Reg. 26,460, 26,478 (June 7, 1991) (JA__).

EPA's 1991 Lead and Copper Rule ("1991 Rule") began by setting a maximum contaminant level goal for lead of zero, finding "no safe

[1] Parts per billion (ppb) is equal to micrograms per liter (µg/L). One ppb or one µg/L is equal to 0.001 milligrams per liter (mg/L). EPA's regulations use all three units of measurement; this brief uses ppb.

threshold" for lead in drinking water.[2] *Id.* at 26,462, 26,467 (JA__) (citation omitted). EPA then found that it was not, at that time, feasible to set a maximum contaminant level for lead. *Id.* at 26,477 (JA__).

The treatment technique EPA promulgated instead does not place a limit on the amount of lead permitted in tap water. Instead, it requires water systems to take actions to reduce the levels of lead in their drinking water after exceeding a lead "action level" of 15 ppb. *Id.* Water systems conduct limited tap water sampling—required at no more than 100 sites, even in the largest cities, *id.* at 26,556 (JA__)—and compare the results to the action level. *Id.* at 26,490 (JA__). If ten percent or more of the samples are above 15 ppb, the water system has exceeded the action level. *Id.*

The action level was not a health-based standard, but rather reflected the lead level EPA believed water systems could achieve at the time using corrosion control, a water treatment technique intended to reduce the amount of lead leaching from underground lead pipes and

[2] For decades, EPA has regulated lead and copper together in the same rule, but only the lead-related provisions are relevant here.

household plumbing. *Id.* EPA expected this action level to spur "treatment among large numbers of systems nationwide." *Id.* at 26,477 (JA__).

Under the 1991 Rule, a water system that exceeded the action level was required to take additional steps intended to lower lead levels and educate the public about risk. *Id.* at 26,490 (JA__). Specifically, a water system was required to install or optimize its corrosion control treatment, unless it had already done so. *Id.* at 26,550 (JA__). Then, if the system continued to exceed the action level, the 1991 Rule required those systems to survey and identify the lead service lines in its system and to replace those lines at a rate of 7 percent per year. *Id.* at 26,552 (JA__). A partial replacement (for example, removing the publicly owned portion of a lead line but leaving a privately owned portion intact) counted towards this rate. *Id.* at 26,553 (JA__). So did "test outs," or sampling results showing lead concentrations at or below 15 ppb for a given lead line. *Id.* If a water system's lead levels subsequently fell below the action level for one year, the water system was no longer required to replace lead service lines. *Id.* at 26,553, 26,556 (JA__).

IV. Lead service lines become the major source of lead in drinking water

Over the last thirty years, lead service lines have overtaken household plumbing as the most significant source of lead in drinking water. *Compare* 56 Fed. Reg. at 26,475 (JA__) (citing "household plumbing" as the source of "most" lead in drinking water in 1991), *with* 86 Fed. Reg. at 4226 (JA__) (lead service lines "are the greatest contributor of lead in drinking water"). Congress amended the Safe Drinking Water Act to virtually eliminate lead from household plumbing and fixtures. 42 U.S.C. § 300g-6. By 2008, lead service lines were responsible for most lead in drinking water. JA__ [2017-0300-0057_at_xvi]. More recent research has found that, where present, lead service lines may contribute nearly all lead present in tap water. JA__ [2017-0300-0096_at_13-14].

In 2015, EPA's National Drinking Water Advisory Council—a panel of outside advisers with diverse perspectives convened to give EPA advice on revisions to the 1991 Rule, *see* 42 U.S.C. §§ 300g-1(d), 300j-5—unanimously recommended that EPA require all water systems to completely replace all lead service lines. JA__ [2017-0300-0062_at _6,

14]; JA__ [2017-0300-0126_at_2]. The following year, EPA announced that it was considering mandating complete lead service line replacement by all water systems. JA__ [2017-0300-0145_at_9-10]. In 2017, the American Water Works Association, the largest trade association of public water systems in the United States, endorsed the Advisory Council's recommendation, calling for "the complete removal of lead service lines." JA__ [2017-0300-0365].

The call for complete lead service line replacement has been joined by, among others, American Water (the private owner and operator of more than 300 drinking water systems in 46 states), the Association of State Drinking Water Administrators, and numerous community groups, scientists, and public health and environmental organizations. *See, e.g.*, JA__ [2017-0300-1139_at_i-ii, 1, 5, 15]; JA__ [2017-0300-1032_at_ii, 17, 18]; JA__ [2017-0300-1124_at_5]; JA__ [2017-0300-1209_at_1]; JA__ [2017-0300-1469_at_15].

V. EPA proposes the first major revisions to the Lead and Copper Rule in thirty years

Between 1995 and 2019, EPA set and then missed at least nine target deadlines to improve the 1991 Rule. *See* Env't Pet'rs' Mot. to End

Abeyance, 17-18, Doc. No. 1932814. EPA made no substantial updates to the 1991 Rule for nearly thirty years.

In November 2019, EPA proposed revisions to the Lead and Copper Rule. 84 Fed. Reg. 61,684 (Nov. 13, 2019) (JA__). Despite decades of new information about the health harms from lead exposure and the feasibility of reducing lead levels in drinking water, EPA proposed no major departures from the structure of the 1991 Rule. It did not propose to set a health-based maximum contaminant level for lead. It did not propose reducing the lead action level below 15 ppb. *Id.* at 61,685, 61,687 (JA__). And despite the recommendation of its Advisory Council and many others, EPA did not propose requiring all water systems to completely replace all lead service lines. *Id.* at 61,696-97 (JA__). Instead, EPA proposed *slowing* the annual rate at which water systems that exceed the action level must replace lead service lines, from seven percent to three percent. *Id.* at 61,688 (JA__). At the same time, EPA proposed tightening what counts as a lead service line replacement to exclude test-outs and partial replacements. *Id.* EPA also proposed creating a new "trigger level" of 10 ppb that, if exceeded, would require water systems to take certain additional steps, including

replacing lead service lines at a system-proposed "goal rate" with no minimum. *Id.* at 61,686, 61,698-99 (JA__).

EPA received thousands of comments on its proposal, many of which criticized the agency for its failure to make sorely needed changes "to better protect human health." *See, e.g.*, JA__ [2017-0300-1390_at_1]. Multiple commenters urged EPA to revisit its decision not to set a maximum contaminant level for lead, explaining that setting one would streamline implementation and oversight and result in a more protective rule. JA__ [2017-0300-0988_at_1-2]; JA__ [2017-0300-1469_at_6-7].

Commenters also criticized EPA's failure to propose a treatment technique that would "prevent known or anticipated adverse effects on the health of persons to the extent feasible." 42 U.S.C. § 300g-1(b)(7)(A). First, commenters from across the spectrum—from water systems to state regulators—urged EPA to mandate complete replacement of all lead service lines, as EPA's Advisory Council had recommended four years earlier. *See, e.g.*, JA__ [2017-0300-1139_at_ii, 1–2, 15]; JA__ [2017-0300-1032_at_ii, 13-14]; JA__ [2017-0300-1390_att._1_at_1]. Second, commenters explained that an action level of 15 ppb was no

longer as protective as feasible, given that water systems could now achieve significantly lower lead levels through corrosion control treatment than in 1991. *See, e.g.*, JA__ [2017-0300-1469_at_8-10], JA__ [2017-0300-1039_at_2]. Third, commenters also criticized EPA for proposing to slow the lead service line replacement rate for water systems above the action level, subjecting people to lead-contaminated water for years longer. *See, e.g.*, JA__ [2017-0300-1103_at_3]; JA__ [2017-0300-1039_at_2-3]; JA__ [2017-0300-1468_at_10-11].

VI. EPA's Revisions Rule fails to adequately protect public health

In January 2021, EPA promulgated the National Primary Drinking Water Regulations: Lead and Copper Rule Revisions ("Revisions Rule"), 86 Fed. Reg. 4198 (Jan. 15, 2021) (JA__). The Revisions Rule, like the proposal, included some minor improvements over the 1991 Rule, including requiring water systems to inventory their lead service lines, *id.* at 4203 (JA__), and strengthening some sampling, monitoring, and public education requirements, *id.* at 4202,

4204 (JA__). But EPA's Revisions Rule was mostly identical to the proposal.

EPA declined to set a maximum contaminant level for lead. *See id.* at 4206 (JA__). The agency refused to strengthen its treatment technique by lowering the action level or mandating that all water systems completely replace their lead service lines. *Id.* at 4216, 4208 (JA__). EPA also slowed down the lead service line replacement rate for systems that exceed the action level (while counting only replacements of entire lead service lines towards the replacement rate). *Id.* at 4203, 4216, 4293 (JA__).

VII. EPA reviewed the Revisions Rule and then let it take effect in December 2021

Petitioners Newburgh Clean Water Project, NAACP, Sierra Club, United Parents Against Lead, and Natural Resources Defense Council ("Community Petitioners") filed petitions for review to challenge the Revisions Rule, Doc. Nos. 1881638 (Case No. 21-1019), 1881661 (Case No. 21-1020), which were consolidated, Doc. No. 1881665. Ten states ("State Petitioners") filed another petition for review, Doc. No. 1888087 (Case No. 21-1076), that was also consolidated, Doc. No. 1888091.

American Water Works Association intervened as a respondent. Doc. Nos. 1885193, 1934258.

EPA then delayed the effective date of the Revisions Rule throughout most of 2021, in accordance with directives from the incoming political administration. 86 Fed. Reg. 31,939, 31,939-41 (June 16, 2021). The parties agreed to hold this case in abeyance while EPA decided whether to modify or withdraw the Revisions Rule. Doc. Nos. 1893782, 1906707. On December 17, 2021, EPA announced that it would let the Revisions Rule take effect, with a compliance date of October 16, 2024. 86 Fed. Reg. 71,574, 71,574 (Dec. 17, 2021). EPA acknowledged that "there are significant opportunities to further improve upon [the Revisions Rule] to achieve increased protection of communities from lead exposure through drinking water," and that "there is a range of potential regulatory and non-regulatory actions" EPA could take "to further reduce drinking water lead exposure." *Id.* at 71,577, 71,578.

EPA sought an indefinite further abeyance of the case while it explored a possible multi-year process to revise the rule again. Doc. No.

1932850. Petitioners opposed, Doc. No. 1934149, and the Court denied EPA's request, Doc. No. 1943142.

SUMMARY OF ARGUMENT

I. Congress directed EPA to set a maximum contaminant level for regulated contaminants unless "it is not economically or technologically feasible to ascertain the level of the contaminant" in water. 42 U.S.C. §§ 300g-1(b)(7)(A), (b)(4)(B); *id.* § 300f(1)(C). EPA arbitrarily refused to set a maximum contaminant level for lead by relying on a thirty-year old justification that has been mooted by changed circumstances. EPA's additional excuses are either internally inconsistent, contradicted by other parts of the Revisions Rule, or undermined by the agency's treatment of different contaminants under the Act.

II. The Safe Drinking Water Act requires any treatment technique for a drinking water contaminant to "prevent known or anticipated adverse effects on the health of persons to the extent feasible." *Id.* § 300g-1(b)(7)(A). In promulgating its treatment technique for lead, EPA arbitrarily failed to analyze feasible, more health-protective measures. EPA refused to consider mandating complete lead service line replacement for all water systems. EPA slowed down the required

lead service line replacement rate for water systems that exceed the action level, without explaining why it could not retain the 1991 Rule's faster rate. And EPA refused to lower the action level at which water systems must take certain steps to limit people's lead exposure, despite abundant record evidence that a lower level is feasible. EPA relied on outdated data, ignored relevant record evidence, or simply offered no justification for these choices.[3]

STANDING

Petitioners have standing to sue on behalf of their members. *See Hunt v. Wash. State Apple Advertising Comm'n*, 432 U.S. 333, 343 (1977). Petitioners are environmental, public health, and civil rights organizations that work to promote the health of all persons and eliminate exposure to lead and other environmental hazards. Trujillo Decl. ¶¶ 6-8; Isherwood Decl. ¶ 6; Shabazz Decl. ¶¶ 1, 4-6; McCarthy-

[3] Community Petitioners support and incorporate by reference the additional arguments in State Petitioners' brief: (1) the Revisions Rule constitutes unlawful backsliding, in violation of 42 U.S.C. § 300g-1(b)(9), because it fails to "maintain, or provide for greater, protection of the health of persons" as the 1991 Rule; and (2) EPA arbitrarily concluded that the Revisions Rule will not cause disproportionate harm to minority and low-income populations.

Wallace Decl. ¶¶ 3-7; Hollo Decl. ¶¶ 3, 5. The interests Petitioners seek to protect are germane to that purpose. *Hunt*, 432 U.S. at 343. Neither adjudication of the claims nor the requested relief require the participation of Petitioners' individual members. *See id.* at 342-43. And Petitioners' members would have standing to sue on their own behalf, *see id.* at 343, because they suffer cognizable harms that are caused by the Revisions Rule and redressable by a favorable decision. *See Clean Wisc. v. EPA*, 964 F.3d 1145, 1156-57 (D.C. Cir. 2020).

Petitioners' members, their children, and their grandchildren are exposed to harmful levels of lead in drinking water. McCray Decl. ¶ 3; Pedraza Decl. ¶¶ 3-4, 6-7; Pari Decl. ¶¶ 3-5; Freese Decl. ¶¶ 4-5; Grewe Decl. ¶¶ 4, 6-8; Cofield Decl. ¶¶ 3-4; Hoffman Decl. ¶¶ 4, 11-12. They have detected unsafe lead levels in their homes, *e.g.*, Pedraza Decl. ¶¶ 3-4; Freese Decl. ¶ 5; Hoffman Decl. ¶ 11, or their water systems have reported unsafe lead levels system-wide, *e.g.*, McCray Decl. ¶ 3; Pari Decl. ¶ 4; Grewe Decl. ¶ 7; Anderson Decl. ¶¶ 8-9; Cofield Decl. ¶ 4; Lancaster Decl. ¶ 4. Petitioners' members are justifiably concerned about lead exposure to themselves and their families. *E.g.*, Pari Decl. ¶ 5; Pedraza Decl. ¶ 7; Grewe Decl. ¶ 6; Anderson Decl. ¶¶ 5-6; Hoffman

Decl. ¶¶ 11-12. Some pay to filter their water or buy bottled water to reduce the health harms. *E.g.*, Freese Decl. ¶¶ 6-7; McCray Decl. ¶¶ 4, 6; Shah Decl. ¶ 9; Anderson Decl. ¶ 7; Lancaster Decl. ¶ 6; Hoffman Decl. ¶ 8.

No amount of lead exposure is safe. 86 Fed. Reg. at 4259. Known exposure to a harmful pollutant for which there is no safe level is an injury for standing. *See Clean Wisc.*, 964 F.3d at 1156-58; *see also NRDC v. EPA*, 755 F.3d 1010, 1016-17 (D.C. Cir. 2014). Petitioners' members who pay to filter their water to reduce lead exposure are also harmed. *In re U.S. Office of Personnel Mgmt. Data Security Breach Litig.*, 928 F.3d 42, 59 (D.C. Cir. 2019) (mitigation costs incurred to prevent likely harm qualify as injury-in-fact); *Talbert v. Am. Water Works Co., Inc.*, 538 F. Supp. 3d 471, 482 (E.D. Pa. 2021) (buying water filters to avoid drinking contaminated water constitutes economic harm, which is a "classic form of injury-in-fact" (internal quotation omitted)).

These injuries are traceable to the Revisions Rule and would be redressed by an order setting aside the challenged provisions of the rule. The rule failed to set a maximum contaminant level for lead, which would be a health-based limit as close to zero as feasible. *See*

Argument § I, *infra*; 42 U.S.C. § 300g-1(b)(4)(B). The rule's treatment technique arbitrarily fails to protect health to the extent feasible, by declining to mandate and instead slowing lead service line replacement, and by setting a weak action level. *See* Argument § II, *infra*. The Revisions Rule thus either perpetuates or increases Petitioners' members' exposure to lead. *See Clean Wisc.*, 964 F.3d at 1157.

This suit would redress that harm. If the Court vacates the challenged parts of the Revisions Rule and EPA promulgates a more protective rule on remand, Petitioners' members would be less exposed to lead in their water. *Sierra Club v. EPA*, 699 F.3d 530, 533 (D.C. Cir. 2012) (harm caused by pollution is redressable where vacatur would require EPA to consider and respond to claim for more stringent standards).

STANDARD OF REVIEW

This Court sets aside agency action that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). "[T]he overarching question" is whether the agency's "decisionmaking was reasoned, principled, and based upon the record."

Env't Def. Fund v. FERC, 2 F.4th 953, 967-68 (D.C. Cir. 2021) (internal quotation omitted).

ARGUMENT

I. EPA arbitrarily refused to set a maximum contaminant level for lead

The Safe Drinking Water Act requires EPA to set a maximum contaminant level unless it is "not economically or technologically feasible to ascertain the level of the contaminant" in water. 42 U.S.C. §§ 300g-1(b)(7)(A), (b)(4)(B); *see also id.* § 300f(1)(C)(i). In the Revisions Rule, EPA refused to set a maximum contaminant level and instead established a treatment technique for lead. EPA's rationale for doing so is arbitrary, internally inconsistent, and based on an outdated, decades-old rationale.

A. EPA's previous justifications for refusing to set a maximum contaminant level no longer apply

This Court in 1994 affirmed EPA's choice in the 1991 Rule to set a treatment technique and not a maximum contaminant level for lead. *American Water Works Ass'n v. EPA*, 40 F.3d 1266, 1270-71 (D.C. Cir. 1994). But the Court's decision turned on two justifications that no longer apply.

First, at the time, the primary source of lead in drinking water was indoor plumbing, not drinking water infrastructure owned or controlled by water systems. *Id.* at 1271. Household plumbing fixtures could then contain up to eight percent lead. JA__ [2017-0300-0988_at_1]; 56 Fed. Reg. at 26,463 (JA__). The Court deferred to EPA's interpretation that it was not "feasible" to set a maximum contaminant level when water systems did not control the major sources of lead in the water. *American Water Works Ass'n*, 40 F.3d at 1271.

Since then, however, the Safe Drinking Water Act has been amended to nearly eliminate lead from plumbing and fixtures. *See* Pub. L. No. 104-182, § 118, 110 Stat. 1613, 1645-47 (1996) (codified as amended at 42 U.S.C. § 300g-6) (expanding previous restrictions on lead pipes, solder, and flux to include lead plumbing fittings and fixtures); Pub. L. No. 111-380, § 2, 124 Stat. 4131, 4131 (2011) (codified as amended at 42 U.S.C. § 300g-6(d)(1)(B)) (lowering the amount of allowable lead in plumbing to 0.25 percent).

As a result, lead service lines have overtaken household plumbing as the dominant source of contamination, as EPA concedes. 86 Fed. Reg. at 4226 (JA__); *see also* JA__ [2017-0300-1546_at_8-9]. This moots

EPA's prior rationale. According to a former EPA official involved in drafting the 1991 Rule: "Given the restrictions on lead in new plumbing, the Agency's rationale in 1991 for rejecting the option to set [a maximum contaminant level] at the tap no longer holds today." JA__ [2017-0300-0988_at_1].

Second, EPA argued in 1991 that requiring all water systems to meet a maximum contaminant level would encourage remedial techniques that reduced lead but *increased* levels of other contaminants, with harmful unintended consequences. *Am. Water Works Ass'n*, 40 F.3d at 1270-71. The Court agreed with EPA's argument that Congress did not contemplate that risk, and therefore "impliedly delegated" to EPA the discretion to impose a treatment technique instead. *Id.*

Congress has since amended the Safe Drinking Water Act to address that situation too, allowing EPA to set a higher maximum contaminant level than otherwise required if necessary to prevent a harmful increase in the concentration of other contaminants. 42 U.S.C. § 300g-1(b)(5). EPA's argument about unintended consequences no longer applies.

In the Revisions Rule, EPA's sole justification for refusing to set a maximum contaminant level—offered in a single sentence—is that the Court upheld EPA's similar choice in the 1991 Rule. 86 Fed. Reg. at 4206 (JA__). And in a separate document responding to comments, EPA incorporates wholesale the justification it offered 30 years ago: "EPA affirms that those reasons apply today just as they did in 1991 when EPA promulgated the original" rule. JA__ [2017-0300-1622_at_470]. But EPA's prior reasons manifestly do not apply today just as they did in 1991.

It was arbitrary for EPA to ignore changed circumstances directly relevant to the agency's decision. EPA was "confronted with evidence that . . . the factual premises underlying its prior judgment have eroded" and thus "must offer more to justify its decision to retain its regulations than mere conclusory statements." *Env't Health Tr. v. Fed. Commc'ns Comm'n*, 9 F.4th 893, 903 (D.C. Cir. 2021); *accord Bechtel v. FCC*, 957 F.2d 873, 881 (D.C. Cir. 1992) (ordering agency to justify continued adherence to a policy made obsolete by regulatory changes in the intervening years). EPA's defense of its decision with a stale

rationale, incorporating its prior justifications without accounting for changed circumstances, was arbitrary.

B. EPA's stated concern about water system "responsibility" is internally inconsistent and arbitrary

In response to comments on the Revisions Rule, EPA asserts that lead service lines are "not always" owned or controlled by the water system, and thus water systems are not "always responsible" for lead in drinking water. JA__ [2017-0300-1622_at_470]. EPA's reasoning is muddled, but the agency appears to argue that this excuses it from setting a maximum contaminant level. JA__ [2017-0300-1622_at_470-71].

This excuse fails because EPA's treatment technique under the Revisions Rule *already* holds water systems responsible for lead contamination from lead service lines, regardless of whether they are owned or controlled by the water system. EPA's internally inconsistent reasoning is arbitrary. *General Chem. Corp. v. United States*, 817 F.2d 844, 846, 854 (D.C. Cir. 1987).

As EPA itself explains, "historically, the [Lead and Copper Rule] *has not been limited to system-owned portions* of the distribution

system." 86 Fed. Reg. at 4212 (JA__) (emphasis added). The Revisions Rule imposes responsibility on water systems regardless of service line ownership in at least six ways. First, EPA defined "lead service line" to include lines "owned by the water system, owned by the property owner, or both." 40 C.F.R. § 141.2. EPA adopted this definition "to ensure that the customer or private side of the service line *are included in rule requirements* such as inventory and replacement." JA__ [2017-0300-1622_at_31] (emphasis added). Second, the rule's corrosion control requirements apply equally to water systems with varying proportions of publicly and privately owned service lines. 40 C.F.R. § 141.81. Third, to determine lead levels in a water system, EPA prioritizes sampling from sites with lead service lines, whether publicly or privately owned. *Id.* § 141.86(a)(3). Fourth, for sampling at homes served by lead service lines, EPA requires collection of the fifth liter of water from the running tap, *id.* § 141.86(b)(3)(ii), which better reflects lead levels resulting from contact with service lines, including "customer-owned" lines, 86 Fed. Reg. at 4226 (JA__). Fifth, water systems that exceed the action level must replace the full lead service line, including any privately owned portion, to get credit towards their required replacement rate. 40 C.F.R.

§ 141.84(g)(3); 86 Fed. Reg. at 4200 (JA__). Sixth, EPA directs water systems to inventory all lead service lines, including private lines, because customer-owned service lines are always "connected to either a system-owned service line or system-owned water main and are therefore accessible to the system." 86 Fed. Reg. at 4212 (JA__).

EPA does not explain why its "responsibility" rationale disqualifies a maximum contaminant level but not a treatment technique. EPA's argument is thus arbitrary because it is "internally inconsistent and inadequately explained." *General Chem. Corp.*, 817 F.2d at 846; *see also ANR Storage Co. v. FERC*, 904 F.3d 1020, 1027-28 (D.C. Cir. 2018).

C. Lead's variability in drinking water does not preclude setting a maximum contaminant level

EPA's final argument is that lead levels in water are variable, and the amount measured can depend on sample technique used, stagnation, physical disruptions to lead pipes, and other factors. JA__ [2017-0300-1622_at_470]. Yet for other purposes, EPA deems it feasible to ascertain lead levels in water despite lead's variability. Indeed, EPA's entire scheme under both the 1991 Rule and Revisions Rule depends on

measuring lead levels and taking prescribed action based on the level detected. *E.g.*, 86 Fed. Reg. at 4201 (JA__) (summarizing required steps based on exceedance of 10 ppb "trigger level" and 15 ppb "action level"); JA__ [2017-0300-1546_at_5]. EPA does not explain why it is feasible to ascertain lead levels to compel action under a treatment technique but not for a maximum contaminant level. This justification, too, is internally inconsistent and arbitrary. *ANR Storage*, 904 F.3d at 1027-28.

Moreover, EPA has set maximum contaminant levels for other similarly variable drinking water contaminants, like total trihalomethanes and haloacetic acids. 40 C.F.R. §§ 141.64(b)(2)(i), 141.601(b). These substances are disinfection byproducts that can vary within a single water supply and at a single location based on the season, water temperature, pH, residence time in the distribution system, and even the diameter of distribution pipes, among other factors. 71 Fed. Reg. 388, 394 (Jan. 4, 2006). Yet EPA accounted for this variability and still established maximum contaminant levels for these chemicals. 40 C.F.R. §§ 141.64(b)(2)(i), 141.601(b).

EPA does not explain why variability precludes a maximum contaminant level for lead, but not other contaminants. Just as for disinfection byproducts, EPA could design and prescribe sampling procedures that account for the variability of lead in water.[4]

It was arbitrary for EPA to treat lead differently than other variable contaminants, without explanation. *See Util. Solid Waste Activities Grp. v. EPA*, 901 F.3d 414, 434 (D.C. Cir. 2018) (EPA rule was arbitrary for treating two pollution sources differently despite "no logical basis for distinguishing between" them); *cf. Burlington N. & Santa Fe Ry. Co. v. Surface Transp. Bd.*, 403 F.3d 771, 776 (D.C. Cir.

[4] EPA also ignored evidence that regulatory agencies in other countries have set the equivalent of a maximum contaminant level for lead and devised adequate monitoring requirements to account for lead's variability. *See* JA__ [2017-0300-1546_at_6]; JA__ [2017-0300-1445_at_2]. Canada, for example, recommends a maximum acceptable concentration for lead of 5 ppb. JA__ [2017-0300-1445_at_2] (citing Health Canada Guidelines). Several Canadian provinces have imposed limits of either 5 or 10 ppb. *See Regulation respecting the quality of drinking water 2021*, q-2, r. 40, s. 3 (Que.) (5 ppb lead limit); *Standards and guidelines for municipal waterworks, wastewater and storm drainage systems 2012*, 1.1 (Alta.) (adopting limits set forth in Health Canada Guidelines); *Ontario Drinking Water Quality Standards 2003*, O. Reg. 169/03 (10 ppb lead limit).

2005) (arbitrary to treat "similarly situated" entities differently without explanation).

* * *

Congress expressed a clear preference that EPA set maximum contaminant levels for regulated contaminants. Only infeasibility in measuring the level of the contaminant excuses the agency from doing so. EPA did not adequately justify its refusal to set a maximum contaminant level for lead.

II. EPA arbitrarily refused to promulgate a treatment technique that protects human health to the extent feasible

Assuming EPA validly promulgated a treatment technique instead of a maximum contaminant level, the treatment technique in the Revisions Rule arbitrarily fails to "prevent known or anticipated adverse effects on the health of persons to the extent feasible," in violation of the Act. *See* 42 U.S.C. § 300g-1(b)(7)(A).

EPA failed to adopt feasible proposals to strengthen its treatment technique. The agency ignored relevant record evidence of feasibility, relied on outdated information, or simply offered no explanation at all.[5]

A. EPA arbitrarily failed to justify its refusal to mandate complete lead service line replacement for all water systems

In the Revisions Rule, EPA refused to mandate replacement of all lead service lines. It did so despite the endorsement of its own Advisory Council, water utility representatives, and a wide range of stakeholders, and despite substantial evidence that mandating replacement of all lead lines is more health-protective and feasible.

1. Ample record evidence shows that mandating replacement of all lead service lines is more protective and is feasible

In the decades leading up to the Revisions Rule, a clear consensus emerged: removing all lead service lines nationwide is a necessary part of any health-protective drinking water standard. EPA's National Drinking Water Advisory Council unanimously recommended that EPA

[5] The Court should reach these arguments even if it rules for Community Petitioners on Argument § I, above, because EPA may again decline to set a maximum contaminant level on remand.

require complete lead service line replacement by all water systems. JA__ [2017-0300-0062_at_6, 14]; JA__ [2017-0300-0126_at_2]. The American Water Works Association endorsed this recommendation. JA__ [2017-0300-0365]. EPA itself announced, in 2016, that it was considering mandating complete lead service line replacement in a future revision to its lead rule. JA__ [2017-0300-0145_at_9-10]. And myriad commenters on the Proposed Rule—including pediatricians, health advocates, state regulators, and others—called for EPA to adopt this requirement. JA__ [2017-0300-1139_at_i-ii, 1, 5, 15]; JA__ [2017-0300-1032_at_2, 7, 17, 18]; JA__ [2017-0300-1124_at_5]; JA__ [2017-0300-1209_at_1]; JA__ [2017-0300-1469_at_15].

This consensus was supported by ample record evidence that it is both health-protective and feasible for EPA to mandate complete replacement of all lead service lines. There is no question that doing so would better protect people's health. JA__ [2017-0300-0126_at_2]. As long as lead lines remain in use, they present a threat to tap water quality. JA__ [2017-0300-0062_at_7]; JA__ [2017-0300-1445_at_4-5]. Corrosion control is complicated to implement and provides incomplete protection; it "often cannot control particulate lead release from lead

pipes." JA__ [2017-0300-1012_at_5]. And regardless of corrosion control, changes in source water or the physical disturbance of lead pipes can cause lead to start leaching, with potentially devastating consequences when lead levels in drinking water spike. JA__ [2017-0300-1124_at_2]; 86 Fed. Reg. at 4214 (JA__).

The record is also replete with evidence demonstrating that complete replacement of all lead service lines is feasible, meaning technically possible and affordable by large public water systems. *See City of Portland*, 507 F.3d at 712; 86 Fed. Reg. at 4206 (JA__). Some large water systems have already replaced all lead service lines, including those in Madison, Wisconsin and Lansing, Michigan. JA__ [2017-0300-0145_at_9]. At least 38 other water systems nationwide, including 20 large systems serving more than 100,000 people, are currently pursuing voluntary lead service line replacement on "aggressive" schedules. JA__ [2017-0300-0699_at_tab_4]; *see also* 84 Fed Reg. at 61,698 (JA__); 86 Fed. Reg. at 4218 (JA__). As of 2018, Michigan requires *all* its water systems to completely replace all lead

service lines within 20 years, at the water system's expense. JA__ [2017-0300-1390_att. 1_at_1].[6]

As EPA has touted, water systems are not on their own when it comes to paying for lead service line replacement. EPA and states provide grants and low-interest water infrastructure loans through the federally funded Drinking Water State Revolving Fund. *See* 86 Fed. Reg. at 4276 (JA__); 42 U.S.C. § 300j-12; JA__ [2017-0300-0010_at_26-28]. Many water systems have used these funds for voluntary replacement of full lead service lines, including replacement of privately owned lines. JA__ [2017-0300-0010_at_19].

Water systems have also developed creative mechanisms to supplement federal and state funding. For example, systems have used nominal ratepayer increases to fund full lead service line replacement and subsidized the cost of replacing a privately owned line using state and municipal bonds. JA__ [2017-0300-0010_at_23-25, 29, 31-32]. Through these measures, among others, it is feasible for water systems

[6] New Jersey and Illinois have since enacted laws requiring water systems to replace all lead service lines in those states too. *See* 415 Ill. Comp. Stat. 5/17.12(v); N.J. Stat. Ann. §§ 58:12A-40, 58:12A-44.

to fund complete lead service line replacement without placing a disproportionate burden on individuals who live in communities where homeowners own part of the service line and who may not be able to afford lead service line replacement.[7]

Reams of evidence thus showed that mandatory replacement of all lead service lines is protective, necessary, and feasible.

2. EPA arbitrarily failed to analyze mandating complete lead service line replacement

In the face of extensive record evidence pointing to both the health benefits and feasibility of mandating replacement of all lead service lines, EPA failed even to examine whether it was feasible. This was arbitrary. *Pub. Citizen v. Steed*, 733 F.2d 93, 103-05 (D.C. Cir. 1984)

[7] As State Petitioners note, EPA failed to address why the Revisions Rule's lead service line replacement requirements would not perpetuate existing inequities in accessing needed funds to replace privately owned lead service lines. *See* State Pet'rs' Br. Argument § II.A. Record evidence shows the availability of equitable approaches. JA__ [2017-0300-0010_at_31-32].

(finding agency action arbitrary and capricious because of failure to "consider adequately" an important alternative).

Despite earlier saying that mandatory lead service line replacement was on the table, EPA dropped the option without a word in its proposed rule, refused to require it in the final rule, and explained its decision in a single sentence in a separate document. The proposed rule made no mention of considering mandatory, complete lead service line replacement. *See generally* 84 Fed. Reg. 61,684 (JA__). The final rule does not respond to the many comments calling for such a requirement. 86 Fed. Reg. at 4216 (JA__). EPA's economic analysis and appendices for the final rule—more than a thousand pages long—do not mention or analyze a mandatory replacement scenario. *See* JA__ [2017-0300-1769_at_3-47–3-50, 5-175–5-176, 5-210–5-211]; JA__ [2017-0300-1768_at_B.16-B.17. And EPA never explored the "incentive[s] and creative funding mechanisms" that could prevent the inequities caused by a poorly designed lead service line replacement requirement. JA__ [2017-0300-0145_at_10]. Instead, in a separate response-to-comments document, EPA justifies its choice in one sentence with no supporting evidence: "EPA does not agree that [complete lead service line

replacement] is appropriate nor feasible for medium and large systems." JA__ [2017-0300-1622_at_191].

EPA's cursory dismissal of the most important strategy for reducing lead exposure nationwide is quintessentially arbitrary. It is axiomatic that an "agency must examine the relevant data and articulate a satisfactory explanation for its action, including a rational connection between the facts found and the choice made." *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (internal quotation omitted); *see also El Rio Santa Cruz Neighborhood Health Ctr., Inc. v. HHS*, 396 F.3d 1265, 1278 (D.C. Cir. 2005). EPA did not explain why it rejected its Advisory Council's recommendation. It did not consider the possible cost of mandatory replacement or the resources available for it. And EPA did not reckon with or rebut any of the substantial record evidence showing that mandatory lead service line replacement is both more protective and is feasible. In other words, EPA did not analyze feasibility at all. This perfunctory treatment of a central issue was arbitrary.

B. EPA arbitrarily slowed the lead service line replacement rate for systems that exceed the action level from seven percent of lead lines per year to three percent

Under the 1991 Rule, water systems that continued to exceed the action level after installing corrosion control treatment were required to replace at least seven percent of lead service lines in their distribution system each year, until their lead levels dropped below the action level for one year. 56 Fed. Reg. at 26,509 (JA__). The record contained extensive evidence that retaining this replacement rate was feasible. Yet EPA disregarded this evidence and slowed the replacement rate by more than half. 86 Fed. Reg. at 4219 (JA__). EPA's failure to consider whether it was feasible to retain the seven percent rate alongside other changes to EPA's lead service line replacement requirements was arbitrary.

1. Record evidence shows that a seven percent replacement rate is more protective and feasible

Replacing more lead service lines more quickly protects health. If EPA required water systems that exceed the action level to replace seven percent of their lead service lines per year, those systems would replace twice as many lines than if EPA only required a three percent

rate. For a system that continues to exceed the action level, a seven percent rate cuts the time for replacement by more than half: from 33 years to just over 14. JA__ [2017-0300-1546_at_1].

An EPA-commissioned analysis in the record shows that retaining the seven percent rate was feasible. According to this analysis, most water systems conducting voluntary lead service line replacement did so at an average annual rate of *12 percent*. JA__ [2017-0300-0699_at_tab 4] (calculating, in table 1b, the average replacement rate for systems serving more than 10,000 people).[8] Water systems that replaced full lead services lines at a rate far faster than three percent per year include Marlborough, Massachusetts (15%); Newark, New Jersey (17%), Louisville, Kentucky (23%), York, Pennsylvania (25%), Green Bay, Wisconsin (30%), Newton, Massachusetts (31%), Spokane, Washington (36%), and Galesburg, Illinois (53%). JA__ [2017-0300-0699_at_tab 2]; *see also* JA__ [2017-0300-0699_at_tab 1] ("Data are only

[8] EPA included this analysis in the rulemaking docket in the form of an Excel spreadsheet. The spreadsheet is available on Regulations.gov at the following web address: https://www.regulations.gov/document/EPA-HQ-OW-2017-0300-0699.

for full [lead service line] replacements."). Because feasible means "technically possible and affordable," *City of Portland*, 507 F.3d at 712, this analysis offers persuasive evidence that water systems can replace at least seven percent of their service lines per year if required.

2. EPA arbitrarily ignored record evidence and failed to examine the feasibility of retaining a seven percent rate

EPA ignored this powerful evidence in the record. Even though the analysis cited above was commissioned by EPA and based on EPA data, *see* JA__ [2017-0300-0699_at_tab 1]—and even though it bears directly on replacement rate feasibility—EPA never discusses it in the proposed or final rule. That was arbitrary. *Sorenson Commc'ns Inc. v. FCC*, 755 F.3d 702, 709-10 (D.C. Cir. 2014) (agency action is arbitrary where there is "contrary evidence" in the record and agency leaves "serious concerns unaddressed"); *Butte Cty. v. Hogan*, 613 F.3d 190, 194-95 (D.C. Cir. 2010) (agency action was arbitrary because it ignored "evidence contradicting its position").

Instead of grappling with this evidence and considering whether retaining the seven percent rate was feasible, EPA defended its slowdown by claiming that *other* changes—specifically, prohibiting

water systems from counting partial replacements and test-outs towards the replacement rate—would lead to more service line replacement overall when compared to the 1991 Rule. 86 Fed. Reg. at 4216-17 (JA__); JA__ [2017-0300-1622_at_188-89]. But even if EPA had support for that conclusion—which it does not, *see* State Pet'rs' Br. Argument § I.B—that does not speak to whether the new regime is as protective as feasible, 42 U.S.C. § 300g-1(b)(7)(A), but only to the separate question of whether the Revisions Rule provides less protection than the 1991 Rule.

Preserving a seven percent replacement rate *and* disallowing partial replacements and test-outs from counting towards replacement totals would unquestionably be more health-protective. But EPA did not consider whether such a combination was feasible, 86 Fed. Reg. at 4216 (JA__); JA__ [2017-0300-1622_at_188-89], even though commenters asked it to, *see, e.g.*, JA__ [2017-0300-1468_at_10-11]; JA__ [2017-0300-1039_at_2-3]. EPA's failure to retain the seven percent rate was arbitrary, and EPA did not give any reason why reducing the rate to three percent was necessary.

C. EPA arbitrarily failed to lower the lead action level

The Revisions Rule requires water systems to take more stringent remedial actions only when they exceed the action level. 86 Fed. Reg. at 4284, 4293 (JA__). The rule retains the same 15 ppb action level as before. *Id.* at 4281 (JA__). In refusing to lower the action level, EPA arbitrarily relied on outdated, thirty-year old information that had concededly limited value even when EPA first analyzed it. EPA's additional rationales are unsupported and irrelevant.

1. Considerable record evidence shows that lowering the action level is more protective and is feasible

Even if nothing else in the rule changed, lowering the action level would be more health-protective. Because no amount of lead is safe, the American Academy of Pediatrics recommends that drinking water in schools never exceed 1 ppb of lead. JA__ [2017-0300-1734_at_11]. Since 1995, the Food and Drug Administration has prohibited bottled water from exceeding 5 ppb of lead. 60 Fed. Reg. 57,076, 57,126 (Nov. 13, 1995). Requiring lead reduction measures at lower lead levels would provide greater health benefits. JA__ [2017-0300-1039_at_2].

Record evidence shows it is feasible to lower the action level. EPA set the action level in 1991 at the number it believed water systems could achieve at the time using corrosion control. 56 Fed. Reg. at 26,490-91 (JA__). Now, EPA has decades of data showing that water systems using corrosion control may comfortably achieve lead levels below 15 ppb. 86 Fed. Reg. at 4200 (JA__) (citing a 90 percent decrease in number of systems exceeding the action level); *see also* JA__ [2017-0300-1039_at_2] (citing research showing that an action level of 10 ppb is realistic). Indeed, most medium and large water systems have already achieved lead levels below 5 ppb. JA__ [2017-0300-1546_at_6-7] (analyzing EPA data); *accord* JA__ [2017-0300-1622_at_467] (EPA acknowledgment that water systems have met these levels using corrosion control). Even EPA's own analysis of prior monitoring found that most water systems could have met a 10 ppb action level in the past, without changing treatment or taking other actions. JA__ [2017-0300-1769_at_9-5–9-8]. Because it is demonstrably possible and affordable to achieve systemwide lead levels well below 15 ppb, a lower action level is feasible. *City of Portland*, 507 F.3d at 712.

EPA's new trigger level acknowledges the feasibility of requiring lead reduction measures at a lead level below 15 ppb. EPA set the trigger level at 10 ppb, finding it feasible for water systems that exceed that level to replace lead service lines at a "goal rate" approved by the state and, if applicable, take the first step toward installing corrosion control by completing a corrosion control study. 86 Fed. Reg at 4202-03 (JA__). As EPA itself explained in its proposed rule, "*meaningful reductions* in drinking water lead exposure could be achieved by requiring water systems to take a progressive set of certain actions to reduce lead levels at the tap" when they exceed the trigger level of 10 ppb. 84 Fed. Reg. at 61,691 (JA__) (emphasis added); *see also* JA__ [2017-0300-1469_at_9-10].

2. Despite evidence of feasibility, EPA arbitrarily refused to lower the action level

In the face of this evidence, EPA continued to rely on its thirty-year old justification for an action level of 15 ppb. EPA defended its decision by citing a 1991 assessment—based on data that EPA admits had "limited" value for "making broad-based estimates of treatment efficacy"—that this level represented what could readily be achieved at

the time through corrosion control treatment. 86 Fed. Reg at 4208 (JA__) (quoting 56 Fed. Reg. at 26,490). As the record shows, this is no longer true (if it ever was). Most water systems could readily meet an action level well below 15 ppb. JA__ [2017-0300-1769_at_9-5–9-8; JA__ [2017-0300-1546_at_6-7]; JA__ [2017-0300-1039_at_2]. EPA's 1991 assessment does not respond to or rebut this new evidence. EPA's disregard of thirty years of experience and recent data on what water systems can achieve in favor of its "limited" 1991 analysis is arbitrary. *See Butte Cty.*, 613 F.3d at 194-95; *Pub. Serv. Comm'n of State of N.Y. v. FERC*, 813 F.2d 448, 465 (D.C. Cir. 1987) (reliance on "obsolete data" is arbitrary).

To the extent EPA offered a fresh justification for failing to lower the action level, this too was arbitrary. In its response to comments on the Revisions Rule, EPA acknowledges that some water systems have achieved very low lead levels through corrosion control alone, but posits that "this may not be feasible for *all* water systems." JA__ [2017-0300-1622_at_467] (emphasis added). This response is irrelevant and unsupported. Nothing in the law requires EPA to find that *all* water systems could currently meet a new drinking water standard. To

determine feasibility under the Safe Drinking Water Act, EPA looks to what "large metropolitan or regional public water systems" can achieve, 86 Fed. Reg. at 4207 (JA__) (citing legislative history), and sets the standard there to drive progress, *see* 56 Fed. Reg. at 26,477 (JA__) (action level in 1991 was intended to spur "treatment among large numbers of systems nationwide"). EPA's justification arbitrarily ignores recent data on what water systems can achieve.

EPA's other defenses are similarly nonresponsive. EPA suggested that it did not need to lower the action level because changes to the Rule's sampling procedures and the addition of a new trigger level would "result in more systems exceeding the action level" than the 1991 Rule and enable those systems to act more quickly once they did exceed the action level. 86 Fed. Reg. at 4208 (JA__). But the Safe Drinking Water Act requires EPA to ensure that the Revisions Rule provides at least as much health protection as the 1991 Rule, 42 U.S.C. § 300g-1(b)(9), *and* to craft a treatment technique that is as protective as

feasible, *id.* § 300g-1(b)(7)(A). EPA's rationale ignores the latter requirement.

Finally, EPA's new trigger level itself illustrates why it was arbitrary not to lower the action level. EPA requires *some* protective measures when lead levels exceed 10 ppb, but reserves more meaningful requirements for systems that exceed 15 ppb. 86 Fed. Reg. at 4201-03 (JA__). EPA never explains why those more protective measures—replacing lead service lines at a fixed rate for at least two years, completing the process of installing corrosion control treatment, and educating the public about risk, *id.* at 4202-04 (JA__)—are feasible for water systems that exceed 15 ppb but not for those that exceed 10. This differential treatment of "similarly situated" water systems without "adequate explanation" was arbitrary. *See Burlington N. & Santa Fe Ry. Co.*, 403 F.3d at 776.

* * *

Congress required that any treatment technique prevent adverse health effects to the extent feasible. 42 U.S.C. § 300g-1(b)(7)(A). EPA's treatment technique fails to do so. EPA arbitrarily failed to assess the feasibility of more protective alternatives, ignored compelling record

evidence, and inadequately justified its failure to strengthen its drinking water standard for lead.

CONCLUSION

The Court should vacate the challenged aspects of the Revisions Rule and remand to EPA. *S. Coast Air Quality Mgmt. Dist. v. EPA*, 489 F.3d 1245, 1248 (D.C. Cir. 2007) (vacating rule "to the extent that the court has sustained challenges to it"). The Revisions Rule is arbitrary and unlawful.

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Respectfully submitted,

/s/ Suzanne Novak
Suzanne Novak
Marissa Lieberman-Klein
48 Wall Street, 15th Floor
New York, NY 10005
Tel. (212) 845-7376
snovak@earthjustice.org
mlieberman-klein@earthjustice.org

Counsel for Petitioners Newburgh Clean Water Project, NAACP, Sierra Club, and United Parents Against Lead

/s/ Adeline S. Rolnick
Adeline S. Rolnick
Aaron Colangelo
Erik D. Olson
Natural Resources Defense Council
1152 15th Street NW, Ste. 300
Washington, DC 20005
Tel. (202) 513-6240
arolnick@nrdc.org
acolangelo@nrdc.org
eolson@nrdc.org

Nanding Chen
Natural Resources Defense Council
111 Sutter Street, 21st Floor
San Francisco, CA 94104
Tel. (484) 362-8970
nchen@nrdc.org

Counsel for Petitioner Natural Resources Defense Council

CERTIFICATE OF COMPLIANCE

Pursuant to Federal Rule of Appellate Procedure 32(g), I hereby certify that this brief complies with the type-volume limitation of Federal Rule of Appellate Procedure 32(a)(7)(B) and the Court's order of May 23, 2022. It contains 8,997 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(f), according to the count of Microsoft Word. Because State Petitioners are filing an opening brief of less than 9,000 words, the combined word count of the two briefs is less than 18,000 words.

I further certify that this brief complies with the typeface and type-style requirements of Federal Rules of Appellate Procedure 32(a)(5) and (6) because it has been prepared in 14-point Century Schoolbook, a proportionally spaced font.

/s/ Adeline S. Rolnick
Adeline S. Rolnick

CERTIFICATE OF SERVICE

I hereby certify that on August 8, 2022, the Initial Opening Brief of Petitioners Newburgh Clean Water Project, NAACP, Sierra Club, United Parents Against Lead, and Natural Resources Defense Council has been served on all registered counsel through the Court's electronic filing system.

/s/ Adeline S. Rolnick
Adeline S. Rolnick