

**ATTORNEYS GENERAL OF NEW YORK, CALIFORNIA, DISTRICT OF
COLUMBIA, MASSACHUSETTS, PENNSYLVANIA, DELAWARE,
CONNECTICUT, HAWAII, IOWA, MAINE, MARYLAND, MICHIGAN,
MINNESOTA, NEW MEXICO, NORTH CAROLINA, OREGON,
RHODE ISLAND, VERMONT and WISCONSIN**

March 16, 2022

Michael Regan, Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, D.C. 20460
Via Electronic Submission

**Re: Docket ID No. EPA–HQ–OLEM–2021–0762: *Multistate Comments
Concerning EPA’s Draft Strategy to Reduce Lead Exposures and
Disparities in U.S. Communities (November 16, 2021)***

Dear Administrator Regan:

The Attorneys General of New York, California, the District of Columbia, Massachusetts, Pennsylvania, Delaware, Connecticut, Hawaii, Iowa, Maine, Maryland, Michigan, Minnesota, New Mexico, North Carolina, Oregon, Rhode Island, Vermont and Wisconsin (Attorneys General) respectfully submit these comments on EPA’s *Draft Strategy to Reduce Lead Exposures and Disparities in U.S. Communities* (Lead Strategy). Lead hazards are a scourge on the health and welfare of the most vulnerable residents of our states, and we support the strongest practical measures at the federal level to protect the public. Reducing lead exposures is an environmental justice imperative and we applaud EPA’s commitment to addressing the issue. The Attorneys General support EPA’s Lead Strategy, which provides a strong starting point for confronting the serious public health issue of human lead exposure, while prioritizing environmental justice (EJ) concerns and pursuing an “all of EPA” and “all of government” approach. In order to bolster that approach and ensure that the Lead Strategy does not miss opportunities to reach its goals or omit critical pathways of lead exposure, the Attorneys General offer the following comments and recommendations.

Summary

In general, the Strategy could be strengthened by including proactive policies and standards, aggressive deadlines, meaningful EJ targets, enforcement mechanisms, increased funding for these initiatives, and the inclusion of other specific metrics to succeed and/or to measure and strengthen the likelihood of success. Our comments address the following lead exposure pathways: homes with lead paint hazards, lead in drinking water, lead in soils, lead in aviation gas, lead in food, and lead in occupational and take-home exposures.

Homes with Lead Paint Hazards: It is widely recognized that lead-based paint in homes is the greatest single source of childhood lead poisoning in America. Moreover, lead poisoning from lead-based paint is also a core environmental justice issue, with a disparate impact on low-income communities and communities of color. The Lead Strategy recognizes the ongoing public health crisis and environmental justice concerns associated with lead poisoning in housing. EPA's proposed strategy should include additional elements to reduce lead poisoning from lead paint in housing, including: (1) better use of data to mitigate the dangers of lead paint in housing, (2) work with HUD to update its lead paint regulations and policies, (3) enhanced enforcement of lead paint regulations, and (4) require additional periodic inspections of homes for lead hazards.

Lead in Drinking Water: The recently enacted Bipartisan Infrastructure Law is an unprecedented opportunity to address environmental injustice by ensuring that adequate funds are directed to removal of lead service lines (LSLs) in communities most impacted by lead in drinking water. Many communities with environmental justice concerns lack the technical resources to apply for public funding assistance, and EPA should make every effort to ensure that the Bipartisan Infrastructure Law's investments are distributed equitably. Among other things, as part of the Lead Strategy, EPA should expeditiously promulgate an improved Lead and Copper Rule that will lower the lead action level, require the replacement of all LSLs, and increase the rate of LSL replacement. EPA should also deploy its "whole of EPA" and "whole of government" approach to ensure that public funding to reduce lead exposure in drinking water is equitably directed to communities with environmental justice concerns in compliance with Title VI of the Federal Civil Rights Act of 1964. EPA should also work with the federal Department of Education, the Department of Health and Human Services, and other relevant agencies and offices to promulgate federal regulations requiring testing of water and remediation of LSLs and lead plumbing fixtures in public, charter, and private schools, and in childcare centers.

Lead in Soil: A significant increase in funding is needed for CERCLA and RCRA cleanups of lead in soil in communities from legacy leaded gasoline, industrial operations and other sources of lead in soil hazards. EPA should revise CERCLA and RCRA soil-lead cleanup standards, to set more protective recommendations for screening sites and to strengthen preliminary remediation goals in accordance with the latest science. Similarly, TSCA standards for lead in soil are inadequate to protect human health and the environment. EPA should strengthen and broaden the scope of these standards. We also request that EPA – together with state and local governments – address the wide-spread soil-lead contamination that is a legacy of our use of leaded gasoline. We support EPA increasing its enforcement of RCRA, TSCA and the Clean Air Act programs related to soil-lead hazards and to work within the whole-of-EPA in a coordinated manner. We urge EPA to work with HUD to reduce toxic exposures to lead in soils at all of its facilities particularly those housing facilities located at or near lead Superfund sites or operating facilities with lead contamination.

Lead in Air: The Lead Strategy does not adequately address leaded aviation gasoline (avgas). Leaded avgas is the only remaining lead-containing transportation fuel, and it is the single largest contributor of airborne lead emissions in the United States. EPA should revise the Lead Strategy to include the deadlines it announced in January 2022 to issue a proposal evaluating whether emissions from leaded avgas endangers public health and welfare and contributes to or causes air pollution, pursuant to Section 231(a)(2)(A) of the Clean Air Act in 2022, and to take final action no later than the end of 2023. If EPA determines that leaded avgas meets the criteria for a Clean Air Act endangerment determination, the FAA, which has regulatory authority over aircraft fuel standards, should then promulgate new fuel standards for piston -engine planes such that they “control or eliminate” lead emissions in a manner consistent with EPA’s endangerment determination. In addition, we urge EPA to review and strengthen, as appropriate, the lead NAAQS and lead NESHAP standards to align these standards with current scientific understanding, including requiring fence-line monitoring for lead emissions. In addition, EPA should increase monitoring and enforcement of compliance with these standards.

Lead in Food: Unfortunately, the Lead Strategy does not address food as a source of lead exposure, leaving unaddressed a significant lead exposure pathway that EPA prioritized as recently as in its 2018 Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts (2018 Lead Plan). In order to mitigate the risk of harm from lead contamination in food, EPA should revise the Lead Strategy, consistent with Goal 3 of the Lead Strategy, to include plans for EPA to communicate and coordinate specifically and regularly on lead in food with FDA, USDA, CDC, and other relevant agencies; share EPA’s scientific analysis and technical data with partner agencies where their work intersects, such as by providing EPA’s lead in soil data to USDA to target food product testing; and actively search for opportunities to achieve practical solutions that overcome the jurisdictional limitations caused by fractured agency authority involving the regulation of lead in food.

Occupational and Take-Home Exposure: OSHA warns workers in certain industries with high lead exposure that “take-home lead” -- lead from work that accumulates on a worker’s clothing and shoes -- can cause lead poisoning in children and other family members at home. Although EPA’s 2018 Lead Plan identified reduction of “lead exposure from occupational sources” as a key objective, the Lead Strategy does not mention it. EPA should partner with OSHA and CDC to expand multi-language (including Spanish) informational campaigns to address take-home lead exposure and should implement programs for blood lead testing of construction workers’ young children and pregnant members of their households, along with lead dust testing of their homes and cars.

The Need to Reduce Human Exposure to Lead

EPA has concluded that the effects of lead poisoning are “devastating and irreversible.”¹ Low-level, chronic exposure to lead can cause severe developmental and behavioral problems in children. Children under the age of five are physiologically more sensitive to lead exposure than the general population. High blood lead levels typically manifest as poor neurocognitive and neurobehavioral effects such as decreases in IQ, attention deficits, impulsivity, hyperactivity, and a predisposition to depression, anxiety, or high-risk behavior.² Lead exposure can lead to a wide range of medical disorders, such as encephalopathy, anemia, peripheral neuropathy, renal failure, hypertension, dental caries, osteoporosis, and reproductive dysfunction. Pregnant people and unborn children also experience severe adverse effects from lead exposure. Data shows that lead exposure during pregnancy increases the odds of gestational hypertension, eclampsia and preeclampsia, renal insufficiency, spontaneous abortions, and stillbirths.³ For a fetus, lead toxicity can impair growth, lower birth weight, and delay neurodevelopment and puberty.⁴ Once absorbed by the human body, lead is extremely difficult to remove, and the health effects of lead poisoning are irreversible. Therefore, *prevention* of lead exposure is the best way to minimize the adverse effects of lead poisoning.⁵

Lead poisoning is a core environmental justice issue. Communities of color are disproportionately exposed to lead-polluting sources. A 2020 study concluded that race was the second strongest predictor for elevated blood lead levels.⁶ Another study found that Black and Hispanic children have higher rates of lead poisoning than white children, even when accounting for socioeconomic status.⁷

¹ EPA, What You Need to Know About Lead Poisoning (2014), https://www.epa.gov/sites/production/files/201405/documents/what_you_need_to_know_about_lead_poisoning.pdf; CDC, Lead Poisoning Prevention, <https://www.cdc.gov/nceh/lead/prevention/blood-lead-levels.htm>; Sanders, T., Liu, Y., Buchner, V., & Tchounwou, P. B. (2009). Neurotoxic effects and biomarkers of lead exposure: a review. *Reviews on Environmental Health*, 24(1), 15–45, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2858639/>

² 75 Fed. Reg. 22,440, 22,444-45 (April 28, 2010).

³ See American College of Obstetricians and Gynecologists (2012), Committee Opinion No. 533: Lead Screening During Pregnancy and Lactation at 1, <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2012/08/lead-screening-during-pregnancy-and-lactation.pdf>.

⁴ *Id.*

⁵For a discussion on primary importance of prevention, see: Int J. Environ Res Public Health 2019 Mar; 16(6). LeBron, Al, Torres, I, et al. *The State of Public Health Lead Policies: Implications for Urban Health Inequities and Recommendations for Health Equity*. See also <https://www.usccr.gov/files/2020/2020-11-12-Report-Lead-Poisoning-in-Indiana.pdf>

⁶ Yeter D. et al. (2020), Disparity in Risk Factor Severity for Early Childhood Blood Lead among Predominantly African-American Black Children: The 1999 to 2010 US NHANES, *International Journal of Environmental Research and Public Health* 17(5) at 19, <https://doi.org/10.3390/ijerph17051552>.

⁷ Environmental Injustice: Lead Poisoning in Indiana (A Report of the Indiana Advisory Committee to the U.S. Commission on Civil Rights, November 2020), page 41, <https://www.usccr.gov/files/2020/2020-11-12-Report-Lead-Poisoning-in-Indiana.pdf>.

The Agency for Toxic Substances and Disease Registry (ATSDR) estimates that the U.S. economy incurs \$43.4 billion annually in the costs of all pediatric environmental disease, and lead poisoning alone accounts for the vast majority of these costs.⁸

EPA's Lead Strategy

EPA's Lead Strategy identifies four goals: "1) Reduce community exposures to lead sources; 2) Identify communities with high lead exposures and improve their health outcomes; 3) Communicate more effectively with stakeholders; and 4) Support and conduct critical research to inform efforts to reduce lead exposures and related health risks."

To achieve the goal of "reducing community exposures to lead sources," the Lead Strategy focuses on the major sources of lead exposure: (1) homes and child-occupied facilities with lead-based paint hazards (Objective A); (2) lead in drinking water (Objective B); (3) lead in soils (Objective C); and (4) lead emissions in ambient air (Objective D). The Lead Strategy identifies enforcement and compliance assistance (Objective E) as measures to address exposures of lead from its major sources.

EPA describes three approaches intended to guide its actions and facilitate greater collaboration within the Agency and with federal partners. Approach 1 is to "reduce lead exposures locally with a focus on communities with disparities and promote environmental justice." This approach entails identification of communities of high lead exposure and blood lead levels and determination of the main sources of lead and cumulative exposure pathways. EPA will use this information to focus the Agency's actions under all applicable authorities to reduce risk.

Approach 2 is to "reduce lead exposures nationally through protective standards, analytical tools, and outreach." This approach entails implementation and enforcement of national standards, policy, and guidance, as well as "using analytical tools, conducting research, and applying evidence to improve the scientific foundations for methods to reduce and mitigate lead exposure; and soliciting stakeholder input to inform Agency decisions."

Approach 3 is to "reduce lead exposures with a 'whole of EPA' and 'whole of government' approach." This involves collaboration "across EPA programs and with federal partners and other governmental stakeholders, including states, tribes, cities, and counties, as well as non-governmental organizations and

⁸ https://www.atsdr.cdc.gov/csem/leadtoxicity/lead_found.html. See also Columbia Law School Health Justice Advocacy Clinic, *The Cost of Childhood Lead Poisoning in the United States of America*, 1 (2019) https://www.law.columbia.edu/sites/default/files/microsites/clinics/healthadvocacy/usa_cba.pdf.

industry stakeholders to focus the full range of resources to reduce lead exposures from all sources in the most impacted communities across the country.”

Major Sources of Lead Exposure

To better achieve these goals, EPA should strengthen the Lead Strategy’s approach to addressing the major sources of lead exposure in the following areas: homes with lead paint hazards, lead in drinking water, lead in soils, leaded aviation gasoline, lead in food, and occupational and take-home lead exposure. We explain how EPA’s Lead Strategy goals can be furthered by pursuing environmental justice (Approach 1), employing more protective standards (Approach 2), and adopting a “whole of EPA” and “whole of government” approach (Approach 3).

I. Lead-Based Paint Hazards in Homes

A. Nature of the Issue

Despite significant achievements in reducing childhood lead poisoning, exposure to lead-based paint in homes and child-occupied facilities remains a pervasive cause of lead poisoning in large parts of the country. For much of the 20th century, lead-based paint was used on both exterior and interior surfaces of housing in the United States. For decades, doctors and scientists have recognized that lead-based paint in older homes is the leading source of lead exposure for children.⁹ The U.S. Department of Health and Human Services has documented that most lead poisoning in children is the result of dust and chips from deteriorating lead-based paint on interior surfaces in older homes.¹⁰ Studies of children with elevated blood lead levels (EBLLs) have shown between 14% and 40% of the EBLLs of children were related to renovation, repair and painting activities in their homes.¹¹

In 1978, the U.S. Consumer Product Safety Commission imposed a federal ban on lead in paint. Nonetheless, lead paint in homes remains a major public health problem. According to EPA, approximately 87% of houses built before 1940 still

⁹ Lanphear, B.P., et al. “The Contribution of Lead Contaminated House Dust and Residential Soil to Children’s Blood Lead Levels. A Pooled Analysis of 12 Epidemiologic Studies” *Environmental Research*, Section A 79, 51-68 (1998); Lanphear B.P. and Roghmann, K.L. “Pathways of Lead Exposure in Urban Children” *Environmental Research* 74, 67-73 (1997); U.S. Department of Health and Human Services. (ATSDR, 2020) Toxicological Profile for Lead, at 2. Available at: <https://www.atsdr.cdc.gov/toxprofiles/tp13.pdf>.

¹⁰ U.S. Department of Health and Human Services. (ATSDR, 2020) Toxicological Profile for Lead, at 421. Available at: <https://www.atsdr.cdc.gov/toxprofiles/tp13.pdf>.

¹¹ Franko, E.M., et al. (1997). Children with Elevated Blood Lead Levels Attributed to Home Renovation and Remodeling Activities – New York, 1993-1994. *Morbidity and Mortality Weekly Report*, 45(51 & 52), 1120-1123. Available at www.cdc.gov/mmwr/preview/mmwrhtml/mm5803a3.htm

contain lead paint, compared with 69% of houses built during 1940-1959 and 24% of houses built during 1960-1977.¹²

Lead poisoning from lead-based paint is also a core environmental justice issue, with a disparate impact on low-income communities and communities of color. Children from households living at or below the federal poverty line are at a greater risk of exposure to lead than children from households above the federal poverty line.¹³ For example, of all U.S. states, New York State has the highest percentage of residential buildings built before 1950.¹⁴ The problem of lead paint in housing is especially acute in Buffalo and Syracuse where at least 90% of housing was built before 1978.¹⁵ In the Buffalo region, children who live in communities of color are 12 times as likely to be diagnosed with an EBLL as children who live in predominantly white neighborhoods.¹⁶ The most recent available data show that Black children in Syracuse are twice as likely as White children to have elevated blood lead levels, (with 22.7% of Black children in Syracuse having EBLs compared to 10.8% of White children).¹⁷ Residents of low-income communities in Buffalo and Syracuse also face higher rates of lead poisoning. Lead poisoning in New York City is also highest among children of color and children living in high-poverty neighborhoods. 66% of children under six with blood lead levels of 5 µg/dL or greater were from high-poverty neighborhoods, and Asian, Black, and Hispanic/Latino children represented 84% of children under age six with blood lead levels of 15 µg/dL or greater.¹⁸

The health issues associated with lead-based paint in housing experienced in New York occur across the country as well. The Attorneys General thus welcome and fully support EPA's commitment to reduce lead poisoning from exposure to lead-

¹² Protect Your Family from Exposures to Lead, EPA, <https://www.epa.gov/lead/protect-your-family-exposures-lead> (last accessed Mar. 15, 2022).

¹³ Childhood Lead Poisoning Prevention: Populations at Higher Risk, CDC, <https://www.cdc.gov/nceh/lead/prevention/populations.htm> (last visited Mar. 14, 2021); Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts, EPA, December 2018, p.3, https://www.epa.gov/sites/default/files/2018-12/documents/fedactionplan_lead_final.pdf

¹⁴ Korfmacher, Katrina and Benfer, Emily and Chachere, Matthew, *Lead Laws and Environmental Justice in New York* (November 22, 2019). The New York Environmental Lawyer, Vol. 39, No. 1, Fall/Winter 2019, p.1, Available at SSRN: <https://ssrn.com/abstract=3492119>

¹⁵ Get Ahead of Lead, Community Foundation for Greater Buffalo, <https://www.cfgb.org/community-change/initiatives/get-ahead-of-lead/> (last accessed Mar. 15, 2022); Get the Lead Out: The Greater Syracuse Lead Poisoning Prevention Action Plan, Home Headquarters: Syracuse & Central NY, (2018), 1, https://www.leadsafecny.org/uploads/1/0/3/5/10359334/greater_syracuse_lead_prevention_action_plan_2018_102218_2.pdf (last accessed Mar. 15, 2022)

¹⁶ University at Buffalo Regional Institute et al., *The Racial Equity Dividend: Buffalo's Great Opportunity*, 2016 (rev. June 2018), at 43, <https://racialequitybuffalo.org/files/documents/report/theequitydividendfinaljune2018.pdf> (last accessed Mar. 15, 2022).

¹⁷ *Id.*

¹⁸ Report to the New York City Council on Progress in Preventing Elevated Blood Lead Levels in New York City, New York City Department of Health & Mental Hygiene, Sept. 2019; <https://www1.nyc.gov/assets/doh/downloads/pdf/lead/lead-rep-cc-annual-19.pdf>

based paint in housing. EPA's proposed strategy would benefit from modifications that we suggest below.

B. Recommendations

The Attorneys General are generally supportive of EPA's strategy to combat poisoning caused by lead-based paint in housing. We do seek several improvements in the Lead Strategy, however: (1) better use of data to guide efforts to mitigate the dangers of lead paint in housing, (2) working with HUD to update its lead paint regulations and policies, and (3) enhanced enforcement of lead paint regulations.

1. EPA should harness data to reduce lead-based paint exposures in housing.

The Attorneys General support EPA's use of data to guide how it allocates resources and funding to address the impacts of lead paint in homes. By using better data, EPA can more effectively allocate resources and invest in historically marginalized communities, consistent with President Biden's Justice40 Initiative.¹⁹ In addition to the methods identified in the Lead Strategy, the Attorneys General recommend that EPA look at two other data sources to address lead poisoning from lead-based paint hazards in housing.

First, EPA and HUD should work with state and local housing code enforcement agencies to obtain data on housing code noncompliance to help identify buildings with potential lead-based paint hazards. Recognizing lead-based paint hazards in housing is a building-by-building data-intensive exercise. Property conditions are significantly influenced by building-specific factors, like the diligence and responsiveness of the building owner and its property management company.

By analyzing housing code non-compliance data, EPA and HUD may be able to proactively address the threat of lead-based paint, before it actually poisons children. Many state and local housing code enforcement agencies have a keen understanding of areas and buildings that suffer from pervasive disrepair. Ideally, EPA and HUD could obtain data from state and local agencies on buildings with violations of chipping and peeling paint and other defective surface conditions. Beyond paint and surface-specific violations, a building with pervasive and long-term security, electrical, heating or cooling, or other maintenance issues, like leaking pipes, may also be indicative of neglect by an owner or property manager. Properties impacted by systemic housing code non-compliance frequently also have chipping and peeling paint. Thus, obtaining data on general housing code compliance or even a list of chronic housing code violators from state and local housing code enforcement agencies can significantly help EPA and HUD to identify buildings and property owners that deserve federal attention and resources in terms of addressing potential lead-based paint conditions.

¹⁹ See generally *Delivering on Justice40*, Dec. 2, 2021, <https://www.whitehouse.gov/omb/briefing-room/2021/12/02/delivering-on-justice40/> (last accessed Mar. 15, 2022).

Second, we support EPA’s inclusion, as part of its Lead Strategy, of identification of lead “hot spots” by using blood lead level data collected by states, tribes, territories, federal agencies, and local governments, with care taken to protect personal privacy. These entities collect data on blood lead levels, particularly in children under the age of six years old. Some of these agencies are directly involved in interviewing parents or guardians, investigating possible additional sources of lead exposure, developing treatment plans, and monitoring the long-term health of lead-poisoned children. In carrying out these roles, the entities often have additional useful data showing where children reside and when they had blood drawn showing an elevated blood lead level. This data would likely evidence a strong correlation to buildings with lead-based paint hazards, particularly when more than one child has had an elevated blood lead level at a particular building or address. This is a crucial step to remedy buildings with long-term or chronic lead-based paint issues.

Finally, EPA notes discrepancies in data among government entities. EPA should consider issuing guidance, in coordination with other relevant agencies, on minimum data requirements (i.e., child’s home address and date of blood draw) and formatting of that data that these entities collect. Long term, such guidance would help EPA to better understand communities that more seriously suffer from lead poisoning.

2. EPA should call on HUD to follow and update its lead-based paint regulations and policies.

We also commend EPA on its proposed “whole of government” approach, including working with HUD to address lead paint relating to public housing, the housing choice voucher (“HCV”) program, and other federally subsidized housing programs like HUD-backed mortgages and loans. In three ways, HUD is a crucial agency in the fight against lead-based paint hazards, particularly for lower-income Americans. First, HUD oversees and provides funding and grants to public housing authorities that own approximately 1.2 million housing units throughout the country.²⁰ HUD provides funding to public housing authorities, including grants for operating and capital expenses, and more tailored grants like the choice neighborhoods revitalization grant, which is used to rebuild or rehabilitate distressed public housing.²¹ Second, in the HCV program, HUD provides grants, typically to public housing authorities, to pay landlords of 2.2 million households to make up the difference between tenant rent payments and the market rental

²⁰ HUD’s Oversight of Lead-Based Paint in Public Housing and Housing Choice Voucher Programs, Office of Inspector General, HUD 3 (2018), <https://www.hudoig.gov/sites/default/files/documents/2018-CH-0002.pdf>.

²¹ See e.g., *Public Housing Operating Fund*, HUD, <https://www.hud.gov/hudprograms/phfund> (last accessed Mar. 15, 2022); *Public Housing Capital Fund*, HUD, <https://www.hud.gov/hudprograms/phcapfund> (last accessed Mar. 15, 2022); *Summary of Resources*, HUD (2021), https://www.hud.gov/sites/dfiles/CFO/documents/9_2022CJ-PHFund.pdf (“The 2022 President’s Budget request \$8.6 billion for the Public Housing Fund, which is \$769 million more than the 2021 enacted level.”); *Choice Neighborhoods*, HUD, <https://www.hud.gov/cn> (last accessed Mar. 15, 2022).

price of the unit.²² Finally, HUD issues private mortgages, loans, and other financing for the purchase, construction, and rehabilitation of low-income housing.²³

HUD requires public housing authorities and owners in the HCV program to visually inspect for lead-based paint hazards prior to the initial term of the lease and annually thereafter.²⁴ HUD also performs visual inspections for lead-based paint hazards at properties owned by public housing authorities and properties with HUD-backed mortgages and loans.²⁵ Thus, HUD's funding and grantmaking role and inspection requirements are key to mitigating and abating lead-based paint hazards.

Despite HUD's recognition that "the most important preventable exposure sources for children . . . in their residential environment [are] deteriorated lead paint, house dust, and lead-contaminated soil,"²⁶ the agency has recently struggled to address lead-based paint hazards. In 2018, HUD's Office of Inspector General finalized a report detailing the agency's shortfalls in its oversight of lead-based paint in public housing and the HCV programs.²⁷ HUD's Inspector General identified three key areas where the agency lacked adequate oversight of lead-based paint reporting and remediation in its public housing and HCV programs. Specifically, HUD did not:

- (1) ensure that public housing agencies appropriately reported and mitigated cases involving children under 6 years of age with environmental intervention blood lead levels (EIBLLs) in its public housing program, (2) establish policies and procedures for public housing agencies to report a child with an EIBLL who resided in a household assisted under its [HCV] program and ensure that identified lead hazards had been mitigated, and (3) ensure that public housing agencies completed required lead-based paint inspections.²⁸

²² See e.g., *Mortgage Insurance for Rental and Cooperative Housing: Section 221(d)(4)*, HUD, https://www.hud.gov/program_offices/housing/mfh/progdesc/rentcoophsg221d3n4 (last accessed Mar. 15, 2022); *Mortgage Insurance for Purchase or Refinancing of Existing Multifamily Rental Housing: Section 207/223(F)*, HUD, https://www.hud.gov/program_offices/housing/mfh/progdesc/purchrefi223f (last accessed Mar. 15, 2022); *HUD Announces \$38.8 Million in Loan Guarantee Assistance to the District of Columbia for Affordable Housing Project*, HUD (Feb. 16, 2021), https://www.hud.gov/press/press_releases_media_advisories/hud_no_21_024.

²³ *Id.*

²⁴ 24 C.F.R. § 35.1355(a)(2).

²⁵ See 24 C.F.R. § 248.147(b).

²⁶ CONGRESSIONAL JUSTIFICATIONS, HUD 33-6 (2016), <https://www.hud.gov/sites/documents/FY16-CJE-ENTIREFILE.PDF>.

²⁷ HUD'S OVERSIGHT OF LEAD-BASED PAINT IN PUBLIC HOUSING AND HOUSING CHOICE VOUCHER PROGRAMS, OFFICE OF INSPECTOR GENERAL, HUD, <https://www.hudoig.gov/sites/default/files/documents/2018-CH-0002.pdf>.

²⁸ *Id.* at 1.

Given these deficiencies, EPA should work with HUD to ensure the agency follows through on its existing duties, particularly related to lead-based paint inspections.

Further, EPA should prompt HUD to strengthen its lead-based paint inspection regulations and/or grant requirements to improve lead-based paint health outcomes. For example, HUD could condition funding or grants on landlords performing more thorough annual lead-based paint inspections (e.g., dust sampling) in housing units compared to the existing visual inspection requirement. While chipping and peeling paint can be merely surface-related issues, occasionally the condition is a symptom of problems beneath the surface, like leaking pipes and water intrusion in a building. Additionally, owners near the time of inspection can paint over chipping and peeling paint, masking the true problem—leaking pipes—which remain and cause chipping and peeling paint to return prior to the annual re-inspection. Similarly, HUD recognizes that owners often make “extraordinary ‘just in time’ repairs to meet minimal compliance thresholds at the time of inspection.”²⁹ While owners have separate duties to address underlying issues, HUD should consider requiring more than just visual inspection to detect lead-based paint hazards, e.g., by requiring confirmatory dust sampling during the annual inspection process. HUD could accomplish this through updating its regulations or conditioning existing or supplemental grant funds on performing the sampling.

In other ways, HUD can condition funding or grants to incentivize owners to address lead-based paint issues. Currently, for instance, HUD may cut funding off to a public housing authority or a privately owned, federally subsidized property if a building receives a failing physical inspection, known as a Real Estate Assessment Center (REAC) score, denoting significant housing code issues that the owner has not addressed. Moving forward, HUD could condition funding or grants based on achieving a certain lead-paint specific REAC score. For example, HUD could create a subset REAC score that relates specifically to chipping and peeling paint and could condition funding based on satisfactory subset scores. For the HCV program, HUD could require owners to inspect for chipping and peeling paint more frequently than annually, such as every six months, and condition funding or grants based on documenting the inspection. Aside from inspections for the HCV program, HUD may condition funding based on a building owner providing documentation showing that they are using and providing tenants with the proper lead-based paint disclosure form for the respective jurisdiction.

3. EPA should commit more resources to enforcing existing lead-based paint laws and regulations.

We also suggest EPA focus efforts and resources on enforcing existing federal laws and regulations relating to lead-based paint hazards. EPA currently has a panoply of regulations in place that provide significant enforcement authority. These

²⁹ STANDARDIZATION OF REAC INSPECTION NOTIFICATION TIMELINES, HUD 1 (Feb. 2019), https://www.hud.gov/sites/dfiles/Main/documents/14-Day_Notice_w_PIH_Signature.pdf.

regulations, however, cannot achieve their full potential to reduce lead poisoning without effective enforcement.

One of the greatest challenges to combating lead poisoning is underenforcement of existing laws. There is already a patchwork of laws – local, state, federal – in place to address lead poisoning from various angles. Municipal and county legislatures have enacted housing codes that impose requirements on property owners and landlords. Other laws at the state level address different aspects of lead poisoning. Federally, there are already laws in place that impose important obligations on property owners, lessors, contractors, and property managers in relation to lead paint and lead hazards in housing.

In 2008, EPA promulgated the Renovation, Repair, and Painting Rule (the “RRP” Rule), 40 C.F.R. §§ 745.80 - 745.92 that, among other things, requires contractors and owners working in housing constructed before 1978 to use lead-safe work practices. The RRP Rule sets health and safety requirements for “renovation” activities in “target housing” (residential housing built before 1978) including detailed certification, notice and recordkeeping requirements.³⁰ EPA and HUD have also promulgated important regulations requiring the disclosure of lead-based paint hazards before the lease or sale of “target housing”, essentially most housing built before 1978. EPA’s regulations, 40 C.F.R. Part 745, Subpart F, and HUD’s regulations, 24 C.F.R. Part 35, Subpart A, are collectively known as the “Lead Disclosure Rule.” Finally, EPA regulates who may perform lead-based paint activities such as abatement and renovations in target housing and child-occupied facilities by setting forth certification requirements as well as work practice standards.³¹ Together these EPA regulations impose a comprehensive set of requirements aimed at reducing exposure to lead by children, workers, and others.

EPA is also armed with significant enforcement mechanisms to help achieve compliance. Civil and criminal penalties for violations of EPA’s lead regulations can be substantial. Violations of the RRP Rule or Lead Disclosure Rule are subject to civil and criminal sanctions under the Toxic Substances Control Act (TSCA), including civil penalties.³² “Knowing violations” under TSCA can be criminal, with substantial monetary penalties, or imprisonment, or both, in addition to or in lieu of civil penalties.³³ And “knowing endangerment” under TSCA carries penalties of up to 15 years imprisonment or a fine of not more than \$250,000, or both, and an organization convicted of knowing endangerment may be subject to a fine of up to \$1,000,000.³⁴ Thus, EPA already has significant tools that it can employ to enforce the existing federal regulatory scheme relating to lead-based paint hazard reduction.

³⁰ See 15 U.S.C. § 2681(17); 40 C.F.R. § 745.83.

³¹ See 40 C.F.R. §§ 745.220-745.239.

³² See 15 U.S.C. § 2615; 40 C.F.R. § 745.118; 24 C.F.R. §§ 30.65(b) and 35.96(f).

³³ 15 U.S.C. § 2615(b)(1).

³⁴ *Id.* § 2615(b)(2)(a).

The Attorneys General acknowledge and appreciate EPA's enforcement efforts and understand the limitations on enforcement-related resources. Although EPA has had some recent enforcement successes relating to lead-based paint regulations, there is room for substantial expansion and improvement.

For example, a recent study concluded that EPA's enforcement of the RRP Rule is "sparse," and that higher compliance with the Rule could protect over 79,000 children in New York alone from lead exposure each year.³⁵ A September 2019 report by the EPA Office of the Inspector General found that "EPA does not have an effective strategy to implement and enforce the lead-based paint rule."³⁶ The report further noted, "[e]ffective oversight and enforcement are needed to further reduce lead exposures from renovation, repair and painting activities."³⁷

As EPA has recognized, "[h]olding businesses and individuals accountable for flouting lead paint laws can serve as an effective deterrent to those who may otherwise seek to cut corners."³⁸ We support EPA's current enforcement efforts and encourage EPA to devote additional resources and efforts to enforcing the lead-based paint related laws and regulations that are already in place. On that score, the Lead Strategy does not go far enough to increase EPA's enforcement of its existing regulations, a shortcoming that the EPA Office of the Inspector General highlighted more than two years ago, and that EPA should commit to resolving in the Lead Strategy.

4. EPA should require increased frequency of inspections in target housing with a history of lead-based paint hazards.

Prevention of exposures to lead is essential for reducing lead poisoning and so we urge EPA to require owners of target housing to take more proactive measures to prevent residents from being exposed to lead-based paint. In our experience, owners and managers of rental housing often do not take sufficient proactive measures to prevent the deterioration of lead-based paint in housing, rather, they take reactive measures addressing lead hazards only after learning from local housing authorities of deteriorating paint or worse, lead-poisoned children.

One effective tool that owners of rental housing can employ to reduce lead poisoning is to conduct more frequent inspections for deteriorating paint. While current EPA and HUD regulations contain some inspection requirements, such requirements are not sufficient to protect against lead exposures and should be

³⁵ Kreher, Alice, Lead-Safe Renovation, Repair, and Painting Activities in New York State, Analysis of the Proposal for State Management of the RRP Rule, p. 2. February 2020. Available at https://ppgbuffalo.org/files/documents/lead_rrp_activities_in_nys.pdf.

³⁶ USEPA, Office of Inspector General, EPA Not Effectively Implementing the Lead-Based Paint Renovation, Repair and Painting Rule, p. 8. Report No. 19-P-0302, September 9, 2019.

³⁷ See *id.* at Executive Summary.

³⁸ USDOJ Press Release, "United States Files Injunction Action Against Long Island-Based Lead Paint Removal Contractor," April 14, 2020. <https://www.justice.gov/usao-edny/pr/united-states-files-injunction-action-against-long-island-based-lead-paint-removal>

expanded. HUD requires initial and periodic inspections of housing where a tenant participates in the HCV program.³⁹ TSCA and the RRP Rule require inspections in conjunction with lead abatement and most renovation projects at target housing to assure compliance with federal requirements.⁴⁰ Inspections under the RRP, however, are not mandatory after the work has been completed and cleared. The lack of follow-up or ongoing inspections, especially where interim controls have been used, is a problem that can be remedied by making post-clearance inspections required, especially after use of interim controls to address a lead-based paint hazard.

Interim controls are defined as:

. . . a set of measures designed to reduce temporarily human exposure or likely exposure to lead-based paint hazards, including specialized cleaning, repairs, maintenance, painting, temporary containment, ongoing monitoring of lead-based paint hazards or potential hazards and the establishment and operation of management and resident education programs.⁴¹

Interim controls are intended to make dwellings lead-safe by *temporarily* controlling lead-based paint hazards whereas abatement is intended to permanently control lead-based paint hazards.⁴² HUD guidance on use of interim controls recognizes that “interim control” measures are fully effective only as long as they are “carefully monitored, maintained, and, in some cases, professionally reevaluated.”⁴³ The HUD guidance further states that “if interim controls are properly maintained, they can be effective indefinitely.”⁴⁴ As both HUD and EPA recognize, as long as surfaces are covered with lead-based paint, however, they constitute potential hazards.⁴⁵ By definition, interim controls are expected to “temporarily, but not permanently, reduce lead-based paint hazards.”⁴⁶ Although EPA’s definition of interim controls recognizes both the temporary reduction of exposure to lead-based paint hazards and the need for “ongoing monitoring,” no such ongoing monitoring is required.⁴⁷ This presents a significant regulatory hole that can be alleviated by imposing on a property owner an ongoing, post-renovation inspection requirement where interim controls have been used to remedy a lead-based paint hazard.

³⁹ 24 C.F.R. § 35.1200(a).

⁴⁰ 15 U.S.C. § 2610(a); 40 C.F.R. § 745.87(e).

⁴¹ 40 C.F.R. § 745.223.

⁴² HUD Guidelines for the Evaluation and Control of Lead-Based Paint in Housing, Chapter 11: Interim Controls. <https://www.hud.gov/sites/documents/LBPH-13.PDF>.

⁴³ *Id.* at 11-7.

⁴⁴ *Id.*

⁴⁵ *Id.*; 40 C.F.R. § 745.223.

⁴⁶ *See* 40 C.F.R. § 745.223(4).

⁴⁷ 40 C.F.R. § 745.223.

A common situation we encounter in situations involving lead-poisoned children is that lead-based paint in homes where an owner has employed interim controls often deteriorates and becomes a lead hazard in relatively short periods of time. This is a particular problem in low-income rental housing where property owners and managers use minimal, inexpensive interim controls in order to achieve clearance of a paint-related violation rather than employing more costly but more permanent methods of addressing lead paint hazards. As such, interim controls frequently are only temporary in nature and require ongoing inspection, maintenance and subsequent repair or renovation. A new, ongoing inspection requirement is proactive in nature and would help prevent the recurrence of lead-based paint hazards following use of temporary, interim controls.

We suggest that EPA revise the RRP Rule to include a periodic inspection requirement where an owner has used interim controls to address a lead-based paint hazard. Such inspection should, at a minimum, include visual inspection for deteriorated paint and potentially more extensive inspection protocol such as dust sampling. Such additional inspections are a relatively low-cost means of preventing exposure to lead. An alternative increased inspection requirement could be modeled after laws, such as the New York City Childhood Lead Poisoning Prevention Act, that require inspections of housing units annually and on tenant turnover or other proactive laws that have been demonstrated to reduce lead paint exposure to children.⁴⁸

Further, in the event such an inspection yields deteriorated paint or some other lead-based paint hazard, the owner should be required to undertake abatement or renovation activities to remove the hazard, in full compliance with the RRP Rule. Finally, owners should be obligated to provide reports from such inspections to tenants and to maintain records of such reports and correspondence to tenants as required by current EPA regulations.⁴⁹ Such increased periodic inspections would be a low-cost method of preventing lead exposures, particularly to children most at-risk of exposure to lead-based paint.

II. Lead in Drinking Water

A. Nature of the Issue

Exposure to lead in drinking water is one of the nation's most pernicious public health environmental injustices, and the Attorneys Generals encourage EPA to take expeditious action to strengthen the lead in drinking water standards and ensure that federal funds are utilized to protect the most-impacted communities. Lead in drinking water – in large part the result of historic lead pipes, or lead-service lines (LSLs) – creates devastating, long-term health impacts that disproportionately impact historically marginalized, low-income communities that often lack the resources to fund the removal and replacement of LSLs. The Bipartisan Infrastructure Law's allocation of \$15 billion to fund such projects

⁴⁸ N.Y.C. Admin. Code §§ 27-2056.1–27-2056.18.

⁴⁹ 40 C.F.R. §§ 745.86, 745.107, and 745.113(a)-(b).

represents an unprecedented opportunity for EPA to ensure that these lead pipes never again expose communities to dangerous, lead-contaminated water supplies.

B. Recommendations:

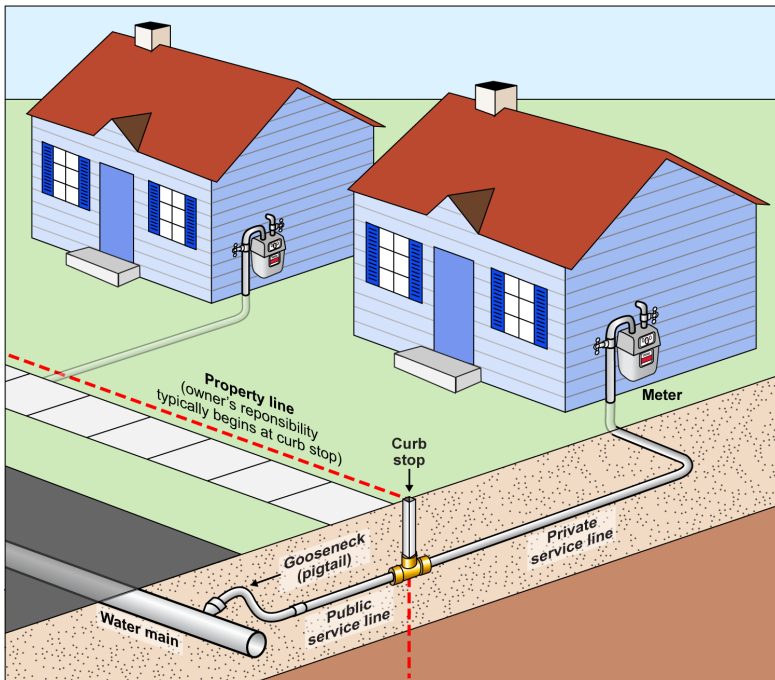
1. Reduce lead exposures locally with a focus on communities with environmental justice concerns

Communities with environmental justice concerns are most likely to be impacted by lead exposure in drinking water, and it is critical that EPA evaluate potential disparate impacts created by the applicable regulation – the Lead and Copper Rule (LCR). One of the most problematic environmental justice issues posed by the LCR is how to remove and replace existing LSLs in communities with limited financial resources. While Congress mandated the use of “lead-free” pipes starting in 1986, EPA estimates that between 6 and 10 million homes nationwide still receive drinking water through LSLs.⁵⁰ Where those LSLs remain, they are the most significant source of exposure to lead in drinking water, and their prompt removal is critical to eliminating the threat they pose as long as they remain in use. Ensuring that LSL removal is conducted in a manner that does not have a disparate impact on low-income communities and communities of color that already bear a disproportionate share of environmental burdens is critical to any successful LCR.

A key reason that LSL removal is such a challenging environmental justice issue is the dual-ownership nature of LSLs, since a portion of the LSL is typically owned by the water system with the remainder owned by the landowner. The following illustration⁵¹ demonstrates the standard arrangement.

⁵⁰[https://www.epa.gov/ground-water-and-drinking-water/lead-service-line-replacement#:~:text=It%20is%20estimated%20that%20there,replacement%20\(LSLR\)%20case%20studies](https://www.epa.gov/ground-water-and-drinking-water/lead-service-line-replacement#:~:text=It%20is%20estimated%20that%20there,replacement%20(LSLR)%20case%20studies).

⁵¹ United States Government Accountability Office, Drinking Water: Approaches to Identifying Lead Service Lines Should Be Shared with All States, 7 (Sept. 2018), <https://www.gao.gov/assets/700/694648.pdf>.



Under the LCR, a water system is only responsible for funding LSL removal of the publicly-owned portion of the LSL, leaving the remaining cost, typically several thousand dollars, to the landowner.⁵² But many people simply cannot afford to pay thousands of dollars out-of-pocket to fund removal of the private portion of a LSL. EPA has recognized that, “[t]o the extent water systems rely on homeowners to pay for replacement of privately owned portions of lines, there are concerns about consumers’ ability to pay and the possibility that lower-income homeowners will be unable to replace lines, resulting in disparate levels of protection.”⁵³ The result of the existing framework is that full LSL removal, in which both the public and private LSL segments are removed, happens largely in affluent communities, while America’s lower-income populations remain exposed to the harmful health impacts caused by lead in their drinking water. Unsurprisingly, studies show strong positive correlations between full LSL removal and income level.⁵⁴ A strong correlation also exists between full LSL removal and race, with water systems serving white populations substantially more likely to conduct full LSL removal than those water systems serving Black populations.⁵⁵

⁵² 84 Fed. Reg. 61,697 (Nov. 13, 2019) (“[W]ater systems are not required to pay for replacement of customer owned lead service lines...”). EPA estimates that the average customer-side LSLR will cost \$3,000. Appendix A-13, Exhibit A.8: Summary of LSLR Costs from Surveys.

⁵³ EPA, Lead and Copper Rule Revisions White Paper, 9 (2016), https://www.epa.gov/sites/default/files/2016-10/documents/508_lcr_revisions_white_paper_final_10.26.16.pdf.

⁵⁴ Environmental Defense Fund, Lead in Drinking Water: Equity Concerns in Replacing Lead Service Lines, American Public Health Association Annual Meeting Presentation (Nov. 5, 2019), https://www.lslr-collaborative.org/uploads/9/2/0/2/92028126/apha_presentation_lsls_and_equity_lindsay_mccormick.pdf.

⁵⁵ *Id.*

The Bipartisan Infrastructure Law is an unprecedented opportunity to address this long-standing environmental injustice by ensuring that adequate funds are directed to communities most impacted by lead in drinking water. Congress has allocated \$15 billion to the Drinking Water State Revolving Fund for LSL replacement, with 49 percent of those funds eligible as grants or 100 percent principal forgiveness loans. The disbursement of these funds has begun. While the Attorneys General appreciate EPA's stated commitment to increasing awareness of these programs in small, underserved communities and communities of color, we encourage EPA to move as expeditiously as possible to provide that guidance to such communities on how to effectively apply for these funds.⁵⁶ Many of these communities historically lack the necessary resources to apply for public funding assistance, and every effort must be made to ensure that the Bipartisan Infrastructure Law's investments are distributed equitably. As one lobbyist hired by cities to advocate for these funds recently stated, "[T]he reality probably is that this is the mother lode of funding for probably the next seven, eight, nine, ten years. So you miss the boat on this one, you're out."⁵⁷ EPA must make every effort to ensure that communities with environmental justice concerns are not left behind while these funds are distributed to better-resourced populations. For example, EPA could dedicate more staff to focus on community outreach and assistance (including outside of regular business hours), improve EPA language access capabilities, mobilize community networks, and streamline application and grant processes as appropriate.

2. Reduce lead exposures nationally through updated protective standards, analytical tools, and outreach

EPA's efforts to reduce lead exposure in drinking water must include the expeditious promulgation of an updated LCR that is sufficiently protective of public health. In January 2021, EPA promulgated its first major update of the LCR in decades. As several members of this multistate group had previously commented, the new LCR failed to take the steps necessary to adequately reduce lead exposure in drinking water throughout the nation.⁵⁸ Several members of this multistate coalition subsequently challenged the new LCR, in a case currently

⁵⁶ On March 8, 2022, EPA released its Memorandum: Implementation of the Clean Water and Drinking Water State Revolving Fund Provisions of the Bipartisan Infrastructure Law (BIL). See <https://www.epa.gov/newsreleases/epa-releases-new-memo-outlining-strategy-equitably-deliver-clean-water-through>. While the Memorandum provides guidance to states regarding implementation and disbursement of BIL funds for replacement of LSLs, it provides little to no guidance to historically marginalized communities on how to qualify, apply for or obtain such funding. We urge EPA to work closely with states to ensure overburdened communities receive appropriate guidance and assistance for obtaining BIL funds for replacement of LSLs.

⁵⁷ Yeganeh Torbati, Jonathan O'Connell and Tony Romm, *'The mother lode:' Cities and counties across America clamor for slice of new infrastructure funds*, Wash. Post (February 1, 2022), <https://www.washingtonpost.com/business/2022/02/01/infrastructure-biden-cities-lobbying/>

⁵⁸ Multistate Comments to EPA dated February 12, 2020, <https://oag.ca.gov/system/files/attachments/pressdocs/LCR%20Multistate%20Comments%20Feb%202012.pdf>

pending in federal court.⁵⁹ After delaying implementation of the prior Administration's LCR several times, on December 17, 2021, EPA announced it will allow the challenged LCR to go into effect.⁶⁰ EPA further indicated that a future revision to strengthen the drinking water standards, called the Lead and Copper Rule Improvements (LCRI), would not be completed until late 2024.

The LCR now in effect is insufficient to tackle the public health crisis from lead in drinking water and must be updated as quickly as possible. EPA has stated that it will take until 2024 to finalize the LCRI because it must conduct additional public outreach. The Attorneys General support stakeholder input while developing the LCRI, but stakeholders have been providing comments on the LCR for years, and ample support and evidence already exists to strengthen the LCR promulgated by the previous Administration. Additionally, expeditious promulgation of the LCRI is necessary to provide states and water systems with the necessary regulatory certainty needed to address this difficult and complex problem. Indeed, recognizing that on-the-ground implementation of elements of the LCR is not required until 2024, water systems are already expending significant limited resources planning for implementation, including conducting newly-required LSL inventories. The LCRI should be released as quickly as possible to ensure that these water systems are not unnecessarily expending resources in planning to comply with requirements that might change again in 2024.⁶¹

a. EPA should lower the action level in the LCRI.

Given new information regarding both the significant health impacts of lead in drinking water, and the reduced costs and improved techniques for removing LSLs, EPA must evaluate whether a lower action level is feasible. The LCR left the action level unchanged at 15 µg/L, the level established in 1991 “based on feasibility and not based on impact on public health.”⁶² However, over the past decades, there have been significant advancements in lead detection, LSL replacement techniques, and treatment options, in addition to overwhelming new evidence regarding the serious health impacts caused by lead exposure. The Safe Drinking Water Act requires continuous review and revision of the LCR to determine the most health protective, feasible standards.⁶³ EPA must evaluate whether – decades later – it is now feasible to reduce the lead action level below 15 µg/L, and if so, must adopt a lower action level in the Proposed LCR.

⁵⁹ *Newburgh Clean Water Project, et al v. EPA, et al* (D.C. Cir. Case No. 21-1019).

⁶⁰ 86 Fed. Reg. 71,574 (December 17, 2021).

⁶¹ See 86 Fed. Reg. 71,574, 71,578 (Dec. 17, 2021).

⁶² 84 Fed. Reg. at 61,691.

⁶³ 42 U.S.C. § 300g-1(b)(9).

b. EPA should require water systems to remove and replace all LSLs in the LCRI.

In order to address the ongoing threat to public health posed by lead pipes, the Attorneys General recommend that the LCRI require water systems to continue removing and replacing LSLs until they are all eliminated. The LCR currently allows water systems to stop replacing lead pipes if sampling shows lead concentrations below the action level for four consecutive monitoring periods (*i.e.*, two years).⁶⁴ However, any existing LSLs remain a threat to public health and safety, even if they temporarily do not cause lead exposure, and should also be removed to ensure the public is protected.⁶⁵ While a reduced mandatory replacement rate for water systems that no longer exceed the action level may be an appropriate incentive to encourage LSL replacement by water systems, the LCRI should require water systems with known LSLs that have exceeded the lead action level to continue implementing their plans to replace all existing lead pipes. Allowing a water system to stop and then resume its removal plan based on sampling data will create inefficiencies and could substantially delay the timeline for complete removal of LSLs. The Attorneys General recommend that the LCRI require water systems that exceed the lead action level to continue removing LSLs until they are all replaced, regardless of test results.

c. EPA should increase the rate of LSL replacement in the LCRI.

Under the current LCR's requirements to remove lead pipes, EPA has projected that only 339,000 to 555,000 LSLs – approximately *five percent* of the total – would be replaced in the next 35 years.⁶⁶ The LCRI must increase the rate of replacement of LSLs to ensure that this grave public health threat is addressed adequately and expeditiously. The existing LCR rolled back the requirements for water systems to remove LSLs from a previous rate of seven percent annually down to three percent, a nearly *60 percent decrease*. EPA previously asserted that lead exposures will be reduced, and that, in fact, more LSLs will be replaced under the new LCR. EPA justified this conclusion by taking away LSL removal credit for “test-outs”⁶⁷ and partial LSL replacement. While the Attorneys General agree with EPA's decision to exclude partial LSL replacement and “test-outs” from inclusion in a water system's mandatory rate, improvements on these issues do not justify the LCR's reduction of the amount of removal and replacement of LSLs that a water system must otherwise complete. The Attorneys General therefore recommend that EPA increase the mandatory rate for water systems to remove and replace LSLs back to seven percent, at minimum.

⁶⁴ 84 Fed. Reg. at 61,757 (proposed 40 C.F.R. §141.84(g)(6)).

⁶⁵ For example, changes in water source or disturbances to the main line or service lines may create new lead exposure where none previously existed.

⁶⁶ 86 Fed. Reg. 71,574, 71,578 (Dec. 17, 2021).

⁶⁷ “Testing out” means collecting a series of samples at the tap. If all of the samples are at or below 15 ppb, that lead service line is counted as “replaced.” See *Lead and Copper Rule Revisions*, 86 Fed. Reg. 4,198, 4,203 (Jan. 21, 2021).

3. Reduce lead exposures with a “whole of EPA” and “whole of government” approach

The Attorneys General encourage EPA to deploy its “whole of EPA” and “whole of government” approach to ensure that public funding to reduce lead exposure in drinking water is equitably directed to communities with environmental justice concerns. President Biden’s Justice40 initiative sets a goal for 40 percent of federal investments to flow to those communities historically marginalized and overburdened by pollution and underinvestment in infrastructure, including clean water supplies. The Bipartisan Infrastructure Law commits billions of dollars of federal funds to reduce lead exposure, and extensive collaboration between EPA and state, local, and tribal governments and water systems is necessary in order to ensure that this money is spent in line with the Administration’s Justice40 commitments. The Attorneys General encourage EPA to evaluate all options for partnerships with stakeholders, including direct engagement with disadvantaged communities to ensure that they are able to compete for and access available water infrastructure funding.

The “whole of EPA” approach should also be used to ensure that entities receiving federal funding comply with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, national origin, disability, sex, and age. Several of these protected classifications correspond to the communities with environmental justice concerns already disproportionately impacted by exposure to lead in drinking water. The states and water systems receiving federal funds have an affirmative obligation to comply with civil rights laws and implement non-discriminatory programs to reduce lead exposure. The Attorneys General encourage EPA to closely monitor the implementation of these lead reduction programs to ensure that they are conducted in compliance with Title VI and all federal civil rights laws.

The “whole of government” approach should also be used to address lead in school drinking water. EPA should work with the federal Department of Education, the Department of Health and Human Services, and other relevant agencies and offices to promulgate federal regulations requiring testing and remediation of LSLs and lead plumbing fixtures in all schools including public, charter, and private schools, and childcare centers. Under such regulations, if lead in water from fixtures (water fountains and faucets) exceeded an action level, then these water sources would be removed and replaced with fixtures providing clean water.

Lastly, EPA should provide funding and research assistance to local municipalities working to map LSLs and better economic assessments of the cost of lead poisoned children.

III. Lead in Soil

A. Nature of the Issue

People are also significantly impacted by lead in soil. Lead is found in America's soils through residue from lead-based exterior paint, leaded fuels and industrial sources. For children, who should be able to play safely in their neighborhood yards, lead in soil is particularly dangerous. While playing outside, children ingest, touch and inhale lead from soil.⁶⁸ This is especially concerning for young children who frequently display hand to mouth behaviors. Reducing lead in soils will help to reduce human exposures and will protect human health including the health of the most vulnerable among us. Between 5.9 and 11.7 million children nationwide are exposed to lead in soil or dust. According to EPA's 2017 model, lead from dust and soil accounts for over 70% of lead exposure in children ages one through six with the highest levels of lead in their blood, and accounts for over fifty percent of lead exposure in infants with the highest blood lead levels.⁶⁹

According to scientists, soils are not passive repositories but rather can act as sources of lead exposure, periodically re-suspend fine lead contaminated soil dust particulates (or aerosols), especially during drier periods in which soil moisture becomes depleted.⁷⁰ An expert from Tulane University's School of Medicine has spent four decades investigating the hazards posed by lead contamination in soils across the U.S. and has mapped lead soil levels over the course of more than 20 years.⁷¹ The Tulane research has shown that substantial quantities of lead-contaminated soils exist within the interior of cities,⁷² and low-income communities make up a substantial percentage of American families facing the risk of lead because low-income communities are more likely to have lead paint and yards with contaminated soils, or to be situated near polluting facilities. Lead in soils derives from a variety of sources from historic uses that have since been eliminated, and present-day activities that cause new exposures to old lead. In extensive studies on lead exposure in the U.S., scientists have shown that soils

⁶⁸ CDC, Lead in Soil, www.cdc.gov/nceh/lead/prevention/sources/soil.htm

⁶⁹ Valerie Zartarian, et. al., *Children's Lead Exposure: A Multimedia Modeling Analysis to Guide Public Health Decision-Making*, Environmental Health Perspectives, 097009-4 (Sept. 12, 2017), ehp.niehs.nih.gov/doi/pdf/10.1289/EHP1605

⁷⁰ Mielke, H.W., et al., Curtailing Lead Aerosols: Effects of Primary Prevention on Declining Soil Lead and Children's Blood in Metropolitan New Orleans; *Int. J. Environ. Res. Public Health*, 2019 Jun, v. 16(12): 2068 at p. 5, available at [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6617018/#:~:text=Lead%20\(Pb\)%20dust%20is%20an,6%2C7%2C8%5D](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6617018/#:~:text=Lead%20(Pb)%20dust%20is%20an,6%2C7%2C8%5D).

⁷¹ Vol 50, Issue 1, January 2020, *Current Problems in Pediatric and Adolescent Health Care*. Mielke, Howard, Egendorf, Sara, et al. *Soil toxicants that potentially affect children's health*. See also <https://web.archive.org/web/20171227105048/https://thinkprogress.org/the-lead-crisis-tackling-an-invisible-dangerous-neurotoxin-d0aebb04c0da/>

⁷² See *id.*, and <https://grist.org/regulation/leaded-gasoline-lead-poisoning-united-nations/>

remain highly contaminated by lead due largely to leaded gasoline emissions, leaded paint and industrial lead sources.⁷³

1. Lead from gasoline

Even though Americans have dramatically reduced the amount of lead being put into the environment, decades of vehicle emissions left behind a dangerous legacy: large deposits of lead particles that remain in the soil today and continue to plague communities.⁷⁴ Despite the Clean Air Act's phase-out of leaded gasoline, it is estimated that 4.5 to 5.5 million tons of lead used in gasoline remaining in soil and soil dust.⁷⁵

Researchers have found that residents in highly trafficked urban centers are exposed to lead particles in the soil that are resuspended into the atmosphere during the summer and fall, particularly during hot, dry weather.⁷⁶ In one expansive study, atmospheric soil and lead aerosol data from the Interagency Monitoring of Protected Visual Environments database were obtained for Pittsburgh, Detroit, Chicago, and Birmingham.⁷⁷ Atmospheric soil and lead aerosols followed seasonal patterns with highest concentrations during the summer and autumn. The scientists found automotive traffic turbulence plays a significant role in re-suspension of contaminated roadside soils and dusts. To prevent health risks of urban lead aerosol concentrations, lead deposition and children's seasonal exposure, it is critical to remediate lead contaminated urban soils and soils along roadways.

2. Lead in paint chips

Another major source of lead in residential soils is lead-based paint. High levels of lead are found in soils near the perimeters of residential and school buildings encased in lead-based paint that has deteriorated as chips and dusts. Chalking, leaching, flaking, weathering, scraping, and sandblasting of leaded paint result in lead deposits in the soil near the base of these buildings, creating a "halo" of lead contamination. Lead in paint also contaminates soils when construction debris

⁷³ <https://web.archive.org/web/20171227105048/https://thinkprogress.org/the-lead-crisis-tackling-an-invisible-dangerous-neurotoxin-d0aebb04c0da/>

⁷⁴ Environ Int. 2011 Jan; Vol 37, Mielke, HW, Laidlaw, MA. *Estimation of leaded gasoline's continuing material and health impacts on 90 US Urbanized areas* at <https://web.archive.org/web/20171021152926/https://www.ncbi.nlm.nih.gov/pubmed/20825992>

⁷⁵ <https://extension.psu.edu/lead-in-residential-soils-sources-testing-and-reducing-exposure>

⁷⁶ <https://www.sciencedirect.com/science/article/abs/pii/S1352231011012131>; Atmospheric Environment, March 2021. Mielke, Howard, Laidlaw, Mark et al. *Re-suspension of lead contaminated urban soil as a dominant source of atmospheric lead in Birmingham, Chicago, Detroit and Pittsburgh.*

⁷⁷ *Id.*

from lead-containing buildings is disposed of. This is especially true as a result of demolition of such buildings.⁷⁸

3. Lead in soils from industry

Industrial sites – both abandoned and operational – continue to be pathways of lead exposure. Children living near hazardous waste sites, incinerators, and landfills may be exposed to lead by swallowing dust or dirt that contains lead deposited from these sources. Lead is one of the most common contaminants found at Superfund sites across the country.⁷⁹

Neighborhoods have been built on top of industrial waste sites with legacy lead. For example, one location includes a little league baseball field in Chicago, Illinois with high lead levels detected right in the middle of the field.⁸⁰ Another location, East Chicago, Indiana, was home to a federal housing complex (West Calumet Public Housing Complex)—built on or near the DuPont East Chicago lead arsenate insecticide factory, an Anaconda Lead lead-based paint plant, and a USS Lead Refinery Plant—a Superfund site because of lead contaminated soils.⁸¹ By the 1990s, 40% of the children tested at West Calumet had elevated blood lead levels and were up to five times as likely to have elevated blood levels as the rest of the nation.⁸² The buildings at the housing complex were demolished in 2019.⁸³

Unfortunately, West Calumet is not the only federal housing community contaminated by lead. Across the country, residents have found high lead levels in their federally assisted housing communities left from former lead smelting plants – most of which are now Superfund sites.⁸⁴ Many of these sites are at or in close

⁷⁸ See https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/HEALTHY_NEIGHBORHOODS/LEADPOISONING/Documents/Best-Practices-Demolition-of-Residences.pdf.

⁷⁹ See Klemick, H., Mason, H., & Sullivan, K. (2020). Superfund Cleanups and Children's Lead Exposure. *Journal of environmental economics and management*, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7055517/>. In this study, the authors note that EPA manages 1,212 Superfund sites with lead identified as a contaminant of concern.

⁸⁰<https://chicago.cbslocal.com/2020/07/07/families-furious-after-dangerous-amounts-of-lead-arsenic-found-at-hegewisch-little-league-field/>

⁸¹ <https://www.nrdc.org/stories/east-chicago-knowing-your-soil-toxic-only-half-battle>. See February 14, 2021 HUD Inspector General Report on West Calumet Housing Complex at <https://www.hudoig.gov/sites/default/files/2021-02/2019-OE-0003.pdf>; see also EPA's Regional Community Case Study in its Lead Strategy, page 16.

⁸² See testimony of Yale Fellow Emily Benfer at Committee hearing of the Indianan Advisory Committee to the U.S. Commission on Civil Rights. Testimony, May 2019 Web Hearing, p. 21; East Chicago Calumet Coalition Community Advisory Group; See also; Browning Testimony, Indianapolis Hearing, pp. 70-71.

⁸³ February 14, 2021 HUD Inspector General Report, at 1, <https://www.hudoig.gov/sites/default/files/2021-02/2019-OE-0003.pdf>

⁸⁴ Cambridge Press. Disaster Medicine, Vol. 8, Issue 1. *Disaster-Related Environmental Health Hazards: Former Lead Smelting Plants in the United States*. 24 February 2014; Allison Young, "Long-gone Lead factories leave Poisons in Nearby Yards," USA Today, 25 April 2012. Allison Young, "Some Neighborhoods Dangerously Contaminated by Lead Fallout. 20 April 2012.

proximity to federally assisted housing.⁸⁵ For example, in New Jersey, there are approximately 700 units of federally assisted housing within or near the Carteret US Metals Refining site – where New Jersey is taking the lead in the cleanup.⁸⁶ At the Carteret site, investigations revealed many locations where the lead levels in soils were extremely high.⁸⁷ In Indianapolis, a community garden association owns land previously owned by a smelter and successfully pushed for cleanup of their urban garden properties.⁸⁸ Other now-closed smelters continue to present hazards and are in need of funding to remediate soils, including sites in Colorado⁸⁹ and several in Pennsylvania.⁹⁰

Soil contamination by smelters and metal processing is not a thing of the past: it continues today. Secondary lead smelters recover lead from used objects such as used lead-acid batteries. In California, a secondary lead smelter has been operating in a neighborhood of Los Angeles County since 1959. Soil tests at the facility show that soil around the facility and the surrounding community is heavily contaminated by lead.⁹¹

EPA has also found high lead levels at other sites in downtown Atlanta. EPA has been investigating a large swath of the English Avenue neighborhood.⁹² From the 1880s to mid-20th century, heavy industries operated near the site, and EPA's investigation indicates that lead-containing slag from those operations may have been used as fill material in the communities and caused or contributed to the present-day lead contamination in soil. EPA is now conducting a cleanup to abate the threat posed by the lead from historic fill material in residential soil and

⁸⁵ See numerous examples of federally assisted housing located within or near lead Superfund sites: https://www.poverty.org/wp-content/uploads/2020/06/environmental_justice_report_final-rev2.pdf

⁸⁶ https://www.poverty.org/wp-content/uploads/2020/06/environmental_justice_report_final-rev2.pdf

⁸⁷ See the following article, page 72, about smelting at the US Metals Refining Company in Carteret, New Jersey. https://www.poverty.org/wp-content/uploads/2020/06/environmental_justice_report_final-rev2.pdf

⁸⁸ <https://indianapolisrecorder.com/new-gardeners-beware-of-this-invisible-soil-hazard/>. The Agency for Toxic Substances and Disease Registry sponsors a soil SHOPS, which provides free soil screening for lead and best practices for safe gardening.

⁸⁹ <https://www.cpr.org/2021/12/29/work-at-the-colorado-smelter-superfund-site-in-pueblo-is-both-winding-down-and-ongoing/>

⁹⁰ Kensington neighborhood of Philadelphia has the site of a former lead factory, known as Azon. The current property owner conducted remediation and the site is now a shopping mall. <https://www.inquirer.com/philly/news/toxic-city-state-confirms-extreme-lead-levels-in-kensington-soil-20181018.html>; See also the Price Battery plant in Berks County PA. <https://cumulis.epa.gov/supercpad/cursites/csinfo.cfm?id=0305679>

⁹¹ https://earthjustice.org/sites/default/files/feature/2021/report-quemetco/Quemetco-Lead-Legacy_Earthjustice.pdf

⁹² <https://www.ajc.com/news/atlanta-news/lead-contamination-lands-atlanta-neighborhood-on-epas-superfund-priority-list/X5PXRMYHUZEEFLXVKZDD5D733Y/>

continues to sample properties in a study area comprising more than 2000 properties.⁹³

4. Other sources of lead in soils

In addition to the above-described sources of lead soil contamination, there are other miscellaneous sources of lead that contaminate soil. One source is pesticides containing lead arsenate that were spread across orchard lands for years to control coddling moth infestations.⁹⁴ Now many of these orchards are residential neighborhoods, schools and parks with lead contaminating the soils. Widespread use of lead arsenate and frequent applications at increasing rates over time contributed to accumulation in topsoil, contaminating thousands of acres across the United States.⁹⁵ Washington State has created a map showing the location of former orchards – including about 115,000 acres of land. It is now using the maps to inform land development and requiring soil sampling and clean up.

B. Recommendations

The Attorneys General are generally supportive of EPA’s strategy to combat lead-contamination of soils. The Lead Strategy related to lead in soils is a statement of broad goals. We strongly encourage EPA to provide detailed actions and a schedule to address the significant problem of soil lead contamination. We urge EPA to utilize its broad statutory authorities to comprehensively remediate lead contamination of soils through the following measures:

1. Reduce lead exposures locally with a focus on communities with disparities, and promote environmental justice.

- a. Increase necessary funding

In the Lead Strategy (Objective C, Approach 1), EPA states that it will prioritize cleaning up soils in communities contaminated by lead from industrial operations, mining, smelting, and other activities, based on risk of potential adverse health effects, and will focus on communities with the greatest exposures and promote environmental justice. EPA says it will work with states, tribes, and others on CERCLA removal and remedial sites and on RCRA corrective action sites to address lead contamination.

Without appropriate funding, however, remedial actions necessary to address this serious problem cannot be implemented. We urge EPA to increase funding to these programs so that it can effectively use the multiple statutory authorities it possesses to prevent and reduce exposure to lead in soil. For soil cleanup, EPA has

⁹³ *Id.*

⁹⁴ <https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-sites/Former-orchard-lands> See WA state maps of lead in soil contamination at: <https://apps.ecology.wa.gov/dirtalert/orchard?lat=47.111777&lon=-120.631071&zoom=8>

⁹⁵ https://www.atsdr.cdc.gov/csem/leadtoxicity/lead_found.html

authority under CERCLA to order cleanups or conduct cleanups itself. Superfund enforcement can be used to compel removal of lead contaminated soils in urban areas and residential yards. EPA has authority under RCRA's permitting program to address the cleanup of lead contamination through corrective action. Similarly, EPA's soil lead guidance for lead-contaminated sites, last updated in 1998, provides recommendations for cleaning up lead contaminated soils at both CERCLA and RCRA sites.⁹⁶

The Superfund program has been underfunded for many years.⁹⁷ Whether through the Superfund tax of industry revived in the Bipartisan Infrastructure Law or by other means, additional funding must be allocated to get Superfund lead in soil sites cleaned up.

The same increased funding recommendation applies to RCRA corrective actions and to all the necessary work to be done to address lead in soil hazards. We urge EPA to publicly provide detailed funding plans for a broad range of agencies to address the large scale of the lead in soils challenge. EPA should accelerate investments in tools to clean up lead soil contamination.

b. Address lead in soil from legacy use of leaded gasoline

As outlined above, soil in lead hazards from legacy use of lead in gasoline continues to cause adverse public health effects across a large swath of the U.S. As evidenced by the efforts of Tulane School of Medicine, these contaminated soils can easily be mapped and addressed, consistent with goal 2 of the Lead Strategy (identify communities with high lead exposures and improve their health outcomes). We urge EPA to develop (with local and state stakeholders), adequately fund, and implement a nationwide strategy to address the widespread lead contamination from legacy use of leaded gasoline.

c. Enforce standards at operating facilities that result in soil in lead hazards

As evidenced by EPA's recent enforcement action at a TAV Holdings facility in Atlanta, industrial facility operations result in releases of soil-lead hazardous wastes to the environment.⁹⁸ At this Atlanta facility, EPA found waste piles reduced to dust-like materials which contained lead at high enough levels to fit within RCRA's definition of a hazardous waste.⁹⁹ The EPA inspectors observed

⁹⁶ <https://www.epa.gov/superfund/lead-superfund-sites-guidance>; See also https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/03/Lead_Res-Sites_Handbook.pdf

⁹⁷ <https://www.epa.gov/superfund/superfund-sites-new-construction-projects-awaiting-funding> (last accessed Mar. 15, 2022); <https://www.epa.gov/newsreleases/epa-announces-plans-use-first-1b-bipartisan-infrastructure-law-funds-clear-out> (last accessed Mar. 15, 2022).

⁹⁸ <https://www.epa.gov/newsreleases/epa-issues-emergency-order-tav-holdings-inc-atlanta-georgia>; <https://semspub.epa.gov/work/04/100009465.pdf> (last accessed Mar. 15, 2022).

⁹⁹ EPA Region 4 Administrative Order dated Jan. 10, 2022, ¶¶ 34, 35, 45, <https://semspub.epa.gov/work/04/100009465.pdf>.

children walking near the site.¹⁰⁰ The Attorneys General acknowledge and appreciate this EPA enforcement and urge EPA to continue and expand such enforcement.

We urge EPA to increase its enforcement at such facilities throughout the country pursuant to its statutory enforcement authorities under RCRA, TSCA and the Clean Air Act. EPA cannot achieve its objectives under these statutes without effective enforcement.

2. Reduce lead exposures nationally through protective standards, analytical tools and outreach.

In its Lead Strategy, EPA expresses its intent to revise its Soil Lead Policy for contaminated sites and to revise its TSCA soil-lead hazard standards. We fully support these actions.

The CERCLA and RCRA soil lead policy for cleaning up contaminated sites, last updated in 1998, also is in need of immediate updating.¹⁰¹ In the Lead Strategy, EPA states that it plans to make new recommendations under these statutes for screening sites and strengthen preliminary remediation goals to reduce lead exposure in communities and protect human health and the environment in accordance with the latest science. Given that scientific information since 1998 shows that human health impacts from lead may be more severe than previously understood, we urge EPA to update statutory soil lead policy expeditiously.

In addition, we urge EPA to update its Superfund Lead-Contaminated Residential Sites Handbook to require that all site investigations include best practices for sampling, risk assessments and community engagement.¹⁰² Consistent with goal 3 of the Lead Strategy (Communicate more effectively with stakeholders), EPA should provide for involvement of impacted communities in the cleanup process.

We also urge EPA to update its long-outdated TSCA lead standards for lead in soil. With no safe level of lead exposure, it is critical that EPA update its TSCA soil in lead hazard standard expeditiously. EPA has obligations pursuant to TSCA to reduce lead in soils.¹⁰³ In TSCA's Title IV, Congress charged EPA with setting soil-lead hazard standards in order to identify the level at which lead in soil becomes dangerous to human health.¹⁰⁴ The current soil-lead hazard standards were set by EPA in 2001. They apply to lead in "bare soil" at residential properties

¹⁰⁰ Id. ¶ 47.

¹⁰¹ <https://www.epa.gov/superfund/lead-superfund-sites-guidance>

¹⁰² See also https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/03/Lead_Res-Sites_Handbook.pdf

¹⁰³ Other than those mentioned in this paragraph, there are additional TSCA authorities including the Residential Lead-based Paint Hazard Reduction Act (Title X).

¹⁰⁴ 15 U.S.C. § 2681(10)

and child-occupied facilities. They identify a “hazard” of 400 ppm of lead in a play area or an average of 1,200 ppm in the rest of the yard.¹⁰⁵

In 2007, EPA’s Clean Air Scientific Advisory Committee informed the agency that these standards are “insufficiently protective of children’s health.”¹⁰⁶ EPA now acknowledges there is no safe level of lead in blood.¹⁰⁷ Therefore, letting the current TSCA rule stand may result in unnecessary lead poisoning, perpetuating racial disparities and environmental justice concerns.

Indeed, given that there is no safe level of lead exposure, the Ninth Circuit Court of Appeals held in 2021 that EPA’s existing soil in lead hazard standards did not identify all levels of lead in soil that are dangerous to human health and thus are contrary to TSCA Title IV.¹⁰⁸ Further, the court held that EPA had an ongoing duty to update the standards. Despite that court’s 2021 decision, EPA has not yet proposed a more protective TSCA lead in soil standard. We urge EPA to set, publicize and adhere to a schedule for expeditiously promulgating this rule.

3. Reduce lead exposures with a “whole of EPA” and “whole of government” approach.

a. Increase coordination with HUD

EPA states that it intends to work with HUD on lead in soils contamination. As stated above, there are many examples across the country of federally assisted housing developments located within or near Superfund and RCRA sites with lead contamination in soils that present hazards of exposure to tenants. We urge EPA to work with HUD in a significant and meaningful way to reduce lead exposures from soils at HUD-supported residential housing.

As also recommended above, there must be a large increased financial commitment to addressing lead contamination of soils at HUD housing. Consistent with goal 4 of the Lead Strategy (Support and conduct critical research to inform efforts to reduce lead exposures and related health risks), we urge EPA and HUD to develop and implement strategies to research HUD’s properties and determine whether soil contamination is present and then remediate such contamination. For sites with known contamination, we urge that EPA in coordination with HUD provide funds so tenants can re-locate to other federally assisted housing.¹⁰⁹ EPA should

¹⁰⁵ 40 C.F.R. § 745.65(c).

¹⁰⁶ See *Cnty. Voice v. U.S. E.P.A. (In re Cnty. Voice)*, 878 F.3d 779, 782 (9th Cir. 2017).

¹⁰⁷ CDC’s reference blood lead concentrations are meaningful only for risk stratification. For discussion of medical perspective See New England Journal of Medicine article at https://commed.vcu.edu/IntroPH/Introduction/2016/leadinwater_Flint%20MI.pdf.

¹⁰⁸ *A Community Voice v. EPA*, <https://cdn.ca9.uscourts.gov/datastore/opinions/2021/05/14/19-71930.pdf>.

¹⁰⁹ See for example the settlement agreement reached with HUD and the West Calumet housing residents that provided residents with comprehensive relocation services, rent abatement, and lead

also work with HUD to ensure that local and state health departments adequately notify tenants when soil contamination is found so that they can then reach out to health providers to provide needed medical assistance.

b. Deepen the “whole of EPA” approach

We strongly support EPA’s EPA-wide approach to address soil in lead hazards. EPA has numerous authorities to address soil-lead hazards, implemented through various programs. EPA can rely on these policies and regulations to achieve the mission of cleaning up soil-lead hazards. Sometimes, however, EPA’s programs are not well coordinated across and among the programs. We urge EPA to break down any such barriers to address lead in soil hazards in a holistic manner.

IV. Lead Emissions in Ambient Air

A. Nature of the Issue

EPA points out in its Lead Strategy that lead emitted in air contributes to multiple pathways of exposure that pose risks to human health and the environment. At the national level, major sources of lead in the air are piston-engine aircraft operating on leaded aviation fuel and ore and metals processing. Other sources are waste incinerators, utilities, and lead-acid battery manufacturers. The highest air concentrations of lead are usually found near lead smelters.

We support the Lead Strategy’s commitment to assess the adequacy of protections provided by the existing Lead NAAQS and to work with the Clean Air Scientific Advisory Committee to decide whether to revise the current NAAQS for lead. Further, we support EPA’s efforts to review the NESHAP emissions standards and the New Source Performance Standards for lead-emitting sources and to update these standards as appropriate to strengthen these regulatory tools for minimizing impacts of lead sources in nearby communities.

B. Recommendations

The Lead Strategy gives short shrift to the magnitude and impact of leaded aviation gas (avgas) on public health and the environment, and as a result, does not put forward a specific strategy or proposed actions that EPA or other federal agencies can take to reduce or eliminate this significant source of lead pollution. Leaded avgas is a significant and preventable source of airborne lead emissions that EPA must contend with, using the agency’s authority under the Clean Air Act, and as part of its national effort to “reduce lead exposure in communities, particularly those with environmental justice concerns.”¹¹⁰

hazard risk assessments for replacement housing. https://www.povertylaw.org/wp-content/uploads/2020/06/environmental_justice_report_final-rev2.pdf, at page 4.

¹¹⁰ 86 Fed. Reg. 59,711, 59,712 (Oct. 28, 2021).

We also we urge EPA to significantly increase its enforcement of the current Clean Air Act lead standards. In particular, we urge EPA to increase its monitoring in states not meeting the National Ambient Air Quality Standards (NAAQS) lead standards and to increase enforcement at facilities where the National Emission Standards for Hazardous Air Pollutants (NESHAP) for lead applies. Increased enforcement will assist the states in complying with the lead NAAQS, will increase facilities' compliance with all Clean Air Act lead standards and will result in reduced exposures to lead in communities near where such facilities are located.

1. Reduce lead exposures locally with a focus on communities with disparities and promote environmental justice.

Leaded aviation gas is “the only remaining lead-containing transportation fuel” and it is the single largest contributor of airborne lead emissions in the United States.¹¹¹ The combustion of avgas by piston-engine planes is responsible for 70% of airborne lead emissions nationwide.¹¹² The most recent emissions data from EPA show that these planes released more than 930,000 pounds of lead into the atmosphere in 2017, and emissions from the general aviation sector are expected to increase in the coming years.¹¹³ The Federal Aviation Administration (FAA) predicts sector emissions will reach 1.5 million pounds per year by 2025—a 66% increase in emissions from 2017.¹¹⁴

These emissions endanger the lives and health of people residing, working, or attending school near general aviation airports. More than 19,000 airports across the country service piston-engine planes and they are often located near densely populated metropolitan areas. A 2011 study of lead exposure from general aviation airports observed that people, especially children, living within 1,000 meters (or .62 miles) of an airport are exposed to dangerous levels of this neurotoxic pollutant.¹¹⁵ Exposure can occur through multiple pathways— inhalation of ambient airborne lead, dermal adsorption, and incidental ingestion “through contact with indoor or outdoor surfaces to which ambient lead has deposited.”¹¹⁶

¹¹¹ 75 Fed. Reg. 22,440, 22,442 (April 28, 2010); United States Federal Aviation Administration, Aviation Gasoline, <https://www.faa.gov/about/initiatives/avgas>.

¹¹² See United States Environmental Protection Agency, 2017 National Emissions Inventory (NEI) Data, <https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data#dataq> (using Sector Summaries Data Query information for mobile aircraft lead emissions and national lead emissions for all sectors).

¹¹³ *Id.* (searching Sector Summaries Data Query for national lead emissions from the mobile aircraft sector).

¹¹⁴ 75 Fed. Reg. 22,440, 22,456 (April 28, 2010).

¹¹⁵ Miranda, M. et al. (2011), A geospatial analysis of the effects of aviation gasoline on childhood blood lead levels, *Environmental Health Perspectives* 119:1513-1519, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3230438/>.

¹¹⁶ 75 Fed. Reg. 22,440, 22,460 (April 28, 2010).

EPA last estimated there were 16 million people residing, and 3 million children attending schools, within about a half-mile of an airport.¹¹⁷

Lead exposure from avgas is most acute within 500 meters (a little more than ¼-mile) from an airport runway. Researchers describe this range as “the maximum impact area for ground-based lead emissions from piston-engine powered aircraft” and note that lead emissions “occur at [] standardized location[s] at or near [] runway[s].”¹¹⁸ Feinberg et al. (2016) identified and defined nine sources of lead emissions at general aviation airports and pinpointed three sources—run-up areas, taxiways, and takeoffs—as the primary contributors from general aviation airports.¹¹⁹ When these lead-producing activities are closely located on airport grounds, emissions accumulate and form lead “hot spots,” which have “relatively high concentrations of airborne lead relative to background concentrations.”¹²⁰ These lead hot spots have been shown to compromise the air quality for the surrounding communities. EPA’s modeling analysis of lead emissions at airports identified a subset of general aviation airports across the country that are at risk of exceeding the lead NAAQS and a handful that have surpassed the primary and secondary standards.¹²¹ Of the 16 million people living within a half-mile of a general aviation airport, 5 million live within this maximum impact area (500 meters of an airport runway) and 363,000 are children five years-old and younger.¹²²

Communities of color are disproportionately exposed to lead-polluting sources, including avgas. A 2011 study, which examined the relationship between lead from avgas pollution and children’s blood lead levels, also noted that residing in “poor or minority neighborhoods” was positively associated with high blood lead levels.¹²³ EPA’s own analysis of populations residing or attending school near airports shows that low-income and non-white racial and ethnic groups are overrepresented in the neighborhoods closest to lead-emitting- airports.¹²⁴

¹¹⁷ *Id.* at 22,442.

¹¹⁸ United States Environmental Protection Agency (2020), National Analysis of the Populations Residing Near or Attending School Near U.S. Airports at 9, <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100YG4A.pdf>.

¹¹⁹ Feinberg, S. et al. (2016), Modeling of lead concentrations and hot spots at general aviation airports, *Transportation Research Record: Journal of the Transportation Research Board*, No. 2569 at 84-86.

¹²⁰ National Academies of Sciences, Engineering, and Medicine (2021), *Options for Reducing Lead Emissions from Piston-Engine Aircraft* at 41.

¹²¹ *See* United States Environmental Protection Agency (2020), Model-extrapolated Estimates of Airborne Lead Concentrations at U.S. Airports, at 59-60, <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100YG52.pdf>.

¹²² *Id.* at 12-13.

¹²³ Miranda, M. et al. (2011), A geospatial analysis of the effects of aviation gasoline on childhood blood lead levels, *Environmental Health Perspectives*, 119:1513-1519, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3230438/>.

¹²⁴ United States Environmental Protection Agency, National Analysis of the Populations Residing Near or attending School Near U.S. Airports (2020) at 13-15.

In a survey of the nation's top 100 lead-emitting airports, 36 general aviation airports are located within a one-mile radius of a community that meets the federal definition of a minority environmental justice community.¹²⁵ Ten airports are within a one-mile radius of community with environmental justice concerns based on its low-income status and seven airports overlap both categories.¹²⁶

In sum, eradicating airborne lead emissions from avgas is an important public health and environmental justice concern worthy of serious consideration by EPA in its Lead Strategy. The federal government should use the tools at its disposal to make it feasible to phase out the use of leaded avgas and facilitate the adoption of certified unleaded aviation fuels for piston-engine planes. Specifically, EPA should commit to following through on its plans to evaluate whether leaded avgas warrants an endangerment determination under the Clean Air Act, as further discussed below.

2. Reduce lead exposures from leaded aviation gas nationally through updated protective standards, analytical tools, and outreach.

A Clean Air Act endangerment determination for leaded avgas is the most effective approach to eliminating lead pollution from the general aviation sector. Section 231(a)(2)(A) of the Clean Air Act authorizes EPA to determine whether an air pollutant endangers the public health or welfare and causes or contributes to air pollution.¹²⁷ The legislative standard for an endangerment determination is inherently preventative and precautionary in nature; it permits regulation of an air pollutant when there is no proof of actual harm or even a high probability of harm occurring.¹²⁸ EPA can make a determination of endangerment despite “the uncertainties and limitations of the data or information available, as risks to public health or welfare may involve the frontiers of scientific or medical knowledge.”¹²⁹

Here, there is overwhelming evidence that lead emissions from the combustion of leaded avgas by piston-engine planes endangers the public health and welfare and area significant cause and contributor of air pollution. Lead is a well-studied pollutant and the consensus among scientists and public health experts is that there is no safe detectable level of lead exposure for people.¹³⁰ In reaching an endangerment determination for leaded avgas, EPA can rely on the peer-reviewed

¹²⁵ See Earthjustice, The Top 100 Lead Polluting Airports (Aug. 24, 2021), https://earthjustice.org/sites/default/files/files/top100leadpollutingairports_2021-08-23.pdf.

¹²⁶ *Id.*

¹²⁷ 42 U.S.C. § 7571(a)(2)(A).

¹²⁸ *Ethyl Corp. v. EPA*, 541 F.2d 1, 13 (D.C. Cir. 1976).

¹²⁹ 74 Fed. Reg. 66,495, 66,505-06 (Dec. 15, 2009) (explaining the legal framework for a Clean Air Act endangerment determination).

¹³⁰ See Centers for Disease Control and Prevention (2012), Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention, https://www.cdc.gov/nceh/lead/acclpp/final_document_030712.pdf; American Academy of Pediatrics (2016), Prevention of Childhood Lead Toxicity, <https://doi.org/10.1542/peds.2016-1493>.

studies examining the deleterious effect of lead pollution on public health.¹³¹ These studies corroborate the toxic and often racialized consequences of lead exposure for communities in close proximity to general aviation airports. The agency can also turn to the robust and comprehensive reports, studies, and data it compiled when it reviewed the lead NAAQS in 2016.¹³² Those data, which represents some of the best science available, supports the conclusion that lead emissions from avgas must be curtailed.

Additionally, pursuing an endangerment determination for avgas is a wise allocation of limited agency resources. EPA has already invested significant time and resources over the last decade gathering and processing the information needed to evaluate whether lead emissions from avgas meet the criteria for an endangerment determination.¹³³ All that work should culminate with a determination of the public health and environmental implications of lead pollution from avgas and, if warranted, action by EPA and other federal agencies to address adverse impacts.

In January 2022, two months after the public comment period for the Lead Strategy opened, EPA announced that it intends to evaluate whether leaded avgas meets the criteria for making an endangerment determination and will “issue a proposal for public review and comment in 2022 and take final action in 2023.”¹³⁴ These deadlines should be included in the final Lead Strategy. The current iteration of the Lead Strategy fails to propose potential federal action(s) to address this source of lead pollution. By contrast, the Lead Strategy proposes specific actions to address lead in soil, drinking water, and in residential settings from lead-based paint. The January 2022 announcement is EPA’s third attempt in ten years to evaluate whether avgas warrants a Clean Air Act endangerment determination. On two prior occasions, EPA committed to issuing a proposal and final endangerment determination but never completed the process. EPA stated that it will “prioritize” implementation of actions memorialized in the final Lead

¹³¹ See Mountain Data Group (2021), Leaded Aviation Gasoline Exposure Risk at Reid-Hillview Airport in Santa Clara County, California, <https://news.sccgov.org/sites/g/files/exjcpb956/files/documents/RHV-Airborne-Lead-Study-Report.pdf>; Zahran, Sammy et al. (2017), The Effect of Leaded Aviation Gasoline on Blood Lead in Children, *Journal of the Association of Environmental and Resource Economists* 2(4): 575-610; Wolfe, Philip et al. (2016), Costs of IQ Loss from Leaded Aviation Gasoline Emissions, *Environmental Science & Technology* 50(17): 9026-9033; Miranda, M. et al. (2011), A geospatial analysis of the effects of aviation gasoline on childhood blood lead levels, *Environmental Health Perspectives* 119:1513-1519, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3230438/>.

¹³² See 81 Fed. Reg. 71,906 (Oct. 18, 2016) (referring to documents from review completed in 2016 for the lead air quality standards available at: <https://www.epa.gov/naaqs/lead-pb-air-quality-standards-documents-review-completed-2016>).

¹³³ See Reports in United States Environmental Protection Agency, EPA’s Data and Analysis of Piston-engine Aircraft Emissions of Lead at U.S. Airports, <https://www.epa.gov/regulations-emissions-vehicles-and-engines/epas-data-and-analysis-piston-engine-aircraft-emissions>.

¹³⁴ United States Environmental Protection Agency, EPA to Evaluate Whether Lead Emissions from Piston-Engine Aircraft Endanger Human Health and Welfare (Jan. 12, 2022), <https://www.epa.gov/newsreleases/epa-evaluate-whether-lead-emissions-piston-engine-aircraft-endanger-human-health-and>.

Strategy, which will “include a timeline of milestones as well as metrics for tracking and measuring EPA’s progress in meeting the actions described.”¹³⁵ To ensure that EPA addresses avgas as part of its national effort to tackle lead, EPA should amend the Lead Strategy to include the avgas endangerment deadlines announced in January 2022.¹³⁶

3. Reduce lead exposures from leaded aviation gas with a “whole of EPA” and “whole of government” approach.

A Clean Air Act endangerment determination is the first step in a two-step process toward regulating lead emissions from avgas. If, as it should, EPA makes a positive endangerment determination for avgas in 2023, it can “prescribe standards to control the emissions of lead from piston-engine aircraft.”¹³⁷ These emissions standards must be developed in consultation with the FAA, which has regulatory authority over aircraft fuel standards. Once new emission standards have been developed, the FAA “would then be required, after consultation with EPA, to prescribe regulations to ensure compliance with any standards to control the emissions of lead from piston-engine aircraft.”¹³⁸

EPA’s January 2022 announcement, setting a timeframe for evaluating an endangerment determination for avgas, does not take into consideration the close coordination and collaboration that is required by EPA and FAA to accomplish the second step—promulgation of new aircraft fuel standards. A Clean Air Act endangerment determination by itself does not confer any protections to communities affected by lead pollution from avgas. EPA and FAA must collaborate on the development of the requisite emissions and fuel standards to initiate a managed phase out of avgas and facilitate widespread adoption of unleaded fuel alternatives. For these reasons, EPA should amend the Lead Strategy to include a milestone requiring EPA and the FAA to develop and promulgate final emissions and aircraft fuel standards by the end of 2024.

¹³⁵ United States Environmental Protection Agency (2021), EPA Strategy to Reduce Lead Exposures and Disparities in U.S. Communities (Public Comment Draft) at 2, <https://www.epa.gov/system/files/documents/2021-11/updated-public-comment-draft-lead-strategy-11-16-2021.pdf>.

¹³⁶ Specifically, EPA should update the section of the Lead Strategy titled “Reduce lead from piston-engine aircraft” to include the new avgas-endangerment timeline. *See* United States Environmental Protection Agency (2021), EPA Strategy to Reduce Lead Exposures and Disparities in U.S. Communities (Public Comment Draft) at 17, <https://www.epa.gov/system/files/documents/2021-11/updated-public-comment-draft-lead-strategy-11-16-2021.pdf>

¹³⁷ 75 Fed. Reg. 22,440, 22,441 (April 28, 2010).

¹³⁸ *Id.*; *see also* 49 U.S.C. § 44714 (mandating that the FAA “prescribe standards . . . to control or eliminate aircraft emissions the Administrator of the Environmental Protection Agency decides under section 231 of the Clean Air Act (42 U.S.C. § 7571) endanger the public health or welfare; and regulations providing for carrying out and enforcing those standards.”)

4. Tighten Clean Air Act lead standards applicable to other industrial sources of lead in air emissions, and increase monitoring and enforcement.

There are many other industrial sources of lead in air emissions that continue to contaminate soils. These include ore and metals processing, waste incinerators, landfills, utilities, including coal combustion waste (coal ash)¹³⁹ and lead-acid battery manufacturers. Lead from these sources can enter the top layer of soil which can lead to human exposure. By strengthening the applicable standards under the Clean Air act, EPA can reduce lead in soils near these facilities.¹⁴⁰

Further, we urge EPA to increase enforcement of these Clean Air Act standards, including conducting more inspections. Enforcement of these standards, and increased inspections, is a relatively low-cost way to improve compliance. We urge EPA to include in any final updated Clean Air Act standard and in any enforcement settlement agreement, a fence-line monitoring requirement. Such fence-line monitoring and follow-up corrective measures can bring toxic lead emissions under better control.

V. Lead in Food

A. Nature of the Issue

The Lead Strategy is premised upon a “whole of government” approach to mitigating the public health consequences of lead. While it represents a thoughtful plan for mitigating lead exposure across several pathways, it fails to address the impacts of lead in food in any meaningful way. It thus leaves unaddressed a significant lead exposure pathway that EPA prioritized as recently as in its 2018 Lead Plan.¹⁴¹ As the 2018 Lead Plan acknowledged, there is substantial evidence that lead exposure from food is an exposure pathway and in particular, a health concern for babies and children in the United States, and that this issue is complicated by fractured federal agency jurisdiction. And as discussed below, there are opportunities for EPA to collaborate with agencies like USDA and FDA to achieve progress on this issue, consistent with the goals of the Lead Strategy. We therefore urge EPA to incorporate our recommendations below into the Lead Strategy to help ensure an effective whole of government approach to mitigating lead-contaminated food exposures.

It is well established that lead in food is a significant contributor to blood lead levels in children. EPA’s 2018 Lead Plan prioritized lead-contaminated food for that very reason. In 2017, EPA estimated that over 5% of children between ages 1

¹³⁹ Coal ash is disposed of in surface impoundments (often unlined) , thus contaminating soils and groundwater.

¹⁴⁰ On page 17 of the Lead Strategy, EPA commits to reviewing these standards. We urge EPA to conduct these reviews expeditiously.

¹⁴¹ See EPA, Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts, 5, 11 (Dec. 2018) (“Objective 1.6. Reduce Exposure to Lead in Food”) available at https://www.epa.gov/sites/default/files/2018-12/documents/fedactionplan_lead_final.pdf.

and 6 have a dietary lead exposure exceeding 3 micrograms of lead per day, which is FDA's current maximum daily lead intake level for young children.¹⁴² And the results of FDA's Total Diet Study from 2003 to 2013 showed that 20% of baby food samples and 14% of other food samples had detectable levels of lead.¹⁴³ Indeed, food manufacturers knowingly allow potentially harmful amounts of lead to remain in their food products, even those like baby food that are designed for vulnerable populations.¹⁴⁴ While the FDA has not set a lead action level for infant formula or baby food, the EU standards are 10 ppb (for liquid infant formulas) and 20 ppb (for dry baby foods, baby drinks and powder formula), the American Academy of Pediatrics prefers 1 ppb, and the maximum lead action level FDA allows in bottled water is 5 ppb.¹⁴⁵ But, according to a February 2021 Staff Report of the Subcommittee on Economic and Consumer Policy of the U.S. House of Representatives' Committee on Oversight and Reform, major baby food companies sold products with ingredients having lead content of up to 886 ppb, 352 ppb, and 48 ppb, and one company sold baby food products that contained up to 641 ppb of lead, according to the company's own finished product testing. Similarly, 54.5% of another baby food brand's products exceeded 5 ppb lead, with some products containing up to 73 ppb lead, based on finished product testing.¹⁴⁶ And, between 2008 and 2017, the New York City Department of Health and Mental Hygiene found that more than 50% of spice samples had detectable lead, and more than 30% had lead concentrations of greater than 2 ppm (2000 ppb).¹⁴⁷

¹⁴² See Environmental Defense Fund ("EDF"), Lead in food: A hidden health threat, 1-2 (June 15, 2017) (citing EPA, Proposed Modeling Approaches for a Health-Based Benchmark for Lead in Drinking Water (2017), <https://www.regulations.gov/document/EPA-HQ-OW-2016-0686-0002>); FDA, Lead in Food, Foodwares, and Dietary Supplements, <https://www.fda.gov/food/metals-and-your-food/lead-food-foodwares-and-dietary-supplements>. The FDA's 3 µg level was premised upon CDC's then-current blood lead reference level of 5 µg/dL. In 2021, CDC lowered that value to 3.5 µg/dL, suggesting a reduction in FDA's intake level is necessary by FDA's existing rationale. See EDF, Comment on FDA's Closer to Zero Action Plan (Dec. 20, 2021), <http://blogs.edf.org/health/files/2021/12/EDF-Comment-on-FDA-Closer-to-Zero-Action-Plan-12-21.pdf>.

¹⁴³ EDF, Lead in food: A hidden health threat 1, 3-5 (June 15, 2017), https://www.edf.org/sites/default/files/edf_lead_food_report_final.pdf.

¹⁴⁴ Staff Report, Subcommittee on Economic and Consumer Policy of the Committee on Oversight and Reform, U.S. House of Representatives, Baby Foods Are Tainted with Dangerous Levels of Arsenic, Lead, Cadmium, and Mercury 3 (Feb. 4, 2021) ("ECP Feb. 2021 Report"), <https://oversight.house.gov/sites/democrats.oversight.house.gov/files/2021-02-04%20ECP%20Baby%20Food%20Staff%20Report.pdf>.

¹⁴⁵ See ECP Feb. 2021 Report 3, 22-23; EU regulation 2021/1317 of August 9, 2021, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R1317&from=EN>

¹⁴⁶ Staff Report, Subcommittee on Economic and Consumer Policy of the Committee on Oversight and Reform, U.S. House of Representatives, New Disclosures Show Dangerous Levels of Toxic Heavy Metals In Even More Baby Foods 3-4 (September 29, 2021) available at <https://oversight.house.gov/sites/democrats.oversight.house.gov/files/ECP%20Second%20Baby%20Food%20Report%209.29.21%20FINAL.pdf> ("ECP Sept. 2021 Report").

¹⁴⁷ Hore, Paromita PhD, MPH; Alex-Oni, Kolapo MPH; Sedlar, Slavenka MA; Nagin, Deborah MPH A Spoonful of Lead: A 10-Year Look at Spices as a Potential Source of Lead Exposure, *Journal of Public Health Management and Practice*: January/February 2019 - Volume 25 - Issue - p S63-S70, available at https://journals.lww.com/jphmp/fulltext/2019/01001/a_spoonful_of_lead_a_10_year_look_at_spices_as_a.11.aspx.

It is also clear that lead can be present in food from a wide variety of sources, including sources regulated in various ways by EPA. For example, agricultural products can uptake lead deposited into soil from air pollution or solid waste—which EPA regulates under statutes like the Clean Air Act and TSCA—and humans or food-source livestock can later consume those contaminated agricultural products.¹⁴⁸ Likewise, lead-contaminated drinking water, regulated by EPA through the Safe Drinking Water Act, can be mixed with baby formula and fed to infants.¹⁴⁹ As a result, EPA’s Lead Strategy will not achieve its goals of comprehensively reducing community exposures to lead sources and eliminating disparities in blood lead levels using a “whole of government” approach without incorporating action strategies for addressing lead in food and prioritizing the reduction of lead exposure from this pathway.¹⁵⁰

B. Recommendations

Because federal agencies other than EPA have regulatory authority over lead contamination in finished food products and agricultural commodities, as well as oversight over food subsidy programs, EPA’s effectiveness in reducing this lead exposure pathway will depend on its ability to work collaboratively with those other federal agencies. Consequently, EPA’s Lead Strategy needs to include specific provisions concerning how EPA will plan for regular communication and cooperation with its partner agencies on mitigating lead food pathways, just as it does in other areas of the Lead Strategy, such as working with HUD on lead paint actions and working with HHS and CDC to identify communities with high lead exposure potential.¹⁵¹

In doing so, EPA should prioritize collaboration with agencies in areas where their work has exposed challenges or inefficiencies in reducing public exposure to lead in food—including with USDA and FDA. For example, USDA’s decisions in implementing its Special Supplemental Nutritional Program for Women, Infants, and Children (WIC), which communities of color use at a disproportionate rate to provide food for pregnant women and children, can impact EPA’s progress toward its goal of mitigating disparities in lead exposures in communities with environmental justice concerns, depending on which food products and brands USDA and state agencies choose to include in the program.¹⁵² Testing of finished

¹⁴⁸ 42 U.S.C. §§ 7401-7671q; 15 U.S.C. §§ 2601-2692; [FDA, Lead in Food, Foodwares, and Dietary Supplements](https://www.fda.gov/food/metals-and-your-food/lead-food-foodwares-and-dietary-supplements) <https://www.fda.gov/food/metals-and-your-food/lead-food-foodwares-and-dietary-supplements>.

¹⁴⁹ See 2 U.S.C. §§ 300f-300j-26; EPA, Proposed Modeling Approaches for a Health-Based Benchmark for Lead in Drinking Water 5 (2017), available at <https://www.regulations.gov/document/EPA-HQ-OW-2016-0686-0002>

¹⁵⁰ See Lead Strategy 2-4.

¹⁵¹ Lead Strategy 8-9, 19, 20.

¹⁵² See Lead Strategy 2-3; 7 C.F.R. §§ 246.1-246.29; <https://www.fns.usda.gov/sites/default/files/wic/wic-fact-sheet.pdf>. For example, considering economic factors for defining environmental justice communities, the EJSCREEN tool EPA uses in

products has indicated that some of the products that the WIC program subsidizes for children and mothers can contain high levels of lead.¹⁵³ Several practical solutions have been proposed to USDA to mitigate this problem, including providing water filters directly to WIC recipients who may be using potentially lead-contaminated water for baby formula and authorizing the use of WIC funding for blood lead testing. To date, however, USDA has not taken action to implement these proposals broadly.¹⁵⁴ Coordination between EPA and USDA on this issue could provide additional authorization or alternative solutions, perhaps with EPA providing the water filters to WIC recipients in localities that EPA has determined have elevated lead levels in drinking water, using WIC participant data from USDA, or working with USDA to expand its recent exception to the use of WIC funding for blood lead testing in Flint, Michigan.¹⁵⁵ EPA and USDA could also provide guidance to those families receiving filters on proper use, maintenance, and replacement of the filters so that they are maximally effective.

EPA and USDA partnership also could reduce lead exposure by using EPA soil contamination data in agricultural food product testing. EPA currently has access to soil lead data in every state.¹⁵⁶ EPA could work collaboratively with the relevant USDA sub-agencies to advise farms that sell their commodities to baby food processors and manufacturers to implement more rigorous lead testing of fruits, vegetables, and grains from those higher-risk areas.¹⁵⁷

its environmental justice planning focuses on households with an income of 200% of the federal poverty level or less, and WIC is limited to households with income of 185% of the poverty level. See EPA, Overview of Demographic Indicators in EJSCREEN, available at <https://www.epa.gov/ejscreen/overview-demographic-indicators-ejscreen>; USDA, WIC Policy Memorandum: #2021-5 Publication of the 2021-2022 WIC Income Eligibility Guidelines, <https://fns-prod.azureedge.net/sites/default/files/resource-files/WIC-Policy-Memo-2021-5-IEG.pdf#page=3>. Considering communities that are defined as Environmental Justice communities on the basis of race/ethnicity, USDA data demonstrates that a significantly greater percentage of “Hispanic” and “non-Hispanic Black-only” people participate in the WIC program than “non-Hispanic White-only” and “non-Hispanic Other” people. See USDA, WIC 2017 Eligibility and Coverage Rates, <https://www.fns.usda.gov/wic-2017-eligibility-and-coverage-rates>.

¹⁵³ See, e.g., Baby Foods are Tainted with Dangerous Levels of Arsenic, Lead, Cadmium, and Mercury, Subcommittee on Econ. & Consumer Policy, Committee on Oversight and Reform, U.S. House of Rep. (Feb. 4, 2021), <https://oversight.house.gov/sites/democrats.oversight.house.gov/files/2021-02-04%20ECP%20Baby%20Food%20Staff%20Report.pdf>.

¹⁵⁴ Making the Case for Use of Federal WIC Funds to Conduct Blood Lead Testing, Legal Council for Health Justice (Nov. 2018); WIC Final Policy Memorandum 2001-1, USDA (Dec. 20, 2000); Letter from Chairman Raja Krishnamoorthi, Subcommittee on Econ. & Consumer Policy, Committee on Oversight Reform to Deputy Undersecretary Stacy Dean, Dept. of Ag. (Nov. 22, 2021).

¹⁵⁵ See USDA, USDA to Temporarily Allow WIC Funds to be Used for Lead Testing for Flint-Area WIC Recipients, Announces Other Measures to Expand Access to Healthy Foods, (Feb. 10, 2016), <https://www.usda.gov/media/press-releases/2016/02/10/usda-temporarily-allow-wic-funds-be-used-lead-testing-flint-area>.

¹⁵⁶ See <https://www.epa.gov/superfund/usgs-background-soil-lead-survey-state-data>

¹⁵⁷ See USDA, Using Soil Survey to Identify Areas With Risks and Hazards to Human Life and Property 18 (2004), https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/16/nrcs143_019308.pdf (Using Soil Survey).

Additionally, there are opportunities for EPA communication and collaboration with FDA that could significantly strengthen existing regulations and programs and therefore, mitigate existing lead exposure pathways under FDA authority. The FDA's Center for Food Safety maintains a "Reportable Foods Registry" requiring companies to voluntarily report and investigate food adulteration incidents.¹⁵⁸ But FDA has not made clear that reporting of lead contamination is required unless the potential lead contamination would meet the definition of a "Class I" recall situation, meaning "one in which there is a reasonable probability that the use of, or exposure to, a violative product will cause serious adverse health consequences or death."¹⁵⁹ Nor has it made clear to what extent lead contamination meets the Class I recall standard, particularly in overburdened communities where children already have higher than average exposure to lead from other sources. EPA, along with CDC, could share their data concerning overburdened communities with environmental justice concerns, where overall lead exposure is higher. EPA could also work with FDA to strengthen its guidance to make clear that exposure to lead contaminated foods, particularly in communities experiencing elevated lead, carries a reasonable probability of causing serious adverse health consequences and that such foods therefore are reportable to FDA's registry and may need to be evaluated under the Class I recall standard.

EPA and FDA collaboration could also enhance or facilitate FDA's long-overdue lead regulation and testing requirements for the foods young children eat. FDA can directly regulate food manufacturers to ensure that they "implement preventive controls" to reduce lead to the "lowest level currently feasible" in the finished food products.¹⁶⁰ FDA is authorized to regulate lead in food through "action levels" and non-binding guidance documents, but FDA has not exercised that authority regarding foods commonly consumed by children in over 15 years. FDA's most recent actions in this area include a 5 ppb action level for lead in bottled water in 1995,¹⁶¹ a 2004 statement that "lead levels in juice above 50 ppb may constitute a health hazard,"¹⁶² and a 100 ppb guidance level for lead in "candy likely to be consumed frequently by small children" in 2006.¹⁶³ A proposed FDA action level guidance for lead in juice has been pending at the Office of

¹⁵⁸ FDA, Guidance for Industry: Questions and Answers Regarding the Reportable Food Registry as Established by the Food and Drug Administration Amendments Act of 2007 (Sept. 2009) <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-questions-and-answers-regarding-reportable-food-registry-established-food-and-drug>.

¹⁵⁹ *See id.*

¹⁶⁰ *See* 21 U.S.C. § 350g(c); 21 C.F.R. §§ 109.7(b), 117.135(a)(1).

¹⁶¹ 59 FR 26,933 (May 25, 1994).

¹⁶² FDA, Guidance -for Industry: Juice Hazard Analysis Critical Control Point Hazards and Controls Guidance, First Edition, available at <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-juice-hazard-analysis-critical-control-point-hazards-and-controls-guidance-first>.

¹⁶³ FDA, Guidance for Industry: Lead in Candy Likely to Be Consumed Frequently by Small Children, available at <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-lead-candy-likely-be-consumed-frequently-small-children>.

Management and Budget (OMB) for nearly a year,¹⁶⁴ and neither FDA nor OMB has offered an explanation for this lengthy delay. Indeed, FDA does not plan to finalize any action levels for lead in baby food until as late as April 2024.¹⁶⁵ Moreover, FDA does not presently require food manufacturers and processors, including those that make food for infants, toddlers, and young children, to test for lead in their finished products. In the absence of any recent FDA action levels for lead in food, many companies in the food industry (including baby food manufacturers) have largely interpreted FDA regulations on “preventive controls” to call for monitoring for lead in some, but not all, ingredients earlier in the supply chain. Just last month, a number of distributors of imported dried/salted plums were forced to recall those products after the California Department of Public Health¹⁶⁶ detected lead in those products at concentrations as high as 33.25 micrograms of lead per serving—more than ten times the FDA “interim reference level” of 3 micrograms of lead daily from all food sources for children.¹⁶⁷ Any “whole of government” effort to reduce lead exposures, particularly in children, must include more robust regulation and enforcement of lead contamination in food by FDA.¹⁶⁸

¹⁶⁴ <https://www.reginfo.gov/public/do/eoDetails?rrid=158964>.

¹⁶⁵ FDA. Closer to Zero: Action Plan for Baby Foods, available at <https://www.fda.gov/food/metals-and-your-food/closer-zero-action-plan-baby-foods>. The “Closer to Zero” Action Plan, announced in April 2021, is FDA’s multi-year plan to reduce exposure to toxic elements (lead, arsenic, cadmium and mercury) from foods eaten by babies and young children—to “as low as possible.” See *id.*

¹⁶⁶ <https://www.cdph.ca.gov/Programs/OPA/Pages/NR22-030.aspx>. Without an FDA finished product testing requirement for lead, the products remained in the market for many months, despite an FDA import alert from 2017 that pertained to dried plums. See https://www.accessdata.fda.gov/cms_ia/importalert_55.html.

¹⁶⁷ <https://www.fda.gov/food/metals-and-your-food/lead-food-foodwares-and-dietary-supplements#:~:text=The%20FDA%20calculated%20the%20current,%C2%B5g%20per%20day%20for%20adults.&text=The%20adult%20level%20is%20particularly,against%20infant%20exposure%20during%20nursing>.

¹⁶⁸ Approach 3 in the Lead Strategy states, among other things, that EPA will “[c]ollaborate to address potential exposures to lead from food, cosmetics and consumer products, and cultural/religious products.” Lead Strategy 9. However, the Lead Strategy does not elaborate on any steps or actions as part of such collaboration. FDA’s *Draft Guidance for Industry on Lead in Cosmetic Lip Products and Externally Applied Cosmetics* recommends a maximum level of 10 parts per million (equivalent to 10,000 parts per billion) for lead in cosmetics marketed in the U.S. See <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/draft-guidance-industry-lead-cosmetic-lip-products-and-externally-applied-cosmetics-recommended>. EPA could work with FDA on additional monitoring of lead concentrations in cosmetics sold at retail in communities where EBLs among children and adults are already known to EPA and CDC. A 2018 CDC study that investigated substances found in the homes of North Carolina children with EBLs stated that “herbal remedies, and ceremonial powders might represent an important route of childhood lead exposure” and advocated for setting “a national maximum allowable limit.” Angelon-Gaetz KA, Klaus C, Chaudhry EA, Bean DK. *Lead in Spices, Herbal Remedies, and Ceremonial Powders Sampled from Home Investigations for Children with Elevated Blood Lead Levels* — North Carolina, 2011–2018, https://www.cdc.gov/mmwr/volumes/67/wr/mm6746a2.htm?s_cid=mm6746a2_w (last accessed Mar. 15, 2022). While some ceremonial powders such as kohl are not approved by the FDA and are subject to import alerts, EPA could share with FDA its data on lead exposures in certain communities as part of a collaboration on developing further FDA regulations and/or guidance to protect families against lead exposure from use of ceremonial powders.

Accordingly, in order to mitigate the risk of harm from lead contamination in food, the Attorneys General urge EPA to add several actions to the Lead Strategy to address the food pathway for potential lead exposure:

- First, EPA should plan to communicate and coordinate specifically and regularly on lead in food with FDA, USDA, CDC, and other relevant agencies, as the Lead Strategy currently requires in other contexts.¹⁶⁹ EPA should apply EJ principles across all food issues, communicate that priority to these partner agencies, and encourage the agencies to consider food health through that same lens.¹⁷⁰
- Second, EPA should share its scientific analysis and technical data with partner agencies where their work intersects, such as EPA's lead soil data which should be used by USDA to target agricultural food product testing.¹⁷¹ At the same time, EPA should coordinate with its partner agencies to avoid procedural roadblocks and facilitate expeditious implementation of the entire Lead Strategy, including components related to lead contaminated food, as they are urgently needed where no meaningful limits currently exist.¹⁷²
- Third, EPA should actively search for opportunities to achieve practical solutions that overcome the jurisdictional limitations caused by fractured agency authority involving the regulation of lead in food, such as EPA's work with USDA in the Flint, Michigan crisis and EPA's collaboration with HHS and other federal and non-governmental entities to encourage community education and develop testing programs related to lead in drinking water at schools and child-care facilities nationwide, and through the WIC program overseen by USDA¹⁷³
- Finally, after the Lead Strategy is finalized, EPA should hold public hearings on topics including lead in food with officials present from EPA's Environmental Justice office and partner agencies like the FDA and USDA, in order for both to inform the public on these important health issues relating to lead exposure from baby food.

¹⁶⁹ Lead Strategy 12, 17 (coordination with HUD).

¹⁷⁰ See EPA, EJ 2020 Action Agenda, https://www.epa.gov/sites/default/files/2016-05/documents/052216_ej_2020_strategic_plan_final_0.pdf (last accessed Mar. 15, 2022).

¹⁷¹ See Using Soil Survey 18.

¹⁷² For example, the FDA's proposed action levels for lead in juice has been stalled at the Office of Information and Regulatory Analysis (OIRA) within OMB since March 30, 2021. See <https://www.reginfo.gov/public/do/eoDetails?rrid=158964>

¹⁷³ USDA to Temporarily Allow WIC Funds to be Used for Lead Testing for Flint-Area WIC Recipients, Announces Other Measures to Expand Access to Healthy Foods, USDA (Feb. 10, 2016), <https://www.usda.gov/media/press-releases/2016/02/10/usda-temporarily-allow-wic-funds-be-used-lead-testing-flint-area>; Memorandum of Understanding Partners on Reducing Lead Levels in Drinking Water in Schools and Child Care Facilities (Nov. 2019), <https://www.epa.gov/ground-water-and-drinking-water/mou-reducing-lead-levels-drinking-water-schools-and-child-care>.

VI. Occupational and Take-Home Exposure

A. Nature of the Issue

A “whole of government” approach to lead reduction in communities must also address occupational lead exposure in certain industries like construction. EPA should work with Occupational Safety and Health Administration (OSHA) and CDC on mitigating occupational lead exposures and the associated take-home exposure risks to children and other family members.

OSHA recognizes that certain industries expose workers to lead at potentially hazardous levels. OSHA thus requires employers in the general industry, maritime and construction sectors to meet standards¹⁷⁴ that include a “permissible exposure limit” of 50 µg/m³ of lead over an eight-hour time-weighted-average for all employees covered and an “action level” of 30 µg/m³, at which an employer must begin blood lead testing for exposed workers, along with other compliance activities.¹⁷⁵

OSHA’s guidance materials warn workers in such industries that “[t]ake-home lead can cause lead poisoning in children and other family members” and that workers should “[s]top lead from getting into your home and vehicle by always washing, showering, and changing out of your work clothes and work shoes before leaving work.”¹⁷⁶ In 2011, EPA, in partnership with CDC, oversaw residential lead abatement efforts for employees of a battery recycling facility in Puerto Rico, after elevated blood lead levels were detected in numerous children of that facility’s employees.¹⁷⁷ In 2019, authorities in Minnesota discovered that two dozen children had elevated blood lead levels attributable to lead dust brought home by their parents from their jobs at a local manufacturer of lead-based products.¹⁷⁸ State authorities there obtained a court order that included requiring the company to pay for lead testing and abatement in the homes of the affected families.¹⁷⁹

EPA’s 2018 Lead Plan identified reduction of “lead exposure from occupational sources” as a key objective. EPA then stated that a possible action could be an Advance Notice of Proposed Rulemaking to collect public input on “improv[ing] protection of workers in industries and occupations where preventable exposure to lead continues to occur” and noted that “OSHA is exploring regulatory options to lower blood lead levels in affected workers.”¹⁸⁰ But EPA has not commenced any

¹⁷⁴ <https://www.osha.gov/lead/standards>

¹⁷⁵ <https://www.osha.gov/lead>

¹⁷⁶ <https://www.osha.gov/sites/default/files/publications/OSHA3680.pdf>

¹⁷⁷ <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6147a4.htm>

¹⁷⁸ <https://www.health.state.mn.us/communities/environment/lead/gremlin.html>

¹⁷⁹ *Leppink v. Water Gremlin Co.*, 944 N.W.2d 493, 497 (Minn. Ct. App. 2020)

¹⁸⁰ See EPA, Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts, p. 11 (Dec. 2018) (“Objective 1.6. Reduce Lead Exposure from Occupational Sources”) available at https://www.epa.gov/sites/default/files/201812/documents/fedactionplan_lead_final.pdf.

rulemaking since then, and, concerningly, EPA now does not even mention the occupational and take-home lead exposure pathway in its Lead Strategy.

B. Recommendations

EPA should recognize not only that occupational and take-home exposure to lead is not only a serious and under-addressed lead exposure pathway, but that this pathway may have a disproportionate impact on some groups who are overrepresented in lead-exposed industries, such as the construction sector. Data from the U.S. Department of Labor's Bureau of Labor Statistics indicates that nearly 33% of workers in the construction industry are Hispanic or Latino, whereas Hispanic/Latino workers constitute 18% of the overall labor force.¹⁸¹ A disproportionate brunt of take-home lead exposures is therefore likely experienced by the children, spouses and other relatives of Hispanic or Latino construction workers. EPA should partner with OSHA and CDC to proactively mitigate the take-home exposure pathway by expanding the scope and languages of the present dual language (English and Spanish) informational campaigns directed at construction workers and other industrial workers to emphasize measures to keep lead-contaminated clothing, shoes and personal protective equipment from exposing their families. Additionally, EPA and OSHA should develop targeted programs to test blood lead levels of workers' young children and any pregnant members of their households, as well as elective lead dust testing of their homes and cars.

* * *

Finally, the Attorneys General recommend that EPA Science Advisory Board be engaged on matters relating to development of EPA's policies and programs to reduce lead exposures, as applicable, as set forth in the February 28, 2022 EPA memorandum entitled, "Science Advisory Board Engagement Process for the Review of Science Supporting EPA Decisions."¹⁸²

Conclusion

Reducing lead exposures through a multi-faceted approach is an environmental justice imperative that we fully support. We thank EPA for the opportunity to provide input into its development of the Lead Strategy. We urge EPA to strengthen its strategy to include the recommendations discussed herein.

Sincerely,



Letitia James
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State of New York

¹⁸¹ <https://www.bls.gov/cps/cpsaat18.htm>

¹⁸² https://sab.epa.gov/ords/sab/sab_apex/r/files/static/v403/Science%20Supporting%20EPA%20Decisions.pdf

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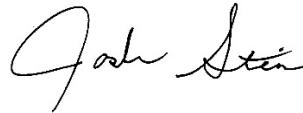
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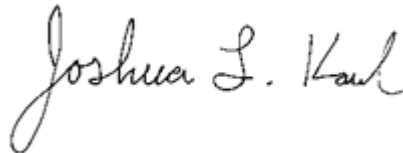
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