

BEFORE THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Petition for Emergency Action under the Safe Drinking Water Act, 42 U.S.C. § 300i, to Abate the Imminent and Substantial Endangerment to Jackson, Mississippi Residents from Lead and Microbial Contamination in Drinking Water

**Submitted on Behalf of Petitioners People's Advocacy Institute
and Mississippi Poor People's Campaign**

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Notice of Petition

Michael Regan
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Mail Code: 1101A
Washington, D.C. 20460
Via Email: Regan.Michael@epa.gov

Jeaneanne Gettle
Acting Regional Administrator
U.S. Environmental Protection Agency, Region 4
Mail Code: 9T25
Sam Nunn Atlanta Federal Center
61 Forsyth Street, S.W.
Atlanta, GA 30303-3104
Via Email: Gettle.jeaneanne@epa.gov

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I. Introduction

People’s Advocacy Institute and Mississippi Poor People’s Campaign (collectively, Petitioners) submit this Petition to request that all Jackson, Mississippi residents have (1) immediate access to safe drinking water, (2) real-time information about the safety of their tap water, and (3) a role in the enforcement and development of a long-term consent decree that is responsive to Jacksonians’ current health and safety complaints.

Petitioners request that the U.S. Environmental Protection Agency (EPA) take additional action using its emergency powers under the Safe Drinking Water Act (SDWA), 42 U.S.C. § 300i, to abate the “imminent and substantial endangerment” to human health present in Jackson’s drinking water system. EPA declared there was an imminent and substantial endangerment present in Jackson’s drinking water system in March 2020 and in November 2022, which remains today. Due to inadequate corrosion control, the downplay of historical lead contamination risk, failure to identify the locations of lead service lines, and the continued delay in rehabilitating microbial treatment processes, Jacksonians have no confidence in the Interim Third-Party Water Manager’s (ITPM) sweeping statements that Jackson’s tap water is safe for all. Residents’ personal accounts of water quality decline are being ignored, and residents are not being assured that a water quality emergency could be detected and reported to them in real time. Furthermore, the ITPM’s delay in fully implementing a long overdue Alternative Water Source Plan has likely critically compromised the ability of officials in the City of Jackson (the City) to mobilize in the event of an acute emergency.

For decades, State-erected legal barriers blocked local leadership from accessing resources necessary to rehabilitate Jackson’s drinking water treatment and distribution system. Community groups, like Petitioners, have created their own solutions in response to institutional inaction to protect the communities’ health. Now, given the large investment of federal money directed to Jackson to improve the water system, EPA must involve residents as partners and co-creators in developing solutions to the water crisis. Jackson residents are the experts of their lived experience and have a right and responsibility to be fully engaged in the redevelopment of their drinking water system. Yet their urgent water quality complaints have been disregarded in the public narrative, and community members have been excluded from confidential negotiations over a long-term consent decree in *United States v. City of Jackson*, No. 22-686 (S.D. Miss.).

The conditions in Jackson’s drinking water system are ripe for lead and microbial contamination, and the people of Jackson should not continue to carry the financial and psychological burden of protecting themselves, particularly when EPA has the broad authority to alleviate those burdens. For the reasons stated herein, **Petitioners request a meeting with EPA by September 8, 2023 to discuss the concerns raised in this Petition.** EPA must also use its broad authority and take immediate action to regularly hold public meetings; distribute bottled water, home testing kits, and water filters; and fulfill its environmental justice obligations by partnering with Jacksonians in the development and deployment of a community-centered resolution to the pending lawsuit.

II. Background

A. The State’s discriminatory practices undermined the City’s ability to maintain its public water system

A drinking water crisis that began decades ago plagues today’s Jackson residents. Between 1990 and 2020, the City lost nearly 25% of its population due to white flight, shifting the City’s population to a majority-Black community. The white residents who left took with them a significant portion of the City’s tax base, leading to dire financial consequences.¹ Meanwhile, the State of Mississippi has “derailed Jackson’s attempts to fund water infrastructure.”² The State has:

- rejected the City’s request—dating back to the mid-1990s—to make up for lost taxes on state-owned property or make loans available to repair the city’s aging infrastructure;³
- rejected state legislative proposals to provide Jackson with significant emergency funding;⁴
- established a special commission to oversee Jackson’s spending of certain sales tax revenue;⁵
- refused to approve the Jackson City Council’s one-percent sales tax increase to fund water system repairs;⁶
- imposed stringent terms for federally funded drinking water revolving loans, issued by the Mississippi State Department of Health (MSDH), including a \$500,000 cap on loan forgiveness, shorter repayment periods (enforced until 2022), and refusing to offer a “disadvantaged community” program until 2012. Notably, Jackson received awards from the revolving loan fund in *only* three of the twenty-five years of the program’s existence;⁷
- blocked access to federal pandemic funding for Jackson’s drinking water system by requiring cities to contribute matching funds and requiring Jackson, specifically, to

¹ Molly Hennessey-Fiske, *White then Black residents abandoned Jackson, propelling its water crisis*, Wash. Post, Sept. 4, 2022, <https://www.washingtonpost.com/nation/2022/09/04/jackson-water-crisis/>; Emily Wagster Pettus, *Black Residents of Jackson, Miss., decry plans by white-dominated Legislature for more state control*, L.A. Times, Feb. 27, 2023, <https://www.latimes.com/world-nation/story/2023-02-27/jackson-mississippi-black-city-white-state-legislature-tensions>.

² NAACP, *Complaint Under Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d, and 40 C.F.R. Part 7 Regarding Discrimination by the State of Mississippi Gravely Adversely Impacting the Drinking Water System for the City and the Health and Well Being of the People of Jackson, Mississippi* (“NAACP Title VI Compl.”) (Sept. 27, 2022), 11, https://www.epa.gov/system/files/documents/2022-10/07R-22-R4%20Complaint_Redacted.pdf. Similar allegations have been lodged against the State with the U.S. Department of Treasury regarding the State’s discriminatory administration of its Municipality and County Water Infrastructure Grant Program. See Letter from S. Poverty Law Ctr. to U.S. Dep’t of Treasury 1 (May 2, 2022), <https://www.splcenter.org/sites/default/files/title-vi-complaint-to-treasury-regarding-mdeq.pdf>.

³ NAACP Title VI Compl., *supra* n.2, at 11.

⁴ *Id.* at 12.

⁵ *Id.* at 5.

⁶ *Id.*

⁷ *Id.* at 13-14.

deposit its American Rescue Plan Act funds for water and sewer projects into a State treasury fund;⁸

- targeted Jackson’s self-governance;⁹
- denied issuing any money to Jackson from the \$75 million federal Bipartisan Infrastructure Law that was earmarked for water infrastructure funding;¹⁰ and
- capped forgiveness of loans from the State’s 2021 Bipartisan Infrastructure Law allocations at \$500,000.¹¹

In 2022, federal sources allocated more than \$814 million to Jackson, plus \$459 million to the State, to address water infrastructure through the Bipartisan Infrastructure Law¹²—the single largest investment in clean water that the federal government has ever made.¹³ However, the State’s strategic accounting mechanisms leave Petitioners concerned that the State will not ensure every Jacksonian receives the full benefits these federal funds offer.¹⁴

⁸ *Id.* at 14.

⁹ As recently as 2023, the Mississippi legislature has removed local control of the City from Jackson residents, including by enacting House Bill 1020, which creates a separate judicial district of judges appointed by the state supreme court justice in Jackson. Bobby Harrison, *Gov. Reeves signs racially divisive HB 1020; Legal Challenges could loom*, Miss. Today, Apr. 21, 2023, <https://mississippitoday.org/2023/04/21/gov-reeves-signs-rationally-divisive-hb-1020-legal-challenge-could-loom/>. One legislator even went so far as to say that “[the State is] not going to turn over hundreds of millions of dollars to a city government over the last several years that’s theme is this, no water, no sewer, no garbage collection, no attempt to collect the necessary fees that operate those systems.” Wicker Perlis, *Mississippi House passes controversial House Bill 1020, sends to Gov. as session nears end*, Mar. 31, 2023, Miss. Clarion Ledger, <https://www.clarionledger.com/story/news/politics/2023/03/31/mississippi-legislature-passes-controversial-hb-1020-jackson-ms-courts-bill/70063431007/>.

¹⁰ Annie Snider, *Congressional committee probe Mississippi’s water spending*, Politico, Oct. 17, 2022, <https://www.politico.com/news/2022/10/17/congress-probe-mississippi-jackson-water-spending-00062096>.

¹¹ NAACP Title VI Complaint, *supra* n.2, at 14.

¹² Rachel Scott & Briana Stewart, ‘*Through the Cracks:’ Inside the fight to fix Jackson’s water crisis*, ABC News, Feb. 6, 2023, <https://abcnews.go.com/US/cracks-inside-fight-fix-jacksons-water-crisis/story?id=96922793>.

¹³ EPA, *Water Infrastructure Investments*, <https://www.epa.gov/infrastructure/water-infrastructure-investments> (last visited Aug. 4, 2023).

¹⁴ The State’s funding decisions have even prompted a federal congressional investigation into how the State is spending federal aid intended for the Jackson water system and why additional review is required only for Jackson’s funding applications. See Letter from U.S. Reps. Carolyn Maloney of New York & Bennie Thompson of Mississippi, to Mississippi Gov. Tate Reeves (Oct. 17, 2022), <https://www.documentcloud.org/documents/23165488-letter-to-gov-tate-reeves-on-jackson-water-spending>.

B. Even with federal authorities' involvement, the issues plaguing the City's drinking water system have only worsened over time

After an EPA National Enforcement Investigations Center (NEIC) inspection in February 2020,¹⁵ EPA declared that the deterioration of Jackson's drinking water system presented "an imminent and substantial endangerment" to Jackson residents.¹⁶ EPA issued an Emergency Administrative Order requiring the City to complete a comprehensive equipment repair program to (1) rehabilitate monitoring, filtration systems, disinfection and pH treatment processes, (2) immediately repair line breaks and other causes of low pressure, and (3) develop a plan to ensure the City could distribute alternative water during emergencies.¹⁷ While the City and EPA began negotiating a resolution, back-to-back winter storms broke distribution pipes, leading to a system wide collapse in late 2020 tanking water pressure across the City.¹⁸ The City issued systemwide boil water notices that lasted for weeks, and tens of thousands of Jackson residents were left without potable water.¹⁹

Negotiations continued, and so did the water system's disrepair. In 2021 and 2022, EPA issued an additional Notice of Noncompliance and negotiated another Administrative Consent Order, imposing further requirements to address the unfulfilled 2020 directives.²⁰ The Order also addressed additional problems with disinfection byproducts,²¹ treatments to control lead contamination,²² and needed comprehensive equipment repairs for the system's disinfection and filtration processes.²³ Still, between April and August 2022, the O.B. Curtis treatment plant shut down twice, leading to city-wide conserve-water and boil-water notices.²⁴ Problems were wide-ranging: an electrical fire, chemical feed issues, equipment failures, high turbidity levels, and the failure of multiple water intake pumps.²⁵

In August 2022, the teetering water system collapsed dramatically once more. Floods from record rainfall overwhelmed O.B. Curtis, again tanking the system's water pressure.²⁶ Jackson residents across large parts of the city faced a complete loss of water usage.²⁷ The City

¹⁵ SDWA Compl. ¶ 55, ECF No. 1, United States v. Jackson, No. 3:22-cv-686 (S.D. Miss. filed Nov. 29, 2022) ("SDWA Compl.").

¹⁶ *Id.* ¶ 56.

¹⁷ *Id.* ¶¶ 56-59.

¹⁸ *Id.* ¶¶ 60-64.

¹⁹ *Id.* ¶ 64.

²⁰ *Id.* ¶¶ 65, 77.

²¹ SDWA Compl. Att. 4, ¶ 44, ECF No. 1-4, United States v. Jackson, No. 3:22-cv-686 (S.D. Miss.) ("2021 Consent Order").

²² *Id.* ¶ 42. Corrosion Control was implemented at O.B. Curtis. SWDA Compl., *supra* n.15, ¶ 65.

²³ SWDA Compl., *supra* n.15, ¶¶ 68-69.

²⁴ *Id.* ¶¶ 81, 83, 84.

²⁵ *Id.* ¶¶ 66, 72, 81, 83, 88, 90.

²⁶ *Id.* ¶ 90.

²⁷ *Id.* ¶¶ 90-91.

was unable to restore pressure across the system until September 2022.²⁸ The collapse drew national attention and catalyzed the current infusion of federal appropriations.²⁹

On November 29, 2022, EPA filed a civil action against the City for its failure to comply with SDWA and prior directives.³⁰ The parties then asked the court to stay the case and, in February 2023 entered into confidential settlement negotiations,³¹ with no community representation.³² Even in the midst of heightened federal enforcement presence, more complications at O.B. Curtis caused by freezing temperatures led to several low-pressure events across the city. Areas in South Jackson and West Jackson had little-to-no water, and boil water notices were issued in December 2022.³³ Schools began 2023 with remote classes, closing their campuses.³⁴ In January 2023, the City issued a public notice concerning ongoing violations of the Lead and Copper Rule.³⁵

In May 2023 the parties extended the stay of the enforcement action, continuing confidential negotiations. In June 2023, EPA acknowledged that “[t]here continues to be an imminent danger that the system could fail again and return to boil water notice[s].”³⁶ EPA offered no update on negotiations or unfulfilled repairs ordered over the last three years, and no interim access to safe drinking water.³⁷

III. Interests of Petitioners

The Petitioners are community groups and nonprofit organizations seeking to ensure that all Jackson residents have access to safe and clean drinking water, access to real-time information about the state of the water coming from their taps, and that those most affected by the water system’s problems are central to the crafting of long-term solutions. The People’s

²⁸ *Id.* ¶ 100.

²⁹ *See id.* ¶¶ 95-96.

³⁰ *See id.* ¶¶ 1-4, p. 41.

³¹ Joint Mot. for a Stip. Order, ECF No. 19, United States v. Jackson, No. 3:22-cv-686 (S.D. Miss. filed Feb. 16, 2023); Order for Confidentiality of Settlement Discussions, ECF No. 20, United States v. Jackson, No. 3:22-cv-686 (S.D. Miss. filed Feb. 17, 2023).

³² Order for Confidentiality of Settlement Discussions, *supra* n.31, ¶¶ 1-2 (noting definition of Participants).

³³ Alex Rozier, *Jackson declares emergency over Christmas water woes*, Miss. Today, Dec. 27, 2022, <https://mississippitoday.org/2022/12/27/jackson-water-christmas-emergency/>.

³⁴ *Parents frustrated as water crisis forces all Jackson Public Schools into remote learning*, Miss. Clarion Ledger, Jan. 4, 2023, <https://www.clarionledger.com/story/news/2023/01/04/jackson-public-schools-go-virtual-again-due-to-jackson-water-crisis/69776586007/>.

³⁵ City of Jackson, *Important Information About Your Drinking Water, Lead and Copper Rule Treatment Technique Violations* (Jan. 19, 2023), <https://storage.googleapis.com/proudcity/jackson/uploads/2023/01/20a0137a-lead-and-copper-repeat-notification-012023.pdf>.

³⁶ Press Release, EPA, *Biden-Harris Administration Invests \$115 million in Funding to Respond to the Drinking Water Emergency in Jackson, Mississippi* (June 6, 2023), <https://www.epa.gov/newsreleases/biden-harris-administration-invests-115-million-funding-respond-drinking-water>.

³⁷ *See* Joint Report & Stip. Order Requesting Stay Extension, ECF No. 29, United States v. Jackson, No. 3:22-cv-686 (S.D. Miss. filed May 28, 2023).

Advocacy Institute (PAI) is a resource and training incubator for transformative justice in the South. Mississippi Poor People’s Campaign (Mississippi PPC) is the state chapter of the national Poor People’s Campaign, and is dedicated to uniting people across Mississippi to challenge the evils of systemic racism, poverty, the war economy, ecological devastation, and religious nationalism.

Mississippi PPC and PAI have been at the forefront of the community response to the Jackson water crisis as leaders of the Mississippi Rapid Response Coalition (MRRC). MRRC was founded in 2020 in response to the COVID-19 pandemic and has since responded to crises related to climate change and failing infrastructure in the state of Mississippi. MRRC currently consists of over thirty partner organizations. With Petitioners at the helm, MRRC has been a lead rapid response provider throughout the Jackson water crisis, providing drinking water across Jackson’s seven wards and establishing a resource call center to provide information to residents. Mississippi PPC has also hosted several “Mississippi Moral Monday” marches to advocate for community-led solutions to this crisis.

IV. Regulating authorities’ failure to reliably engage with residents has limited the effectiveness of EPA’s enforcement action

A. Federal authorities have not fulfilled their environmental justice commitment to dynamically engage with Jackson’s communities, which is critical for ensuring water quality improvements

The Biden-Harris administration has declared a “Government-Wide Approach to Environmental Justice” that requires agencies to “seek[] out and encourag[e] the involvement of” communities.”³⁸ Federal agencies, including EPA and the Department of Justice,³⁹ have affirmed this policy position. As stated by EPA, “a fundamental element of achieving . . . equity and justice” is for its programs “to listen and respond to community voices.”⁴⁰

³⁸ Executive Order 14,096, Revitalizing Our Nation’s Commitment to Environmental Justice for All, 88 Fed. Reg. 25,251, 25,254 (Apr. 21, 2023); *see also* Executive Order 13,985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, 86 Fed. Reg. 7009, 7011 (2021).

³⁹ U.S. Dep’t of Justice, Equity Action Plan Summary, at 3 (2022) (“Effective engagement is critical in ensuring that communities have equitable access to, and benefit from, DOJ’s services To these ends, the Justice Department seeks to improve its understanding of the interests, needs, and perspectives of marginalized and underserved communities.”).

⁴⁰ FY 2022-2026 EPA Strategic Plan, at 30 (discussing Objective 2.1: Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels) (“EPA Strategic Plan”), available at <https://www.epa.gov/system/files/documents/2022-03/fy-2022-2026-epa-strategic-plan.pdf>.

EPA has consistently reiterated that “enforcement is essential to ensuring that everyone is protected by our nation’s environmental laws and regulations.”⁴¹ Accordingly, EPA developed a “bold and unprecedented” Strategic Plan to advance environmental justice, promising to “employ the full array of policy and legal tools at [the agency’s] disposal to incorporate environmental . . . justice considerations in . . . enforcement, [and] . . . disaster response and recovery.”⁴² Critical to EPA’s success in this area is supporting the efforts of community members and organizations to provide EPA with their expertise and viewpoints.

More specifically, Objective 2.2 of the Strategic Plan states that the agency must “advance” its “ability to engage in community-driven work” so that “EPA decision making incorporates meaningful community involvement and analyses that identify disproportionate impacts.”⁴³ DOJ similarly has declared that it “must ensure meaningful engagement with impacted communities.”⁴⁴ “Achieving meaningful change necessitates that EPA . . . significantly advance its ability to work on the ground with communities as a regular means of achieving its mission.”⁴⁵ EPA has also declared that “[p]ublic accountability drives better compliance.”⁴⁶

Petitioners agree. Jackson communities have mobilized, and are led by local leadership that EPA can “leverage and coordinate . . . and collaborate with . . . to advance comprehensive and strategic community-driven approaches.”⁴⁷ And yet, EPA has not engaged with Jacksonians as equal partners, in spite of multiple local calls for inclusion, and has underutilized the resources that Jackson residents could bring to addressing the water crisis. Most of the touchpoints set up by EPA and DOJ for the public have been limited, one-off interactions rather than collaborative, iterative processes. For example, while both agencies set up webpages that collect information about previous EPA investigations and the pending DOJ enforcement action,⁴⁸ the only link

⁴¹ Memorandum from Lawrence E. Starfield, Acting EPA Assistant Administrator, on Using All Appropriate Injunctive Relief Tools in Civil Enforcement Settlements, to EPA Deputies, Directors, and Regional Counsels 1 (Apr. 26, 2021) (“EPA Civil Enforcement Memo”), available at <https://www.epa.gov/sites/default/files/2021-04/documents/usingallappropriateinjunctiverelieftoolsincivilenforcementsettlement0426.pdf>.

⁴² EPA Strategic Plan, *supra* n.40, at 5.

⁴³ *Id.* at 32.

⁴⁴ Memorandum from Vanita Gupta, Assoc. Att’y Gen., Dep’t of Justice, to Heads of Department Components & U.S. Att’ys 6 (May 5, 2022), available at <https://www.justice.gov/asg/page/file/1499286/download> (“Consistent with the principles of this Strategy and the Department’s implementation of Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, 86 Fed. Reg. 7009 (2021), USAOs and other Department components, with the support of the Office of Environmental Justice within ENRD, should, when appropriate, participate with agency partners in conducting general outreach to communities regarding environmental justice concerns.”).

⁴⁵ EPA Strategic Plan, *supra* n.40, at 34.

⁴⁶ EPA Civil Enforcement Memo, *supra* n.41, at 6.

⁴⁷ EPA Strategic Plan, *supra* n.40, at 34.

⁴⁸ See EPA, *Jackson, MS Drinking Water*, <https://www.epa.gov/ms/jackson-ms-drinking-water> (last visited June 28, 2023); Dep’t of Justice, *Jackson, Mississippi Drinking Water and Sewer*

offered to collect community statements on either of these webpages is to a now-expired survey.⁴⁹

Petitioners submitted their own community statement through this portal on July 11, 2023.⁵⁰ Although the portal includes targeted questions, it falls short of EPA's promises in its Strategic Plan. The websites lack information to facilitate a dialogue with the public, such as explaining how the agencies will use the answers or whether the agencies will follow up with commenters. While EPA's webpage provides links to its case filings and results from water sampling conducted in September 2022,⁵¹ it does not include any recent sampling information, including for contaminants named in EPA's complaint as violating SDWA standards. In-person meetings have also fallen short of the dynamic engagement the administration promised.⁵²

Throughout the long arc of negotiations between EPA, the City, and the State, Jackson residents have been unable to access basic information to establish confidence that their water is *currently* safe. Publicly available information about Jackson's water is insufficient to help individuals protect themselves or equip community leaders to serve as enforcement partners and raise compliance issues. The ITPM and State have made claims to the Court that the water is "safe" without evidentiary support, and the *only* challengers have been Jacksonians armed with the reality of their lived experiences that reflect otherwise.⁵³

B. The ITPM's engagement neither reflects Jacksonians' wishes nor acknowledges the existence of continuing water quality complaints

When the EPA filed its lawsuit against the City on November 29, 2022,⁵⁴ the parties entered into an Interim Stipulated Order (ISO) appointing the current ITPM.⁵⁵ The ITPM was installed as a "short-term method to stabilize the drinking water system."⁵⁶ However, the ITPM's

Overflow Issues, <https://www.justice.gov/oej/jackson-mississippi-drinking-water-and-sewer-overflow-issues> (last visited June 28, 2023).

⁴⁹ Dep't of Justice, *Jackson, Mississippi Drinking Water and Sewer Overflow Issues Request for Community Statements*, https://dojenrd.gov1.qualtrics.com/jfe/form/SV_0cbGlkoP7ik3eZg (last visited Aug. 2, 2023) (Petitioners understand this survey closed on July 31, 2023).

⁵⁰ Letter from MS-PPC & PAI to EPA Region 4, Request for Community Input on the Jackson Water Crisis (July 11, 2023), <https://forwardjustice.org/wp-content/uploads/2023/07/PAI-MS-PPC-Community-Statement-7-11-23.pdf> (last visited Aug. 7, 2023).

⁵¹ EPA, *Jackson, MS Drinking Water*, *supra* n.48.

⁵² Exhibit A, Declaration of Danyelle Holmes (Holmes Decl.) ¶¶ 46-50.

⁵³ *See, e.g.*, Transcript of July 13, 2023 Status Conference at 346:11-12, ECF No. 40, United States v. Jackson, No. 3:22-cv-686 (7/13/2023 Tr.) (Ted Henifin, ITPM) ("The water is safe to drink without reservation"); *see also* Letter from MS-PPC & PAI to EPA Region 4, *supra* n.50; Holmes Decl. ¶¶ 42, 45.

⁵⁴ *See* SDWA Compl. ¶¶ 1-4, p. 41.

⁵⁵ Interim Stipulated Order (ISO), United States v. Jackson, No. 3:22-cv-686 (S.D. Miss. Nov. 29, 2022), ECF No. 6, ¶ 4.

⁵⁶ Memo. in Supp. of Unopposed Mot. to Enter Interim Stipulated Order, ECF No. 3, United States v. Jackson, No. 3:22-cv-686 (S.D. Miss. Nov. 29, 2022).

term has no set expiration date and he possesses broad authority over all aspects of the City's drinking water system.⁵⁷ Without the same accountability mechanisms and checks as a government body, the ITPM's exercise of that authority to date has been incongruent with Jackson residents' priorities and non-responsive to information requests and real-time complaints.

The ITPM has taken the first steps toward privatizing the water system, which is against the wishes of Jacksonians. Privatization of Jackson's public utilities would harm Jackson residents.⁵⁸ Per the ISO, companies hired⁵⁹ to address the water crisis are not subject to public disclosure laws, nor public procurement laws requiring an open and competitive bidding process for government contracts.⁶⁰ Mayor Lumumba has repeatedly spoken out against privatizing Jackson's water system as misaligned with the will of the people, and local groups have lobbied against the State's attempts to do the same.⁶¹ Yet the ITPM effectively did just that by incorporating JXN Water, Inc.—a for-profit corporation that is shielded from public disclosure laws.⁶² This is even more disturbing given reports that the ITPM opposed privatization in recent recommendations when the State attempted to create a regional water authority.⁶³ There is no indication JXN Water, Inc. will be dissolved nor plans announced for the City to “own” JXN Water, Inc. once the ISO is lifted. And with privatization, Jackson residents have also lost their ultimate accountability tool: the ballot box. When the water system was

⁵⁷ JXN Water (@jxnwtr), *JXN Water Town Hall*, Facebook (Mar. 7, 2023, 1:03 PM) <https://www.facebook.com/jxnwater/videos/198220299562056/> (timestamp at 54:31) (ITPM stating he has more authority over Jackson's water “than [he] would give [him]self”).

⁵⁸ See generally Naomi Klein, *The Shock Doctrine: The Rise of Disaster Capitalism* (2007) (enunciating the concept of “disaster capitalism,” a phenomenon when predatory corporate forces take advantage of natural disasters or other crises to push forward unpopular policies, which often elevate private gain over public good); Nathalie Baptiste, *Privatization Isn't The Answer To Jackson's Water Crisis*, HuffPost (Sept. 17, 2022, 8:00 AM), https://www.huffpost.com/entry/jackson-water-crisis-privatization_n_6324d6c2e4b0ed021dfd034f (discussing the harms that come from water system privatization, like higher rates for consumers).

⁵⁹ See Anthony Warren & Joseph Doehring, *Jackson Water Maintenance Workers Protest Third-Party Privatization Efforts*, WLBT (Apr. 21, 2023, 6:30 PM), <https://www.wlbt.com/2023/04/21/jackson-water-maintenance-workers-protest-third-party-privatization-efforts/> (discussing the impacts of privatization on workers).

⁶⁰ See ISO ¶¶ 6.m, 17.a.

⁶¹ Molly Minta, ‘What's Next, the Air?’ Local Activists Push Back on Proposed Plans to Privatize City Water System, Miss. Today (Sept. 15, 2023), <https://mississippitoday.org/2022/09/15/local-activists-push-back-on-plans-to-privatize-city-water-system/>.

⁶² See JXN Water Inc., Articles of Incorporation, Jackson, MS: JXN Water (Dec. 7, 2022), <https://corp.sos.ms.gov/corpcnv/portal/c/ExecuteWorkflow.aspx?workflowid=g12dbd558-fa5d-49a1-a869-ad8b9db198db&FilingId=6575ba07-e514-4d89-ba80-52bb9ea02afd>.

⁶³ Wicker Perlis, *Bill to Regionalize the Jackson, MS Water System Takes Step Forward in Mississippi Senate*, Miss. Clarion Ledger (Feb. 7, 2023), <https://www.clarionledger.com/story/news/politics/2023/02/07/jackson-ms-water-crisis-mississippi-senate-passes-bill-regionalizing-jackson-mississippi-water/69880262007/>.

public, Jacksonians could elect a new mayor if they were dissatisfied with their water; with a private company in charge, they have no such recourse.

The ITPM, through JXN Water, Inc., has entered into long-term contractual arrangements⁶⁴ committing local resources and likely future federal funding without the input of a community that relies on the water treatment plants not just to treat its water but also as major employers. The ITPM claims that he is “hopeful that all the community partners stay at the table and continue to hold [him] accountable to the people of Jackson.”⁶⁵ But this sentiment will remain a mere hope so long as JXN Water, Inc. has limited mechanisms for accountability or community collaboration.

The ITPM has fallen short of meaningful community engagement. The JXN Water, Inc. website does not include any information about upcoming community engagements.⁶⁶ Although for a time, the website stated that “[f]rom June 12 to June 20, residents in each ward [would] have an opportunity to participate in meetings that will give [JXN Water] an opportunity to hear directly from everyone” and that “specific dates and locations for meetings in each ward” would be shared soon, that time has since passed with no meetings publicized or held.⁶⁷ Residents have also struggled to share their concerns about water quality issues through the JXN Water, Inc. hotline.⁶⁸ The “events” section of the web page has not functioned since at least early June, where it continually loads a blank page when accessed. There is no publicly available information on how or when the ITPM intends to use JXN Water, Inc.’s increased budget to meaningfully respond to the community like the ITPM represented to the court. It is likewise unclear how the Community Engagement Manager, for which the ITPM sought additional funding, will be selected. The ITPM is not acting in a vacuum. The State is already undermining Jacksonians’ ability to self-rule, and the process of repairing the water system should not further contribute to their disenfranchisement.

⁶⁴ The ITPM entered a \$2 million per month contract with Jacobs Engineering Firm, a Dallas, Texas, based consulting firm, to manage the water treatment plants. Ed Inman, *JXN Water Announces New Contractor to Operate Treatment Plants, Scholarships*, Miss. Clarion Ledger (Feb. 24, 2023, 2:19 PM), <https://www.clarionledger.com/story/news/2023/02/24/jxn-water-gets-new-contractor-to-operate-treatment-plants-jackson-ms/69939812007/>; Alex Rozier, *Jackson Community Leaders Call Out Henifin for Lack of Collaboration, Personnel Issues*, Miss. Today (Mar. 23, 2023), <https://mississippitoday.org/2023/03/23/jackson-community-leaders-henifin-issues/>.

⁶⁵ Scott Simmons, *The EPA Wanted to Hear from the Jackson Community on World Water Day*, WAPT (Mar. 23, 2023, 8:52 AM), <https://www.wapt.com/article/the-epa-wanted-to-hear-from-the-jackson-community-on-world-water-day/43391120>.

⁶⁶ See JXN Water, Events, <https://jxnwtr.com/events/> (last visited Aug. 8, 2023).

⁶⁷ JXN Water, *Community Update: Vol. 1*, <https://jxnwater.com/community-update-vol-1/> (last visited Aug. 8, 2023).

⁶⁸ See, e.g., Transcript of July 12, 2023 Status Conference at 130:2-3, ECF No. 39, United States v. Jackson, No. 3:22-cv-686 (7/12/2023 Tr.) (Brooke Floyd, recounting that “I called [JXN Water to report a water quality issue] . . . [but] I just kept being put on hold. Nobody ever came back. The phone disconnected . . . [and though] I have called every week [for over three weeks,] . . . I’ve never gotten a response.”).

Further, the ITPM has made statements during court proceedings alleging that the water is “safe,” and there is no present mechanism requiring the ITPM to support his assertions. The ISO does not require the ITPM to explain how his decisions are aligned with abating the imminent and substantial endangerment in Jackson’s water system. The ITPM quarterly reports consistently focus on improvements to water distribution functions and funding sources. Plans to rehabilitate treatment processes and implement corrosion control that equally affect public safety continue to be delayed.⁶⁹ The reports do not include contaminant testing results or actions taken to rehabilitate historical malfunctions in the treatment systems that keep microbes and lead out of the drinking water.

The damage caused by the lack of a necessary framework to contextualize the water system’s historical malfunctions, understand the relationship between the ITPM’s priority list and EPA’s imminent and substantial endangerment findings, and understand the relationship between the system’s challenges and public health effects, is reflected in the court’s line of questioning during status conferences. Recent status hearings have perpetuated the idea that the water is “safe” and undermine other authorities that raise questions about the ITPM’s progress.⁷⁰

Alarmingly, DOJ and EPA have remained silent during public discussions of water quality and corrosion control, which are central to their own lawsuit. As a result, community leaders like Petitioners remain in the dark about vital data points, and the ITPM remains highly critical of Jacksonians’ ability to understand the “weeds”⁷¹ of the work that needs to be done. It is the duty of DOJ and EPA to “reinforc[e] science” by ensuring facts about water quality remain the focus of status conferences and to ensure that communities are not robbed of the opportunity to meaningfully engage due to a lack of information.⁷²

Preserving Jacksonian’s dignity requires the ITPM to substantiate his sweeping public health statements that offend the seriousness and complexity of the current lawsuit. The ITPM says that “the water is great,”⁷³ and that the water is tested regularly at the water treatment plants. But these anecdotal statements lack context and evidence. The ITPM directs people to the JXN Water, Inc. website or to contact JXN Water, Inc. staff for more information about their water.⁷⁴

⁶⁹ See ISO ¶ 16.a.

⁷⁰ See generally Transcript of June 21, 2023 Status Conference at 49 et seq., ECF No. 34, United States v. Jackson, No. 3:22-cv-686 (6/21/2023 Tr.) (Court questioning why the mayor was distributing donated water filters, while the ITPM asserted that the water is safe without filtration including for pregnant people and children under five, despite the State and City health guidance to the contrary).

⁷¹ Anthony Warren & Joseph Doehring, *Jackson Mayor Stands Behind Comments on Water; Doesn’t Apologize for Providing Filters to Residents*, WLBT (June 21, 2023, 7:41 PM), <https://www.wlbt.com/2023/06/21/jackson-mayor-stands-behind-comments-water-doesnt-apologize-providing-filters-residents/> (quoting the ITPM as saying, “[y]ou start talking about what your [sic] putting in the water, and how its used... [that’s] way too down in the weeds”).

⁷² See EPA Strategic Plan, *supra* n.40, at 8.

⁷³ JXN Water (@jxnwtr), *JXN Water Town Hall*, *supra* n.57 (timestamp at 40:50).

⁷⁴ 7/13/2023 Tr. at 346:21, 347:2, 347:13 (Ted Henifin, ITPM).

But as described above, in practice, at least some Jacksonians have been unable to speak with JXN Water, Inc. staff about their issues. Furthermore, the JXN Water, Inc. website offers limited data about water quality tests completed at the water treatment plants,⁷⁵ and nothing about the quality of water when it reaches residents' homes.

The ITPM's assertions that the water is safe also demand that Jacksonians ignore their own senses. For many Jackson residents, the ITPM's efforts are not manifesting as real quality of life improvements.⁷⁶ Jackson residents continue to observe discolored water and experience low pressure coming from their taps.⁷⁷ Residents report that, through this summer, they have been unable to drink the water in their homes. Many complain that they cannot cook, clean, or bathe with the water. Faced with state advisories that have not been lifted, and conflicting information from the ITPM, residents struggle to care for their babies and children—whom they can't always keep from ingesting the water—and which they believe has made them sick.⁷⁸ Some have moved. Others leave for long periods of time to find safe water with families and friends outside of the city. When some residents do come in contact with the water, it makes their skin itch and makes their eczema flare.⁷⁹ Residents have connected infections with exposure to their tap water; some have been unable to go to work and children have been unable to go to school; residents have been left “fearful” and “scared” of the water coming out of their taps.⁸⁰ And without sufficient alternative sources of drinking water, many residents have had to pay exorbitant costs, sometimes hundreds of dollars, to protect themselves. Over time, this has created an excessive financial burden that Jacksonians should not have to bear.

In short, Jackson residents have been unable to obtain clear answers to their questions about the safety of their tap water. Without better information from the ITPM, there are few ways for the public (or federal authorities) to know whether the most recent problems Jackson residents observe at their taps pose the same threat that EPA declared in November 2022 or if it is a new issue authorities have yet to identify.⁸¹

⁷⁵ See generally JXN Water, <https://jxnwater.com/> (last visited Aug. 7, 2023).

⁷⁶ See Holmes Decl. ¶¶ 25-29. After one person spoke in court during the July 12/13 status conference about their poor water quality experiences and repeated (un-returned) requests to JXN Water, they returned home to find a JXN Water crew at their home. The crew restored their water quality by flushing their water for three hours and replacing their water meter connection. (Documentation supporting this story is available from the Petitioners upon request.) It should not require a court inquiry for residents' legitimate concerns to be taken seriously by the entities charged with resolving the safety of their water.

⁷⁷ Holmes Decl. ¶¶ 25, 27-28.

⁷⁸ *Id.* ¶¶ 25-27, 29.

⁷⁹ See 7/12/2023 Tr. at 102:21-25 (Nsombi Lambright-Hayes).

⁸⁰ Holmes Decl. ¶¶ 25, 29. These characterizations also come from paper intake forms collected by the Petitioners attesting to Jacksonians' personal experiences with their water.

⁸¹ Petitioners note that the customer complaints could be treated as a potential way for the ITPM to better understand acute issues within the treatment system. See A. Whelton, et al., Customer Feedback a Tool for Distribution System Network Monitoring for Improved Drinking Water Surveillance, 8th Annual Water Distribution System Analysis Symposium 1 (Aug. 27-30, 2006).

C. Residents are not adequately notified when their water may be unsafe because the boil water notice system lacks accessibility and the complaint call center is insufficient

Decades of State disinvestment have left Jackson’s water system ill-equipped to communicate with residents during emergencies. Low pressure events have driven boil water notices in Jackson which impact large parts of the city. Between 2017 and 2021, the system had 7,321 line breaks—more than triple the industry average benchmark.⁸² As a result, the City issued 750 boil water notices between 2016 and 2020 alone.⁸³ Despite the widespread and repetitive nature of the boil water notices, the City (and now JXN Water, Inc.) has not utilized best practices to ensure residents know when and why boil water notices are issued, particularly with elderly residents and residents who have limited access to technology.

Boil water notices have been posted consistently only on MSDH’s and the City’s website or social media accounts, which is insufficient to reach all Jacksonians.⁸⁴ In 2021, 13% of Jackson households lacked internet access,⁸⁵ making those households unlikely to see a boil water notice. Even for households with internet access, boil water notices posted only on hard-to-navigate websites, requiring a consumer to *proactively* check that website for boil water notices, do not provide adequate *real-time notice* of dangers to all affected residents. Petitioners have first-hand knowledge that these notices do not reach all Jackson residents.⁸⁶ To ensure that residents were aware that their drinking water was unsafe, Petitioners, with MRRC, have gone door-to-door in communities under boil water notices to notify residents. Many community members have learned of each boil water notice for the first time through this canvassing. When the City ran the water system, city staff would even call MRRC volunteers to tell them about boil water notices, and MRRC volunteers would then go directly to neighborhoods to spread the word and deliver bottled water.⁸⁷ With their limited time and resources, Petitioners have taken on a great deal of responsibility to do the labor that the better-resourced parties to this action should be performing. As such, Petitioners have built up trust with members of the community and are a valuable asset to the team that is tasked with the equitable rehaul of Jackson’s public water system.

(pilot study showing that customer feedback data “has the potential to be an effective drinking water contamination event monitoring technique”).

⁸² SDWA Compl. ¶ 40. By comparison, one industry goal is that there should be no more than fifteen breaks per one hundred miles of line. *Id.* ¶ 40.

⁸³ EPA, *National Enforcement Investigations Center Civil Investigation Report, City of Jackson Water System* 18 (2020) (NEIC Report).

⁸⁴ JXN Water recently created a webpage for boil water notices. *See* JXN Water, Precautionary Boil Water Notices (last visited Aug. 8, 2023), <https://jxnwater.com/boilwaternotices/>.

⁸⁵ U.S. Census, Types of Computers and Internet Subscriptions, <https://data.census.gov/table?q=Telephone,+Computer,+and+Internet+Access&g=310XX00US27140&tid=ACSST1Y2021.S2801> (last visited Aug. 4, 2023) (stating that there are a total of 228,001 households in the Jackson, MS Metro Area and that 29,576 of them do not have an internet subscription).

⁸⁶ Holmes Decl. ¶ 19.

⁸⁷ *Id.* ¶ 55.

Since the filing of *United States v. City of Jackson*, Jacksonians have continued to experience water pressure issues, discolored and malodorous water, and water main breaks.⁸⁸ Under guidance provided on the Mississippi State Department of Health’s website, if water systems lose pressure, a boil water notice will be issued.⁸⁹ However, many residents are not receiving boil water notices from JXN Water. This is so despite the fact that some boil water notices continue to be posted on the state’s website.⁹⁰ This raises questions as to why JXN Water, Inc. did not issue any boil water notices along with the State, and under what circumstances JXN Water, Inc.’s decision making deviates from state guidance and EPA’s specific directives.⁹¹

V. Contaminants in and likely to enter Jackson’s drinking water may present an imminent and substantial endangerment to human health

In 2020 and again in 2022, EPA concluded that emergency action was needed to abate an urgent threat to Jacksonians’ health caused by systemic failures in the City’s drinking water system.⁹² But EPA’s actions have not sufficiently mitigated those threats. Despite some progress, the system remains ripe for lead and microbial contamination as explained here and further detailed in the attached expert declaration of Elin W. Betanzo. Furthermore, Jacksonians’ recent accounts of discolored, cloudy, and smelly water provide additional signals that water quality problems, and related public health threats, likely remain unaddressed.

A. Jackson’s water remains at risk of lead contamination

1. The water system has not provided evidence that it has installed or is maintaining optimal corrosion control treatment

For at least the last seven years, the water system has consistently violated the requirement to maintain optimal corrosion control treatment.⁹³ Without adequate corrosion control, Jackson residents are at risk of lead leaching into their water.

⁸⁸ *Id.* ¶¶ 25-29, 53, 56; *see, e.g.*, 7/13/2023 Tr. at 210:2 et seq. (Danyelle Holmes); 7/12/2023 Tr. at 100:12 et seq. (Nsombi Lambright-Haynes).

⁸⁹ MSDH, *Boil Water Notices: Precautions to Take* (last updated Aug. 2, 2022), <https://msdh.ms.gov/page/23,0,148,626.html>.

⁹⁰ *See, e.g.*, Bianca Ball, *Boil Water Notice Issued for 175 Jackson Customers*, WJTV (Mar. 20, 2023, 5:16 PM), <https://www.wjtv.com/news/local-news/boil-water-notice-issued-for-175-jackson-customers/>.

⁹¹ *See* Emergency Administrative Consent Order ¶¶ 40-45, *supra* n.21 (EPA emergency directives to the City of Jackson).

⁹² *See* 42 U.S.C. § 300i(a); *see also* Section II.B.

⁹³ The water system violated the requirement for every consecutive monitoring period from January 2016 through December 2022. *See* EPA, Administrative Compliance Order on Consent, Docket No. SDWA-04-2020-2301 (July 1, 2021) ¶¶ 31-32; MSDH, *Drinking Water Branch, Violations for City of Jackson*, https://apps.msdh.ms.gov/DWW/JSP/Violations.js?p?tinwsys_is_number=317&tinwsys_st_code=MS (listing violations for “WQP [water quality parameter] Level Non-Compliance (LCR)”).

Lead can enter a water distribution system through numerous sources. The biggest potential source are lead service lines—pipes that connect a building’s plumbing with a water main.⁹⁴ Other sources are lead goosenecks (short pipes used to connect both copper service lines and those made of more rigid materials, like galvanized steel, with water mains), lead solder, and lead interior (premise) plumbing.⁹⁵ Importantly, even if plumbing is made primarily out of another metal, it can still contain some percentage of lead; until 2014, plumbing could contain up to 8% lead by weight and still meet SDWA’s requirement that plumbing be lead free.⁹⁶

Lead enters drinking water when plumbing that contains lead corrodes after coming into contact with water.⁹⁷ “The amount of lead in drinking water depends heavily on the corrosivity of the water.”⁹⁸ Water with high acidity or low mineral content can be particularly corrosive.⁹⁹

EPA’s Lead and Copper Rule regulations require water utilities to treat drinking water to reduce its corrosivity and minimize the risk of lead leaching as water travels through the distribution system to people’s faucets.¹⁰⁰ The treatment that will minimize lead release is known as “optimal corrosion control.” The Lead and Copper Rule required all large public water systems (those serving populations of 50,000 or more, like Jackson’s) to identify and implement optimal corrosion control programs by January 1, 1997.¹⁰¹

There is no question that at least some homes in Jackson are connected to some form of lead plumbing. The ITPM has budgeted \$88 million for lead line replacement,¹⁰² and in 2016, Jackson water samples exceeded the EPA’s “lead action level”— a level of lead contamination

⁹⁴ AWWA Rsch. Found. & EPA, *Contribution of Service Line & Plumbing Fixtures to Lead & Copper Rule Compliance Issues* 49, 80 (2008).

⁹⁵ EPA, Sources of Lead in Drinking Water, https://www.epa.gov/sites/default/files/2017-08/documents/epa_lead_in_drinking_water_final_8.21.17.pdf (last visited July 26, 2023); Exhibit B, Declaration of Elin Betanzo (Betanzo Decl.) ¶¶ 65-69.

⁹⁶ See Reduction of Lead in Drinking Water Act, Pub. L. No. 111-380 § 2(a)-(b), 124 Stat. 4131 (2011) (amending SDWA’s definition of “lead free” at 42 U.S.C. § 300g-6(d) with effective date 36 months after enactment); 85 Fed. Reg. 54,235, 54,237 (Sept. 1, 2020) (amending EPA’s regulations and explaining change); Betanzo Decl. ¶ 68. Even under the current definition, lead free plumbing can still contain 0.25% lead by weight. See 42 U.S.C. § 300g-6(d)(1)(B).

⁹⁷ EPA, Basic Information about Lead in Drinking Water, <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#getinto> (last visited July 26, 2023).

⁹⁸ Maximum Contaminant Level Goals and National Primary Drinking Water Regulations for Lead and Copper, 56 Fed. Reg. 26,460, 26,466 (June 7, 1991) (to be codified at 40 C.F.R. pts. 141 & 142).

⁹⁹ EPA, Basic Information about Lead in Drinking Water, *supra* n.97.

¹⁰⁰ *Id.*; 40 C.F.R. § 141.81(a).

¹⁰¹ 40 C.F.R. § 141.81(d)(4), (a)(1).

¹⁰² Edward Henifin, The Consolidated Report of Activities for the quarter ended June 30, 2023, at 9 (“Q2 2023 ITPM Report”) (July 31, 2023).

high enough that EPA requires a water system to take action to protect public health.¹⁰³ Despite this history of lead contamination, it is likely that the system is failing to adequately protect residents from potentially lead-contaminated water. First, the water system continues to violate EPA’s own requirements for minimizing lead release and maintaining optimal water quality. EPA has acknowledged that the City had not been maintaining optimized corrosion control treatment at its two surface water treatment plants for years. Following the 2016 exceedances, the City conducted a corrosion control study to assess changes to its water treatment that would minimize lead release.¹⁰⁴ Yet, to date, the J.H. Fewell treatment plant still lacks optimal corrosion control,¹⁰⁵ and the system has been in violation of the optimal water quality parameters for years (including through June 2023).¹⁰⁶

The water system’s current (non-optimal) corrosion control treatment is unlikely to minimize lead release. Corrosion control treatment, when installed, does not immediately reduce lead risks. Corrosion control prevents lead leaching by building protective “scales” on the inside of plumbing.¹⁰⁷ But protective scales won’t build up without consistent water quality and treatment dosages, which the water system lacks.¹⁰⁸ For example, the valves at the boundary of the surface and groundwater systems were only recently reported as closed.¹⁰⁹ Inadvertent mixing between the systems would change the surface water system’s corrosion control treatment and prevent the optimized formula from reaching people’s homes until the valve closure.¹¹⁰ And leaving groundwater aside, both water treatment plants still exhibit significant variability of water quality parameters.¹¹¹ Because Jackson has not had consistent, let alone optimized, water quality or treatment dosages for any significant period of time, it is unlikely its plumbing has stable protective scales.

¹⁰³ *Id.* § 141.80(c)(2); *see also* SDWA Compl. ¶ 164. “The lead action level is a measure of the effectiveness of the corrosion control treatment in water systems.” EPA, Understanding the Lead and Copper Rule 1 (Sept. 2020), https://www.epa.gov/sites/default/files/2019-10/documents/lcr101_factsheet_10.9.19_final_2.pdf. Critically, “[t]he action level is not a standard for establishing a safe level of lead in a home.” *Id.*

¹⁰⁴ 2021 EPA Admin. Order on Consent ¶ 31.

¹⁰⁵ *See* SDWA Compl. ¶ 168 (noting that, as of November 29, 2022, the City “ha[d] not completed installing [optimized corrosion control treatment] at J.H. Fewell”); Ted Henifin, The Consolidated Report of Activities for the quarter ended March 31, 2023, at 24-25 (Apr. 28, 2023) (Q1 2023 ITPM Report) (noting that J.H. Fewell corrosion control work was in progress).

¹⁰⁶ *See* Scott Simmons, *JXN Water reports 2 violations to health department*, WAPT (July 18, 2023, 5:30 PM), <https://www.wapt.com/article/jxn-water-reports-2-violations-to-health-department/44580420>.

¹⁰⁷ Betanzo Decl. ¶¶ 72-75.

¹⁰⁸ *Id.* ¶¶ 72-75, 81-86.

¹⁰⁹ *See* Q1 2023 ITPM Report, *supra* n.105, at 10 (“[T]he surface water system has been isolated from the groundwater system, improving performance and operations in both systems.”).

¹¹⁰ Betanzo Decl. ¶ 84. The ITPM likely did not seal the valves prior to the first quarter of 2023, which is not sufficient time for the corrosion control technique to form a protective scale. *See* Betanzo Decl. ¶¶ 85-86.

¹¹¹ *See id.* ¶¶ 44-45, 81, 107, 134 & Ex. I.

Even if the water system had fully implemented the state-designated corrosion control treatment—which it has not—the study the City used to select its corrosion control was flawed. These problems range from failing to follow basic scientific good practices (like ensuring replicability) to using the “coupon study” technique,¹¹² which EPA has discouraged relying exclusively on because it does not account for distribution system conditions.¹¹³ These problems matter because a flawed corrosion control study could result in the implementation of a treatment that could exacerbate, rather than mitigate, lead leaching.¹¹⁴

Finally, to determine whether corrosion control is working, the system must have an adequate protocol to sample for lead. Jackson has systemic problems with its lead sampling protocol, as discussed *infra* at section V.A.3. Sampling issues make it impossible to trust that measurements of lead in drinking water are accurate.

Relying on a lack of lead action level exceedances to justify not having optimized corrosion control is like driving a car you know has faulty brakes and hoping your driving skills alone will prevent accidents. Because the water system still is not maintaining optimized corrosion control treatment, the danger of lead contamination remains. Contrary to the ITPM’s statements, the fact that JXN Water has not reported a lead action level exceedance since 2016 does not *by itself* demonstrate that lead is not an imminent risk to people drinking the City’s water, particularly when lead sampling may be flawed. The questionable basis for MSDH’s selection of appropriate treatment, the water system’s ongoing failure to install and maintain consistent treatment, and reports of brown, foul smelling water strongly suggest that corrosion is occurring. Sampling results do not negate this conclusion when there is a lack of information on where and how Lead and Copper Rule samples are collected, and a lack of information about the location of lead plumbing in the water system.¹¹⁵

2. The ITPM has not demonstrated that JXN Water Inc. is monitoring for lead at appropriate homes as needed to detect lead contamination

Because lead contamination occurs as water runs through and corrodes lead-containing materials in a *distribution* system, detecting lead contamination requires testing water at residents’ taps. Water systems that change their corrosion control approach as a result of a lead action level exceedance must collect samples from residents’ taps every six months and calculate whether more than ten percent of those samples have a lead concentration greater than 15 parts

¹¹² A coupon study is a corrosion control study technique which recommends “an optimal corrosion control treatment . . . by assessing the amount of lead and copper dissolved from three pieces of new metal exposed to three different corrosion control treatments.” *Id.* ¶ 88.

¹¹³ See EPA, Optimal Corrosion Control Treatment Evaluation Technical Recommendations for Primacy Agencies and Public Water Systems F-2 (March 2016); Betanzo Decl. ¶ 93. The corrosion control studies were obtained via a public records request to MSDH. The studies reference appendices that MSDH did not produce. Some of the conclusions in the expert declaration attached to this petition may change based on the appendices, but as of August 9, 2023, MSDH had not yet produced them.

¹¹⁴ See Betanzo Decl. ¶¶ 80, 103-06.

¹¹⁵ See *id.* ¶¶ 131, 134.

per billion (ppb).¹¹⁶ Importantly, water systems must sample at homes most at risk for lead contamination.¹¹⁷ The ITPM’s statements about the safety of Jackson’s water are especially troubling because the water system lacks basic information needed to comply with its lead sampling obligations. Those information gaps fall into two categories.

First, the system lacks a full materials evaluation. Homes are at high risk for lead if the homes’ pipes contain lead plumbing or receive water through lead service lines.¹¹⁸ To support identifying high-risk monitoring sites, the Lead and Copper Rule required Jackson to identify materials making up its water distribution system by January 1, 1992.¹¹⁹ The City of Jackson did not do so. Eighteen years later, in of 2020, because the City still “d[id] not maintain a current inventory of distribution system materials,” NEIC inspectors “were not able to verify” whether the water system’s selected sampling sites were adequate monitoring locations.¹²⁰ MSDH’s website states that, as of 2019 (the most recent year for which this data is available on MSDH’s website), Jackson’s system *has* lead-containing service lines, but has not submitted a materials evaluation report;¹²¹ by contrast, the ITPM’s most recent quarterly report indicates that JXN

¹¹⁶ See 40 C.F.R. § 141.80(c)(2) (listing the lead action level as 15 µg/L, which equates to 15 ppb); *id.* § 141.90(a)(1)(iv).

¹¹⁷ See *id.* § 141.86(a)(11) (“A water system whose distribution system contains lead service lines must collect all samples for monitoring under this section from sites served by a lead service line”; if there are not enough sampling sites with documented lead services lines, it must collect samples from sites with lead risk, progressing from highest known risk to unknown risk).

¹¹⁸ 56 Fed. Reg. at 26,514; see also 40 C.F.R. § 141.86(a).

¹¹⁹ See NEIC Report, *supra* n.83, at 9 (“The city of Jackson did not complete a materials evaluation of its distribution system by January 1, 1992, in order to identify a pool of targeted sampling sites. This evaluation . . . was required to have been submitted 28 years ago . . .”). Petitioners have seen no information contradicting this statement.

¹²⁰ See *id.*

¹²¹ MSDH, *Lead and Copper Rule Public Water System Materials Inventory 2019*, https://msdh.ms.gov/msdhsite/Water_systems_inventory/Water_systems_inventory.html (last visited Aug. 1, 2023) (search for “Jackson” in “Find a system name or ID”) (showing that Jackson has lead services lines, but has “[n]o report submitted”). *But see* Ross Riely, *City Reverses Course on Lead in Jackson Water, Says It Is Aware of No Lead in Pipes*, Miss. Clarion Ledger, Oct. 8, 2022, <https://www.clarionledger.com/story/news/2022/10/08/jackson-ms-mayor-lumumba-says-no-lead-in-water/69549205007/> (quoting a statement released by the City of Jackson on October 7, 2022, asserting that “[w]e do not have any known lead service lines at this time” in Jackson’s water system). The ITPM’s latest report also provides a mixed message on the presence of lead service lines. See Q2 2023 ITPM Report, *supra* n.102, at 9, 26 (stating that (1) replacing Jackson’s lead service lines will cost \$88 million but (2) there is currently no positive verification of any lead service lines in Jackson; also stating that JXN Water is also working with a contractor to identify potential locations of lead service lines). Jackson reported 71,221 out of its 71,486 service lines as of “unknown” material to EPA in 2021. See EPA, Raw, unadjusted LSL Inventory data uploaded to the Drinking Water Infrastructure Needs Survey & Assessment Website (Oct. 25, 2022) (on file with Petitioners).

Water is working with a contractor to use data analytics to validate its existing service line inventory and to identify potential locations of lead service lines.¹²²

Second, the water system in the past failed to show that it is following the proper protocol to collect lead samples, which may result in underestimates of lead contamination. To draw a sample that complies with the Lead and Copper Rule, the sampler must draw water from a tap that had been sitting motionless for at least six hours—e.g., collecting first thing in the morning, after the tap had been shut off all night.¹²³ This is called a “first draw” sample.¹²⁴ The City failed to provide the EPA with evidence that the compliance samples have been first draw samples.¹²⁵ The City has also consistently failed to collect and document its samples according to correct regulatory protocols. Among other errors, the City has filled in information on sampling forms meant to be completed by customers, failed to take some samples to the state laboratory for analysis, completed sample forms incorrectly, failed to sample at consistent locations across monitoring periods, and collected duplicate samples from the same site during the same reporting period to meet the minimum site requirement—meaning that the City actually collected fewer than the required 100 samples, failing to meet the minimums required by EPA for large water systems to accurately gauge lead levels.¹²⁶ JXN Water, Inc. has not affirmatively shown that sampling collection protocols have improved.

These errors are not harmless—they can materially alter conclusions about lead contamination levels. In fact, when EPA inspectors observed sample documentation issues for October 2018 sampling data and helped MSDH staff correct that data, it changed the lead calculations.¹²⁷ Given cumulative monitoring issues, it is possible that the city’s lead measurements are not only unreliable, but underestimate lead contamination in the water.

At least some homes in Jackson receive water via galvanized steel service lines,¹²⁸ but this fact does not assuage Petitioners’ worries about lead for two reasons. First, the presence of galvanized service lines in some places does not mean, ipso facto, the absence of lead service lines everywhere. Second, galvanized service lines can exacerbate the risks of any lead (or microbials) present in the system.¹²⁹ Galvanized piping typically contains steel coated with zinc.

¹²² Q2 2023 ITPM Report, *supra* n.102, at 26.

¹²³ *See* 40 C.F.R. § 141.86(b)(2).

¹²⁴ *See id.*

¹²⁵ NEIC Report, *supra* n.83, at 9 (“The city of Jackson failed to provide evidence that samples sat motionless for at least 6 hours. Customer sampling procedure forms document this finding.”).

¹²⁶ NEIC Report, *supra* n.83, at 9-12.

¹²⁷ *Id.* at 10.

¹²⁸ Betanzo Dec. ¶ 59; Transcript of Jan. 12, 2023, Status Conference at 346:11-12, *United States v. Jackson*, No. 3:22-cv-686 (1/12/2023 Tr.) (Ted Henifin, ITPM) at 32 (stating that Jackson has “a lot of galvanized [service] lines, which “are restricting [water] flow to the houses,” as well as “galvanized small diameter pipes in 109 miles of streets” which the ITPM hopes to replace).

¹²⁹ Betanzo Decl. ¶ 61; *see also* EPA, Frequently Asked Questions about Drinking Water Pilot Study (Jan. 2017), https://www.epa.gov/sites/default/files/2017-01/documents/faqs_uss_lead.pdf (“The most common way that lead enters drinking water is through the corrosion of lead or galvanized iron plumbing.”).

This material is “particularly susceptible” to corrosion.¹³⁰ When galvanized pipes corrode, they rust and creating a place for bacteria to grow, resulting in brown and foul-smelling water (water conditions that align with Jackson residents’ lived experiences).¹³¹ If rusty pipes are joined by lead solder or goosenecks, the pipes can “soak up lead . . . and then release the lead over time.”¹³²

Finally, even if Jackson is complying with sampling requirements, that sampling may not capture significant lead risk due to specific attributes of galvanized service lines. In the case of galvanized steel service lines with lead goosenecks, a first draw sample may not capture water sitting in the gooseneck, and could thus undercount lead.¹³³ The complications posed by galvanized service lines make it even less appropriate to use the recent absence of a documented lead action level exceedance as an indicator of adequate public health protection.

3. The ITPM is contradicting a State advisory related to lead risk without evidentiary or legal support

MSDH has conceded that lead in drinking water endangers Jackson residents. MSDH recommends, given the threat of lead in the water system, that children five and under and all pregnant people “*should* use filtered water (NSF53 certified filter) or bottled water for drinking and cooking,” and that “[b]aby formula *should* be ‘ready-to-feed’ or prepared using only filtered water or bottled water.”¹³⁴ The ITPM’s dubious opinion that this advisory is unnecessary¹³⁵ contradicts the advisory and only confuses the public. Federal authorities must immediately clarify the appropriate public health advisories to protect public health or prove that lead contamination (*vis-à-vis* corrosion control and appropriate compliance sampling, discussed *supra* at section V.A.3) no longer poses an imminent and substantial endangerment to the public.

* * *

In sum, Jackson’s water system has a history of sampling errors; it is unclear whether current sampling addresses all of EPA’s prior concerns including selecting appropriate sites for lead sampling; no materials evaluation exists; and there is a lack of reliable information about the placement and condition of lead and galvanized service lines. As a result, particularly when optimized corrosion control is not in place, JXN Water Inc. cannot rely simply on a lack of lead action level exceedances to support its broad public health safety statements. These gaps underscore the imminent and substantial risk of lead contamination.

¹³⁰ Betanzo Decl. ¶ 59.

¹³¹ *Id.* ¶ 60.

¹³² *Id.* ¶ 66.

¹³³ *See id.* ¶ 77.

¹³⁴ MSDH, *Lead and Jackson Water: Recommendations for Homeowners, Schools and Facilities*, <https://msdh.ms.gov/page/23,0,148,720.html> (last updated May 9, 2023) (recommendations under “Homeowners and Parents”) (emphases added).

¹³⁵ *See* 6/21/2021 Tr. at 55-59, (ITPM).

B. Microbial contaminants are likely to enter Jackson’s water system

EPA’s imminent and substantial endangerment declaration¹³⁶ is also based on the water system’s past failures to meet filtration and disinfection requirements.¹³⁷ The repairs detailed in the comprehensive equipment repair plan and other inspection reports are critical for ensuring that the drinking water system meets applicable filtration and disinfection standards.¹³⁸ However, the ITPM’s three quarterly reports¹³⁹ and public statements provide little assurance that the water system’s treatment plants are effectively meeting critical rehabilitation needs.

Jackson’s treatments plants must meet both filtration and disinfection requirements to ensure that disease-causing microorganisms are not in drinking water.¹⁴⁰ Filtration requirements set performance standards for filters, which include conventional filters (used by J.H. Fewell and one system at O.B. Curtis) and membranes (used by the other system at O.B. Curtis).¹⁴¹ The treatment plants meet disinfection requirements through removal/inactivation credits earned by each plant’s microbial treatment processes—filtration, membrane, chemical disinfection, and UV disinfection—that count towards a “log” total¹⁴² necessary for the State to certify¹⁴³ compliance with SDWA. As described below, questions about monitoring data raise concerns about whether the plants are meeting their requirements.¹⁴⁴ Moreover, even if the plants are currently in compliance, they run close to their regulatory limits and lack significant redundancies.¹⁴⁵ Thus, any one of the problems discussed below creates an imminent and substantial risk of microbial contamination.¹⁴⁶ Without substantial progress on repairs to these treatment processes, Jackson’s treatment plants remain at risk for failing and exposing residents to microbial contamination.

¹³⁶ See SDWA Compl., *supra* n.15, ¶ 56.

¹³⁷ These include exceedances for turbidity and the maximum contaminant level for a group of five haloacetic acids known as HAA5, a carcinogenic disinfection byproduct. See *id.* ¶¶ 56, 148-50, 152; see also *id.* ¶¶ 65, 124.

¹³⁸ *Id.* ¶¶ 59, 89, 155-60.

¹³⁹ Shortly before filing this Petition, Petitioners received the ITPM’s report for the second quarter of 2023. See Q2 2023 ITPM Report, *supra* n.102. Petitioners are continuing to review the ITPM’s report. Should the report provide information that gives rise to substantive changes in Petitioners’ understanding of the imminent and substantial dangers Jackson’s water system may present, or what remedies are necessary to address those dangers, Petitioners will address those changes with EPA in a supplemental communication.

¹⁴⁰ See 40 C.F.R. §§ 141.70(b)(2), 141.170(b)(2).

¹⁴¹ See *id.* § 141.173(a), (b); see also Betanzo Decl. ¶¶ 11-14.

¹⁴² Betanzo Decl. ¶ 16.

¹⁴³ *Id.* ¶¶ 15-16.

¹⁴⁴ *Id.* ¶ 20.

¹⁴⁵ See *id.* ¶¶ 18-19, 27.

¹⁴⁶ *Id.* ¶¶ 20, 27.

1. The system's filters are in dire need of repair

Filters remove sludge and other particulates (i.e., turbidity¹⁴⁷) from the water prior to disinfection, which is important for two reasons: (1) particulates (no matter how small) serve as a medium for microbes to grow,¹⁴⁸ and (2) particulates render disinfection processes less effective.¹⁴⁹ Jackson's treatment plants must achieve certain levels of turbidity to meet filtration requirements.¹⁵⁰

Inspection reports for several years have consistently flagged the dire state of individual conventional filters and their need for rehabilitation.¹⁵¹ After turbidity exceedances in January 2020, MSDH noted in February 2020 that the conventional filters at both treatment facilities were long overdue for rehabilitation, that filter media needed to be replaced and underdrains and/or valving needed repairs to ensure operational reliability.¹⁵² Later that year, these issues remained unaddressed.¹⁵³

Recent data offers no assurance that the remaining filters at both plants have been assessed for necessary repairs or evaluated to determine if they are working as they should be.¹⁵⁴ In 2021, the City planned to return three filters (numbers 24, 26, and 28) to service at J.H. Fewell.¹⁵⁵ Additionally, the latest ITPM quarterly reports focus on a plan to upgrade Filter 5 at O.B. Curtis¹⁵⁶ and show that work on Filters 24 and 26 at J.H. Fewell is progressing.¹⁵⁷ However, there are no details regarding repair of the remaining filters at either plant. The latest

¹⁴⁷ "Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness . . . Higher turbidity levels are often associated with higher levels of disease-causing microorganisms[.]" EPA, National Primary Drinking Water Regulations, <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations#:~:text=Turbidity%20is%20a%20measure%20of,viruses%2C%20parasites%20and%20some%20bacteria> (last visited Aug. 5, 2023).

¹⁴⁸ Jung, A., et al., *Microbial Contamination Detection in Water Resources: Interest of Current Optical Methods, Trends and Needs in the Context of Climate Change*, Int. J. Environ. Res. Public Health (2014), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4025003/>.

¹⁴⁹ *Id.*; Betanzo Decl. ¶¶ 18, 22.

¹⁵⁰ See 40 C.F.R. §§ 141.70-.73, 141.170-.74.

¹⁵¹ See, e.g., NEIC Report, *supra* n.83, at 21 (O.B. Curtis), 22 (J.H. Fewell).

¹⁵² MSDH, Report of Inspection of Drinking Water Supply ("Feb. 2020 Sanitary Survey") 2 (generated Apr. 16, 2021).

¹⁵³ MSDH, Report of Inspection of Drinking Water Supply ("Nov. 2020 Sanitary Survey") 2 (generated Apr. 16, 2021) (noting no change in filter maintenance since February 2020).

¹⁵⁴ See Betanzo Decl. ¶¶ 30-32 & tbl.2.

¹⁵⁵ See MSDH, Report of Inspection of Drinking Water Supply ("Nov. 2021 Sanitary Survey") 2 (generated Nov. 28, 2022); Q2 2023 ITPM Report, *supra* n.102, at 44.

¹⁵⁶ Q2 2023 ITPM Report, *supra* n.102, at 28.

¹⁵⁷ *Id.* at 44, 66; Q1 2023 ITPM Report, *supra* n.105, at 35. This is of particular concern because filter maintenance at O.B. Curtis has been flagged as needing repairs, but EPA's enforcement action does not expressly include such repairs in its claims for relief. *Cf.* SDWA Compl. at 37 (fifth claim for relief, focusing on failure to timely proceed with general filter rehabilitation at J.H. Fewell).

report admits that “no completion date can be established until extent of repair/remediation/replacement work can be determined,” listing “[f]ilters” at both O.B. Curtis and J.H. Fewell among the items with no completion date.¹⁵⁸ The ITPM’s Spending Plan also appears to delay J.H. Fewell filter rehabilitation investment until 2024-2025,¹⁵⁹ casting further doubt on whether the rehabilitation needs that MSDH previously characterized as “overdue”¹⁶⁰ are fully understood or properly prioritized. Recent data obtained through records requests shows that both treatment plants operate close to turbidity limits, potentially signaling that the filters could be in the final stages of effectiveness as pointed out in the sanitary surveys.¹⁶¹

2. Compliance monitoring likely remains unreliable

To assess its compliance with turbidity standards, JXN Water must take two types of measurements: combined filter effluent (CFE) and individual filter effluent (IFE).¹⁶² IFE is measured because CFE turbidity results may mask the performance of an individual filter, since the individual filter may have a brief turbidity spike not detected by combined filter effluent readings.¹⁶³

In January 2020, EPA discovered that “the continuous turbidity monitoring equipment at . . . O.B. Curtis . . . had read inaccurately for approximately 3 years due to a lack of calibration and maintenance, and that turbidity samples were taken during this time period at a frequency of once per shift, for a total of 3 times per day.”¹⁶⁴ Recent publicly available data indicate that continuous monitoring still faces operational challenges related to accurate sampling.¹⁶⁵ The status of J.H. Fewell’s monitoring systems, also previously identified as problematic in 2020,¹⁶⁶ are unclear because all monitoring improvements the ITPM reported have only occurred at O.B. Curtis.¹⁶⁷

In addition to filtration requirements, the membranes at O.B. Curtis must pass Membrane Integrity Testing (MIT), daily and during turbidity spikes, to prove the membrane fibers are

¹⁵⁸ Q2 2023 ITPM Report, *supra* n.102, at 41.

¹⁵⁹ *Id.* at 37, Fig. 26.

¹⁶⁰ See Nov. 2020 Sanitary Survey, *supra* n.153, at 2.

¹⁶¹ Betanzo Decl. ¶¶ 26-27 & Exs. C-E; see also *id.* ¶¶ 30-32.

¹⁶² 40 C.F.R. § 141.173(a)-(b); see Betanzo Decl. ¶ 21.

¹⁶³ See Betanzo Decl. ¶ 23; EPA, Comprehensive Surface Water Treatment Rules Quick Reference Guide: Systems Using Conventional or Direct Filtration at 3, available at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=500025GQ.txt>.

¹⁶⁴ NEIC Report, *supra* n.83, at 16.

¹⁶⁵ See Betanzo Decl. ¶¶ 35-38 (describing irregularities in monthly operating report continuous monitoring data).

¹⁶⁶ Feb. 2020 Sanitary Survey, *supra* n.152, at 3.

¹⁶⁷ Betanzo Decl. ¶ 36. Even with improvements to monitoring equipment, there are also questions about O.B. Curtis’s turbidity data given that it reflects turbidity levels before the plant adds other treatments (like corrosion control). The water that enters the distribution system has a higher level of turbidity that could facilitate growth of microbials that are not removed at the plants or enter through the distribution system. See Betanzo Decl. ¶¶ 26, 29.

achieving *Cryptosporidium* removal.¹⁶⁸ However, the ITPM’s quarterly reports do not indicate JXN Water has improved MIT reliability, since MIT was first identified as malfunctioning in 2020.¹⁶⁹

3. The disinfection treatment systems run on tight margins that easily compromise their effectiveness

Jackson’s treatment plants use two disinfection processes: chemical disinfection and UV disinfection. The UV systems must be online for the treatment plants to meet their disinfection requirements.¹⁷⁰ If a UV reactor is down, that stream of filtered water must be taken offline to prevent it from entering the distribution system.¹⁷¹ However, UV reactors at both plants have consistently been inoperable or down over the last three years.¹⁷² UV reactors remain online only sporadically based on the most recent monthly operating reports, but the ITPM has not provided any updates on necessary repairs for these critical disinfection processes.¹⁷³ The Q2 Report indicates that the ITPM has not completed UV rehabilitation and does not provide a completion date for these critical repairs.¹⁷⁴

There are also issues with the treatment plants’ chemical disinfection processes.¹⁷⁵ Chemical disinfection effectiveness depends on many factors, including the type and amount of disinfectant used and the time the disinfectant is in contact with the water.¹⁷⁶ However, data measuring the amount of disinfectant entering the distribution systems shows wide variations, particularly at O.B. Curtis.¹⁷⁷ This suggests that the disinfectant levels inside the plant may also be inconsistent and may not always be providing the disinfectant level they claim to be using to treat the water.¹⁷⁸ Inconsistent disinfectant levels are concerning because both treatment plants have small margins for errors.¹⁷⁹ The treatment plants’ disinfection process uses two chemicals—free chlorine, to disinfect the raw water at the plant, and chloramines, a more stable form of

¹⁶⁸ See Betanzo Decl. ¶ 21.

¹⁶⁹ Betanzo Decl. ¶¶ 33-34. Membrane trains were failing MIT according to the November 2015, 2016, 2017, and 2019 Sanitary Surveys. See MSDH, Report of Inspection of Drinking Water Supply (“Nov. 2015 Sanitary Survey”) 2 (generated Apr. 16, 2021), MSDH, Report of Inspection of Drinking Water Supply (“Nov. 2016 Sanitary Survey”) 3 (generated Apr. 16, 2021), MSDH, Report of Inspection of Drinking Water Supply (“Nov. 2017 Sanitary Survey”) 3 (generated Apr. 16, 2021), MSDH, Report of Inspection of Drinking Water Supply (“Nov. 2019 Sanitary Survey”) 3 (generated Apr. 16, 2021). Beginning in February 2020, the MIT system itself began malfunctioning. Nov. 2021 Sanitary Survey, *supra* n.155 at 2.

¹⁷⁰ See Betanzo Decl. ¶¶ 50-51 & tbl.1.

¹⁷¹ See *id.* ¶ 50.

¹⁷² See, e.g., NEIC Report, *supra* n.83, at 16-17; Betanzo Decl. ¶ 51.

¹⁷³ See generally Q1 2023 ITPM Report, *supra* n.105; Q2 2023 ITPM Report, *supra* n.102.

¹⁷⁴ Q2 2023 ITPM Report, *supra* n.102 at 41.

¹⁷⁵ See generally Process Applications, Inc., City of Jackson Distribution System Assessment: Summary of Findings and Assessment Team Recommendations (July 2022).

¹⁷⁶ See Betanzo Decl. ¶ 39.

¹⁷⁷ *Id.* ¶¶ 44-45 & Exs. F-H.

¹⁷⁸ See *id.* ¶ 46.

¹⁷⁹ See *id.* ¶¶ 42-43.

chlorine to maintain disinfection as water travels through the distribution system. The treatment plants mix free chlorine and ammonia to create chloramine in the same process they treat the raw water with chlorine. As a result, inexact chlorine and ammonia dosages can reduce the free chlorine levels below those necessary to disinfect the raw water.¹⁸⁰ This is a real concern in light of the ITPM Q2 report's statements that chemical feed improvements aren't expected to be complete until "late 2024."¹⁸¹ Thus, significant questions exist about whether both the chemical and UV disinfection systems are stabilized enough to ensure reliability.

4. Turbidity in the distribution system raises serious concerns in light of compromised distribution system pressure

Jackson residents continue to report that their water is brown and foul-smelling.¹⁸² Data from O.B. Curtis offers a potential explanation for why some Jacksonians' water may be cloudy. The turbidity monitoring point was recently moved to a point after filtration/disinfection, but upstream from corrosion control treatment, as a way to prevent "false" boil water notice triggers caused by post-treatment chemical byproducts.¹⁸³ Adding corrosion control chemicals to treated water can increase the turbidity of the water before it is sent through the distribution system.¹⁸⁴ The City's use of galvanized steel service lines provides another potential explanation. Corroding iron inside of galvanized service lines can cause water to turn brown and smell bad.¹⁸⁵

While post-treatment chemicals for corrosion control or iron-corrosion-induced turbidity isn't *per se* a health concern,¹⁸⁶ the increased turbidity provides media for any bacteria already present in the system to latch onto and propagate.¹⁸⁷ The increased turbidity from O.B. Curtis's post-treatment chemicals offers a way for microbes that escape disinfection to thrive. This is all the more concerning because there are serious questions about the effectiveness of both plants' disinfection processes, discussed above, and corroded galvanized pipes in the system may offer microbes additional places to multiply. Brown, foul-smelling water from galvanized service lines strongly suggests that nitrification—a process in which bacteria convert ammonia into nitrite and nitrate—is occurring, which can further fuel bacterial growth.¹⁸⁸

In addition, EPA has listed a reduction or loss of pressure in a distribution system (e.g., due to broken water mains or power outages) that increases the risk of contaminants entering the water as an example of an imminent endangerment, which makes the existence of known breaks

¹⁸⁰ *See id.* ¶¶ 42-43; *see also id.* ¶¶ 45-48.

¹⁸¹ Q2 2023 ITPM Report, *supra* n.102, at 20; *see also id.* at 14.

¹⁸² Holmes Decl. ¶¶ 25, 27-29.

¹⁸³ Letter from Marlin King, Public Works Director, City of Jackson Dep't of Public Works, to Bill Moody, P.E., Director, Bureau of Public Water Supply, MSDH Re: OB Curtis Combined Filter Effluent Sample Sites and WQP pH Compliance Range (Aug. 8, 2022).

¹⁸⁴ *Id.*

¹⁸⁵ Betanzo Decl. ¶ 60.

¹⁸⁶ *Id.*

¹⁸⁷ *Id.*

¹⁸⁸ *See id.* ¶¶ 140-42. EPA previously raised this as a concern in Jackson. *See id.* ¶ 142; Process Applications, Inc., *supra* n.175.

troubling.¹⁸⁹ A variety of circumstances can cause low pressure events, including line breaks, valve malfunctions, valve replacements, and other circumstances. In 2020, the City was repairing line breaks at the rate of five or six per day,¹⁹⁰ and was losing forty to fifty percent of its clean water via line breaks.¹⁹¹ Water reliability issues, and quality issues, have become so severe that three local hospitals have left the City’s water system and drilled their own wells to have access to reliable sources of drinking water.¹⁹² The ITPM’s Q1 report shows that as of March 2023, he has made significant progress on repairing several large main breaks.¹⁹³ But, the ITPM has not started repairing all known water main breaks, and some repairs had not been scheduled to start until May 2023.¹⁹⁴ Community members’ statements in court have suggested that pressure loss continues to be a problem.¹⁹⁵ As further evidenced by recent boil water notices,¹⁹⁶ this means pressure within the distribution system has not been fully stabilized, meaning water can stagnate and offer the opportunity for pathogens to enter the distribution system.¹⁹⁷

C. The continuing systemic deficiencies with Jackson’s water may present an imminent and substantial endangerment to Jacksonians’ health

The systemic deficiencies with Jackson’s water system that EPA found warranted emergency action nearly eight months ago have not been remedied. The combined risk of lead and microbial contamination in Jackson’s tap water may present immediate and serious health risks.

There is no safe level of lead to consume. The poisonous effects of lead on “virtually every system in the body,” particularly on the developing brains of young children, are well

¹⁸⁹ SWDA Compl. ¶¶ 38-39, 124.

¹⁹⁰ NEIC Report, *supra* n.83, at 18.

¹⁹¹ *Id.*

¹⁹² *Id.*

¹⁹³ Q1 2023 ITPM Report, *supra* n.105, at 29-30.

¹⁹⁴ Q2 2023 ITPM Report, *supra* n.102, at 42.

¹⁹⁵ *See, e.g.*, 7/12/2023 Tr. at 100:13-17(Nsombi Lambright-Haynes) (Jackson resident reporting that her water pressure is variable); *id.* at 129:14-130:23 (Brooke Floyd) (Jackson resident reporting that she has “lost water pressure or lost water service at least three times with no notice” over the last month, with two incidents seemingly unrelated to repair work).

¹⁹⁶ MSDH, *How Boil-Water Notices Are Issued*, <https://msdh.ms.gov/page/23,0,148.html> (last visited Aug. 5, 2023) (listing “[c]urrent boil-water notices”).

¹⁹⁷ EPA, Distribution System Water Quality: Protecting Water Quality Through Distribution System Flushing (Apr. 2022), https://www.epa.gov/system/files/documents/2022-04/ds-toolbox-fact-sheets_flushing_final-508.pdf (describing how flushing can reduce bacteria counts); EPA, Maintaining or Restoring Water Quality in Buildings with Low or No Use, https://www.epa.gov/sites/default/files/2020-05/documents/final_maintaining_building_water_quality_5.6.20-v2.pdf (May 6, 2020) (explaining how flushing can help eliminate “optimal growth conditions for undesirable pathogens, such as *Legionella* bacteria”).

documented.¹⁹⁸ The harms from lead exposure can include cognitive impairment, decreased red blood cell survival, kidney damage, coronary heart disease, and impaired reproductive function.¹⁹⁹ Even low levels of lead “have been shown to affect learning, [the] ability to pay attention, and academic achievement,” effects that are “permanent.”²⁰⁰ The scientific community has not identified any threshold of lead in blood below which there are no adverse health impacts.²⁰¹ This is why the maximum contaminant level goal for lead under the Safe Drinking Water Act—a health-protective goal—is zero.²⁰² In short, there is no safe level of lead in drinking water.

As EPA itself concluded, the lack of a recent lead action level exceedance is not dispositive of whether lead contamination contributes to an endangerment. Even though Jackson has not had a lead action level exceedance since 2016, lead contamination may still pose an imminent and substantial risk to residents’ health. Lead accumulates in the body. Once lead enters the body, lead stays in the bones, where it can continue to cause long-term harm to health for decades.²⁰³ (One of the few ways large amounts of lead can leave the body is during pregnancy and breastfeeding, when the pregnant or lactating parent transfers the lead in her body into her child.)²⁰⁴

Because lead is so persistent and pernicious, lead exposure at any level is particularly harmful in places like Jackson that have previously exceeded the lead action level,²⁰⁵ because much of the lead Jacksonians were exposed to over the last three decades still resides in their, or their children’s, bodies. And, as the water system still lacks adequate corrosion control and responsible parties have yet to start removing sources of lead from the water system, the risk of further lead accumulation looms. In addition, the frequent boil water notices issued to Jackson residents to address potential microbiological contamination may be exacerbating the lead

¹⁹⁸ CDC, Preventing Lead Poisoning in Young Children: Chapter 2 (Oct. 1991), <https://wonder.cdc.gov/wonder/prevguid/p0000029/p0000029.asp>; see also 80 Fed. Reg. 278, 290 (Jan. 5, 2015); 56 Fed. Reg. 26,460, 26,467-68 (June 7, 1991).

¹⁹⁹ See, e.g., EPA, Integrated Science Assessment for Lead (Pb) (Mar. 2023); EPA, Basic Information about Lead in Drinking Water, *supra* n.97, (same); see also Nat. Ambient Air Quality Standards for Lead, 80 Fed. Reg. 278, 290 (Jan. 5, 2015).

²⁰⁰ CDC, Lead Poisoning Prevention, <https://www.cdc.gov/nceh/lead/prevention/default.htm> (last reviewed Sept. 2, 2022).

²⁰¹ CDC, Health Effects of Lead Exposure, <https://www.cdc.gov/nceh/lead/prevention/health-effects.htm> (last updated Sept. 2, 2022).

²⁰² This Maximum Contaminant Level Goal reflects EPA’s determination that a threshold of zero lead in drinking water is the level at which “no known or anticipated adverse effect” on human health will occur, allowing for a margin of safety. 40 C.F.R. §§ 141.2, 141.51(b).

²⁰³ Or. Dep’t of Hum. Serv., Health Effects of Lead Exposure, <https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/HEALTHYNEIGHBORHOODS/LEADPOISONING/MEDICALPROVIDERSLABORATORIES/Documents/introthehealtheffectsmedicalprovider.pdf> (last visited July 26, 2023).

²⁰⁴ EPA, Basic Information about Lead in Drinking Water, *supra* n.97.

²⁰⁵ Betanzo Decl. ¶ 136.

problem, because boiling water concentrates lead, resulting in higher lead levels in water used for drinking, baby bottles, or food preparation.

Finally, beyond lead, microbial contamination in drinking water poses health risks. Water contaminated with microbes (whether viruses, bacteria like *Legionella*, or parasites like *Cryptosporidium* or *Giardia*) can sicken and sometimes kill people.²⁰⁶ “Human exposure [to microbial-contaminated drinking water] can cause gastrointestinal, respiratory, eye, ear, nose, and throat irritation; skin diseases; [and,] impairment of cells of the digestive tract and organs.”²⁰⁷ Some people, including infants, children, elderly people, and those with compromised immune systems are particularly susceptible to developing severe illness from microbial contamination.²⁰⁸ Jackson’s lack of adequate disinfection leaves residents at risk of microbial illness.

VI. EPA should take additional immediate action to address the public health threats present in the drinking water system

EPA and JXN Water hold the burden to demonstrate the water is safe. Although EPA’s exercise of its emergency authority has ushered in some progress, JXN Water Inc. has not made all of the repairs EPA deemed necessary to assert that Jackson’s water is “safe.” (If the circumstances that triggered EPA’s emergency powers and its enforcement action have changed, those conclusions must be grounded in sound science and engineering, and the ITPM should present evidence for those conclusions immediately to the public.) The conditions in the distribution system and the unresolved concerns with the treatment processes at the plants signal that lead and microbial contamination remain imminent threats and that immediate interim relief is necessary to protect Jacksonians’ health. The people of Jackson should not carry the burden of guessing when and how to protect themselves from those threats. Building trust with a traumatized community takes time and intentionality to meet residents where they are, and EPA and the ITPM should not delegitimize residents’ efforts to protect themselves in a murky situation.

²⁰⁶ See EPA, Water Quality Topics: Pathogens <https://www.epa.gov/wqclr/water-quality-topics-pathogens> (last visited July 27, 2023) (describing how 40,000 people per year are hospitalized as a result of microbial contamination in water per year, and how the largest modern outbreak of waterborne illness in the U.S. killed 54 people in 1993).

²⁰⁷ *Id.*

²⁰⁸ See EPA, Legionella: Drinking water fact sheet 1-2 (Sept. 2000), <https://www.epa.gov/sites/default/files/2015-10/documents/legionella-factsheet.pdf> (describing the symptoms *Legionella* bacteria can cause, from loss of appetite and fever to death, and that immunocompromised people are particularly susceptible to the disease); EPA, Cryptosporidium: Drinking Water Health Advisory 11-12 (Mar. 2021), <https://www.epa.gov/sites/default/files/2015-10/documents/cryptosporidium-report.pdf> (describing cancer patients, AIDS patients, infants, children, and the elderly as most at risk from Cryptosporidium infections, which causes “profuse” diarrhea); EPA, Giardia: Drinking Water Fact Sheet 2-3 (Sept. 2000), <https://www.epa.gov/sites/default/files/2015-10/documents/giardia-factsheet.pdf> (describing how *Giardia* can cause diarrhea with significant weight loss and results in the hospitalization of 4,600 people per year, most of whom are children under five).

As a first step towards building that trust, **Petitioners request a meeting with EPA by September 8, 2023, to discuss the concerns raised in this Petition and to provide the information discussed in the Appendix to Elin Betanzo’s Declaration.** And as described in more detail below, Petitioners also request that EPA—by starting the process to obtain a new ISO, as discussed *infra*—order responsible parties to take the following actions:

- **Request #1: Order increased access to information and increased reporting:**
 - EPA must expeditiously hold public meetings to present any data proving an imminent and substantial endangerment has been abated.
 - EPA must order the State and JXN Water Inc. to regularly publish monthly operating reports, all Lead and Copper Rule compliance data including sampling addresses, dates, results, and protocols; a list and map of boil water notices that includes locations of water main repairs and/or replacements and pressure monitors; any inventories or maps of lead service lines with maps of lead testing sites and justification for the selection of those sites, and distribution system sampling mapped with color-coded results.
 - EPA must offer technical assistance to the State and JXN Water Inc. to ensure that boil water notices are issued to residents via text messages, automated calls, door-to-door canvassing, calls directly to neighborhood associations, social media posts, mailings, press releases, and notices shared with local media outlets.

- **Request #2: Increase community involvement:**
 - EPA must order the City or JXN Water to employ a community-identified ombudsperson to meet with the ITPM, City, and EPA monthly to represent community interests.
 - EPA must arrange regular meetings between agency officials, the ITPM, the City, and the State to update the community about the status of consent decree negotiations and obtain community direction on terms related to hiring, contracting, and public disclosure/transparency around the status of water quality, before a proposal is released for court review.

- **Request #3: Ensure the ITPM’s Project Priority List focuses on the following public health and safety needs:**
 - EPA must ensure the ITPM completes the Alternative Water Source Plan by September 8, 2023, and releases that plan for public community input;
 - EPA must ensure that the ITPM order the prioritization of corrosion control measures to bring the system into compliance with the Lead and Copper Rule by a date certain, and require quarterly public meetings to discuss progress on compliance.
 - EPA must ensure that the ITPM completes the lead service line inventory.

- **Request #4: EPA must immediately facilitate bottled water distribution to residents while there is an ongoing imminent threat from microbial and lead contamination.**

- **Request #5: EPA must facilitate the distribution and installation of water filters through funding to local leadership to abate the failure to implement corrosion control measures.**
- **Request #6: EPA must fund and facilitate the provision of home testing kits and offer technical assistance to design home testing protocols for contaminants of concern.**

EPA has escalated its involvement in Jackson from issuing emergency and administrative consent orders to filing a civil enforcement suit. Nonetheless, since the lawsuit’s commencement in November 2022, EPA’s public-facing involvement has been mostly limited to moving for the appointment of the ITPM while it confidentially negotiates a consent decree without clear understanding of or explanation to Jackson residents regarding how community input will influence its final form. EPA has not taken additional steps—beyond delegating implementation of the Project Priority List to the ITPM—to ensure that Jacksonians have immediate access to safe water and timely information about the status of their water quality. Given that the ISO supersedes EPA’s prior Emergency Order,²⁰⁹ the Petitioners request EPA initiate the process for a new emergency order or ISO that incorporates Petitioners’ requests.²¹⁰ The current ISO’s conditions are not sufficient to protect Jackson residents’ health, and the continued displacement of community control with the ITPM’s broad powers is inconsistent with the government’s stated environmental justice policies.²¹¹ Fulfilling Petitioners’ requests is well within EPA’s “very

²⁰⁹ See Interim Stipulated Order ¶ 25., ECF No. 6, United States v. Jackson, No. 3:22-cv-686 (“ISO”).

²¹⁰ Given the urgent nature of Jackson’s water crisis, Petitioners implore EPA to obtain the remedies listed herein by whatever means are most expeditious, whether under a new (or amended) ISO or via other EPA administrative processes such as EPA issuing a new emergency order that applies to the relevant entities. Normally, the City would be the most appropriate entity to take most of these actions. However, the ISO placed most of the City’s water management under the ITPM, who in turn created JXN Water to implement the ISO. If EPA believes that the ITPM (rather than the City or JXN Water) must take certain actions and it must seek the court’s leave, Petitioners request that EPA consult with the State and City to seek modification to the ISO. See ISO ¶ 25. In the absence of agreement with the State and City, EPA should separately move for the court to exercise its Federal Rule of Civil Procedure 66 oversight authority and order the ITPM to take the specified actions.

²¹¹ Petitioners’ requested remedies are consistent with EPA’s policy that the knowledge attained from community engagement activities be reflected throughout EPA documented decisions and that commitments to address disproportionate impacts is reflected in written agreements. See EPA Strategic Plan, *supra* n.40, at 29 (Strategic Goal No. 2 to “Take Decisive Action to Advance Environmental Justice and Civil Right” includes Objective 2.1 to “Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels.”). Once EPA invokes its emergency powers, the agency may “take such actions as [the agency] deem[s] necessary in order to protect the health” of the affected communities. 42 U.S.C. § 300i(a).

broad”²¹² authority under SDWA, which authorizes EPA to seek relief that “give[s] paramount importance to the objective of protection of the public health.”²¹³

A. Request #1: Order increased access to information and increased reporting

EPA has recognized that providing the public with “accurate and reliable information” is a part of its emergency powers.²¹⁴ Increased data transparency is a particularly important remedy because “[p]ublic accountability drives better compliance.”²¹⁵ In other cases, EPA acknowledged “the decades of environmental injustice”²¹⁶ communities have suffered, and responded to community concerns by ordering, for example, the inclusion of environmental data in monthly reports while it negotiated a consent decree.²¹⁷ EPA has recognized that “[g]reater public access . . . can promote a community’s ability to better understand and manage risks” and give the community tools “to monitor compliance at local facilities.”²¹⁸ To ensure that the public actually receives information about the state of the water system, Petitioners request that EPA take the following actions:

- As detailed herein, the ITPM and State’s statements about the safety of Jackson’s water system conflict with EPA’s conclusions about the system’s compliance status and EPA’s endangerment finding. Accordingly, in addition to meeting with Petitioners, EPA must

²¹² EPA, Updated Guidance on Invoking Emergency Authority Under Section 1431 of the Safe Drinking Water Act 14 (2018) (“EPA Guidance”).

²¹³ *Id.* at 4 n.3 (quoting H.R. Rep. No. 93-1185, at 35-36 (1974)), 14, 17-18; *see also* 42 U.S.C. § 300j-1(b) (authorizing EPA to make grants and provide technical assistance to “publicly owned water systems to assist in responding to and alleviating any emergency situation” when EPA determines that actions “necessary for preventing, limiting or mitigating danger to the public health” and “would not, in the judgment of the Administrator, be taken without such emergency assistance”).

²¹⁴ Emergency Admin. Order ¶ 37, *In re City of Flint* (Jan. 21, 2016), *available at* https://www.epa.gov/sites/default/files/2016-01/documents/1_21_sdwa_1431_emergency_admin_order_012116.pdf (“Flint Order”); *see also* EPA Guidance, *supra* n.212, at 14 (listing “public notification of hazards” as a remedy available under EPA’s emergency powers).

²¹⁵ Memorandum on Using All Appropriate Injunction Relief Tools in Civil Enforcement Settlements from Lawrence E. Starfield, Acting Assistant Administrator, EPA, to Regional Councils and Deputies 6 (Apr. 26, 2021) (“EPA Injunction Memo”).

²¹⁶ Toa Alta Landfill RCRA Settlement: Summary of Key Community Comments and Concerns and EPA Response 4-5, ECF No. 122-7, *United States v. Municipality of Toa Alta*, No. 21-cv-01087 (D.P.R. Aug. 9, 2022).

²¹⁷ *See* Stip. & Preliminary Inj. Order ¶ 14, ECF No. 122-2, *United States v. Municipality of Toa Alta*, No. 21-cv-01087 (D.P.R. Aug. 9, 2022); *see also* Mem. In Support of Prelim. Inj. 9, ECF No. 21-cv-01087, *United States v. Municipality of Toa Alta*, No. 21-cv-01087 (explaining the stipulation incorporated community feedback including that “EPA should work to assure long-term community involvement” and that reporting requirements “aligned” with this community concern).

²¹⁸ EPA Injunction Memo, *supra* n.215, at 2.

immediately hold public meetings to address these conflicts and offer concrete data about the safety of Jackson's water. Those meetings should answer the questions listed in the Appendix to Elin Betanzo's Declaration.

- EPA should provide technical assistance to the State and JXN Water to create a template showing how to report for clear public consumption on public websites and immediately order that all the following information is regularly reported via a publicly available website:
 - Monthly operating reports for both treatment plants, Lead and Copper Rule Compliance data (including addresses, dates, results, and sampling protocols), boil water notices, and distribution system sampling. Petitioners request that EPA order data (with the exception of boil water notices, as described *infra*) released on at least a monthly basis to allow residents to have access to current information and to take any necessary action in response.²¹⁹ Web material should include summaries making it easy for residents to understand the significance of the data.
 - This information should be disclosed with data explanations and must provide explanations for inconsistencies Petitioners have identified that raise questions about the data's reliability.²²⁰ EPA should provide technical assistance to make this information more accessible to the public, such as by using maps to display boil water notices (with water main repairs and pressure monitors) and distribution system sampling results.
- Order the State and JXN Water, with EPA's technical assistance, to modernize the boil water notice system to provide timely and accessible information about what trigger the boil water notice and follow-up explanations for what remedial actions were taken to address the trigger.²²¹ To reach all affected residents, boil water notices should be delivered via text messages, automated calls, door-to-door canvassing in affected neighborhoods, calls directly to neighborhood associations, social media posts, mailings, press releases, and notices shared with local media outlets (including both television and radio). EPA should also order consultation with the Mississippi Rapid Response Coalition and other grassroots community organizations to ensure that individuals receive information each time there is a boil water notice.

²¹⁹ EPA has experience ordering similar remedies. For example, the agency's emergency orders have included the creation of a publicly available website with all "reports, sampling results, plans, weekly status reports" on progress, and any other documentation it ordered." Flint Order, *supra* n.214 at ¶ 51; *see also* Consent Decree ¶ 20.b-d, *United States v. County of Westchester*, ECF No. 56-1, No. 7:13-cv-05475 (May 21, 2015) (requiring the posting of weekly monitoring data to the website until construction of treatment plants are complete).

²²⁰ *See* Betanzo Decl. ¶ 35-38.

²²¹ *Cf.* Consent Decree ¶ 18, ECF No. 5, *United States v. Town of Ticonderoga*, No. 8:18-cv-442 (W.D.N.Y. July 11, 2018) (ordering town to create a boil water notice program allowing residents to receive notices through phone, email, or text message as a supplemental environmental project).

B. Request #2: Increase community involvement

EPA must ensure that Jackson residents have a say in how the water they drink is kept safe and managed. Petitioners deserve a voice in this process and deserve to have the issues they raise, including issues about higher billing rates, meaningfully addressed. Environmental justice communities have developed their own systems to protect their health in response to institutional inaction. By sharing their prior strategies, community voices can make emergency responses more effective and efficient. EPA and DOJ have required officials to incorporate community input as part of other interim agreements and emergency orders.²²² Jackson deserves no less.

EPA's enforcement cases have long lifespans. Therefore, EPA acknowledges that it must "endeavor to provide early injunctive relief and monitoring" and "increase communication to affected communities about the progress of enforcement efforts."²²³ In the specific context of environmental justice, EPA acknowledges it must not only provide information but also receive it by "support[ing] the efforts of community members and organizations to provide EPA with their expertise and viewpoints."²²⁴ Similarly, one of the key principles of the Department of Justice's Comprehensive Environmental Justice Enforcement Strategy is "ensur[ing] meaningful engagement with impacted communities" because they "should have a say in the government decisions that affect them."²²⁵

Unfortunately, the Interim Stipulated Order neither provides the community with significant information nor creates channels to obtain input. EPA must do more to involve the community members with decisions that affect their health. Given the timeline of this case, the ITPM's operation of the water system is no longer a short-term measure. EPA must negotiate and impose additional requirements to incorporate community feedback and ensure accountability while the ITPM remains in control of the water system. EPA must:

- Direct the City or JXN Water to employ a salaried community-identified ombudsperson to represent community interests in connection with water infrastructure needs.²²⁶ The

²²² See Interim Resolution Agreement Between U.S. Dep't of Justice & U.S. Dep't of Health & Human Servs. & Ala. Dep't of Publ. Health 10 (May 3, 2023) (requiring Alabama to "incorporate the input of [residents, their representatives, experts, and environmental justice advocates] through community engagement and other platforms on a community basis" in developing a Public Health and Infrastructure Improvement Plan to address wastewater infrastructure problems); Flint Order, *supra* n.214, ¶¶ 63-64 (creating an Independent Advisory Panel that included "members of the affected community" to advise the City on "steps needed to mitigate the imminent and substantial endangerment to the health of persons" and operation of the City's water system to ensure SDWA compliance).

²²³ EPA Strategic Plan, *supra* n.40, at 41.

²²⁴ *Id.* at 30.

²²⁵ Memorandum from Vanita Gupta, *supra* n.44, at 6.

²²⁶ See, e.g., *Sierra Club v. Hamilton Cnty. Bd. of Cnty. Comm'rs*, 504 F.3d 634, 640-41 (6th Cir. 2007) (to facilitate consent decree implementation in a Clean Water Act case, the court

scope of the work that the City and ITPM are currently undertaking is enormous and could set the trajectory for long-term plans for the water system's management, making an ombudsperson's input crucial to serve environmental justice. The ombudsperson's charge should include reporting community concerns and making recommendations to the ITPM, the City, and EPA. Appropriate representatives of JXN Water, the City, the State, and EPA should meet with the ombudsperson monthly and incorporate the ombudsperson's input into any plans affecting the water system, including changes to the Project Priority List, Financial Management Plan, and Alternative Water Source Plan. The ombudsperson should also be empowered to address issues related to customer billing, water shut-offs due to inequitable billing practices,²²⁷ and JXN Water's hiring practices.

- Require JXN Water to schedule quarterly community meetings, co-led by the salaried community-identified ombudsperson, where community can raise or address concerns or questions about the City's water system. JXN Water must ensure that a representative familiar with both water system issues and community concerns attends the meeting and is available to answer questions.²²⁸ The scope of those meetings should not be limited to water quality alone, but should also encompass community demands for billing relief and other administrative issues.
- Arrange meetings (via the Department of Justice if appropriate) between agency officials, the ITPM, the City, and the State to update the community about the consent decree process and obtain community input on proposed terms. The Department of Justice has allowed for community input on settlement terms in other cases, and its Environmental Justice policy acknowledges that "the Department can honor [confidentiality] interests and legal obligations while establishing a culture of transparency in this work."²²⁹

appointed an "ombudsperson" who could "provide the public with an advocate who can ensure that the [negotiated] program is working, investigate complaints, and keep the Court informed of the status of such program").

²²⁷ Petitioners have been disturbed to hear from community members that some Jacksonians may be facing imminent water shutoffs because they are behind on their water bills. Because these bills encompass periods of time when households were receiving no, low, or foul water, Petitioners understand that there has been community confusion about whether they must pay their bills. While billing is beyond the scope of this petition, Petitioners urge EPA to ensure that no Jacksonian loses water access due to unpaid bills.

²²⁸ See Stip. & Preliminary Inj. Order ¶ 15.b, ECF No. 122-2, *United States v. Municipality of Toa Alta*, *supra* n.217 (ordering similar relief).

²²⁹ Memorandum from Vanita Gupta, *supra* n.44, at 12; see also *United States v. Municipality of Toa Alta* for Public Input: Summary of Potential Terms for Preliminary Injunction Order in Federal Case, ECF No. 122-6, *United States v. Municipality of Toa Alta*, No. 21-cv-01087; *Sierra Club*, 504 F.3d at 639-40, *supra* n. 226 (requiring EPA and defendant to keep citizen group "apprised of their settlement negotiations so that the parties will have the benefit of [the citizen group's] views").

C. Request #3: Ensure the ITPM’s Project Priority List focuses on the following public health and safety needs

EPA must require that the ITPM prioritize (1) completing the Alternative Water Source Plan and submit it no later than September 8, 2023, for public review, (2) optimizing corrosion control measures, and (3) completing the service line inventory to identify any lead service lines. As recently as June 2023, EPA acknowledged that “[t]here continues to be an imminent danger that the system could fail again and return to [widespread] boil water notice[s].”²³⁰ This threat makes the completion of the Alternative Water Source Plan essential. The Alternative Water Source Plan would ensure that the City is prepared to provide residents with bottled water should new contamination enter the system when interim bottled water distribution is no longer needed. The Alternative Water Source Plan should also ensure that, for periods of prolonged water shutoff, there is a plan to provide residents facing particular risks from those shutoffs—like pregnant people, families with young children, and elderly people—with temporary relocation funding.

It is essential that JXN Water establish appropriate corrosion control as soon as possible to address the danger of lead contamination, discussed *supra* at section V.C.²³¹ As recently as July 2023, EPA issued a failure to optimize corrosion control violation to Jackson’s water system. It is the public’s understanding that this violation will continue to occur until State-approved treatment improvements are put in place. The ITPM indicated in the Q2 Report that he has submitted a new treatment plan to MSDH. Petitioners urge EPA to offer JXN Water technical assistance to ensure any new corrosion control treatment complies with SDWA’s requirement of minimizing lead release, is based on best practices, and is implemented promptly once approved.

Finally, the ITPM must prioritize completing its project identifying where lead service lines exist in the system and make the results publicly available.²³² Especially given the ongoing corrosion control issues, discussed *supra* at section V.A.1, any lead service line in Jackson would risk lead contamination for residents receiving water through that line. And should the ITPM confirm the existence of any lead or galvanized service lines, Petitioners request that EPA consult with community members on next steps to remove and replace those lines within 5 years. Petitioners request that written notice be provided to all homes with a confirmed or potential lead service line, or galvanized service line (with or without a lead gooseneck).

²³⁰ See Press Release, EPA, Biden-Harris Administration, *supra* n.36.

²³¹ Any new corrosion control studies should address the issues identified in the petition and accompanying declaration. See Betanzo Decl. ¶¶ 92-98.

²³² Petitioners are aware that, as of the 2023 Q2 report, the ITPM is working with Blue Conduit to identify lead service lines. Petitioners are encouraged to see that this work is underway, and urge the ITPM to complete it as soon as possible given the system’s corrosion control issues. Q2 2023 ITPM Report, *supra* n.102, at 26.

D. Request #4: EPA must immediately facilitate bottled water distribution to residents while there is an ongoing imminent threat from microbial and lead contamination

EPA should either issue an emergency grant to the City, or order the State to provide funding, to allow the City to procure bottled water for community distribution. Furthermore, EPA should require that procured water is distributed by the Mississippi Rapid Response Coalition.

EPA can use its emergency authority to order the “provision of alternative water supplies,”²³³ and has exercised this authority in the past.²³⁴ “One major function” of EPA’s emergency powers is “its use as a preventative enforcement measure.”²³⁵ EPA should not wait for the “potential hazard [to] materializ[e],” such as a positive contaminant result, before ordering the provision of water supplies if the risk to public health is high.²³⁶ Bottled water distribution is necessary until EPA makes a determination that Jackson’s water no longer poses an imminent and substantial endangerment to Jackson residents’ health from microbial and lead contamination.

EPA cannot limit bottled water distribution to specific geographic areas because the location of lead plumbing in the system is unknown, and the risk of microbial contamination exists due to both treatment issues and line breaks in the distribution system.²³⁷ Because Jackson does not have a comprehensive map of where galvanized and lead-containing service lines are located, EPA cannot confidently determine in which areas lead pipes are absent. Low water pressure continues to be an issue for residents,²³⁸ which could be a result of leaks and breaks that remain unknown to the ITPM. EPA cannot wait for confirmation of lead action level exceedances or disease outbreaks to distribute water when the risks of either are both so high.

Establishing water distribution centers is insufficient: Many Jackson residents cannot reach distribution centers or stand in (often long) lines to receive water, because they, for example, are older, have mobility limitations, are pregnant or caring for young children, or simply need to be present at work. While Petitioners request that EPA order stockpiles of water to be established in the City for ready distribution, the best way to distribute that water is via community delivery.

²³³ 42 U.S.C. § 300i(a).

²³⁴ See, e.g., Order on Consent ¶ 42(h), In re E.I. Du Pont De Nemours & Co., 2006 WL 8457416 (EPA Region 5, Nov. 20, 2006) (ordering provision of bottled water); In re Yakima Valley Dairies, Admin. Order on Consent App. B, at 4 & tbl.1 (EPA Region 10, Mar. 5, 2013) (ordering installation of reverse osmosis systems as provision of alternative water); see also EPA, Planning for an Emergency Drinking Water Supply 4 (June 2011) (provision of bottled water is a “common federal response” in emergencies); cf. 40 C.F.R. § 141.101 (allowing public water systems to use bottled water on a temporary basis “to avoid unreasonable risk to health”).

²³⁵ EPA Guidance, *supra* n.212, at 4.

²³⁶ *Id.* at 4 & n.3 (quoting H.R. Rep. No. 93-1185, at 35-36).

²³⁷ See *supra* section V.

²³⁸ Holmes Decl. ¶ 25; 7/12/2023 Tr. at 100, 129, 132, 145 (statements of Jackson community members sharing their continued water pressure issues).

Petitioners also request that the EPA designate a community organization, such as MRRC, to lead bottled water distribution, with the City of Jackson providing support as MRRC requests. Throughout the water crisis, MRRC has distributed over two million bottles of water to Jackson residents. MRRC has hired staff members trained and positioned for bottled water distribution, and has expertise and local knowledge to effectively distribute water to residents.

EPA should ensure that any bottled water provided meets SDWA standards.

Petitioners have previously tested some distributed bottled water and found that it did not meet safe drinking water standards. Thus, before distribution, a representative sample of the brand of bottled water to be distributed must be tested to ensure that it meets EPA's safe drinking water requirements.²³⁹

Jackson residents should not be expected to use their own limited resources to secure bottled water. Bottled water purchases would represent a larger percentage of Jackson residents' budget than in other cities because Jackson's poverty rate is much higher than the national average.²⁴⁰ Moreover, many Jackson residents struggle to pay their water bills, and rates have only risen since EPA filed its action.²⁴¹ Members of the Jackson community have described their experience buying their own bottled water in surveys collected by the Petitioners, and some have stated that they cannot afford bottled water. Notably, MSDH and the City have yet to lift their advisories that people who are pregnant and children under the age of five should not drink tap water, even though there is no method for those residents to obtain bottled water except out of their own (or their parents') pockets.²⁴²

While environmental justice demands that Jackson residents are not left to bear the cost of bottled water, someone must pay. EPA should order the State of Mississippi to fund bottled water distribution. EPA has the authority to order "persons who caused or contributed to the

²³⁹ See also Betanzo Decl. ¶ 149 (explaining potential safety concerns with bottled water).

²⁴⁰ Jackson's median household income (\$39,969) is less than two-thirds the national average for cities and towns with a population over 5,000 people (\$69,021). See *QuickFacts: Jackson city, Mississippi*, U.S. Census Bureau, <https://www.census.gov/quickfacts/fact/table/jacksoncitymississippi/PST045222> (last visited August 2, 2023); *QuickFacts: United States*, U.S. Census Bureau, <https://www.census.gov/quickfacts/fact/table/US/PST045222> (last visited August 2, 2023).

Although not directly comparable due to potential methodological differences, the Census reports Jackson's poverty rate as 26.1%, see *QuickFacts: Jackson city, Mississippi*, while cities and towns with populations over 5000 people have an 11.6% poverty rate on average, see U.S. *QuickFacts: United States*.

²⁴¹ Julis Jacobo, *Skyrocketing bills the latest concern in Jackson water crisis*, ABC News (Mar. 7, 2023), <https://abcnews.go.com/US/skyrocketing-bills-latest-concern-jackson-water-crisis/story?id=97679053>.

²⁴² See *supra* section V.A.3. The City has offered free filters to households with people who are pregnant or children under the age of five, but filters do not address the potential microbial risk.

endangerment” of public health to take appropriate remedial action.²⁴³ As discussed *supra* at section II.A, Mississippi has a long history of hampering and interfering with Jackson’s ability to provide its residents with clean water and therefore “contributed to” the endangerment of Jackson residents.²⁴⁴ It is therefore appropriate for EPA to order the State to fund relief to Jackson residents.

E. Request #5: EPA must facilitate the distribution and installation of water filters through funding to local leadership

Petitioners recognize that indefinite bottled water distribution and reliance on bottled water is not the ideal solution to provide clean drinking water to Jackson residents. As such, Petitioners also request EPA to issue emergency grant funding to the City and order the City to initiate a filter distribution effort.

- a) Immediately offer installation of reverse-osmosis filters to all households with residents particularly susceptible to water borne illness*

There is no affordable, easy-to-install at-home treatment or filtration technique that can address both lead and microbials simultaneously, because the methods for treating one contaminant exacerbate the other. The carbon filters often used to remove lead—such as Brita and other pitcher filters available in grocery stores—can inadvertently increase the risk of disease-causing pathogens.²⁴⁵ Rather than carbon filtration, the solution for microbial contamination is water boiling, which is time-consuming and cumbersome, making it a poor long-term solution. Relying on boiling water is also dangerous in Jackson, however, because if water is lead contaminated, boiling it increases the concentration of lead.

²⁴³ EPA Guidance, *supra* n.212, at 14 (citing H.R. Rep. No. 93-1185, at 35); *see also* 42 U.S.C. § 300i(a)(1). Indeed, EPA has recognized that in some instances, it may use its emergency authority “to reach parties that are not responsible for the endangerment” to protect or mitigate harm to the public. EPA Guidance, *supra* n.212, at 18.

²⁴⁴ Because SDWA does not define “contribute to,” EPA should look to the term’s ordinary meaning. *Russello v. United States*, 464 U.S. 16, 21 (1983). The Fifth Circuit used this approach when interpreting the term “contribute” in the Resource Conservation and Recovery Act and determined that “contribute” meant to “have a part or share in producing an effect.” *Cox v. City of Dallas*, 256 F.3d 281, 294 (5th Cir. 2001). The State’s discriminatory funding decisions had a “part or share in producing” the endangerment to Jackson residents.

²⁴⁵ Rebecca Williams, *Study: Bacteria can grow in faucet water filters*, Mich. Pub. Radio (Aug. 1, 2017), <https://www.michiganradio.org/environment-science/2017-08-01/study-bacteria-can-grow-in-faucet-water-filters>; Jerome Nriago et. al., *Influence of Household Water Filters on Bacterial Growth and Trace Metals in Tap Water of Doha, Qatar*, 8 Sci. Rep. 6-7 (May 29, 2018); *see also* Betanzo Decl. ¶ 146.

However, some filtration systems, such as those installed in some refrigerators and under-counter reverse osmosis systems, can treat both lead and many microbials.²⁴⁶ Petitioners request that EPA provide an emergency grant to the City and then order it to immediately begin installing reverse osmosis filter systems in all Jackson homes where pregnant people, infants, young children, or people otherwise particularly vulnerable to lead and/or microbial contamination reside.

- b) *Offer lead removal filters to all Jackson residents until EPA no longer finds an imminent and substantial endangerment to public health is present in the water system*

Petitioners understand that JXN Water is working to improve its filtration and disinfection processes. It is possible that once the treatment techniques and filtration systems are fully repaired and the frequency of line breaks is reduced, the risk of microbial contamination will be significantly reduced. However, the possibility of lead contamination will remain so long as lead service lines, lead goosenecks, corroded galvanized service lines contaminated with lead, and other lead plumbing remain in the distribution system.²⁴⁷ Removing lead plumbing will take time to complete.²⁴⁸

While Jacksonians await comprehensive lead pipe replacement and after the risk of microbial contamination in the water declines, EPA must help fund the City's procurement of certified lead-reducing filters, and order the City to distribute those filters to all who want them. The filters should be accompanied by instructions explaining that during boil water periods, Jackson residents should filter first and then boil their water or consider using bottled water. Every home in Jackson should be offered a certified lead-reducing filter and free replacement filters until (1) JXN Water verifies that the home is not served by a lead service line or lead gooseneck, or (2) JXN water replaces the lead service line (and other materials, if present). Replacement filters should be mailed to any household that has been given a filter for timely replacement to ensure proper upkeep.²⁴⁹ Finally, the ITPM's most recent report indicated that the Shannon Dale Road area will soon start receiving water from the groundwater, instead of the surface water, system—the Shannon Dale Road must *immediately* receive certified lead reducing

²⁴⁶ See Betanzo Decl. ¶ 147. EPA previously has ordered the installation of reverse-osmosis treatment using its emergency powers. See *In re Yakima Valley Dairies*, Admin. Order on Consent, *supra* n.234, App. B, at 4 & tbl.1.

²⁴⁷ See Betanzo Decl. ¶¶ 64-69.

²⁴⁸ The ITPM estimates that Jackson's lead service line removal project will take ten years. Q2 2023 ITPM Report, *supra* n.102, at 9. Lead service line replacement in Flint, Michigan, is still ongoing, nearly a decade after the Flint lead crisis came to light. Carol Thompson and Kayla Ruble, *Coalition Sues to Force Flint to Finish Replacing Lead Water Lines*, Detroit News (Nov. 2, 2022), <https://www.detroitnews.com/story/news/michigan/flint-water-crisis/2022/11/02/coalition-sues-to-force-flint-to-finish-replacing-lead-water-lines/69614478007/>.

²⁴⁹ Denver, Colorado's lead reduction program and filter provision offers a model for lead reduction and filter distribution that EPA can look to as an example. See *Lead Reduction Program*, Denver Water, <https://www.denverwater.org/your-water/water-quality/lead/what-is-lead-reduction-program> (last visited August 2, 2023).

filters, because the change in source water could destabilize any corrosion control scale on the pipes and increase lead release.²⁵⁰

F. Request #6: EPA must fund and facilitate the provision of home testing kits and offer technical assistance to design home testing protocols for contaminants of concern

Petitioners request funding and technical assistance for the City to allow immediate home testing for lead and microbial contamination (including procurement if needed) and set up a system to maximize home testing kits' benefits. Technical assistance should include a website through which the results are reported and/or compiled, education by a community-identified water expert on how to use the kits and interpret the results, community creation of instructions to accompany the kits, and ways to improve the reliability of home testing kits' results. Because home testing kits can provide information about the water system, Petitioners request that the home testing kits be provided even when bottled water is being distributed.

Home testing kits for lead and microbial contamination are needed to protect residents' health. One of EPA's strategies to achieve its enforcement goals is using appropriate injunctive relief tools, such as ensuring data-holders (such as operators of water systems) provide timely data to the public, "who can assist in monitoring compliance."²⁵¹ Immediate provision of at-home kits serves this goal. At-home lead testing kits will assist EPA and JXN Water with determining the location of lead contamination. Positive lead results from commercially available kits would suggest that a resident has lead plumbing of some form.²⁵² Similarly, data from home-testing kits for microbials could assist with locating additional leaks and places where microbial contamination is entering the system so that relevant distribution lines could be prioritized for repair.

Existing home testing kits, however, often do not sample enough water to test for all the potential sources of lead connected to a house.²⁵³ As a longer term solution, EPA should provide funding and technical assistance to the City for a home testing program that collects sufficient samples to test for lead service lines and goosenecks.²⁵⁴ EPA should also provide similar technical assistance for microbial home testing to improve their informational value.

²⁵⁰ See Betanzo Decl. ¶¶ 73, 75.

²⁵¹ EPA Strategic Plan, *supra* n.40, at 41.

²⁵² See Mich. Dep't of Health & Human Servs., Sample Bottle Selection When Testing Water for Lead, Version 2, (2022) (showing how smaller samples may not detect sources of lead but will still detect lead plumbing in the home); Betanzo Decl. ¶ 155 (stating positive home tests results would be "concerning").

²⁵³ See Betanzo Decl. ¶¶ 125-27, 155.

²⁵⁴ See, e.g., Bottle Selection When Testing Water for Lead, *supra* n.252, at 2; see also Betanzo Decl. ¶¶ 126-27, 154 (describing sequential sampling programs).

VII. Conclusion

For the foregoing reasons, Petitioners respectfully request that EPA meet with Petitioners by September 8, 2023, and take the actions necessary to abate the imminent and substantial endangerment to Jackson residents’ health from the risk of lead and microbial contamination in their drinking water.

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Respectfully Submitted,

/s/ Danyelle Holmes
Danyelle Holmes
danyelle@poorpeoplescampaign.org
MISSISSIPPI POOR PEOPLE’S CAMPAIGN
Jackson, Mississippi

/s/ Brooke Floyd
Brooke Floyd
Rukia Lumumba
info@peoplesadvocacyinstitute.com
THE PEOPLE’S ADVOCACY INSTITUTE
Jackson, Mississippi

/s/ Kimberly E. Leefatt
Kimberly E. Leefatt
Jackie Iwata
Lauren P. Phillips
Sarah C. Tallman
NATURAL RESOURCES DEFENSE COUNCIL
1314 Second Street
Santa Monica, CA 90401
(310) 434-2300
kleeftatt@nrdc.org
jiwata@nrdc.org
lphillips@nrdc.org
stallman@nrdc.org
Counsel for Petitioners

/s/ Lori L. Sherman
Lori L. Sherman
Caitlin A. Swain
Kathleen E. Roblez
Ashley Mitchell
FORWARD JUSTICE
P.O. Box 1932
Durham, NC 27721

Phone: (919) 323-3889
lsherman@forwardjustice.org
cswain@forwardjustice.org
kroblez@forwardjustice.org
amitchell@forwardjustice.org
Counsel for Petitioners

/s/ Emily Early _____
Emily Early
Jessica Vosburgh
Mikaila Hernández, *Admission pending review of application for moral character*
THE CENTER FOR CONSTITUTIONAL RIGHTS
666 Broadway Avenue, Floor 7
New York, New York 10012
(212) 614- 6464
early@ccrjustice.org
jvosburgh@ccrjustice.org
mhernandez@ccrjustice.org
Counsel for Petitioners

/s/ Claudia Williams Hyman _____
Claudia Williams Hyman
Joshua Tom
AMERICAN CIVIL LIBERTIES UNION OF MISSISSIPPI FOUNDATION
101 South Congress Street
Jackson, MS 39201
(601) 354-3408
cwilliamshyman@aclu-ms.org
jtom@aclu-ms.org
Counsel for Petitioners

CC:

Radhika Fox
Assistant Administrator, Office of Water
U.S. Environmental Protection Agency
Fox.Radhika@epa.gov

Rosemary Enobakhar
Associate Administrator, Public Engagement and Environmental Education
U.S. Environmental Protection Agency
Enobakhare.Rosemary@epa.gov

Copies also provided via separate communication to:

JXN Water Inc
c/o Edward "Ted" Henifin
802 Lakeland Drive, Apt 414
Jackson, MS 39216
Via Email: ted@jxnwater.com

Malissa Wilson
Charles Mitchell McGuffey
Forman Watkins & Krutz, LLP
P.O. Box 22608
210 E. Capitol St., Suite 2200 (39201-2375)
Jackson, MS 39225-2608
Counsel for JXN Water
(601) 960-8600
Via Email: malissa.wilson@formanwatkins.com
mitch.mcguffey@formanwatkins.com

Frank Paul Calamita, III
Aqualaw, PLC
6 S. 5th Street
Richmond, VA 23219
(804) 716-9021
Counsel for JXN Water
Via Email: paul@aqualaw.com

Mayor Chokwe Lumumba
Jackson City Hall
219 S. President St.
Jackson, MS 39201
Via Email: calumumba@jacksonms.gov

Catoria Parker Martin
Terrell S. Williamson
210 E. Capitol St., Suite 2200 (39201-2375)
455 E. Capitol Street 39201
Jackson, MS 39207-2779
Attorneys, City of Jackson
Via Email: cmartin@city.jackson.ms.us
twilliamson@city.jackson.ms.us

Karl Fingerhood
Angela Mo
Stefan J. Bachman

Devon Lea Flanagan
Attorneys, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044
Via Email: karl.fingerhood@usdoj.gov
angela.mo@usdoj.gov
stefan.bachman@usdoj.gov
devon.flanagan@usdoj.gov

Kiana Courtney
Trial Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
150 M Street NE,
Washington, D.C. 20002
Via Email: kiana.courtney@usdoj.gov

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