

CIVIL COVER SHEET

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON NEXT PAGE OF THIS FORM.)

I. (a) PLAINTIFFS

United States of America

(b) County of Residence of First Listed Plaintiff (EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorneys (Firm Name, Address, and Telephone Number) Karl Fingerhood, Angela Mo, Stefan Bachman, Devon Flanagan, U.S. Department of Justice, Environmental Enforcement Section: (202) 514-7519

DEFENDANTS

The City of Jackson, Mississippi

County of Residence of First Listed Defendant Hinds (IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE TRACT OF LAND INVOLVED.

Attorneys (If Known)

Catoria P. Martin, City Attorney, City of Jackson, MS, 455 East Capitol Street, P.O. Box 2779, Jackson, MS 39207

II. BASIS OF JURISDICTION (Place an "X" in One Box Only)

- 1 U.S. Government Plaintiff, 2 U.S. Government Defendant, 3 Federal Question (U.S. Government Not a Party), 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES (Place an "X" in One Box for Plaintiff and One Box for Defendant)

Table with columns for Plaintiff (PTF) and Defendant (DEF) citizenship: Citizen of This State, Citizen of Another State, Citizen or Subject of a Foreign Country, Incorporated or Principal Place of Business In This State, Incorporated and Principal Place of Business In Another State, Foreign Nation.

IV. NATURE OF SUIT (Place an "X" in One Box Only)

Click here for: Nature of Suit Code Descriptions.

Large table with categories: CONTRACT, REAL PROPERTY, CIVIL RIGHTS, TORTS, PRISONER PETITIONS, HABES CORPUS, FORFEITURE/PENALTY, LABOR, IMMIGRATION, BANKRUPTCY, INTELLECTUAL PROPERTY RIGHTS, SOCIAL SECURITY, FEDERAL TAX SUITS, OTHER STATUTES.

V. ORIGIN (Place an "X" in One Box Only)

- 1 Original Proceeding, 2 Removed from State Court, 3 Remanded from Appellate Court, 4 Reinstated or Reopened, 5 Transferred from Another District (specify), 6 Multidistrict Litigation - Transfer, 8 Multidistrict Litigation - Direct File

VI. CAUSE OF ACTION

Cite the U.S. Civil Statute under which you are filing (Do not cite jurisdictional statutes unless diversity): 42 U.S.C. §§ 300f to 300j-27

Brief description of cause: Complaint for relief for violations of and imminent and substantial endangerment under Safe Drinking Water Act

VII. REQUESTED IN COMPLAINT:

CHECK IF THIS IS A CLASS ACTION UNDER RULE 23, F.R.Cv.P. DEMAND \$ CHECK YES only if demanded in complaint: JURY DEMAND: Yes No

VIII. RELATED CASE(S) IF ANY

(See instructions): JUDGE DOCKET NUMBER

DATE: Nov 29, 2022 SIGNATURE OF ATTORNEY OF RECORD: /s/ Karl Fingerhood

FOR OFFICE USE ONLY

RECEIPT # AMOUNT APPLYING IFP JUDGE MAG. JUDGE

IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF MISSISSIPPI  
(Northern Division)

UNITED STATES OF AMERICA, )  
 )  
 Plaintiff, )  
 )  
 v. )  
 )  
 THE CITY OF JACKSON, MISSISSIPPI, )  
 )  
 Defendant. )  
\_\_\_\_\_ )

Case No. 3:22-cv-686-HTW-LGI

**COMPLAINT**

Plaintiff the United States of America (“United States”), by the authority of the Attorney General and at the request and on behalf of the Administrator of the United States Environmental Protection Agency (“EPA”), alleges as follows:

**NATURE OF THE ACTION**

1. This is a civil action concerning the failure of the City of Jackson, Mississippi (“City”), to provide drinking water that is reliably compliant with the Safe Drinking Water Act (“SDWA”) to the City’s residents.

2. During the week of August 29, 2022, multiple raw water intake pumps failed at one of the City’s two surface water treatment plants, impacting its ability to produce adequate quantities of water and causing a catastrophic loss of pressure in the distribution system. As a result of this pressure drop, many residents had no running water and thus lost the ability to use water for basic safety and hygiene purposes such as washing hands, showering, flushing toilets, fighting fires, and washing dishes. During this period of low pressure, affected residents were dependent

on bottled water and other alternative water sources supplied by the City and state and federal agencies or procured elsewhere.

3. Even beyond this event and continuing through the present, contaminants are in or are likely to enter the City's public water system that may present an imminent and substantial endangerment within the meaning of the SDWA. The City has also violated various specific requirements of the SDWA and administrative orders issued by EPA concerning the City's public water system.

4. This action thus requests relief under Sections 1414 and 1431 of the SDWA, 42 U.S.C. §§ 300g-3 and 300i, including to require the City to:

- a. perform corrective measures to protect the health of residents and consumers served by the City's public drinking water system;
- b. achieve and maintain compliance with the SDWA, 42 U.S.C. § 300f *et seq.*, the National Primary Drinking Water Regulations, 40 C.F.R. Part 141, and the Mississippi Primary Drinking Water Regulations, promulgated pursuant to the Mississippi Safe Drinking Water Act of 1997, Miss. Code Ann § 41-26-1 *et seq.*; and
- c. achieve and maintain compliance with administrative orders issued under the SDWA by EPA on April 2, 2020 (Emergency Administrative Order, Docket No. SDWA-04-2020-2300), as amended by Docket No. SDWA-04-2020-2300, and July 1, 2021 (Administrative Compliance Order on Consent, Docket No. SDWA-04-2020-2301) (collectively the "EPA Orders").

5. Authority to bring this action is vested in the United States Department of Justice by 28 U.S.C. §§ 516 and 519 and by 42 U.S.C. §§ 300g-3 and 300i.

### **JURISDICTION AND VENUE**

6. This Court has jurisdiction over the subject matter of this action under 28 U.S.C. §§ 1331, 1345, and 1355, and under 42 U.S.C. §§ 300g-3 and 300i.

7. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b) and 1395(a) and under 42 U.S.C. §§ 300g-3(b) and 300i(b) because the events giving rise to the claims in this action arose within this judicial district.

### **STATUTORY AND REGULATORY FRAMEWORK**

#### **EPA's Powers to Address Imminent and Substantial Endangerment to Health**

8. Under Section 1431 of the SDWA, EPA is authorized to commence a civil action and to issue an administrative order when it receives information that a contaminant “is present in or is likely to enter a public water system or an underground source of drinking water . . . which may present an imminent and substantial endangerment to the health of persons,” and where the “appropriate State and local authorities have not acted to protect the health of such persons.” 42 U.S.C. § 300i(a).

#### **National Primary Drinking Water Regulations and Mississippi Primary Drinking Water Regulations**

9. The SDWA was enacted to ensure that public water supply systems meet minimum national standards for the protection of public health. Under the authority of Section 1412 of the SDWA, 42 U.S.C. § 300g-1, EPA has promulgated National Primary Drinking Water Regulations (“National Regulations”) at 40 C.F.R. Part 141 to establish contaminant limitations, monitoring requirements, public notification requirements, and other requirements for regulated drinking water systems.

10. The National Regulations apply to all public water systems, unless exempted under the SDWA. The SDWA and National Regulations define the term “public water system” as “a



system for the provision to the public of water for human consumption through pipes or . . . other constructed conveyances, if such system has at least fifteen service connections or regularly serves at least twenty-five individuals.” 42 U.S.C. § 300f(4); 40 C.F.R. § 141.2. The term includes “any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system.” 42 U.S.C. § 300f(4); 40 C.F.R. § 141.2.

11. Mississippi enacted the Mississippi Safe Drinking Water Act of 1997 (“Mississippi SDWA”) at Miss. Code Ann. § 41-26-1 *et seq.* Under the authority of this statute, *see* Miss. Code Ann. § 41-26-5, Mississippi has promulgated Mississippi Primary Drinking Water Regulations (“State Regulations”), codified at Miss. Admin. Code § 15-20-72.

12. A public water system is classified as either a “community water system” or a “noncommunity water system.” A community water system is a public water system that (a) serves at least 15 service connections used by year-round residents of the area served by the system or (b) regularly serves at least 25 year-round residents. 42 U.S.C. § 300f(15); 40 C.F.R. § 141.2; Miss. Code Ann. § 41-26-3(c); Miss. Admin. Code § 15-20-72-2.2.2.4.

13. A public water system that is a community water system must comply with the requirements of the National Regulations and the State Regulations. 40 C.F.R. § 141.1; 40 C.F.R. Part 141 *passim* (imposing requirements on community water systems); Miss. Code Ann. § 41-26-5(2)(a); Miss. Admin Code § 15-20-72-1.1.4.

14. Any person who owns or operates a public water system is a “supplier of water.” 42 U.S.C. § 300f(5); 40 C.F.R. § 141.2; Miss. Code Ann. § 41-26-3(s) (“supplier of water” means any person who owns or controls a public water system).

15. A supplier of water must comply with the National Regulations and the State Regulations. 40 C.F.R. Part 141 *passim* (imposing requirements on suppliers of water); Miss. Code Ann. § 41-26-15(b); Miss. Admin. Code § 15-20-72 *passim* (same).

16. Under the State Regulations, a Class A system is a system “with surface water treatment, groundwater under the direct influence of surface water, lime softening, or coagulation and filtration for the removal of constituents other than iron or manganese.” Miss. Admin. Code § 15-20-72.2.2.1(5). “A certified class A operator shall be onsite whenever the treatment plant for a Class A public water system treating surface water is in operation. The certified operator in responsible charge shall be available twenty-four (24) hours per day to address system needs and problems as they occur.” *Id.*; *see also* Miss. Admin. Code. § 15-20-72.1.1.6.11 (compelling compliance with same requirement in Mississippi State Department of Health Public Water Supply Operations Manual).

### **Enforcement of the SDWA**

17. Section 1413 of the SDWA, 42 U.S.C. § 300g-2, provides that “a State has primary enforcement responsibility for public water systems during any period for which the [EPA] Administrator determines . . . that such State” has met various requirements, including “adopt[ing] drinking water regulations that are no less stringent than the national primary drinking water regulations,” “implementing adequate procedures for the enforcement of such State regulations,” and keeping such records and reports “as the Administrator may require by regulation.” 42 U.S.C. § 300g-2(a).

18. Under SDWA Section 1413 and the Mississippi SDWA, the State of Mississippi (the “State”) has “primacy,” meaning it has primary enforcement responsibility for public water systems in Mississippi. Under the Mississippi SDWA, the State Health Officer or the Health

Officer’s designee holds the authority to “exercise general supervision over the administration and enforcement of this chapter and applicable rules and regulations,” “enforce the laws, rules and regulations governing safe drinking water,” and “perform all acts necessary to carry out this chapter or the federal [SDWA].” 26 Miss. Code Ann. § 41-26-7(1)(a), (h), and (k) (describing the powers and duties of the “director”); *see also* 26 Miss. Code Ann. § 41-26-3(h) (defining “director”).

19. The Mississippi State Department of Health (“MSDH”) is the primacy agency, meaning the state agency with primary enforcement authority under the SDWA.

20. SDWA Section 1414 authorizes EPA to issue administrative orders and bring civil actions under certain circumstances, independent of EPA’s emergency powers under SDWA Section 1431 to address an imminent and substantial endangerment.

21. When the EPA Administrator finds that a public water system does not comply with any “applicable requirement” or with any schedule or other requirement imposed thereto during a period in which the state has primary enforcement authority, the EPA Administrator shall issue an administrative order under Section 1414(g) or commence a civil action under Section 1414(b) of the SDWA. 42 U.S.C. § 300g-3(a)(1).

22. Under SDWA Section 1414(b), 42 U.S.C. § 300g-3(b), the EPA Administrator may bring a civil action in the appropriate district court to require compliance with any “applicable requirement” and with any administrative order issued under Section 1414(g) if authorized under Section 1414(a) or if requested by the state primacy agency or the state’s chief executive officer.

23. Under SDWA Section 1414(i), 42 U.S.C. § 300g-3(i), “applicable requirement” means:

- a. any requirement of SDWA Sections 1412 (National Regulations),  
1414 (enforcement of drinking water regulations), 1415 (variances),

1416 (exemptions), 1417 (prohibition on use of lead pipes, solder and flux), 1433 (community water system risk and resilience), 1441 (assurances of availability of adequate supplies of chemicals necessary for treatment of water), and 1445 (records and inspections);

- b. any regulation promulgated under the sections cited above;
- c. any schedule or requirement imposed pursuant to a section cited above; and
- d. any requirement of, or permit issued under, an applicable State program for which the EPA has made a determination that the requirements of Section 1413 of the SDWA have been satisfied, or an applicable State program approved under Section 1414.

24. The court may enter “such judgment as protection of public health may require, taking into consideration the time necessary to comply and the availability of alternative water supplies.” 42 U.S.C. § 300g-3(b). The court may impose a civil penalty for each violation under Section 1414. *Id.* The court may also impose a civil penalty for each violation of an EPA administrative order issued under SDWA Section 1431(a)(1). 42 U.S.C. § 300i(b).

### **FACTUAL BACKGROUND**

#### **The City’s Drinking Water System**

25. The City’s public drinking water system (referred to herein as the “System”) consists of a surface water system identified as Public Water System No. MS0250008, a groundwater system identified as Public Water System No. MS0250012, and appurtenant treatment, storage, and distribution facilities.

26. The System includes but is not limited to two surface water treatment plants—O.B. Curtis Water Treatment Plant (“O.B. Curtis”) and J.H. Fewell Water Treatment Plant (“J.H. Fewell”)—a series of elevated storage tanks, and a series of distribution pipes or “lines.”

27. The City, through its Department of Public Works, operates and maintains the System.

28. O.B. Curtis is located at 100 O.B. Curtis Drive, Ridgeland, Madison County, Mississippi.

29. J.H. Fewell is located at 2302 Laurel Street, Jackson, Hinds County, Mississippi.

30. The System’s surface water system serves drinking water to approximately 143,445 people and has approximately 71,486 service connections.

31. The System’s groundwater system serves drinking water to approximately 16,555 people and has approximately 5,762 service connections.

32. Therefore, in total, the System serves drinking water to approximately 160,000 people and has approximately 77,248 service connections.

33. The surface water sources of the System are the Ross Barnett Reservoir, which serves O.B. Curtis, and the Pearl River, which serves J.H. Fewell.

34. O.B. Curtis uses both conventional filtration and membrane filtration in parallel tracks to treat water. J.H. Fewell uses conventional filtration to treat water.

35. Conventional filtration treatment is “a series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal.” 40 C.F.R. § 141.2.

36. Membrane filtration is a pressure- or vacuum-driven separation process in which particulate matter larger than 1 micrometer is rejected by an engineered barrier, primarily through a size-exclusion mechanism, and which has a measurable removal efficiency of a target organism that can be verified through the application of a direct integrity test. 40 C.F.R. § 141.2.

Membrane filtration includes microfiltration, ultrafiltration, nanofiltration, and reverse osmosis.

*Id.*

37. Both treatment plants' filtration systems utilize UV disinfection treatment on each individual effluent flow to inactivate pathogens, such as viruses, *Cryptosporidium*, and *Giardia*. Finished water at both plants are also disinfected using chloramines. The treated water is then pumped to storage tanks.

38. Sufficient volumes of water are required to create enough pressure within the distribution system. When adequate water pressure is maintained in the System, the pressure exerted from within the distribution lines keeps contaminants outside the lines from entering into the System. If a plant cannot produce sufficient amounts of treated water to fill the tanks, then the System's pressure may be low.

39. When inadequate or low water pressure is present in the System, negative pressure may pull water from outside a distribution line to inside the distribution line through cracks, breaks, or joints in the distribution lines that are common in all drinking water systems. This phenomenon is sometimes referred to as "back siphonage." Back siphonage can introduce contaminants into treated, potable water inside the lines downstream of the water treatment plant, before the water is delivered to users.

### **Problems with the System and EPA Enforcement Efforts**

#### Line Breaks and Boil Water Notices

40. The System experienced over 7,300 distribution line breaks from 2017 through 2021. These line breaks occurred at an average annual rate of 55 breaks per 100 miles of line per year. By comparison, one industry benchmark goal is no more than 15 breaks per 100 miles of line per year. The number of annual reported line breaks from 2017 to 2021 is as follows:

<b>Year</b>	<b>Line breaks</b>
2017	1627
2018	2085
2019	1226
2020	962
2021	1421
<b>Total</b>	<b>7321</b>

While these line breaks occurred in every zone of the City, a spatial analysis of water line breaks conducted by EPA showed distinct areas within the City distribution systems with a high number of breaks, including the North Jackson and Seneca Street areas. These areas correspond to locations where small-diameter, pre-1910 cast iron pipe is still in use. These lines are susceptible to breakage due to their age and likelihood of corrosion.

41. Controlling for corrosion is critical for lines that are susceptible to breakage and for lines, connectors, or pipe fittings that may contain lead.

42. Since May 1, 2020, more than 320 boil-water notices (“BWNs”) have been issued for the System. Attachment A to this Complaint provides a detailed summary of the BWNs issued for the System in 2020, 2021, and 2022.

43. For just the surface water portion of the System, which relies on treated water from O.B. Curtis and J.H. Fewell, nearly 280 BWNs were issued between May 1, 2020, and October 21, 2022. Based on the City’s data, the City deemed 80 of these surface water BWNs “system wide.” Below is an overview of the surface water BWNs by year:



<b>Time Period</b>	<b>Number of Surface Water BWNs</b>	<b>Average Number of Days to Lift</b>	<b>Number of Surface Water Systemwide BWNs</b>	<b>Percentage of Surface Water BWNs Attributable to Low- or Loss-of-Pressure Events</b>
2020 (May 1 to Dec. 31)	83	3.1	0	98.8%
2021 (Jan. 1 to Dec. 31)	108	3.6	78	96.3%
2022 (Jan. 1 to Oct. 21)	88	3.9	2	97.7%
<b>OVERALL</b>	<b>279</b>	<b>3.6</b>	<b>80</b>	<b>97.6%</b>

44. Either the City or MSDH may issue a BWN. Circumstances necessitating a BWN can include loss of pressure in the distribution system caused by distribution line breaks, decreased water pressures at the entry point to the distribution system, or planned service outages. In addition, BWNs can be issued as a result of water treatment failures leading to the potential for microbial contamination in the distribution system.

45. In Mississippi, MSDH may issue an immediate state-imposed BWN in certain circumstances, including (1) when a water system loses pressure or is compromised, there is a significant probability that contamination can or will enter the system, and the operator of the system has not issued an alert or (2) a catastrophic event or natural disaster occurs. *See* MSDH, Guidelines for Issuing a Boil-Water Notice (Dec. 1, 2016), *available at* [https://msdh.ms.gov/msdhsite/\\_static/resources/3850.pdf](https://msdh.ms.gov/msdhsite/_static/resources/3850.pdf) (accessed Sept. 15, 2022).

46. Low pressure and loss of pressure in a drinking water distribution system may cause back siphonage, as described above, which may introduce contaminants, including but not limited to total coliform bacteria and other bacteria, parasites, viruses, or pathogens, to the System.

47. Total coliforms are a group of related bacteria, some of which are harmful to humans.

48. EPA considers total coliforms an indicator of the presence of other pathogens in a drinking water system, and their presence is used to determine the adequacy of water treatment and the integrity of a distribution system. *See* Final Rule: National Primary Drinking Water Regulations: Revisions to the Total Coliform Rule, 78 Fed. Reg. 10,270, 10,271 (Feb. 13, 2013).

49. Among the pathogens that may be indicated by the presence of total coliforms are fecal contamination (*E. coli*) and waterborne pathogens (including *Cryptosporidium*, *Giardia*, *Legionella*, and certain viruses), all of which can cause diarrhea, abdominal discomfort, nausea, vomiting, cramps, headaches, or other symptoms, if ingested. Other more severe illnesses that can be caused by exposure to such pathogens include hemolytic uremic syndrome (kidney failure), hepatitis, and bloody diarrhea. Infection by a waterborne pathogen can also result in chronic conditions such as irritable bowel syndrome, renal impairment, hypertension, cardiovascular disease, and reactive arthritis.

50. Pathogens may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.

51. Turbidity is a measure of the cloudiness or opaqueness of water and is used to indicate water quality and filtration effectiveness. Turbidity in water may indicate the presence of pathogens because particles of matter can interfere with disinfection of water and provide a medium for microbial growth. High levels of turbidity indicate the increased likelihood that drinking water may contain disease-causing organisms, such as total coliforms (including *E. coli*), *Cryptosporidium*, *Giardia*, *Legionella*, and other viruses, pathogens, or bacteria.

52. The National Regulations recommend that systems conduct “[p]roper maintenance of the distribution system including appropriate pipe replacement and repair procedures, main flushing programs, proper operation and maintenance of storage tanks and reservoirs, cross connection

control, and continual maintenance of positive water pressure in all parts of the distribution system.” 40 C.F.R. § 141.63(e)(3). Among other things, failure to heed these treatment techniques can result in the presence of potentially harmful bacteria, indicated by total coliform sampling.

53. The ability of the System to reliably maintain positive water pressure depends largely on the City’s ability to timely complete necessary repairs and routine maintenance at O.B. Curtis and J.H. Fewell so that the plants produce adequate volumes of treated water.

54. The City has deferred critical repairs and maintenance at O.B. Curtis and J.H. Fewell and in the distribution system, impairing the System’s ability to maintain sufficient pressure.

#### Timeline of Recent Events and Compliance Efforts

55. At the request of EPA Region 4 and as part of EPA’s National Compliance Initiative to Reduce Noncompliance with Drinking Water Standards at Community Water Systems, EPA’s National Enforcement Investigations Center conducted a SDWA compliance inspection of the System on February 3-7, 2020. EPA’s investigation report was provided to the City on March 30, 2020. Among other observations, EPA’s inspectors noted operator staffing shortages and operation and maintenance issues at O.B. Curtis, J.H. Fewell, and the groundwater system. EPA’s inspectors also noted turbidity exceedances at O.B. Curtis and J.H. Fewell reported by the City in January and February 2020.

#### *The Emergency Order*

56. Based on EPA’s observations during the February 2020 inspection and documents provided by the City—including evidence of turbidity exceedances, concerns regarding the disinfection treatment of the water, and the condition of the distribution system—EPA issued an Emergency Administrative Order (“Emergency Order”) to the City under Section 1431, 42

U.S.C. § 300i, of the SDWA effective April 2, 2020 (Emergency Administrative Order, Docket No. SDWA-04-2020-2300). In the Emergency Order, EPA determined that existing conditions in the System presented an imminent and substantial endangerment to persons served by the System, giving rise to the potential presence of, *inter alia*, *E. Coli*, *Cryptosporidium*, and *Giardia* in the drinking water. The Emergency Order is attached to this Complaint as Attachment B.

57. Based on information provided by the City, information collected during EPA's February 2020 inspection, information provided by MSDH and the City, and information reported in EPA's Safe Drinking Water Information System database, EPA determined that the System was noncompliant with the SDWA, the National Regulations, and the State Regulations. During an April 28, 2020, meeting between EPA and the City held pursuant to the Emergency Order, EPA provided the City with notice of and an opportunity to discuss the violations. On May 11, 2020, EPA issued a Notice of Noncompliance to the City under Section 1414(a)(1)(A) of the SDWA, 42 U.S.C. § 300g-3(a)(1)(A), for the violations, which included the City's failure to have a Class A certified operator onsite at the System's treatment plants at all times.

58. During the April 28, 2020, meeting between EPA and the City, the City requested clarification regarding the implementation of the Alternative Water Source Plan required under the Emergency Order. Following the meeting, EPA issued an amendment to the Emergency Order on May 28, 2020, replacing a paragraph of the Order with the text contained in the amendment. The amendment is attached to this Complaint as Attachment C.

59. Under the Emergency Order, as amended, EPA required the City to take actions to address the imminent and substantial endangerment and communicate regularly with EPA, including *inter alia*:

- a. provide alternative water supplies to residents following specified triggering events;
- b. develop a Comprehensive Equipment Repair Plan (“CERP”) addressing the repair and/or replacement of monitoring equipment and the maintenance of appurtenant treatment equipment;
- c. address concerns about disinfection and pH treatment of the water;
- d. immediately repair line breaks or any cause of low pressure/loss of pressure;
- e. take additional coliform bacteria samples in certain circumstances, such as when a line breaks or when another low-pressure or loss-of-pressure event likely to cause contamination in the System’s distribution system occurs;
- f. submit weekly updates to EPA on the City’s progress complying with the Emergency Order and submit operating report entries on a weekly basis; and
- g. meet biweekly with EPA and MSDH.

60. In April 2020, EPA, MSDH, and the City began meeting biweekly to discuss the City’s compliance with the Emergency Order, including the City’s development of the CERP.

Attendees typically included at least EPA Region 4’s Drinking Water Enforcement Section Chief; MSDH’s Director of the Bureau of Public Water Supply; the City’s Public Works Director, Deputy Director of Water Operations, and Class A-certified operators; and legal and technical staff. The City timely submitted an Alternative Water Source Plan for EPA’s review and approval.

61. In May 2020, EPA and the City began negotiations to resolve the City’s SDWA violations through an administrative settlement agreement. The City timely submitted to EPA

the CERP required by the Emergency Order, and EPA approved an Alternative Water Source Plan that the City had revised in response to EPA's comments.

62. In December 2020, the City submitted to EPA an updated CERP, and EPA and the City continued meeting regularly to negotiate an administrative settlement agreement.

63. In early February 2021, the City submitted to EPA another updated CERP.

64. In mid-February 2021, back-to-back winter storms impacted the System, with freezing temperatures causing line breaks and equipment failure due to lack of pressure. As a result, a surface water systemwide BWN was in effect from February 16 through March 17, 2021; a groundwater systemwide BWN was in effect from February 18 through March 10, 2021; and tens of thousands of the City's customers (primarily in West and South Jackson) were left without running potable water for several weeks.

65. Based on a March 31, 2021, public notice issued by the City informing the public of violations of drinking water standards and requirements, EPA found that the System was noncompliant with the SDWA, the National Regulations, and the State regulations. Specifically, the System exceeded the maximum contaminant level for HAA5 (a group of five haloacetic acids that are a type of chlorine disinfection byproduct) in the 4th Quarter of 2020 and the 1st Quarter of 2021, and the City had failed to install optimal corrosion control treatment at J.H. Fewell by MSDH's deadline of May 31, 2019. The City did complete installing optimal corrosion control treatment at O.B. Curtis. On April 27, 2021, EPA issued a second Notice of Noncompliance to the City under Section 1414(a)(1)(A) of the SDWA, 42 U.S.C. § 300g-3(a)(1)(A), for the violations.

66. On April 30, 2021, an electrical fire damaged the electrical panel at O.B. Curtis running all five of the plant's high-service pump lines, rendering the pumps inoperable. The loss of the

pumps caused multiple elevated tanks to be low or empty and caused certain areas of the distribution system to have sustained low pressure. As a result, the City issued a surface water systemwide BWN on April 30, 2021 that lasted through May 3, 2021.

67. On May 4, 2021, the Federal Emergency Management Agency approved a Major Emergency Declaration for Mississippi, including portions of Jackson in Hinds County, for the impacts from the winter storms.

*The Consent Order*

68. Throughout 2021, EPA and the City continued negotiating an administrative settlement agreement, culminating in the EPA and the City entering into an Administrative Compliance Order on Consent (“Consent Order”) under Section 1414(g) of the SDWA, 42 U.S.C. § 300g-3(g), effective July 1, 2021 (Docket No. SDWA-04-2020-2301). The Consent Order is attached to this Complaint as Attachment D.

69. Under the Consent Order, the City agreed to *inter alia*:

- a. provide EPA with a Comprehensive Staffing Plan within 30 days (i.e., by July 31, 2021) that identified “how [the City] will ensure that a Class A operator is onsite [at O.B. Curtis and J.H. Fewell] at all times, including any backup plans in case staff are unavailable,” Consent Order ¶ 39; and
- b. implement the tasks described in the City’s Comprehensive Equipment Repair Plan as approved by EPA and attached as Appendix A to the Consent Order in accordance with the schedules of implementation therein, *id.* ¶ 40, including:
  - i. hiring two new operators for O.B. Curtis who would both be eligible for licensure and would complete the Class A operator test within



- seven months (i.e., by February 1, 2022), *see* Comprehensive Equipment Repair Plan, task nos. 2 and 3;
- ii. within 60 days, developing a scope of work with timeframes for returning the filters at J.H. Fewell to fully operational and functional status, *see id.*, task no. 6; and
  - iii. repairing and rehabilitating the conventional and membrane filtration systems at O.B. Curtis, including completing within seven months all repairs to the conventional filtration system so that it would be fully functional and operational, *see id.*, task no. 13.

70. In September 2021, EPA, MSDH, and the City began meeting biweekly to discuss the City's compliance with the Consent Order and any situational changes. Attendees typically included at least EPA Region 4's Drinking Water Enforcement Section Chief; MSDH's Director of the Bureau of Public Water Supply; the City's Public Works Director, Deputy Director of Water Operations, and Class A-certified operators; and legal and technical staff.

71. On November 8, 2021, MSDH conducted its annual sanitary survey of the System and noted as a significant deficiency that the O.B. Curtis high-service pumps remained out of service following the April 2021 electrical panel fire, with no target date to return the pumps to service. *See* 40 C.F.R. § 141.2 (defining "sanitary survey" as an onsite review to evaluate the adequacy of the water sources, facilities, equipment, operation, and maintenance of a public water system for producing and distributing safe drinking water). MSDH required the City to provide MSDH with a written response identifying corrective actions and timeframes by January 14, 2022, and that the City complete the corrective actions within 120 days of receipt of the report, i.e., no later than April 14, 2022.

72. On November 13, 2021, the City shut down O.B. Curtis due to chemical feed issues with the aluminum chlorohydrate process, which then caused low water pressure and issuance of a surface water systemwide BWN that lasted from November 15 through November 19, 2021.

73. On November 15, 2021, as part of a multi-state tour to spotlight environmental justice concerns in historically marginalized communities, the EPA Administrator visited Jackson, where he *inter alia* met with the Mayor, toured O.B. Curtis, and met with administrators and students of an elementary school that was closed at the time because of low water pressure.

74. On November 23, 2021, the City Council passed pay raises for drinking water treatment plant operators and increased water utility usage rates by 20%.

75. On January 19, 2022, the Mayor and the City's Chief Financial Officer met with the EPA Administrator in Washington, D.C., to discuss *inter alia* the City's water infrastructure needs and Bipartisan Infrastructure Law funding.

76. On January 24, 2022, the EPA Administrator sent letters to the Mayor and to the Governor of Mississippi outlining EPA's prerogatives for the City's drinking water system and the State's role in assisting the City to achieve compliance.

77. On January 25, 2022, EPA issued a third Notice of Noncompliance to the City under Section 1414(a)(1)(A) of the SDWA, 42 U.S.C. § 300g-3(a)(1)(A). EPA found that the System was noncompliant with the SDWA, the National Regulations, and the State regulations because the City had yet to repair or replace the electrical panel at O.B. Curtis to restore the pumps to service, and because the City had not provided the required written response identifying corrective actions and timeframes to do so.

78. In February 2022, EPA coordinated with the Department of Homeland Security to obtain a commitment from the manufacturer of the electrical panel to expedite delivery of a replacement panel, and in mid-April 2022, the new electrical panel was installed at O.B. Curtis.

79. During the week of March 2, 2022, EPA Region 4, EPA's Technical Support Center, EPA's contractors, and MSDH visited the City to gather information and assess the City's water distribution system.

80. On March 18, 2022, the EPA Administrator sent letters to the Mayor and to the Governor of Mississippi, noting the availability of federal infrastructure funds under the Bipartisan Infrastructure Law.

81. On April 20, 2022, a water hammer—a sudden surge of water pressure when water flow quickly changes direction or is stopped, such as when a valve suddenly closes or a pump suddenly shuts down—caused a pipe to break in the O.B. Curtis potassium permanganate room, causing the plant to shut down and the System's water pressure to fall.

82. On April 21, 2022, during a regular biweekly meeting among the City, MSDH, and EPA, the City estimated vacancies for five operators and at least a half-dozen maintenance workers across both plants. The City's timesheets indicated that two operator supervisors at both plants were working a combined average of 128 hours per week.

83. In late June 2022, the City began having difficulty producing water from O.B. Curtis because of equipment failures and inadequate maintenance related to the membrane filters, and the System became unable to fill elevated storage tanks throughout the System, thereby lowering water pressure. The City issued a water conservation advisory on June 21, 2022, to customers that they should conserve the use of water.

84. On June 24, 2022, as a result of high turbidity levels and the continued water production issues at O.B. Curtis, the City issued a Systemwide BWN for all customers of both the surface water and groundwater systems. This BWN stayed in effect for two weeks while City staff addressed production and turbidity issues. That same day, the City began providing limited quantities of bottled water on a first-come, first-served basis.

85. On June 30, 2022, due to the ongoing high turbidity levels, MSDH issued a surface water systemwide BWN, supplementing the City's June 24, 2022 notice.

86. On July 9, 2022, with the concurrence of MSDH, the City lifted the BWN.

87. In July 2022, EPA issued the report "City of Jackson Distribution System Assessment: Summary of Findings and Assessment Team Recommendations" ("July 2022 Assessment"), stemming from the March 2022 distribution system assessment and site visit conducted by EPA Region 4, EPA's Technical Support Center, EPA's contractor, and MSDH. Of particular relevance to the claims in this Complaint, the many issues with the System identified in the Assessment included:

- a. The System has an extensive history of line breaks;
- b. The City does not collect and record continuous pressure data, which could be used to identify areas in need of pressure improvements to prevent contamination in the distribution system, *id.* at 6;
- c. The City failed to consistently meet water quality parameters for pH and alkalinity, *id.* at 10;
- d. The City does not perform routine flushing of the distribution system, which can be utilized to reduce water age (i.e., the amount of time for water to travel from its source to the user) and optimize chlorine residuals, *id.* at 6;

- e. There were infrequent cycling of storage tanks and poor mixing performance ratios, suggesting insufficient chlorine residuals in the system, *id.* at 7, and a disruption in the chloramine process control, *id.* at 10;
- f. The monochloramine residual in the O.B. Curtis effluent was at times less than the optimization goal, *id.* at 10-11;
- g. There were considerable staffing problems, including:
  - i. the Utilities Manager position was vacant at the time of the visit, which the City explained was due to budget limitations, *id.* at 11;
  - ii. there are insufficient operators to consistently staff three shifts, seven days per week; staff are unable to take time off without forcing remaining staff to work extra hours; supervisors are working shifts in addition to their managerial responsibilities; and distribution system crews are sparsely staffed and are unable to conduct preventive maintenance, *id.* at 12;
  - iii. operator turnover is high, and operators indicated instances of working up to 75 hours per week without receiving overtime pay, *id.*; and
  - iv. the utility does not have adequate plant and distribution system staff to perform preventative maintenance that could reduce overall operational costs of the system, *id.*; and
- h. Various water billing and metering issues persist and contribute to the City's loss of water-billing revenue (32 percent decrease since 2016) and loss of large customers (i.e., hospitals and local schools), *id.* at 12-13.

88. On July 29, 2022, MSDH issued a surface water systemwide BWN. The next day, the City issued its own surface water systemwide BWN. According to MSDH's notice,

[w]ater samples collected 7/28/2022 showed turbidity levels of 1.0 to 2.5 turbidity units. This is above the standard of 0.30 turbidity units. Due to these high levels of turbidity, there is an increased chance that the water may contain disease-causing organisms. . . . Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

89. Since EPA's initial inspection of the City's public drinking water system in February 2020, EPA has communicated regularly with the City to enforce SDWA compliance and provided assistance, including providing ongoing assistance from EPA's Compliance Advisor program; providing financial technical assistance and analysis from EPA's contractor; requesting documents and further information; and holding meetings between EPA and the City, including between EPA Region 4's Enforcement and Compliance Assurance Division Director and the Mayor.

#### **Complete Loss of Water Use in August and September 2022**

90. During the week of August 8, 2022, multiple raw water intake pumps failed at O.B. Curtis, impacting its ability to produce adequate quantities of water and causing a loss of pressure in the distribution system. In mid- to late August 2022, the City experienced record rainfalls, resulting in what has been reported as the second wettest August on record for the City of Jackson. Flooding exacerbated the pre-existing problems at O.B. Curtis by disturbing the water treatment process, clogging the filters, and preventing O.B. Curtis from producing potable water that could fill storage tanks and establish adequate water pressure in the distribution system. As a result of the decreased water pressure, many System users had no running water

and thus lost the ability to use water for basic safety and hygiene purposes such as washing hands, showering, flushing toilets, fighting fires, and washing dishes.

91. During the period of low pressure, many System users were dependent on alternative water sources supplied by the City and State and federal agencies or procured from other sources.

92. On August 29, 2022, the Mayor signed a Mayoral Proclamation of Local Emergency under Section 33-15-17(d) of the Mississippi Code of 1972, as amended, which defines an emergency as “any occurrence, or threat thereof, whether natural, technological, or man-made, in war or in peace, which results or may result in substantial injury or harm to the population or substantial damage to or loss of property,” Miss. Code Ann. § 33-15-5(h).

93. In proclaiming the existence of a local emergency, the Mayoral Proclamation referenced *inter alia* the March 27, 2020, SDWA Emergency Administrative Order and the July 1, 2021, SDWA Administrative Order on Consent.

94. On August 30, 2022, the Mississippi Governor issued Executive Order No. 1564 proclaiming under the State Constitution and Section 33-15-11(b)(17) of the Mississippi Code that “a State of Emergency exists in the City of Jackson, Mississippi and the surrounding areas of Hinds County that receive water from [O.B. Curtis] as a result of the total or near total loss of water pressure throughout that area” and ordering the deployment of the Mississippi National Guard to further response and recovery efforts.

95. On August 30, 2022, the President of the United States declared that an emergency exists in the State of Mississippi and ordered Federal assistance to supplement the State’s response efforts due to the emergency conditions resulting from the water crisis. The President’s action authorized the Federal Emergency Management Agency (FEMA) to coordinate all disaster relief



efforts which have the purpose of alleviating the hardship and suffering caused by the emergency on the local population, and to provide appropriate assistance for required emergency measures to save lives and to protect property and public health and safety, and to lessen or avert the threat of a catastrophe in Hinds County.

96. FEMA, EPA, and the United States Army Corps of Engineers have deployed to Jackson emergency responders, drinking water infrastructure experts, and others to respond to the emergency situation on the ground.

97. The State of Mississippi has taken various actions to address the existing emergency circumstances, including issuing an emergency order from MSDH (the “MSDH Emergency Order”) to the City on August 30, 2022. By its terms, the MSDH Emergency Order is in effect for not more than 120 days (i.e., no later than December 28, 2022), subject to 30-day extensions by the State Health Officer.

98. Among other things, the MSDH Emergency Order provides:

Notwithstanding the requirements of this Order, the City of Jackson shall continue to be responsible for compliance with the Safe Drinking Water Act [and] any U.S. EPA Emergency Administrative Orders . . . . Compliance with this Order shall not in any way be construed to relieve the City of Jackson from its obligations to comply with all provisions of federal, state, or local law.

99. Pursuant to the emergency declarations, a Unified Command consisting of representatives from the Mississippi Emergency Management Agency, MSDH, the City, EPA, FEMA, and the U.S. Army Corps of Engineers have taken a number of actions to restore and sustain water service to the City’s customers, including but not limited to:

- a. reestablishing raw water flow at both plants;
- b. restoring water tank levels and produced water volumes from both plants;

- c. integrating temporary operators from other states to assist within plant operations;
- d. granting provisional Class A licenses to two previously-licensed water operators at O.B. Curtis;
- e. repairing or procuring critical treatment equipment;
- f. increasing the facility maintenance capabilities at both plants in the short-term through use of mechanics, instrument technicians, electricians, and other workers from other states;
- g. engineering and developing a liquid soda-ash feed system for corrosion control treatment at O.B. Curtis;
- h. sourcing parts for both plants; and
- i. evaluating the winterization needs of the System.

100. On or about September 6, 2022, water pressure within the System and water service to System users was restored.

101. The July 29, 2022, BWN remained in effect until September 15, 2022.

102. Notwithstanding the actions that the State and the City have taken or will take to address the emergency situation, an imminent and substantial endangerment to the health of persons continues to exist.

103. From September 15, 2022, and through October 21, 2022, at least 16 more BWNs have been issued for various portions of the System.

104. The City has consistently experienced a shortage of certified Class A operators, maintenance personnel, and other key System personnel who can operate and maintain the System.

105. While System operations are currently being supplemented by contractors working under emergency, short-term contracts, this is not a long-term solution to the City's regulatory requirement to have a certified Class A operator onsite whenever O.B. Curtis and J.H. Fewell are in operation. *See* Miss. Admin. Code § 15-20-72.2.2.1(5).

106. The emergency response does not address all of the repairs and rehabilitation needed for O.B. Curtis and J.H. Fewell to ensure long-term compliance with the SDWA, including but not limited to full repair of the O.B. Curtis conventional and membrane filters.

107. The emergency response does not address all of the repairs and rehabilitation needed for the distribution system, which requires *inter alia* repairing or replacing failing lines, developing a standard operating procedure for exercising valves and hydrants, conducting continuous pressure monitoring in the distribution system to characterize pressure loss issues, and developing and implementing a flushing program to improve water quality.

108. The emergency response is not designed to address the City's financial and technical capacity shortfalls that have long hindered the City's ability to operate the System in compliance with the law and in a manner that ensures a reliable source of drinking water for System users. Absent appropriate relief, the City will continue to experience these shortfalls and the System's users remain at risk of losing water access and dealing with boil-water notices during severe weather events and during System failures.

109. As the Mayor stated when appearing on "Amanpour & Co." on September 6, 2022:

Until we have significant funding to deal with the challenges for the three decades' long of neglect and lack of investment in our water treatment facility, it's not a matter of if, but it's a matter of when these systems will fail again.

110. As the Mayor further stated when appearing on "Face the Nation" on September 11, 2022:

They [residents] have yet to have the boil water notice lifted, and so there are still concerns around the consumption of that water.

Right now, as many repairs and adjustments are taking place in the triage period of where we are at the water treatment facility. There's also investigatory sampling taking place. And so we believe that it's a matter of days, not weeks, before that boil water notice can be lifted.

But I would note this, that we have been here before, where we've been [able] to restore pressure. We've been able to lift boil water notices. But without the significant capital improvements to take place, it still is a matter of [when, not if] these things will happen again.

111. Therefore, while significant, the actions taken pursuant to the emergency response will not provide long-term, sustainable solutions to the City's drinking water system to a degree that will reliably protect the health of persons served by the System.

### **GENERAL ALLEGATIONS**

112. The City owns and operates the System.

113. The City is a "person" within the meaning of the SDWA, Mississippi SDWA, National Regulations, and State Regulations because it is a municipality. *See* 42 U.S.C. § 300f(12); 40 C.F.R. § 141.2; Miss. Code Ann. § 41-26-3(p); Miss. Admin. Code § 15-20-72-2.1.2.11.

114. The System's surface water system and groundwater system are each a "public water system" and a "community water system" within the meaning of the SDWA, Mississippi SDWA, National Regulations, and State Regulations because they each regularly serve at least 25 year-round residents. 42 U.S.C. § 300f(15); 40 C.F.R. § 141.2; Miss. Code Ann. §§ 41-26-3(c) and (q); Miss. Admin. Code §§ 15-20-72-1.1.2.10 and 15-20-72.-2.1.2.4.

115. As public water systems that are community water systems, the System's surface water system and groundwater system are each subject to the requirements of the National Regulations and the State Regulations. 40 C.F.R. § 141.1; 40 C.F.R. Part 141 *passim* (imposing requirements

on community water systems); Miss. Code Ann. § 41-26-5(2)(a); Miss. Admin Code § 15-20-72-1.1.4.

116. The City is a “supplier of water” within the meaning of the SDWA, Mississippi SDWA, National Regulations, and State Regulations because it owns and operates a public water system. *See* 42 U.S.C. § 300f(5); 40 C.F.R. § 141.2; Miss. Code Ann. § 41-26-3(s) (“supplier of water” means any person who owns or controls a public water system).

117. As a supplier of water, the City must comply with the National Regulations and the State Regulations. 40 C.F.R. Part 141 *passim* (imposing requirements on suppliers of water); Miss. Code Ann. § 41-26-15(b); Miss. Admin. Code § 15-20-72 *passim* (same).

118. The System’s surface water system is a Class A system because it is a system with surface water treatment, groundwater under the direct influence of surface water, lime softening, or coagulation and filtration for the removal of constituents other than iron or manganese. *See* Miss. Admin. Code § 15-20-72.2.2.1(5).

119. Sediment or other matter causing significant cloudiness in water, or high turbidity, is a “contaminant” within the meaning of the SDWA because it is a physical substance or matter in water. *See* 42 U.S.C. § 300f(6).

120. HAA5 is a “contaminant” within the meaning of the SDWA because it is a chemical substance or matter in water. *See* 42 U.S.C. § 300f(6).

121. Coliforms, *E. Coli*, *Cryptosporidium*, *Giardia*, *Legionella*, and viruses, pathogens, and bacteria are “contaminants” within the meaning of the SDWA because they are biological substances or matter in water. *See* 42 U.S.C. § 300f(6).

122. EPA is authorized to bring this civil action because on February 28, 2020, MSDH requested that EPA take the lead in the SDWA enforcement process with the City. *See* 42 U.S.C. § 300g-3(b)(2) (authorizing civil action if requested by state primacy agency).

**FIRST CLAIM FOR RELIEF**

Injunctive Relief to Abate an Imminent and Substantial Endangerment to Health  
(SDWA Section 1431, 42 U.S.C. § 300i)

123. Paragraphs 1 through 122 are realleged and incorporated by reference.

124. The EPA has received information that one or more contaminants, including at least sediment or other matter causing significant cloudiness in water, HAA5, coliforms, *E. Coli*, *Cryptosporidium*, *Giardia*, *Legionella*, or other viruses, pathogens, or bacteria, is present in or is likely to enter the System, which may present an imminent and substantial endangerment to the health of persons. Such information includes:

- a. the over 320 BWNs issued over the last two years, the vast majority which are caused by loss of pressure, as set forth in Attachment A;
- b. the nearly seven-week surface water systemwide BWN running from July 29, 2022, through September 15, 2022;
- c. the excessive number of line breaks in the System, which may create back siphonage capable of contaminating water in the System with contaminants outside the System;
- d. the heightened susceptibility to breakage and corrosion of aging, pre-1910 cast iron distribution lines in the System;
- e. the City's failure to adequately staff O.B. Curtis and J.H. Fewell with certified Class A operators;

- f. the City's failure to maintain equipment to ensure appropriate operation and maintenance of O.B. Curtis, J.H Fewell, and the distribution system;
- g. the City's failure to perform routine flushing of the distribution system;
- h. the infrequent cycling of storage tanks and poor mixing performance ratios;
- i. the frequent failures to maintain appropriate pH parameters as a corrosion control method;
- j. the failure of the System that began in August 2022 resulting in local, State, and federal emergency declarations and the loss of running water for many of the System's users for over a week;
- k. the City's recurring failures to implement an Alternative Water Source Plan following specified triggering events;
- l. the City's failure to comply with the Emergency Order; and
- m. the City's failure to comply with the Consent Order.

125. EPA has consulted with the State and local authorities to confirm the correctness of the information that contaminants are present in or are likely to enter the System, and to ascertain the actions that such authorities are or will be taking.

126. State and local actions have been insufficient to prevent the threat of additional failures in the System. *See* 42 U.S.C. § 300i(a) (allowing Section 1431 claims when, *inter alia*, state and local authorities have "not acted" in a manner that "protect[s] the health of persons"). Such failures are likely to continue to occur, whether under normal working conditions or in extreme weather events.

127. Under Section 1431(a) of the SDWA, 42 U.S.C. § 300i(a), the United States seeks an injunction to abate the imminent and substantial endangerment, including such relief as the Court



deems necessary to ensure the permanent and reliable provision of water, in compliance with the SDWA, to the System’s customers.

**SECOND CLAIM FOR RELIEF**

Failure to Staff O.B. Curtis and J.H. Fewell with Class A Operators at All Times  
(SDWA Section 1414, 42 U.S.C. § 300g-3; Miss. Admin. Code § 15-20-72.2.2.1(5))

128. Paragraphs 1 through 122 are realleged and incorporated by reference.

129. At both O.B. Curtis and J.H. Fewell, the City lacks sufficient certified Class A operators, necessitating unsustainable working conditions, supplemental coverage by non-operators who hold Class A licenses (e.g., a Deputy Director of Water Operations and an operations supervisor), and high turnover of operators.

130. Timesheets for just four months of operation this year show that, in at least 15 instances, J.H. Fewell did not have a certified Class A operator onsite while in operation:

<b>Date</b>	<b>Time</b>
June 5-6, 2022	8:18 p.m. – 6:52 a.m.
June 6-7, 2022	9:19 p.m. – 7:08 a.m.
June 11, 2022	7:00 a.m. – 10:00 a.m. 2:00 p.m. – 6:56 p.m.
June 12-13, 2022	7:13 p.m. – 6:55 a.m.
June 17, 2022	4:30 p.m. – 7:04 p.m.
June 18, 2022	7:00 a.m. – 7:04 p.m.
June 19-20, 2022	7:11 p.m. – 6:53 a.m.
June 21, 2022	4:00 a.m. – 6:57 a.m.
June 24, 2022	4:59 p.m. – 7:05 p.m.
June 25, 2022	7:01 a.m. – 7:05 p.m.
June 26-27, 2022	7:00 p.m. – 6:52 a.m.
June 28, 2022	4:03 a.m. – 6:55 a.m.
July 1, 2022	4:22 p.m. – 7:00 p.m.
July 2, 2022	7:00 a.m. – 3:09 p.m.

131. As documented in the July 2022 Assessment, the City has insufficient operators to, among other things, consistently staff three shifts a day, seven days per week.

132. On May 18, 2022, the City's then-Deputy Director of Water Operations emailed the then-Director of Public Works (cc-ing the Chief Administrative Officer and Chief Financial Officer), stating: "I worked 24 to 36 hours at OBC [O.B. Curtis] every Saturday and Sunday 7a-7p and Wednesday or Thursday night 7p-7a over six (6) months last year because of the Class A operator shortage. At this point, I am just worn down."

133. On November 16, 2021, the City Engineer emailed the Director of Human Resources, Chief Administrative Officer, Chief Financial Officer, and the then-Director of Public Works about the "low number of current licensed water operators." He wrote: "If we lose any additional operators at either plant a shutdown is unavoidable. We are in an emergency crisis. We are overworking our staff due to our low numbers that [sic] putting a lot of stress and strain on them. The lack of competitive pay is hindering our efforts to recruit new water operators."

134. In an October 27, 2021, memorandum from the City Engineer to the then-Director of Public Works, Chief Administrative Officer, Director of Human Resources, and a human resource officer titled "Recruitment and Retention Policy for Water Treatment Plants," the City Engineer stated:

The Department of Health requires a Class A Operator on duty during all hours of operations. We are facing a severe situation that needs to be addressed proactively. Currently, we have six class "A" licensed operators between the two plants that are in operations twenty-four (24) hours a day, 365 days a year. Our current operators are working more than one shift and covering empty shifts due [to] the shortage of Class A operators at each plant and working more than one job just to keep up with the cost of living in Jackson that in turn puts the city's water at risk by having tired semi alert operators watching the water process. This poses a safety hazard not only to the water process but our operators as well.

135. Thus, the City has not sufficiently staffed its System with certified Class A operators onsite at all times of operation, in violation of Miss. Admin. Code § 15-20-72.2.2.1(5).

136. Paragraph 39 of the Consent Order required the City to submit a Comprehensive Staffing Plan within 30 days of the Consent Order's effective date, i.e., no later than July 31, 2021. The Plan was required to *inter alia* identify how the City will ensure that a Class A operator is onsite at all times, including any backup plans in case staff are unavailable.

137. The City has not provided EPA with a Comprehensive Staffing Plan, in violation of Paragraph 39 of the Consent Order.

138. Under Section 1414(b) of the SDWA, 42 U.S.C. § 300g-3(b), the United States is entitled to injunctive relief to remedy the violations and, as appropriate, civil penalties. Unless enjoined by an order of the Court, violations of the State Regulations and the Consent Order are likely to continue and/or recur.

### **THIRD CLAIM FOR RELIEF**

#### Failures to Implement the Alternative Water Source Plan (SDWA Section 1431, 42 U.S.C. § 300i)

139. Paragraphs 1 through 122 are realleged and incorporated by reference.

140. EPA issued the 2020 Emergency Order to the City under Section 1431(a)(1) of the SDWA, 42 U.S.C. § 300i(a)(1).

141. As required by Paragraph 39.a of the Emergency Order, the City developed and submitted an Alternative Water Source Plan (“AWSP”) to EPA for review and approval. EPA approved the City’s May 21, 2020, AWSP. Among other things required by the AWSP, alternative water “must be made available at no cost to every person served by the System, as needed for drinking, cooking, maintaining oral hygiene, and dishwashing,” and the City must provide “at least one gallon per day, per person to every person served in the affected area.”

142. Under Paragraph 39.c.ii of the Emergency Order, the City must implement the AWSP for as long as any of the daily special purpose samples required under Paragraph 37 (CFE Turbidity Exceedance Events) or Paragraph 38 (Low Pressure/Loss of Pressure Events) of the Emergency Order receives a total coliform-positive sample result.

143. During the below seven boil-water-notice events, the System had a daily special purpose sample that was total-coliform positive, yet the City did not implement its AWSP:

<b>Boil Water Notice ID</b>	<b>Reason for Boil Water Notice</b>	<b>Dates of Boil Water Notice</b>
10-BWN-2020	Pressure loss due to valve replacement	August 6-11, 2020
37-BWN-2020	Pressure loss when contractor hit main line	August 13-19, 2020
41-BWN-2020	Pressure loss due to break on main line	August 23-25, 2020
84-BWN-2020	Pressure loss due to line break	December 23-30, 2020
19-BWN-2021	Pressure loss due to break on line	January 27-February 1, 2021
48-BWN-2021	Pressure loss due to blow out on main line	June 12-17, 2021
67-BWN-2021	Pressure loss due to malfunctioning valve	August 20-26, 2021

144. Thus, the City has failed to implement the AWSP when required, in violation of Paragraph 39 of the Emergency Order.

145. Under Section 1431(a) and (b) of the SDWA, 42 U.S.C. § 300i(a) and (b), the United States is entitled to injunctive relief to remedy the violations and, as appropriate, civil penalties. Unless enjoined by an order of the Court, violations of the Emergency Order are likely to recur.

#### **FOURTH CLAIM FOR RELIEF**

Exceedances of Turbidity Limits  
(SDWA Section 1414, 42 U.S.C. § 300g-3; 40 C.F.R. §§ 141.173(a)(2) and (a)(1);  
Miss. Admin. Code § 15-20-72.1.7.4)

146. Paragraphs 1 through 122 are realleged and incorporated by reference.

147. Under Subpart P (Enhanced Filtration and Disinfection – Systems Serving 10,000 or More People) of the National Regulations and the implementing State Regulations, the turbidity

level of representative samples of the System’s filtered water must at no time exceed 1 nephelometric unit (“NTU”). 40 C.F.R. § 141.173(a)(2) (setting forth turbidity requirements for systems using conventional filtration); Miss. Admin. Code § 15-20-72.1.7.4 (requiring compliance with 40 C.F.R. § 141.173).

148. The turbidity levels of filtered water samples from the System taken between February 18-23, 2021, exceeded 1 NTU, in violation of 40 C.F.R. § 141.173(a)(2) and Miss. Admin. Code § 15-20-72.1.7.4.

149. The turbidity levels of filtered water samples from the System taken on June 27 and 28, 2022, exceeded 1 NTU—ranging as high as 7.5 NTU—in violation of 40 C.F.R. § 141.173(a)(2) and Miss. Admin. Code § 15-20-72.1.7.4.

150. The turbidity levels of filtered water samples from the System taken on July 18, 2022, exceeded 1 NTU—ranging as high as 2.5 NTU—in violation of 40 C.F.R. § 141.173(a)(2) and Miss. Admin. Code § 15-20-72.1.7.4.

151. Under Subpart P (Enhanced Filtration and Disinfection – Systems Serving 10,000 or More People) of the National Regulations and the implementing State Regulations, the turbidity level of representative samples of the System’s filtered water must be less than or equal to 0.3 NTU in at least 95% of the measurements taken each month. 40 C.F.R. § 141.173(a)(1); Miss. Admin. Code § 15-20-72-1.7.4.

152. In February 2021, the System failed to meet that standard, in violation of 40 C.F.R. § 141.173(a)(1) and Miss. Admin. Code § 15-20-72-1.7.4. Specifically:

- a. At O.B. Curtis, only 75% of the turbidity measurements were less than or equal to 0.3 NTU; and

- b. At J.H. Fewell, only 93% of the turbidity measurements were less than or equal to 0.3 NTU.

153. Under Section 1414(b) of the SDWA, 42 U.S.C. § 300g-3(b), the United States is entitled to injunctive relief to remedy the violations and, as appropriate, civil penalties. Unless enjoined by an order of the Court, violations of the National Regulations and the State Regulations are likely to recur.

#### **FIFTH CLAIM FOR RELIEF**

##### Failure to Timely Proceed with General Filter Rehabilitation at J.H. Fewell (SDWA Section 1414, 42 U.S.C. § 300g-3)

154. Paragraphs 1 through 122 are realleged and incorporated by reference.

155. To address turbidity exceedances at J.H. Fewell and as required by task no. 6 of the Consent Order's CERP, the City developed an initial scope of work to rehabilitate the filters at J.H. Fewell in order to return them to fully operational and functional status. *See* Consent Order at Appendix A (CERP), task no. 6. Upon EPA approval of the scope of work, the CERP would be updated to include the individual tasks and timeframe. *Id.*

156. EPA approved the City's initial scope of work for the general filters on December 13, 2021, and a revised scope of work on February 4, 2022. Under task no. 6.B of the scope of work, the City agreed to issue a notice to proceed to begin the engineering design process within eight months of the City's execution of Drinking Water State Revolving Fund ("DWSRF") Loan No. 3.

157. The City and the State executed DWSRF Loan No. 3 on September 30, 2021, so the notice to proceed to begin the engineering design process was due to be issued by May 30, 2022.

158. On April 4, 2022, the City requested an extension and proposed to start the design process on July 1, 2023. EPA denied this extension.

159. Thus, the City has not timely issued the notice to proceed to begin the engineering design process and has not timely begun the design process to rehabilitate the general filters at J.H. Fewell, in violation of Paragraph 40 and task no. 6 of the CERP (Appendix A) of the Consent Order.

160. Under Section 1414(b) of the SDWA, 42 U.S.C. § 300g-3(b), the United States is entitled to injunctive relief to remedy the violation and, as appropriate, civil penalties. Unless enjoined by an order of the Court, violations of the Consent Order are likely to continue.

### **SIXTH CLAIM FOR RELIEF**

Failure to Install Corrosion Control Treatment  
(SDWA Section 1414, 42 U.S.C. § 300g-3; 40 C.F.R. §§ 141.80(e) and 141.83;  
Miss. Admin. Code § 15-20-72.1.3.2)

161. Paragraphs 1 through 122 are realleged and incorporated by reference.

162. Under Subpart I (Control of Lead and Copper) of the National Regulations and the implementing State Regulations, the System's lead action level is exceeded if the concentration of lead in more than 10% of tap water samples collected during any monitoring period is greater than 0.015 mg/L (i.e., if the 90th percentile lead level is greater than 0.015 mg/L). 40 C.F.R. § 141.80(c); Miss. Admin Code § 15-20-72.1.3.2 (incorporating National Regulations on lead and copper).

163. When the lead action level is exceeded, the System shall implement all applicable source water treatment requirements specified by the State under 40 C.F.R. § 141.83. 40 C.F.R. § 141.80(e). Under 40 C.F.R. § 141.83, the System must complete source water monitoring and make treatment recommendations to the State within 180 days after the end of the monitoring period during which the lead action level was exceeded. 40 C.F.R. § 141.83(a)(1). The State

then makes a determination regarding source water treatment and, if necessary, may require the public water system to install and operate such treatment. 40 C.F.R. § 141.83(a)(2)-(3).

164. The System exceeded the lead action level of 0.015 mg/L for the monitoring periods of January-June 2015, January-June 2016, and July-December 2016.

165. MSDH issued a compliance plan to the City on February 12, 2016, to address the lead action level exceedances.

166. The City conducted an optimal corrosion control treatment (“OCCT”) study between October 2016 and April 2017 and provided the recommended treatment technique to MSDH on June 13, 2017.

167. MSDH concurred with the recommended treatment technique and set a deadline of May 31, 2019, for the City to complete installing the treatment at J.H. Fewell. At the City’s request, MSDH later extended the deadline to December 29, 2019.

168. The City has not completed installing OCCT at J.H. Fewell, in violation of the National Regulations and the State Regulations. *See* 40 C.F.R. §§ 141.80(e) and 141.83; Miss. Admin. Code § 15-20-72.1.3.2.

169. Under Section 1414(b) of the SDWA, 42 U.S.C. § 300g-3(b), the United States is entitled to injunctive relief to remedy the violation and, as appropriate, civil penalties. Unless enjoined by an order of the Court, violations of the National Regulations and the State Regulations are likely to continue.

### **SEVENTH CLAIM FOR RELIEF**

Exceedances of Maximum Contaminant Level for HAA5  
(SDWA Section 1414, 42 U.S.C. § 300g-3; 40 C.F.R. § 141.64(b)(2);  
Miss. Admin. Code § 15-20-72.1.2.6)

170. Paragraphs 1 through 122 are realleged and incorporated by reference.



171. Under Subpart G (Maximum Contaminant Levels and Maximum Residual Disinfectant Levels) of the National Regulations and the implementing State Regulations, the maximum contaminant level for HAA5 is 0.060 mg/L, or 60 µg/L, determined as a locational running annual average at each monitoring location. 40 C.F.R. § 141.64(b); Miss. Admin. Code § 15-20-72.1.2.6 (applying 40 C.F.R. § 141.64 to public water systems). The “locational running annual average” is the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. 40 C.F.R. § 141.2. The maximum contaminant level for HAA5 is a health-based standard, as HAA5 may cause an increased risk of cancer when ingested long term.

172. The HAA5 locational running annual average at one monitoring site in the System’s distribution system for the 4th Quarter of 2020 was 0.066 mg/L, or 66 µg/L.

173. The HAA5 locational running annual average at one monitoring site in the System’s distribution system for the 1st Quarter of 2021 was 0.065 mg/L, or 65 µg/L.

174. Thus, the City exceeded the maximum contaminant level for HAA5, in violation of 40 C.F.R. § 141.64(b) and Miss. Admin. Code § 15-20-72.1.2.6.

175. Under Section 1414(b) of the SDWA, 42 U.S.C. § 300g-3(b), the United States is entitled to injunctive relief to remedy the violations and, as appropriate, civil penalties. Unless enjoined by an order of the Court, violations of the National Regulations and the State Regulations are likely to recur.

**PRAYER FOR RELIEF**

WHEREFORE, Plaintiff the United States prays that this Court:

1. Enter an injunction requiring the City to abate any conditions of its public drinking water system that may present an imminent and substantial endangerment to human health;
2. Enter an injunction requiring the City to comply with the SDWA, including the National Regulations and the State Regulations;
3. Enter an injunction requiring the City to comply with the EPA Orders;
4. Enter a money judgment, as appropriate, for civil penalties; and
5. Grant such other relief as this Court deems just and proper.

Respectfully submitted,

TODD KIM  
Assistant Attorney General  
Environment and Natural Resources Division  
U.S. Department of Justice

Dated: November 29, 2022

/s/ Karl Fingerhood  
KARL FINGERHOOD (PA Bar No. 63260)  
ANGELA MO (CA Bar No. 262113)  
STEFAN J. BACHMAN (SC Bar No. 102182)  
DEVON LEA FLANAGAN (VA Bar No. 87444)  
Attorneys  
Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611  
Washington, D.C. 20044-7611  
Tel: (202) 514-7519  
Fax: (202) 616-2427  
Email: Karl.Fingerhood@usdoj.gov  
Angela.Mo@usdoj.gov  
Stefan.Bachman@usdoj.gov  
Devon.Flanagan@usdoj.gov

DARREN J. LAMARCA  
United States Attorney for the  
Southern District of Mississippi

ANGELA GIVENS WILLIAMS  
Chief, Civil Division  
Assistant United States Attorney

Dated: November 29, 2022

/s/ Jennifer Case  
JENNIFER CASE (MS Bar No. 104238)  
Assistant United States Attorney  
United States Attorney's Office  
501 East Court Street, Suite 4.430  
Jackson, Mississippi 39201  
Tel: (601) 965-4480

OF COUNSEL:

SUZANNE RUBINI  
SUZANNE ARMOR  
MICHELE WETHERINGTON  
United States Environmental Protection Agency  
Region 4  
61 Forsyth Street S.W.  
Atlanta, Georgia 30303

JAMES VINCH  
United States Environmental Protection Agency  
Office of Enforcement and Compliance Assurance  
1200 Pennsylvania Avenue, N.W.  
Washington, D.C. 20460

Attachment A  
Summary of Boil-Water Notices

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
<b>2020 (Beginning with May 1)</b>						
001	<b>01-BWN-2020</b>	5/1/2020	5/6/2020	[100-299] Windsor Dr.; 39209 [100-199] Clinton Circle; 39209	40	Loss in water pressure
002	<b>02-BWN-2020</b>	5/1/2020	5/6/2020	[100-199] Angle Dr.; 39204	5	Loss in water pressure
003	<b>03-BWN-2020</b>	5/3/2020	5/6/2020	[3900-4299] Crane Blvd.; 39216	20	Loss in water pressure
004	<b>04-BWN-2020</b>	5/3/2020	5/6/2020	[300-699] Lawrence Road; 39206	50	Loss in water pressure
005	<b>05-BWN-2020</b>	5/7/2020	5/11/2020	[1800-1899] Russell Lane; 39213	5	Loss in water pressure
006	<b>06-BWN-2020</b>	5/11/2020	5/14/2020	[200-299] East Pascagoula St.; 39201	5	Loss in water pressure
007	<b>07-BWN-2020</b>	5/11/2020	5/14/2020	[100-199] Scottdale Dr.; 39212 [1-19] Rob Lane; 39212	50	Loss in water pressure
008	<b>08-BWN-2020</b>	5/12/2020	5/15/2020	[3600-3799] Gammill Street; 39213	25	Loss in water pressure
009	<b>02-BWN-2020</b>	5/13/2020	5/15/2020	[300-399] Ridgelea Rd.; 39272 [2200-2299] W. Ridge Rd.; 39272 [2000-2199] S. Ridge Rd.; 39272 [1900-1999] E. Ridge Rd.; 39272 [600-699] Bob White Rd.; 39272 [1800-1899] Turtle Rd.; 39272 [800-899] Meadow Lane; 39272 [100-199] Lure Ave.; 39272 [1100-1399] Lake Shore Dr.; 39272 [1-99] Pike Ave.; 39272 [1500-1599] Park Ave.; 39272 [1400-1499] Oak Ave.; 39272 [700-799] Mary Lane; 39272 [1600-1699] Rod St.; 39272 [500-599] Reel St.; 39272 [900-999] Hook St.; 39272 [1000-1099] Horse Shoe Circle; 39272 [400-499] Line St.; 39272 [1700-1799] Spinning St.; 39272	500	Loss in water pressure
010	<b>09-BWN-2020</b>	5/21/2020	5/26/2020	[3100-3199] Oak Forest Dr.; 39212	25	Loss in water pressure
011	<b>10-BWN-2020</b>	5/22/2020 (re-issued 5/23/2020)	5/27/2020	[1200-1999] Petit Bois St. N.; 39211 [2000-2099] Petit Bois St. S.; 39211	40	Loss in water pressure
012	<b>11-BWN-2020</b>	5/23/2020	5/28/2020	[1000-1199] Arbor Vista Blvd.; 39209	50	Loss in water pressure
013	<b>12-BWN-2020</b>	5/24/2020	5/28/2020	[1700-1799] Cheswood Dr.; 39204	20	Loss in water pressure
014	<b>13-BWN-2020</b>	5/25/2020	5/27/2020	[900-1199] Larkspur St.; 39213 [900-1199] Carnation St.; 39213 [3100-3299] Albermarle Rd.; 39213 [1600-1699] Ashdown St.; 39213 [3200-3599] Holmes Ave.; 39213	125	Loss in water pressure
015	<b>14-BWN-2020</b>	5/31/2020	6/2/2020	[3600-3899] Lee Drive; 39212	30	Loss in water pressure
016	<b>15-BWN-2020</b>	5/31/2020	6/2/2020	[5700-5799] Beechcrest Court; 39211	15	Loss in water pressure
017	<b>16-BWN-2020</b>	6/3/2020	6/5/2020	[100-299] Colonial Circle; 39211 [5600-5699] Clubview Dr.; 39211 [100-199] Parkway Dr.; 39211 [100-299] South Park Dr.; 39211	80	Loss in water pressure

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
018	03-BWN-2020	6/10/2020	6/13/2020	[2100-4299] Raymond Rd.; 39212 [100-2299] Maddox Rd.; 39212 [6000-7699] Channel 16 Way; 39212 [3000-3199] Forest Hill Rd.; 39212 [100-199] Leggett Dr.; 39212 [100-199] S. EnterpriseSt.; 39212 [100-199] Timberlawn Rd.; 39212 [100-299] Plummer Circle; 39212 [100-199] Del Ray Dr.; 39212 [100-199] Portwood Dr.; 39212 [100-199] Rebel Circle; 39212 [100-299] Forest Hill Dr.; 39212 [100-199] Waywood Dr.; 39212 [100-599] Cedarwood Dr.; 39212 [100-599] Sharon Hills Dr.; 39212 [100-199] Fairoaks Cove; 39212 [100-199] Waxwing Dr.; 39212 [100-399] Woodcliff Dr.; 39212 [300-499] Briar Vista; 39212 [500-599] Winnwood; 39212 [400-599] Greenmont Dr.; 39212 [300-399] Cedarwood Dr.; 39212 [100-299] Carriage Hills Dr.; 39212 [100-199] Farmington St.; 39212 [100-199] Yorkshire; 39212 [100-199] Riderwood Dr.; 39212 [100-199] Surrey Dr.; 39212	600	Loss in water pressure
019	04-BWN-2020	6/10/2020	6/13/2020	[100-299] Handley Blvd.; 39272 [500-599] Towne Center Blvd.; 39272	10	Loss in water pressure
020	17-BWN-2020	6/10/2020	6/13/2020	[100-199] Kolb Ave.; 39209	30	Loss in water pressure
021	18-BWN-2020	6/11/2020	6/13/2020	[2600-3099] Coleman Ave.; 39213	Not available	Loss in water pressure
022	19-BWN-2020	6/18/2020	6/20/2020	[100-299] Queen Anne Lane; 39209	30	Loss in water pressure
023	20-BWN-2020	6/20/2020	6/23/2020	[700-799] Belhaven Street; 39202	10	Loss in water pressure
024	21-BWN-2020	6/20/2020	6/23/2020	[1000-1399] Peachtree Street; 39202	5	Loss in water pressure
025	22-BWN-2020	6/29/2020	7/1/2020	[1000-1099] Whitworth St; 39202	25	Loss in water pressure
026	05-BWN-2020	6/30/2020	7/4/2020	[2200-2799] Greenway Dr.; 39209 [5200-5299] Greenway Dr. Extd.; 39209 [4800-5999] MS-18; 39209	50	Loss in water pressure
027	23-BWN-2020	7/2/2020	7/7/2020	[1000-1799] University Blvd.; 39204 [800-999] West Porter St.; 39204 [800-1099] Winter St.; 39204 [800-899] Evergreen Ave.; 39204 [900-999] Peabody St.; 39204 [600-799] Cherry St.; 39204	100	Loss in water pressure
028	24-BWN-2020	7/8/2020	7/10/2020	[100-199] Northcliff Dr.; 39211 [1-99] Highland Meadows; 39211 [1-99] Pondsides Dr.; 39211	40	Loss in water pressure
029	25-BWN-2020	7/12/2020	7/15/2020	[1800-1899] Westover Street; 39209	15	Loss in water pressure
030	26-BWN-2020	7/12/2020	7/15/2020	[800-899] Beechwood Court; 39206	Not available	Loss in water pressure
031	27-BWN-2020	7/13/2020	7/16/2020	[1500-1599] Peachtree St.; 39202	5	Loss in water pressure
032	06-BWN-2020	7/17/2020	7/24/2020	39170 39209 39212 39272  Corrected to: TV Road between Maddox and Highway 18 Maddox Road from Highway 18 to Raymond Road Brookhollow Subdivision Cedar Hills Subdivision	25 (corrected to 3,000)	Loss in water pressure

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
033	29-BWN-2020	7/17/2020	7/22/2020	[701-799] Ewing St. [1100-1200] Lewis St. [301-499] Line St.	30	Loss in water pressure
034	01 CWN 2020	7/19/2020	Not available	The City of Jackson in Zip Codes 39170, 39209, 39212, 39272	All customers being served by the City of Jackson Maddox Well System	Low Flow in the City's well system
035	30-BWN-2020	7/24/2020	7/30/2020	[2000-2400] East Northside Dr. [4600-4700] Trawick Dr.	Not available	Loss in water pressure
036	31-BWN-2020	7/27/2020 (corrected 8/1/2020)	8/5/2020	[1700-1900] Hamilton Blvd. [1700-1900] Northwood Cr. [1100-1500] Beasley Road [5400-6400] Watkins Drive [1200-1300] Echelon Parkway [5700-6500] Livingston Road [1300-1700] West County Line Road Lakeover Subdivision  Corrected to: [1700-3899] Beasley Road; 39213 [5900-6599] Livingston Road; 39213 Lakeover Subdivision Richwood Estates Subdivision Richwood III Estates Subdivision	200 (corrected to 500)	Loss in water pressure
037	07-BWN-2020	7/30/2020	8/3/2020	[2200-2799] Maddox Road; 39209	40	Loss in water pressure
038	32-BWN-2020	8/2/2020	8/5/2020	[200-299] Raymond Road; 39204	10	Loss in water pressure
039	08-BWN-2020	8/3/2020	8/5/2020	Sunkist Subdivision off Rainey Road North Valley Falls Road South Valley Falls Road Glenstone Circle Clayton Place	100	Loss in water pressure
040	33-BWN-2020	8/6/2020	8/7/2020	[1200-1899] North State Street; 39202	30	Loss in water pressure
041	35-BWN-2020	8/7/2020	8/11/2020	[1600-1999] Lamar Street; 39202 [300-399] Adelle Street; 39202	25	Loss in water pressure
042	09-BWN-2020	8/11/2020	8/14/2020	[100-499] Riverbend Dr.; 39272	100	Loss in water pressure
043	10-BWN-2020 (was 34-BWN-2020)	8/11/2020 (originally 8/6/2020)	8/11/2020	6672 Terry Road; 39170	1	Loss in water pressure
044	36-BWN-2020	8/12/2020	8/14/2020	[400-799] Daniel Circle; 39212 [3100-3199] Bilgray Dr.; 39212 [3100-3199] Adrienne Dr.; 39212	120	Loss in water pressure
045	37-BWN-2020	8/13/2020	8/19/2020	[5100-5299] Kaywood Dr.; 39211	20	Loss in water pressure
046	38-BWN-2020	8/16/2020	8/22/2020	[4000-4199] Northview Dr.; 39206 [100-299] Triangle Dr.; 39206	20	Loss in water pressure
047	39-BWN-2020	8/21/2020	8/25/2020	[200-299] South Canton Club Circle; 39211	20	Loss in water pressure
048	11-BWN-2020	8/23/2020	8/25/2020	[5300-5699] Shaw Road; 39209	20	Loss in water pressure
049	40-BWN-2020	8/23/2020	8/25/2020	[800-1099] North West Street; 39202	20	Loss in water pressure

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
050	41-BWN-2020	8/23/2020	8/25/2020 (8/27/2020 for West Hill Drive: 39202)	[5300-5699] Clinton Blvd., [100-499] Magnolia Rd., [100-599] North Flag Chapel Rd., [100-399] Westhaven Blvd., Westwick Apts, Windsor Park Apts., Knob Hill Dr., Glen Rose Dr., Bayberry Dr., Wild Flower Dr., Melba Hill Dr., Wood Rose Terrace, Magnolia Dr., Magnolia Cir., Highwood Dr., York Dr., Delano Dr., Glenco Ave., West Hill Dr., Lowder Dr., Rich Dr., Queen Elanor Ln., Queen Christina Ln., Queen Ct., Queen Julianna Ln., Queen Theresa Ln., Queen Marie Ln., Queen Esther Ln., Queen Park Cir., Mattox St., Queen Alma Ln., Queen Andria Ln., Ginger Dr., Bonita Dr., Queen Mary Ln., Queen Anne Ln., Queen Elizabeth Ln., Queen Victoria Ln., Queen Isabella Ln., Queen Maud Ln., Queen Alexandria Ln., Queen Margaret Ln., Queen Cir., Queen Joanna Ln., Queen Josephine Ln., W. Lane Dr., Hayes Dr., Loden Pl., N. Windsor Dr., S. Windsor Dr., Wynndyke Rd., Wynndyke Cir., Ladd St., Sheronn St., Chalet Ave., Speights St., Riffle Ave.	1000	Loss in water pressure
051	42-BWN-2020	8/24/2020	8/26/2020	[2100-2399] Lake Circle; 39211 [1900-2099] Eastbourne Pl.; 39211 [3900-3999] Restbrook Pl; 39211 [3900-3999] Rhymes Pl.; 39211	30	Loss in water pressure
052	43-BWN-2020	8/25/2020	8/27/2020	[2400-2499] Prosperity Street; 39213	15	Loss in water pressure
053	44-BWN-2020	8/26/2020	8/28/2020	[500-599] Woodland Hills Place; 39216	15	Loss in water pressure
054	45-BWN-2020	8/31/2020	9/5/2020	[4600-5499] I-55 North Frontage Road; 39206	35	Loss in water pressure
055	46-BWN-2020	9/5/2020	9/10/2020	[100-299] Fredrica Ave.; 39209 [2300-2499] Clinton Ave.; 39209	40	Loss in water pressure
056	47-BWN-2020	9/13/2020	9/15/2020	[100-199] Chatham Circle; 39206	30	Loss in water pressure
057	48-BWN-2020	9/17/2020	9/21/2020	[5800-5899] North Commerce Plaza; 39206 [5700-5799] Gallant Dr.; 39206	20	Loss in water pressure
058	49-BWN-2020	9/20/2020	9/23/2020	[100-299] Northside Dr.; 39206 [300-499] Northside Cir.; 39206 [3900-3999] Hanging Moss Rd.; 39206 [100-299] Triangle Dr.; 39206 [4000-4199] Northview Dr.; 39206	80	Loss in water pressure
059	12-BWN-2020	9/22/2020	9/23/2020	[6000-6399] MS-18; 39212 [2000-2999] N. Siwell Road; 39212 [3700-4099] S. Siwell Road; 39212 [1000-1799] McCluer Road; 39212 [3000-3799] Forest Hill Road; 39212 [2500-4599] Raymond Road; 39212 [100-2699] Maddox Road; 39209 Willowood Subdivision Cedar Hills Subdivision Oak Creek Subdivision Pecan Acres Subdivision Windsor Forest Subdivision	1000	Loss in water pressure
060	50-BWN-2020	9/22/2020	9/24/2020	[900-1099] Combs St.; 39204	50	Loss in water pressure
061	51-BWN-2020	9/23/2020	9/25/2020	[400-499] East Ridgeway Street; 39206	25	Loss in water pressure
062	52-BWN-2020	10/4/2020	10/6/2020	[1900-2099] Eastbourne Pl.; 39211 [3900-3999] Rhymes Pl.; 39211	15	Loss in water pressure
063	53-BWN-2020	10/5/2020	10/7/2020	[4000-4199] Northview Dr.; 39206 [100-299] Triangle Dr.; 39206	20	Loss in water pressure
064	54-BWN-2020	10/5/2020	10/7/2020	[100-199] Louisiana Ave.; 39209	15	Loss in water pressure
065	55-BWN-2020	10/6/2020	10/8/2020	[3900-3999] Roxbury Road; 39211	15	Loss in water pressure



BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
066	56-BWN-2020	10/6/2020	10/8/2020	[400-499] Dunbar St.; 39216	15	Loss in water pressure
067	57-BWN-2020	10/13/2020	10/15/2020	[4100-4599] Hanging Moss Rd.; 39206 [200-399] Iris Ave.; 39206 [400-499] Meadow Moss Rd.; 39206 [4100-4399] Oaklawn Dr.; 39206	100	Loss in water pressure
068	13-BWN-2020	10/14/2020	10/17/2020	[100-299] Carriage Hills Dr.; 39212 [100-199] Yorkshire; 39212 [100-199] Farmington St.; 39212	50	Loss in water pressure
069	58-BWN-2020	10/15/2020	10/17/2020	[1500-1699] Myrtle St.; 39202	15	Loss in water pressure
070	59-BWN-2020	10/15/2020	10/17/2020	[1800-1899] Linden Pl.; 39202	10	Loss in water pressure
071	60-BWN-2020	10/26/2020	10/29/2020	[2000-2099] Petit Bois St. South; 39211	20	Loss in water pressure
072	61-BWN-2020	10/27/2022	10/29/2020	[400-799] Benning Road; 39206	60	Loss in water pressure
073	62-BWN-2020	10/27/2020	11/7/2020	[1900-2099] Pleasant Ave.; 39203/39213	Not available	Loss in water pressure
074	63-BWN-2020	11/16/2020	11/18/2020	[100-199] Sidway Street; 39202	15	Loss in water pressure
075	64-BWN-2020	11/17/2020	11/19/2020	[100-399] McTyere Ave.; 39202 [1800-1899] Wightman St.; 39202	40	Loss in water pressure
076	65-BWN-2020	11/17/2020	11/19/2020	[400-599] East Woodrow Wilson Dr.; 39216	20	Loss in water pressure
077	14-BWN-2020	11/18/2020	11/20/2020	[100-1999]; N. Siwell Road; 39209 [1000-1199] Davis Cove; 39209	20	Loss in water pressure
078	66-BWN-2020	11/30/2020	12/3/2020	[1200-1599] Pittsburg Street; 39203	30	Loss in water pressure
079	67-BWN-2020	11/30/2020	12/3/2020	[2400-2499] East Northside Drive; 39211 [4600-4699] East Cheryl Drive; 39211	35	Loss in water pressure
080	68-BWN-2020	12/1/2020	12/3/2020	[3900-4299] Crane Blvd; 39216	20	Loss in water pressure
081	69-BWN-2020	12/2/2020	12/4/2020	[3900-3999] Roxbury Road; 39211	15	Loss in water pressure
082	70-BWN-2020 (71-BWN-2020 was combined and rescinded)	12/3/2020 (revised 12/3/2020)	12/4/2020	[2200-2399] Terry Road; 39204 [100-399] Shadowlawn Drive; 39204  Revised to include: [2100-2399] Oakhurst Dr; 39204 [100-299] Alta Woods Blvd; 39204	80	Loss in water pressure
083	72-BWN-2020	12/4/2020	12/8/2020	[2700-2999] Duane St.; 39209 [900-1099] Terrace Ave.; 39209 [900-1099] Wynwood Dr.; 39209	60	Loss in water pressure
084	73-BWN-2020	12/4/2020	12/8/2020	[3700-3799] Hawthorn Drive; 39216	5	Loss in water pressure
085	15-BWN-2020	12/5/2020	12/8/2020	Western Hill Subdivision; 39212 Western Hills Drive Old Spanish Trail Sundown Trail Hillandale Drive	225	Loss in water pressure
086	74-BWN-2020	12/6/2020	12/8/2020	[400-499] Dunbar Street; 39216	20	Loss in water pressure
087	75-BWN-2020	12/9/2020	12/11/2020	[1600-2099] Robinson Road; 39209	60	Loss in water pressure
088	76-BWN-2020	12/9/2020	12/11/2020	[1000-1199] John R. Lynch Street; 39203	20	Loss in water pressure
089	77-BWN-2020	12/10/2020	12/13/2020	[2400-2499] Courtview St.; 39213	20	Loss in water pressure
090	78-BWN-2020	12/10/2020	12/13/2020	[3000-3399] Oxford Ave.; 39216 [3000-3299] Downing St.; 39216 [3000-3099] Windsor Ave.; 39216 [300-499] Hartfield St.; 39216	50	Loss in water pressure
091	79-BWN-2020	12/11/2020	12/15/2020	[5700-5799] Bayberry Dr.; 39209	5	Loss in water pressure
092	80-BWN-2020	12/14/2020	12/16/2020	[700-4599] Kirkley Dr.; 39206 [4500-4599] Kirkley Circle; 39206	40	Loss in water pressure
093	81-BWN-2020	12/15/2020	12/17/2020	[900-999] Morningside Street; 39202	15	Loss in water pressure

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
094	82-BWN-2020	12/16/2020	12/18/2020	[1900-1999] Petit Bois Street North; 39211 [2000-2099] Petit Bois Street South; 39211	40	Loss in water pressure
095	83-BWN-2020	12/18/2020	12/22/2020	[800-1099] Briarfield Dr.; 39211 [5400-5599] Melwood Dr.; 39211 [900-999] Park Lane; 39211	75	Loss in water pressure
096	84-BWN-2020	12/23/2020	12/30/2020	[4000-4399] Council Circle; 39206	30	Loss in water pressure
097	86-BWN-2020	12/25/2020	12/29/2020	[900-1199] Wiggins Street; 39203	25	Loss in water pressure
098	87-BWN-2020	12/26/2020	12/29/2020	[2200-2299] Sloane Street; 39204 [1300-1399] Sharon Drive; 39204	30	Loss in water pressure
099	88-BWN-2020	12/26/2020	12/29/2020	[1400-1599] Peachtree Street; 39202	5	Loss in water pressure
100	89-BWN-2020	12/27/2020	12/29/2020	[5000-5199] Wayneland Drive; 39211	10	Loss in water pressure
101	16-BWN-2020 (was 85-BWN-2020)	12/28/2020	12/29/2020	[200-299] Sundown Trail; 39212 [100-399] Old Spanish Trail; 39212	90	Loss in water pressure
102	90-BWN-2020	12/28/2020	12/30/2020	[100-299] Windsor Drive; 39209	25	Loss in water pressure
103	91-BWN-2020	12/29/2020	1/6/2021	[200-299] Gaddis Street; 39216 [3000-3199] Downing St.; 39216	25	Loss in water pressure
104	92-BWN-2020	12/30/2020	1/5/2021	[2200-2799] St. Charles Street; 39209	50	Loss in water pressure
105	93-BWN-2020	12/30/2020	1/6/2021	[1300-1499] Kimwood Dr.; 39211 [1500-1599] Kimwood Circle; 39211	50	Loss in water pressure
<b>2021</b>						
106	01-BWN-2021	1/6/2021	1/11/2021	[4600-4699] I-55 North Frontage Road (East Side); 39211 [100-399] Maywood Circle; 39211 [4600-4699] Kelton Drive; 39211	50	Loss in water pressure
107	02-BWN-2021	1/6/2021	1/8/2021	[1100-1199] North Jefferson Street; 39202 [900-1199] Manship Street; 39202 [1100-1299] Kenwood Place; 39202	50	Loss in water pressure
108	03-BWN-2021	1/7/2021	1/11/2021	[300-399] Park Lane; 39212	12	Loss in water pressure
109	04-BWN-2021	1/8/2021	1/13/2021	[3000-4099] Country Club Dr.; 39213	12	Loss in water pressure
110	05-BWN-2021	1/8/2021	1/13/2021	[3300-3499] Edwards Ave.; 39213	25	Loss in water pressure
111	06-BWN-2021	1/9/2021	1/13/2021	[1400-1499] Lelia Dr.; 39216 [2500-2699] Lakeward Dr.; 39216 [2700-3399] Lakeland Terrace; 39216 [1500-1699] Lakeside Dr.; Dr; 39216	15	Loss in water pressure
112	07-BWN-2020 [sic]	1/9/2021	1/13/2021	[1300-1499] Kimwood Dr.; 39211 [1500-1599] Kimwood Circle; 39211	50	Loss in water pressure
113	08-BWN-2021	1/9/2021	1/13/2021	[1000-1199] North Jefferson St.; 39202 [900-1199] Manship Street; 39202 [1100-1299] Kenwood Place; 39202	45	Loss in water pressure
114	09-BWN-2021	1/10/2021	1/13/2021	[400-599] Fryant Ave.; 39209 [2400-2699] Latimer Ave.; 39209	25	Loss in water pressure
115	10-BWN-2021	1/11/2021	1/13/2021	[1300-1399] Greymont Ave.; 39202	10	Loss in water pressure
116	11-BWN-2021	1/12/2021	1/13/2021	[100-199] East Capitol Street; 39201	10	Loss in water pressure
117	01-BWN-2021	1/15/2021	1/20/2021	5610 Shaw Road; 39209 Park Springs Apartment	1	Loss in water pressure
118	12-BWN-2021	1/16/2021	1/20/2021	[400-699] West McDowell Road; 39204 [2800-3099] Greenview Dr.; 39212	75	Loss in water pressure
119	13-BWN-2021	1/16/2021	1/20/2021	[5400-5599] Robinson Road Ext.; 39204 [100-199] Colony Square; 39204	60	Loss in water pressure
120	14-BWN-2021	1/18/2021	1/20/2021	[4100-4299] El Paso Street; 39206	40	Loss in water pressure
121	15-BWN-2021	1/18/2021	1/20/2021	[4300-4499] Meadow Ridge Dr.; 39206 [4300-4399] Henderson Circle; 39206	30	Loss in water pressure
122	16-BWN-2021	1/19/2021	1/21/2021	[1200-1299] Biloxi Street; 39203	15	Loss in water pressure
123	17-BWN-2021	1/19/2021	1/21/2021	[1000-1299] West Pascagoula Street; 39203 [1000-1199] Cleary Street; 39203	20	Loss in water pressure
124	18-BWN-2021	1/27/2021	3/17/2021	[3375-3376] Forest Hill Road; 39212  Extended on 1/27/2021 to: [3200-3499] Forest Hill Road; 39212	2, extended to 25	Loss in water pressure
125	19-BWN-2021	1/27/2021	2/1/2021	[3800-3899] Yarbro Street; 39204 [3900-4099] Mary Edith Street; 39204 [3800-4099] Fernley Street; 39204	10	Loss in water pressure

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
126	02 -BWN-2021	1/29/2021	2/3/2021	[3500-5899] Old Jackson Road; 39170	45	Loss in water pressure
127	20-BWN-2021	2/1/2021	2/4/2021	[200-299] South Prentiss Street; 39203	30	Loss in water pressure
128	21-BWN-2021	2/1/2021	2/4/2021	[4100-4399] Oaklawn Dr.; 39206 [200-399] Essex Ave.; 39206 [100-399] Iris Ave.; 39206 [4100-4199] Plaza St.; 39206 [4100-4199] Cedar St.; 39206 [400-499] Meadow Moss Road; 39206	120	Loss in water pressure
129	22 -BWN-2021	2/4/2021	2/9/2021	[3800-3899] Yarbro Street; 39204 [3900-4099] Mary Edith Street; 39204 [3800-4099] Fernley Street; 39204	10	Loss in water pressure
130	23 -BWN-2021	2/4/2021	2/9/2021	[200-299] Raymond Road; 39204 [1800-1999] Wilton Street; 39204	6	Loss in water pressure
131	24-BWN-2021	2/7/2021	2/9/2021	[2300-2599] Paden St.; 39204	60	Loss in water pressure
132	25 -BWN-2021	2/8/2021	2/11/2021	[2400-4699] Nottingham Road; 39211 [4600-4699] Friar Circle; 39211	25	Loss in water pressure
133	26 -BWN-2021	2/9/2021	2/11/2021	[500-699] Witsell Road; 39206 [4100-4399] Meadowlane Dr.; 39206	90	Loss in water pressure
134	27 -BWN-2021	2/9/2021	2/11/2021	[3400-3599] Cardinal Street; 39213	25	Loss in water pressure
135	28 -BWN-2021	2/10/2021	2/12/2021	[100-199] Richardson Drive; 39209 [1-199] Shubuta Street; 39209	15	Loss in water pressure
136	29-BWN-2021	2/10/2021	2/12/2021	[200-499] Broadmoor Drive; 39206	20	Loss in water pressure
137	30 -BWN-2021	2/11/2021	Not officially lifted due to the issuance of the citywide BWN on 2/16/2021	[700-799] Cooper Road; 39212	10	Loss in water pressure
138	31-BWN-2021	2/16/2021 (revised 2/24/2021)	3/17/2021	City of Jackson	All Surface Water Connections (43000)	1) Extreme cold weather and low temperatures 2) Loss in water pressure  Revision: 1) Turbidity levels exceeded standard
139	03-BWN-2021	2/18/2021	3/10/2021 (revised to be lifted for All Well Water Connections served by the Jackson-Maddox Well System in the following Zip Codes: 39170, 39212, 39154, 39209- Jackson Customers Off Maddox and Wiggins Road; 39272- Byram Customers on the West Side of I-55 South)	All Well Water Connections on the City of Jackson Drinking Water System	All Well Water Connections	1) Extreme cold weather and low temperatures 2) Water main breaks in the groundwater system 3) Loss in water pressure
140	32-BWN-2021	4/2/2021	4/6/2021	[4000-4399] El Paso Street; 39206 [200-399] Pine Ridge Road; 39206	85	Loss in water pressure
141	33-BWN-2021	4/11/2021	4/13/2021	[100-199] Evans Drive; 39272	6	Loss in water pressure
142	34-BWN-2021	4/11/2021	4/13/2021	[4800-4999] Caroline Drive; 39209 [1400-1499] St. Francis Street; 39209 [1400-1499] Regina Street; 39209	20	Loss in water pressure
143	35-BWN-2021	4/12/2021	4/16/2021	[900-1099] Stuart Street; 39204	30	Loss in water pressure

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
144	36 -BWN-2021	4/20/2021	4/21/2021	[1200-2299] Breckinridge Road; 39204 [2100-2299] Castle Hill Dr.; 39204 [1200-1299] Dorgan Street; 39204 [2200-2299] Sloane Street; 39204	50	Loss in water pressure
145	37 -BWN-2021	4/26/2021	4/28/2021	[1700-1899] Hillview Dr.; 39211 [1600-1899] Brecon Dr.; 39211 [1600-1799] Winchester St.; 39211 [1800-1899] Highland Terrace; 39211 [4800-4899] Ridgewood Rd.; 39211	120	Loss in water pressure
146	04-BWN-2021	4/27/2021	4/29/2021	[100-299] Barrington Dr.; 39272 [300-399] Barrington Cove; 39272	20	Loss in water pressure
147	38-BWN-2021	4/27/2021	4/29/2021	[900-1099] Martin Luther King Dr.; 39203	6	Loss in water pressure
148	40-BWN-2021	4/30/2021	5/3/2021	All City of Jackson Surface Water Customers	43000 (All Surface Water Connections)	1) Plant shutdown caused by an electrical fire 2) Loss in water pressure
149	05-BWN-2020 (Should be 05-BWN-2021)	5/1/2021	5/5/2021	[1-99] Bellewood Grove; 39272	10	Loss in water pressure
150	41-BWN-2021	5/12/2021	5/14/2021	[100-299] Livingston Street.; 39202	15	Loss in water pressure
151	42-BWN-2021	5/14/2021	5/18/2021	[4000-4099] Boxwood Circle; 39211	20	Loss in water pressure
152	06-BWN-2021	5/17/2021	5/27/2021 (lifted for: [2200-2299] TV Road; 39209, [100-2699] Maddox Road; 39209, [2200-4599] Raymond Road; 39209, [2200-4599] Raymond Road; 39212, [5700-6399] MS-18; 39212, [3700-7399] S. Siwell Road; 39212, [5800-6699] Terry Road; 39272, [9700-12799] Spingridge Road; 39170, [1000-3299] Gary Road; 39272)	[2200-2299] TV Road; 39209, [100-2699] Maddox Road; 39209, [2200-4599] Raymond Road; 39212, [5700-6399] MS-18; 39212, Jackson Ave., Harvey Dr., Channel 16 Way, Rebel Cir., Forest Hill Dr., Carriage Hills Dr., Surrey Dr., Riderwood Dr., Farmington St., Carriage Ct., Yorkshire, Del Rey Dr., Plummer Cir., Timberlawn Rd., Portwood Dr., Eden Downs Rd., Canada Way, New Market Dr., Cedar Hills Subdivision, Willowood Subdivision  Extended on 5/18/2021 to: [2200-2299] TV Road; 39209, [100-2699] Maddox Road; 39209, [2200-4599] Raymond Road; 39212, [5700-6399] MS-18; 39212, [3700-7399] S. Siwell Road; 39212, [5800-6699] Terry Road; 39272, [9700-12799] Spingridge Road; 39170, [1000-3299] Gary Road; 39272	1000, extended to 2000	Loss in water pressure
153	43-BWN-2021	5/17/2021	5/18/2021	[100-199] East Rankin Street; 39201 [100-399] West Rankin Street; 39201 [100-399] Beatty Street; 39201 [800-1399] South West Street; 39201	30	Loss in water pressure
154	44-BWN-2021	5/24/2021	5/25/2021	[1000-1099] Greymont Ave.; 39202	10	Loss in water pressure
155	45-BWN-2021	5/24/2021	5/27/2021	[4800-4999] Interstate 55 North Frontage Road; 39211 [4700-4899] Old Canton Road; 39211 [100-199] LeFleurs Square; 39211 [1400-1499] Old Square Road; 39211 [1400-1599] Jacksonian Plaza; 39211	30	Loss in water pressure
156	46-BWN-2021	5/25/2021	5/27/2021	[3500-3599] Rita Dr.; 39213 [100-199] Rita Cove; 39213 [3500-3599] Dye Cove; 39213 [3400-3499] Dye Street; 39213 [3500-3599] Jackeye Lane; 39213	60	Loss in water pressure

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
157	07-BWN-2021	6/7/2021	6/24/2021	[2200-2299] TV Road; 39209 [100-2699] Maddox Road; 39209 [2200-4599] Raymond Road; 39212 [5700-6399] MS-18; 39212 [3700-7399] S. Siwell Road; 39212 [5800-6699] Terry Road; 39272 [9700-12799] Spingridge Road; 39170 [1000-3299] Gary Road; 39272	2000	Loss in water pressure
158	47-BWN-2021	6/9/2021	6/14/2021	[3700-3999] North Flag Chapel Road; 39213	5	Loss in water pressure
159	48-BWN-2021	6/12/2021	6/17/2021	[5300-5399] Fairway St.; 39211	35	Loss in water pressure
160	49-BWN-2021	6/13/2021	6/15/2021	[500-599] Woodland Hills Place; 39216	15	Loss in water pressure
161	50-BWN-2021	6/14/2021	6/17/2021	[4700-4799] East Massena Dr.; 39216	10	Loss in water pressure
162	51-BWN-2021	6/30/2021	7/2/2021	[1700-1899] Myrtle Street; 39202	30	Loss in water pressure
163	52-BWN-2021	6/30/2021	7/2/2021	River Place 2; 39211	20	Loss in water pressure
164	53-BWN-2021	7/1/2021	7/6/2021	[300-400] Greymont Street; 39202	10	Loss in water pressure
165	54-BWN-2021	7/3/2021	7/7/2021	[3400-3499] Edwards Avenue; 39213	15	Loss in water pressure
166	55-BWN-2021	7/3/2021	7/7/2021	[400-699] North State Street; 39201-9202	20	Loss in water pressure
167	56-BWN-2021	7/5/2021	7/7/2021	[4800-4999] Interstate 55 North Frontage Road; 39211 [4700-4899] Old Canton Road; 39211 [100-199] LeFleurs Square; 39211 [1400-1599] Jacksonian Plaza; 39211 [1400-1499] Old Square Road; 39211	35	Loss in water pressure
168	57-BWN-2021	7/6/2021 (extended 7/8/2021)	7/12/2021	[100-179] Woodway Dr.; 39206 [800-899] Serville Dr.; 39206 [100-149] Grove Circle; 39206 [100-169] Grove Loop; 39206 [5200-5299] Ponce De Leon Place; 39206 [5200-5299] Diberville Place; 39206 [5200-5299] Bienville Place; 39206  Extended to: Pebble Creek Apts. 5255 Manhattan Rd.; 39206	80	Loss in water pressure
169	58-BWN-2021	7/7/2021	7/12/2021	[100-299] Melrose Dr.; 39211 [100-299] Southbrook Dr.; 39211	70	Loss in water pressure
170	59-BWN-2021	7/16/2021	7/20/2021	[2200-2399] Morton Ave.; 39213	40	Loss in water pressure
171	60-BWN-2021	7/21/2021	7/23/2021	[1100-1199] Craft Street; 39209 [3000-3199] Burch Street; 39209	30	Loss in water pressure
172	61-BWN-2021	7/23/2021	7/29/2021	[800-1099] Briarfield Road; 39213	50	Loss in water pressure
173	62-BWN-2021	7/23/2021	7/30/2021	[1900-1999] Petit Bois North; 39211	Not available	Loss in water pressure
174	63-BWN-2021	7/26/2021	7/29/2021	[100-399] Nimitz Street; 39209	Not available	Loss in water pressure
175	64-BWN-2021	7/29/2021 (extended 7/29/2021)	8/2/2021	[5400-5599] Robinson Road; 39204  Extended to: [100-199] Colony Square; 39204	10 (extended to 40)	Loss in water pressure
176	65-BWN-2021	7/29/2021	8/2/2021	[1400-1499] Argyle Street; 39211	3	Loss in water pressure
177	66-BWN-2021	8/9/2021	8/12/2021	[6600-6699] George Washington Dr.; 36213 [6580-6699] Abraham Lincoln Dr.; 39213	50	Loss in water pressure

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
178	67-BWN-2021	8/20/2021	8/24/2021 (8/26/2021 for Franklin D. Roosevelt Dr., Overlook Cir., Trace Dr., Roosevelt Pl., Roosevelt Cir., Warren Harding Dr., [6600-6699] Presidential Dr.)	Presidential Hills Subdivision; Jackson, 39213	2000	Loss in water pressure
179	68-BWN-2021	8/24/2021	8/26/2021 (8/31/2021 for [5300-5899] Clinton Blvd., [100-399] Westhaven Blvd., Windsor Park Apts., South Flag Chapel Rd., East Lane, North Lane, Loden Pl., Sunrise Pl., Wynndyke Rd., Wynndyke Cir., Ladd St., Sheronn St., Chalet Ave., Speights St., Riffle Ave.)	[5300-5899] Clinton Blvd., [100-599] Magnolia Rd., [100-599] North Flag Chapel Rd., [100-399] Westhaven Blvd., Westwick Apts, Windsor Park Apts., Keystone Estates, John Hopkins Rd., Badger Dr., South Flag Chapel Rd., East Lane, North Lane, Knob Hill Dr., Glen Rose Dr., Bayberry Dr., Wild Flower Dr., Melba Hill Dr., Wood Rose Terrace, Magnolia Dr., Magnolia Cir., Highwood Dr., York Dr., Delano Dr., Glenco Ave., West Hill Dr., Lowder Dr., Rich Dr., Queen Elanor Ln., Queen Christina Ln., Queen Ct., Queen Julianna Ln., Queen Theresa Ln., Queen Marie Ln., Queen Esther Ln., Queen Park Cir., Mattox St., Queen Alma Ln., Queen Andria Ln., Ginger Dr., Bonita Dr., Queen Mary Ln., Queen Anne Ln., Queen Elizabeth Ln., Queen Victoria Ln., Queen Isabella Ln., Queen Maud Ln., Queen Alexandria Ln., Queen Margaret Ln., Queen Cir., Queen Joanna Ln., Queen Josephine Ln., W. Lane Dr., Hayes Dr., Loden Pl., Sunrise Pl., N. Windsor Dr., S. Windsor Dr., Wynndyke Rd., Wynndyke Cir., Ladd St., Sheronn St., Chalet Ave., Speights St., Riffle Ave.	2000	Loss in water pressure
180	69-BWN-2021	8/31/2021	9/2/2021	John Hopkins Elementary School; 39209	1	Loss in water pressure
181	70-BWN-2021	9/1/2021	9/3/2021	[2500-2599] Mulberry St.; 39204	15	Loss in water pressure
182	71-BWN-2021	9/4/2021	9/9/2021	[300-499] Bounds Street [800-899] Serville Dr. [5200-5299] Clair St. [5200-5299] Ponce De Leon Pl. [5200-5299] Bienville Pl. [5200-5299] Diberville Pl. [5200-5299] Cedar Park Dr. [400-499] Marquis St. [5100-5299] Galaxie Dr. [5100-5299] Keele St. [400-499] Comet Dr.	120	Loss in water pressure
183	72-BWN-2021	9/7/2021	9/9/2021	[1600-1799] Winchester St.; 39211 [1600-1799] Wilhurst St.; 39211	80	Loss in water pressure
184	08-BWN-2021	9/8/2021	9/10/2021	Town of Byram (Well Water Customers Only) [1100-2199] S. McRaven Road [8100-8299] MS-18 [4700-5999] Raymond Road [3700-4099] S. Siwell Road [500-4599] N. Siwell Road [1500-9499] Springridge Road	Not available	Loss in water pressure
185	73-BWN-2021	9/10/2021	9/14/2021	[1500-6299] Northlake Circle; 39211 [1500-1599] Sherman Ave.; 39211	45	Loss in water pressure
186	74-BWN-2021	9/19/2021	9/22/2021	[600-799] Naples Road; 39206 [700-799] Gardner St. [4400-4599] Brook Dr. [4400-4599] Broadmeadow St.	Not available	Loss in water pressure

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
187	75-BWN-2021	9/20/2021	9/22/2021	[6500-6999] Franklin D. Roosevelt Dr.; 39206 [3500-3999] North Flag Chapel Rd. [6600-6699] Presidential Dr. Presidential Pl. Flag Chapel Circle Warren Harding Dr. Roosevelt Circle Roosevelt Pl. Overlook Circle Trace Dr. Harrison Pl. John Tyler Pl. Zachary Taylor Circle	350	Loss in water pressure
188	76-BWN-2021	9/20/2021	9/22/2021	[2500-2599] Mulberry St.; 39204	15	Loss in water pressure
189	09-BWN-2021	9/24/2021	9/28/2021	[4220-4299] Gunar Dr.; Byram, 39272 (All Homes on Gunar after Blake Circle) Blake Circle Cliff Cove	60	Loss in water pressure
190	77-BWN-2021	9/24/2021	9/28/2021	[2200-2399] Forest Park Dr.; 39212 Park Circle Forest Valley Dr. Park Lane	80	Loss in water pressure
191	78-BWN-2021	9/29/2021	10/4/2021	[200-999] South Valley Falls Road; 39212 One Park Place	20	Loss in water pressure
192	10-BWN-2021	9/30/2021	10/4/2021	[2500-2599] Raymond Road; 39212 [3000-3045] Forest Hill Road Forest Hill High School 2607 Raymond Road	5	Loss in water pressure
193	79-BWN-2021	10/2/2021	10/5/2021	[2500-3199] Robinson Road; 39209 [800-899] Primos Ave. Pecan Park Cir. Duane St. Metairie Road Gentilly Dr. Wynwood Dr. Gretna Green Terrace Ave. Glenwood St. Shrewbury Ct. Copperfield St.	170	Loss in water pressure
194	80-BWN-2021	10/3/2021	10/5/2021	[499-3300] Downing St.; 39216 [3300-3399] Oxford Ave. Decelle St. Dunbar St. Stirling St. Donald St. Northview Dr.	Not available	Loss in water pressure
195	81-BWN-2021	10/4/2021	10/6/2021	[4600-4699] Kirkley Drive; 39206	30	Loss in water pressure
196	82-BWN-2021	10/6/2021	10/8/2021	[2300-2599] Coronet Place; 39204	60	Loss in water pressure
197	83-BWN-2021	10/7/2021	10/12/2021	[6500-6999] Franklin D. Roosevelt Dr.; 39206 [3500-3999] North Flag Chapel Rd. [6600-6699] Presidential Dr. Presidential Pl. Flag Chapel Circle Warren Harding Dr. Roosevelt Circle Roosevelt Pl. Overlook Circle Trace Dr. Harrison Pl. John Tyler Pl. Zachary Taylor Circle William McKinley Circle	400	Loss in water pressure
198	84-BWN-2021	10/7/2021	10/11/2021	Not available	Not available	Loss in water pressure



BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
199	11-BWN-2021	10/8/2021	10/12/2021	[7100-7399] Siwell Road; Byram Willow Creek Lane Byram Place Hollowpine Road	40	Loss in water pressure
200	85-BWN-2021	10/10/2021	10/12/2021	[3500-3699] Downing St.; 39216 Stirling St.	30	Loss in water pressure
201	86-BWN-2021	10/12/2021	10/14/2021	Britt Avenue; 39209	6	Loss in water pressure
202	87-BWN-2021	10/21/2021	10/25/2021	Texas Avenue; 39209	15	Loss in water pressure
203	88-BWN-2021	10/25/2021	10/28/2021	Hillside Dr.; 39206	10	Loss in water pressure
204	89-BWN-2021	10/26/2021	10/28/2021	[2840-2899] Arbor Hills; 39212	Not available	Loss in water pressure
205	90-BWN-2021	10/26/2021	10/29/2021	[3500-3599] Britton Ave.; 39213	Not available	Loss in water pressure
206	12-BWN-2021	10/31/2021	11/2/2021	[499-1900] North Siwell Road; 39209 [2200-3399] South McRaven Road[5700-6099] McRaven Road Davis Cove North Pine Lea Drive South Pine Lea Drive Michelle Rae Drive	100	Loss in water pressure
207	91-BWN-2021	10/31/2021	11/2/2021	[3900-4299] Oakridge Dr.; 39216 [4100-4199] Robin Dr.; 39206 [4100-4199] Hawthorne Dr. [700-799] Chickasaw Ave. Brookwood Rd. Hawthorne Ct.	90	Loss in water pressure
208	92-BWN-2021	11/2/2021	11/3/2021	[100-199] North Farish St.; 39201 [200-299] South Farish St.; 39201 [100-199] East Amite St.; 39201 [100-299] West Amite St.; 39201 [100-199] East Pearl St.; 39201 [100-299] West Pearl St.; 39201 [100-199] East Capitol St.; 29201 [200-299] West Capitol St.; 39201 [100-199] North Roach St.; 39201 [100-299] South Roach St.; 39201	50	Loss in water pressure
209	93-BWN-2021	11/7/2021	11/9/2021	[100-199] North Farish St.; 39201 [200-299] South Farish St.; 39201 [100-199] East Amite St.; 39201 [100-299] West Amite St.; 39201 [100-199] East Pearl St.; 39201 [100-299] West Pearl St.; 39201 [100-199] East Capitol St.; 39201 [200-299] West Capitol St.; 39201 [100-199] North Roach St.; 39201 [100-299] South Roach St.; 39201	50	Loss in water pressure
210	94-BWN-2021	11/8/2021	11/10/2021	[530-699] Houston Ave; 39209	10	Loss in water pressure
211	95-BWN-2021	11/9/2021	11/12/2021	[4500-4699] Village Drive; 39206	70	Loss in water pressure
212	96-BWN-2021	11/9/2021	11/12/2021	[4800-4899] Kilkullen Place; 39209	13	Loss in water pressure
213	97-BWN-2021	11/12/2021	11/19/2021	Bristol Blvd.; 39204 Avian Lane	30	Loss in water pressure
214	98-BWN-2021	11/14/2021	11/19/2021	[2400-3299] US Highway 80; 39204/39209	15	Loss in water pressure
215	99-BWN-2021	11/15/2021	11/19/2021	All City of Jackson Surface Water Customers	All Surface Water Connections except the Jackson Maddox Well System connections	1) ACH (Aluminum Chlorohydrate) issues 2) Loss in water pressure



Attachment B  
Emergency Order



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

MAR 27 2020

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

The Honorable Chokwe A. Lumumba  
Mayor of City of Jackson  
219 South President Street  
Jackson, Mississippi 39205

Re: Emergency Administrative Order under SDWA Section 1431, 42 U.S.C. § 300i  
Public Water System: City of Jackson Public Water System  
PWS ID Number: MS0250008  
Docket No.: SDWA-SDWA-04-2020-2300

Dear Mayor Lumumba:

Enclosed is an Emergency Administrative Order (Order) issued by the U.S. Environmental Protection Agency to the City of Jackson, Mississippi (Respondent), as the owner/operator of the City of Jackson Public Water System (System), pursuant to section 1431 of the Safe Drinking Water Act (SDWA), 42 U.S.C. § 300i.

Based on observations made by the EPA during its inspection conducted the week of February 3, 2020, and review of the documents provided by Respondent in response to the EPA's request for information issued pursuant to its authority under section 1445 of the SDWA, 42 U.S.C. § 300j-4, the EPA has determined that conditions exist at the System that present an imminent and substantial endangerment to the persons served by the System. Based on evidence of turbidity exceedances, disinfection treatment concerns, and/or the condition of the distribution system, the System has the potential to have the presence of *E. Coli*, *Cryptosporidium*, or *Giardia* in the drinking water being served to its customers. Therefore, pursuant to section 1431 of the SDWA, 42 U.S.C. § 300i, the EPA is authorized to take actions necessary to protect human health. The Order and its requirements are necessary to ensure adequate protection of public health.

The enclosed Order sets forth the actions that must be taken to ensure that the people served by the System are provided with safe drinking water. The Order requires the System to, among other things: (1) develop and implement a plan to address all monitoring equipment and appurtenant treatment equipment repairs and/or replacements; (2) address dosing processes for disinfection and pH control; (3) develop and implement a plan to provide alternative drinking water when specific triggers are met; and (4) take additional total coliform bacteria samples under prescribed conditions.

The Order constitutes a final agency action and under Section 1448(a) of the SDWA, 42 U.S.C. § 300j-7(a) you may seek federal judicial review. If you have any questions or wish to discuss this Order, please contact Amanda Driskell at (404) 562-9735 or [Driskell.Amanda@epa.gov](mailto:Driskell.Amanda@epa.gov). For legal inquiries,

please have your attorneys contact Suzanne Armor, Associate Regional Counsel, at (404) 562-9701 or Armor.Suzanne@epa.gov. Thank you for your attention to this matter.

Sincerely,



Carol L. Kemker

Director

Enforcement and Compliance Assurance Division

Enclosure

cc: Robert K Miller, Director, City of Jackson Department of Public Works  
Lester Herrington, Director of Office of Environmental Health,  
Mississippi State Department of Health



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

<b>IN THE MATTER OF:</b>	)	Docket No. SDWA-04-2020-2300
	)	
City of Jackson, Mississippi,	)	<b>EMERGENCY ADMINISTRATIVE</b>
	)	<b>ORDER</b>
Respondent.	)	
	)	
Public Water System, PWS ID. No. MS0250008.)	)	Proceeding pursuant to Section 1431(a)
	)	of the Safe Drinking Water Act,
	)	42 U.S.C. § 300i(a).

---

**I. AUTHORITY**

1. This Emergency Administrative Order (“Order”) is issued to the City of Jackson, Mississippi (“Respondent”) pursuant to the authority vested in the Administrator of the U.S. Environmental Protection Agency Section 1431(a) of the Safe Drinking Water Act (“SDWA”), 42 U.S.C. § 300i(a). The Administrator has delegated this authority to the Regional Administrator of the EPA Region 4, who has, in turn, delegated this authority to the Director of the Enforcement Compliance and Assurance Division.
2. The EPA has jurisdiction to issue emergency orders pursuant to Section 1431 of the SDWA, 42 U.S.C. § 300i.

**II. FINDINGS OF FACT AND CONCLUSIONS OF LAW**

**General Findings**

3. Respondent is a municipality created under the laws of the State of Mississippi and is therefore a “person” as that term is defined in the SDWA. 42 U.S.C. § 300f(12); 40 C.F.R. § 141.2.
4. Respondent owns and/or operates a public water system located in the City of Jackson, Mississippi, PWS ID No. MS0250008 (“System”). The System provides water for human consumption to a population of approximately 173,514.
5. The System is a “public water system” within the meaning of Section 1401(4) of the SDWA, 42 U.S.C. § 300f(4); 40 C.F.R. § 141.2.
6. The System regularly serves at least 25 year-round residents and is therefore a “community water system” (“CWS”) within the meaning of Section 1401(15) of the SDWA, 42 U.S.C. § 300f(15), and 40 C.F.R. § 141.2.
7. Respondent’s ownership and/or operation of the System makes it a “supplier of water” within the meaning of Section 1401(5) of the SDWA, 42 U.S.C. § 300f(5), and 40 C.F.R. § 141.2, and subject to the requirements of Part B of the SDWA, 42 U.S.C. § 300g, and the National Primary Drinking Water Regulations (“NPDWRs”) at 40 C.F.R. § 141.



8. Pursuant to SDWA Section 1413, 42 U.S.C. § 300g-2, the Mississippi State Department of Health (“MSDH”) has primary responsibility for the implementation and enforcement of the public water supply program in Mississippi.
9. The System consists of two water treatment plants, known as the O.B. Curtis Water Treatment Plant (“O.B. Curtis WTP”)<sup>1</sup> and the J.H. Fewell Water Treatment Plant (“J.H. Fewell WTP”),<sup>2</sup> a number of groundwater wells,<sup>3</sup> and appurtenant collection, treatment, storage, and distribution facilities.<sup>4</sup>
10. Portions of the System can be supplied by both ground and surface water sources, while others are served only by surface water sources. The surface water sources are the Ross Barnett Reservoir and the Pearl River. The ground water source is the Sparta Aquifer.
11. The O.B. Curtis and J.H. Fewell WTPs, both of which treat the surface water portions of the System, employ conventional filtration with ultraviolet (“UV”) systems to inactivate pathogens. Finished water at the WTPs is disinfected using chloramines.
12. UV disinfection treatment is installed on each individual filter effluent (“IFE”) flow at both the O.B. Curtis and J.H. Fewell WTPs to treat for viruses, including *Cryptosporidium* and *Giardia*.
13. Respondent’s PWS is required to provide filtration pursuant to 40 C.F.R. §§ 141.73 and 141.173, and disinfection pursuant to 40 C.F.R. §§ 141.72(b) and 141.172.
14. Ground water from the wells is treated at the point of withdrawal using gaseous chlorine.
15. The term “contaminant” means any physical, chemical, biological, or radiological substance or matter in water.” 42 U.S.C. § 300f(6).
16. Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness (such as whether disease-causing organisms are present). Higher turbidity levels are often associated with higher levels of disease-causing microorganisms.
17. *E. coli*, *Cryptosporidium*, and *Giardia* are contaminants under the meaning of 42 U.S.C. § 300f(6), and are or may be present in the System.
18. On November 22, 2019, the EPA issued a Request for Information to Respondent, pursuant to Section 1445 of the SDWA, 42 U.S.C. § 300j-4, and 40 C.F.R. § 141.31, seeking information to determine Respondent’s compliance with federal drinking water regulations.
19. On December 23, 2019, Respondent provided its response to the EPA’s Request for Information.

---

<sup>1</sup> To the EPA’s knowledge and belief, the O.B. Curtis WTP was initially constructed in or around 1992.

<sup>2</sup> To the EPA’s knowledge and belief, the J.H. Fewell WTP was initially constructed in or around 1914.

<sup>3</sup> Respondent maintains at least six active groundwater wells (T.V. Road Well, Willo-O-Wood Well, Wiggins Road Well, Siwell Road Well, Highway 18 Well, and Maddox Road Well), along with three inactive groundwater wells (Forest Hill Road Well, Rainey Road Well, and Presidential Hill Well).

<sup>4</sup> Until approximately October 2014, there were two separately identified public drinking water systems owned by the City of Jackson, Mississippi. One was supplied entirely by groundwater and identified under the PWS ID No. MS0250012; the other was supplied by surface water and identified under the PWS ID No. MS0250008.



20. On January 15 and 16, 2020, consistent with the requirements of Section 1445(b)(1), 42 U.S.C. § 300j-4(b)(1), the EPA notified MSDH and Respondent, respectively, of its intent to inspect the PWS.
21. On February 3 to 7, 2020, representatives of the EPA conducted an inspection of the PWS, pursuant to its authority under Section 1445(b)(1) of the SDWA, 42 U.S.C. § 300j-4(b)(1).

### **Bacterial Contamination and Proper Disinfection**

22. During the inspection, the EPA identified the following preliminary concerns related to bacterial contamination and proper disinfection:
  - a. The necessary chemical dosing of coagulant to address turbidity is determined by the streaming current detectors (“SCDs”); however, Respondent’s SCDs were not properly calibrated at either the O.B. Curtis or J.H. Fewell WTPs, thus failing to provide accurate dosing for proper treatment of drinking water;
  - b. Continuous monitoring equipment at the O.B. Curtis WTP has not been repaired or calibrated for approximately three years since the instrument technician position was vacated. This equipment includes pH meters, flow measurement devices, turbidimeters, and the SCDs. Comparisons of operator laboratory bench sheet results indicated that the readouts from the continuous pH meters are off by up to 2 units in some instances. It was indicated on the monthly operating reports submitted in response to the EPA’s November 22, 2019 Request for Information, that this equipment was used as the basis for the values reported for compliance.
  - c. Jar tests are commonly used in the industry as “bench-scale” simulations of full-scale coagulation/flocculation/sedimentation water treatment processes. Respondent does not follow the industry standard of conducting regular jar tests at both the O.B. Curtis and J.H. Fewell WTPs. Because the SCDs are used as the basis for those coagulant dosing decisions without having been calibrated, the lack of jar testing is an additional indicator in evaluating the ability of the WTPs to deliver safe drinking water to the System’s users.
  - d. Respondent conducts membrane cleaning cycles without the use of automatic monitoring equipment for pH and chlorine levels. Excess chlorine levels can damage and reduce membrane efficiency. In addition, membrane cleaning is partially dependent on pH, requiring either higher or lower pH cleaning regimes based on the foulants present. This automatic monitoring equipment has been nonfunctional for several years.
  - e. Respondent cannot currently perform membrane integrity testing at O.B. Curtis WTP due to wear and breakage of the system components and compressor. This is concerning due to the inability of the Respondent to evaluate the membrane filters’ mechanical integrity during times of turbidity exceedance.
  - f. Respondent has failed to perform filter maintenance at O.B. Curtis WTP and J.H. Fewell. Considering the recent turbidity exceedances, it is crucial that Respondent maintain the System filters to perform in optimal condition for protection of human health.
  - g. NDPWRs require a system's combined filtered water at each plant be less than or equal to 0.3 NTU in at least 95% of the measurements taken each month, and the turbidity level of a



system's combined filtered water at each plant must at no time exceed 1 NTU. Turbidity exceedances were reported at both the O.B. Curtis and J.H. Fewell WTPs in the January 2020 monthly operating report ("MOR"). Finished water turbidity reached 1.35 NTU at the O.B. Curtis WTP and 3.00 NTU at the J.H. Fewell WTP. Additionally, at the O.B. Curtis WTP, 93.5% of turbidity samples were equal to or less than the turbidity limit of 0.3 NTU. The EPA's inspectors observed that the continuous turbidity monitoring equipment at the O.B. Curtis WTP has read inaccurately for approximately three 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 three times per day. Given that the turbidity monitoring equipment was not operational, the system, to maintain compliance with NDPRWs, should have conducted grab sampling every four hours in lieu of continuous monitoring, but for no more than five working days following the nonoperation of the equipment.

- h. UV disinfection devices were found to be offline for significant periods of time at both the O.B. Curtis and J.H. Fewell WTPs. UV disinfection devices are to be operated continuously. In its January 2020 MOR, Respondent reported the following:
- i. At the J.H. Fewell WTP:
    - UV Reactor 1 was offline for the entire month of January 2020 (and had been offline since October 16, 2019);
    - UV Reactor 2 was offline for 15 of 31 days;
    - UV Reactor 3 was offline for 17 of 31 days; and
    - UV Reactor 4 was offline for 17 of 31 days.
  - ii. At the O.B. Curtis WTP:
    - UV Reactor 1 was offline for two of 31 days;
    - UV Reactor 2 was offline for four of 31 days;
    - UV Reactor 3 was offline for one of 31 days;
    - UV Reactor 4 was offline for three of 31 days; and
    - UV Reactor 5 was offline for 10 of 31 days.

23. MSDH provided the EPA with a list of all Boil Water Notices ("BWNs") issued between January 2, 2016 and February 1, 2020, to provide notice to the public of the potential to have serious adverse effects on human health as a result of short-term exposure pursuant to 40 C.F.R. § 141.202. The majority of the BWNs issued were due to loss of pressure from leaks and/or line breaks. Low-pressure and loss of pressure in a drinking water distribution system may cause a net movement of water from outside the pipe to the inside through cracks, breaks, or joints in the distribution system. Crack, breaks and joints are common in all water systems. Backsiphonage occurs when pressure is lost in pipes creating a negative pressure and a partial vacuum that pulls water from a contaminated source outside the pipe into the treated, potable water inside the pipe. This creates a suitable environment for bacteriological contamination and other disease-causing organisms, including *E. coli*, to enter the water distribution system downstream of the WTPs, which is then delivered to users.



24. High levels of turbidity increase the likelihood that drinking water may contain disease-causing organisms, such as *Cryptosporidium*, *Giardia*, *Legionella*, and *E. coli* because particles of turbidity provide shelter for microbes and reduce the microbes' exposure to disinfectants. If particulate material is not removed, a high turbidity event can provide shelter for and promote regrowth of pathogens in the water, leading to an outbreak of waterborne diseases.
25. Pathogens, such as *Giardia*, *Cryptosporidium*, and *Legionella*, are often found in water. If consumed, these pathogens can cause gastrointestinal illness (e.g., diarrhea, vomiting, cramps) and other health problems. These illnesses may be severe and sometimes fatal for people with weakened immune systems. *Cryptosporidium* is a significant concern in drinking water because it is resistant to chlorine and other disinfectants.
26. *E. coli* are bacteria, that when present, indicate the water may have been contaminated with human and/or animal wastes. Human and/or animal wastes may contain pathogens that can cause short-term health impacts, such as diarrhea, cramps, nausea, headaches, or other symptoms. Pathogens may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.

#### **MSDH Actions and the EPA's Coordination with MSDH**

27. MSDH has pursued informal enforcement actions against Respondent for Lead and Copper Rule ("LCR") treatment technique violations and Long-Term Enhanced Surface Water Treatment Rule violations due to turbidity exceedances. Additionally, MSDH issued a compliance plan to Respondent on February 12, 2016, to address the LCR violations that occurred starting in June 2015. However, these actions have not been effective in adequately protecting the health of the System's users with respect to the findings above.
28. EPA consulted with the City of Jackson and MSDH, to the extent practicable in light of the imminent endangerment, to confirm the correctness of the information on which this Order is based and to ascertain the action which such authorities were or would be taking.
29. Based on the findings above, the EPA has determined that the System has numerous SDWA violations, including violations of the NPDWRs.
30. Based on the findings above, and despite actions taken by MSDH, the local authorities have not undertaken all actions necessary to protect the public health and conditions exist at the System that may present an imminent and substantial endangerment to the health of persons served by the System. On February 28, 2020, MSDH submitted a written request for the EPA to assist with addressing the System's SDWA noncompliance. Therefore, this Order is necessary to protect human health.
31. The EPA has therefore determined that the actions specified in this Order are necessary to protect the health of persons.



### **III. ORDER**

Based on the foregoing findings and conclusions, and pursuant to Section 1431 of the Act, 42 U.S.C. § 300i, it is ordered:

#### **Intent to Comply**

32. Within 72 hours of receipt of this Order, Respondent must notify the EPA in writing of its intent to comply with the terms of this Order. To satisfy this requirement, Respondent shall email the EPA point of contact identified below in Paragraph 44.

#### **Public Notification**

33. Effective immediately upon the Effective Date of this Order, Respondent shall carry out the public notice requirements as required by 40 C.F.R. Part 141, Subpart Q for all future violations of NPDWRs. Additionally, Respondent must treat any exceedances of maximum allowable turbidity levels and breaks in water lines or other low pressure or loss of pressure events likely to cause contamination in the System's distribution system as requiring Tier 1 public notification as required by 40 C.F.R. § 141.202 until notified by the EPA that this is no longer necessary.

#### **Treatment and Distribution System Management**

34. Notwithstanding the requirements of this Order, Respondent shall continue to implement all applicable monitoring and reporting requirements of the SDWA and NPDWRs in accordance with 40 C.F.R. Part 141.
35. Dosing Process Repair. Within one week of the Effective Date of this Order, Respondent shall fix dosing process for disinfection and pH control.
36. Repair and/or Replacement of Equipment.
  - a. Within one week of the Effective Date of this Order, Respondent shall provide to the EPA and MSDH a status of all monitoring equipment and appurtenant treatment equipment (including, but not limited to, pH meters, flow measurement devices, turbidimeters, SCDs, chlorine analyzers, raw water screens, UV reactors, automatic sludge removal system, membrane filtration treatment train flocculator motors, membrane integrity testing system, and filters). This must include, at a minimum, descriptions of the conditions of the equipment, identify in which facility this equipment is located, any needed repairs, and status of calibration.
  - b. Within 30 days of the Effective Date of this Order, Respondent shall submit a comprehensive plan, including a schedule of implementation, for the EPA's review and approval, to repair and/or replace monitoring equipment and repair, replace, and/or perform maintenance on the appurtenant treatment equipment to ensure the System has the appropriate treatment equipment and appropriate information to make treatment decisions, and that the water quality is properly measured for compliance with the NPDWRs. All future MORs and weekly data, as required pursuant to Paragraph 43(43.a), shall include the date of last calibration and any repairs and/or replacement of monitoring equipment done since the last report was provided, until further notice by the EPA.



- c. Until such time as the monitoring equipment has been repaired and/or replaced and properly maintained, Respondent shall conduct monitoring by collecting grab samples every four hours in lieu of the continuous monitoring. For any instance where grab sampling is conducted in lieu of the required continuous monitoring, Respondent shall identify this deviation in the weekly MORs provided in accordance with Paragraph 43(43.a) of this Order.

37. CFE Turbidity Exceedance Events.

- a. In the event of CFE turbidity measurements exceeding 1.0 NTU, Respondent shall implement the following:
  - i. Comply with all requirements of NPDWRs, including 40 C.F.R. §§ 141.170 – 141.175.
  - ii. Notify the EPA and MSDH within 24 hours. If cause of the exceedance is known, include this information with notice. However, do not hold or delay the notification in instances where the cause of the exceedance is not known.
  - iii. Consult with MSDH on the exceedance and the appropriate BWN.
  - iv. Respondent shall issue a Tier 1 public notice as required by 40 C.F.R. § 141.202.
  - v. Within 24 hours after the CFE turbidity is less than 0.3 NTU, Respondent shall collect consecutive daily (one sample per calendar day) special purpose samples (bacteriological and microbial) (defined in 40 C.F.R. § 141.21(a)(6)) from the entry point to the distribution system of the treatment plant that had the turbidity exceedance, as well as any other distribution sampling location deemed necessary as identified by MSDH. Respondent shall ensure that each sample is analyzed for total coliform, *E. coli* (if sample is total coliform positive), and chlorine residual.
  - vi. Provide the EPA with chlorine residual results as measured at the entry point to the System and in the System's distribution for 10 calendar days preceding and following the event.
- b. In the event of CFE turbidity measurements exceeding 2.0 NTU, Respondent shall implement the following:
  - i. Comply with all requirements of NPDWRs, including 40 C.F.R. §§ 141.170 – 141.175.
  - ii. Immediately issue an appropriate BWN, provide notice and consult with MSDH within 24 hours, and provide notice to the EPA within 24 hours.
  - iii. Respondent shall issue a Tier 1 public notice as required by 40 C.F.R. § 141.202.
  - iv. Within 24 hours after the CFE turbidity is less than 0.3 NTU, the System shall collect consecutive daily (one sample per calendar day) special purpose samples (bacteriological and microbial) (defined in 40 C.F.R. § 141.21(a)(6)) from the entry point to the distribution system of the treatment plant that had the turbidity



exceedance as well as any other distribution sampling location deemed necessary, as identified by MSDH. Respondent shall ensure that each sample is analyzed for total coliform, *E. coli* (if sample is total coliform positive), and chlorine residual.

- v. Provide the EPA with chlorine residual results as measured at the entry point to the System and in the System's distribution for 10 calendar days preceding and following the event.
  - vi. Respondent shall provide the EPA and MSDH a self-assessment evaluation of CFE and IFE to include: (1) assessment of filter performance; (2) development of a filter profile; (3) identification and prioritization of factors limiting filter performance; and (4) corrective action plan to address the issue.
38. Low Pressure/Loss of Pressure Events. In the future event that Respondent experiences breaks in water lines or other low pressure or loss of pressure events likely to cause contamination in the System's distribution system, Respondent will take the following actions:
- a. Respondent shall consult with MSDH within 24 hours to determine if a BWN is required and provide notification to the EPA within 24 hours.
  - b. Respondent shall issue a Tier 1 public notice as required by 40 C.F.R. § 141.202.
  - c. Respondent shall immediately repair the line break or cause of the low pressure/loss of pressure. When satisfied that system pressure will be maintained and there is adequate chlorine residual, Respondent shall begin sampling from the affected area as described below. MSDH typically recommends a free chlorine residual of 0.5 mg/l at the ends of your distribution system.
  - d. Within 24 hours after making repair(s) to the water line(s) as required above, Respondent shall begin collecting special purpose samples (bacteriological and microbial) (defined in 40 C.F.R. § 141.21(a)(6)) from the System's distribution system. The chart, in Attachment I to this Order, lists the number of samples required based on the number of customers affected. If the entire system is placed on BWN, samples should be collected from sites representing the entire water system. Respondent shall ensure that each sample is analyzed for total coliform, *E.coli* (if the sample is total coliform positive), and chlorine residual. Respondent shall continue sampling until results from two consecutive rounds are total coliform negative.
39. Alternative Water Source Plan Development and Implementation.
- a. Within 14 days of the Effective Date of this Order, Respondent shall develop, and submit to the EPA for review and approval, an Alternative Water Source Plan ("AWSP"). In the AWSP, Respondent shall detail how and where it will provide at least one gallon of potable water per day, per person to every person served by the System. This allotment of alternative water must be made available at no cost to every person served by the System, as needed for drinking, cooking, maintaining oral hygiene, and dish washing. The AWSP will also outline how Respondent will inform every person served by the System of when and how an alternative water source is made available. As part of its AWSP, Respondent may opt to provide an alternate water supply that is: (1) provided by a licensed water distributor; (2) purchased bottle water; or (3) provided by another public water system that meets the requirements of



the NPDWRs. *Note:* If the AWSP trigger is localized to a specific portion of the distribution system and the entire system is not impacted, Respondent may opt to only serve alternative water to the portion of the population impacted. In order to consider this approach, the AWSP must include a detailed map of the System.

- b. The alternative source of water provided shall meet all applicable SDWA requirements at 40 C.F.R. §141. If bottled water will be used by Respondent as an alternative water in accordance with this Order, Respondent must ensure that the bottled water is certified by the International Bottled Water Association or National Sanitation Foundation International.
- c. AWSP Implementation Triggers.
  - i. If, based upon Respondent's Revised Total Coliform Rule ("RTCR") sampling data collected in accordance with 40 C.F.R. § 141.857 and as outlined in Paragraph 41 below, the PWS exceeds 5.0% total coliform-positive samples in any monthly period during the term of this Order, Respondent shall comply with the "Level 1" assessment requirements of the RTCR at 40 C.F.R. § 141.859(b). In addition, Respondent shall begin implementation of the AWSP within 24 hours of receiving such sampling results. Respondent shall continue implementing the AWSP until the EPA provides written notification to Respondent that AWSP implementation is no longer required; or
  - ii. Within 24 hours of Respondent's collection of daily special purpose samples required under Paragraphs 37 and 38 above, Respondent shall begin implementation of the AWSP. Respondent shall continue implementing the AWSP until all daily special purpose sample results are total coliform negative. *Note:* The AWSP may consider, in certain situations, that only a portion of the population is impacted by the triggering event and therefore alternative water only needs to be provided to those impacted. See requirements under Paragraph 39(a) above.

#### **Notifications and Reporting**

40. Within 72 hours of the Effective Date of this Order, Respondent shall provide the February 2020 MORs, including the IFE data for all conventional filters at both the O.B. Curtis and J.H. Fewell WTPs during this timeframe.

41. Sample Siting Plan.

- a. Within one week of the Effective Date of this Order, Respondent shall review its current Sample Siting Plan developed pursuant to 40 C.F.R. § 141.853, to ensure consistency with the RTCR, at 40 C.F.R. Part 141, subpart Y, and simultaneously provide a copy of the current Sample Siting Plan to the EPA for the EPA's concurrent review.
- b. If the current Sample Siting Plan does not include a minimum of 120 sampling locations per month as required under 40 C.F.R. § 141.857(b), Respondent shall update the Sample Siting Plan to achieve the required minimum monitoring frequency for the monthly monitoring period after the Effective Date of this Order.



- c. Within 10 business days of the Effective Date of this Order, Respondent shall provide to the EPA, RTCR sampling data for the months of January 2020 and February 2020. If the Respondent has not yet conducted the March 2020 sampling, this sampling shall be conducted within one week of the Effective Date of this Order and the results submitted within 10 days of receipt of the sampling analysis. If the March 2020 sampling has been completed prior to the Effective Date of this Order, Respondent shall submit these results along with the January 2020 and February 2020 results. All RTCR sampling data shall include the chlorine residual data for the RTCR locations.
  - d. The Respondent shall continue to submit the RTCR sampling data to the EPA until directed otherwise. This data shall include all chlorine residual data for all RTCR sampling locations.
42. Respondent must notify the EPA within 24 hours after learning of a violation of this Order or any NPDWRs, or of a situation with the potential to have serious adverse effects on human health as a result of short-term exposure to contaminants.
43. Establishing Regular Contact with the EPA.
- a. Immediately upon the Effective Date of this Order and until further notice by the EPA, Respondent shall submit MOR information weekly as follows:
    - i. Reports must run from Sunday to Saturday each week;
    - ii. Weekly reports must be submitted to the EPA and MSDH by Tuesday of the following week (e.g., for the monitoring timeframe of Sunday, March 29 through Saturday, April 4, the report must be submitted by Tuesday, April 7).
    - iii. IFE data must be submitted with each weekly MOR until further notice.
    - iv. If at any time, the Respondent is notified, by the EPA or MSDH that a revision to the MOR is required, the Respondent shall implement the revision on the following report required unless the EPA or MSDH provides a specific alternate timeline for implementation.
  - b. Within five business days of the Effective Date of this Order, Respondent shall begin submitting weekly updates to the EPA on Respondent's progress complying with this Order. Respondent shall submit subsequent weekly reports on Tuesday of each subsequent week. Each weekly update shall identify and describe all actions taken in the previous week to meet the requirements of this Order.
  - c. Within seven business days of the Effective Date of this Order, Respondent shall contact the EPA to set up a mutually agreeable meeting schedule. The purpose of the meetings to be scheduled pursuant to this paragraph are to accomplish the following goals:
    - i. Provide an opportunity for the Respondent and the EPA to clarify requirements and timelines,
    - ii. Provide an opportunity for Respondent to report to the EPA any issues, concerns, or problems it faces in complying with the terms of this Order, and



- iii. Provide an opportunity for Respondent and the EPA to maintain an open channel of communication wherein new information can be shared.
  - d. Respondent shall prepare an outline of all the requirements in this Order, how Respondent plans to meet all the requirements of this Order, and submit to the EPA in writing at least 48 hours in advance of the first agreed-upon meeting required under Paragraph 43(c) above. If this falls on a weekend, Respondent shall provide the outline on the last workday before the meeting.
44. Respondent shall send all reports, notifications, documentation and submittals required by this Order in writing or via e-mail to:

U.S. EPA, Region 4  
Enforcement and Compliance Assurance Division  
Attn: Amanda Driskell  
U.S. Environmental Protection Agency  
61 Forsyth Street  
Atlanta, GA 30303  
Email: driskell.amanda@epa.gov

45. All reports, notifications, documentation, and submissions required by this Order must be signed by a duly authorized representative of Respondent and must include the following statement:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

#### IV. PARTIES BOUND

46. The provisions of this Order shall apply to and be binding upon Respondent, its officers, employees, agents, successors, and assigns.

#### V. GENERAL PROVISIONS

47. This Order constitutes final agency action. Under Section 1448(a) of the SDWA, 42 U.S.C. § 300j-7(a), Respondent may seek federal judicial review.
48. The EPA may modify this Order to ensure protection of human health. The EPA will communicate any modification(s) to Respondent in writing and the modification(s) shall be incorporated into this Order.
49. Compliance with the terms and conditions of this Order shall not in any way be construed to relieve Respondent from its obligations to comply with all provisions of federal, state, or local law, nor shall it be construed to be a determination of any issue related to any federal, state or local permit.

Compliance with this Order shall not be a defense to any actions subsequently commenced for any violation of federal laws and regulations administered by the EPA, and it is the responsibility of Respondent to comply with such laws and regulations.

50. Pursuant to SDWA Section 1431(b), 42 U.S.C. § 300i(b), in the event Respondent violates, fails or refuses to comply with any of the terms or provisions of this Order, the EPA may commence a civil action in U.S. District Court to require compliance with this Order and to assess a civil penalty of up to \$24,386 per day of violation under the SDWA, as adjusted by the Federal Civil Penalties Inflation Adjustment Act of 1990, amended by the Debt Collection Improvement Act of 1996, and the subsequent Civil Monetary Penalty Inflation Adjustment Rule, 40 C.F.R. § 19.
51. The EPA reserves all rights against Respondent and all other persons to take any further civil, criminal, or administrative enforcement action pursuant to any available legal authority, and to exercise its information gathering and inspection authorities. Nothing in this Order shall preclude the EPA from taking any additional enforcement actions, including modification of this Order or issuance of additional Orders, and/or additional actions as the EPA may deem necessary, and/or from requiring Respondent in the future to perform additional activities pursuant to the SDWA or any other applicable law.

#### **VI. EFFECTIVE DATE**

52. Under SDWA Section 1431, 42 U.S.C. § 300i, this Order shall be effective immediately upon Respondent's receipt of this Order. If modifications are made by the EPA to this Order, such modifications will be effective on the date received by Respondent. This Order shall remain in effect until the provisions identified in the Order have been met in accordance with the EPA's written approval.

#### **VII. TERMINATION**

53. The provisions of this Order shall be deemed satisfied upon Respondent's receipt of written notice from the EPA that Respondent has demonstrated, to the satisfaction of the EPA, that the terms of this Order have been satisfactorily completed.

**FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:**

Carol L. Kemker

3/27/2020

Carol L. Kemker, Director

Date

Enforcement and Compliance Assurance Division  
Region 4



**ATTACHMENT I****Sampling Requirements**

<b># of Connections Affected</b>	<b># of Samples Required</b>	<b># of Connections Affected</b>	<b># of Samples Required</b>
1 – 100	2	4,301 – 5,700	18
101 – 300	3	5,701 – 8,300	20
301 – 500	4	8,301 – 11,000	30
501 – 700	5	11,001 – 13,000	40
701 – 900	6	13,001 – 16,000	50
901 – 1,100	7	16,001 – 19,000	60
1,101 – 1,300	8	19,001 – 23,000	70
1,301 – 1,600	9	23,001 – 27,000	80
1,601 – 2,200	10	27,001 – 32,000	90
2,201 – 2,500	11	32,001 – 43,000	100
2,501 – 2,800	12	43,001 – 73,000	120
2,801 – 4,300	15	73,001 – 107,000	150

Note: Equivalent connections (and population served) will be considered when determining the number of samples which must be collected for a system with a large ratio of population to connections.

Mailing Addresses for the CCs:

Mr. Robert K. Miller, Director  
City of Jackson Department of Public Works  
200 South President Street  
Jackson, Mississippi 39205-0017

William Moody, MSDH  
Bureau of Public Water Supply  
P.O. Box 1700  
2423 North State Street  
Jackson, MS 39215-1700

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
216	100-BWN-2021	11/19/2021	Not available	[3200-3499] Forest H[ill] Road; 39212 Forest Park Drive Park Circle Forest Valley Dr. Park Lane Park Dr.  Corrected on 11/19/2021 to: [3200-3499] Forest Hill Road; 39212	100, corrected to 15	Loss in water pressure
217	13-BWN-2021	11/22/2021	11/29/2021	[5600-5899] Turner St.; 39209 [1500-1799] Reddix St. [1500-1799] Dewey St. [1500-1724] Truman St.	90	Loss in water pressure
218	101-BWN-2021	11/23/2021	11/30/2021	[1600-1699] Piedmont St.; 39202	10	Loss in water pressure
219	14-BWN-2021	11/24/2021	11/30/2021	[940-1199] Bullrun Dr.; 39272 Mourning Dove Cove Olive Branch Cove White Dove Cove	120	Loss in water pressure
220	102-BWN-2021	11/29/2021	12/1/2021	Flag Chapel Circle; 39213	Not available	Loss in water pressure
221	15-BWN-2021	12/1/2021	12/3/2021	Mountain Cove; Byram 39272	Not available	Loss in water pressure
222	103-BWN-2021	12/2/2021	12/6/2021	Flag Chapel Circle; 39213	25	Loss in water pressure
223	16-BWN-2021	12/2/2021	12/7/2021	[1500-3499] Springridge Road, Raymond; 39154 Lockett Lane Devinity Dr. Vance Dr. Lyles Lane Spears Trace Windsor Lane	Not available	Loss in water pressure
224	104-BWN-2021	12/13/2021	12/15/2021	[400-599] Magnolia St.; 39203 [1300-1499] 4th Ave.	30	Loss in water pressure
225	105-BWN-2021	12/15/2021	12/16/2021	[2400-3299] US Highway 80; 39204/39209	15	Loss in water pressure
226	17-BWN-2021	12/17/2021	12/21/2021	[200-299] Forbes Drive; Byram, 39272	10	Loss in water pressure
227	18-BWN-2021	12/20/2021	12/28/2021	[5500-5799] US 80; 39209 (North Side Only) [5600-5699] Shaw Road Kennedy Road Samantha Dr. Paco Way Zepher Road	75	Loss in water pressure
228	106-BWN-2021	12/21/2021	12/28/2021	[200-299] Colonial Circle; 39211	Not available	Loss in water pressure
229	107-BWN-2021	12/22/2021	12/28/2021	[3700-4099] West Capitol St.; 39209	30	Loss in water pressure
230	108-BWN-2021	12/23/2021 (extended 12/27/2021)	12/28/2021	[400-499] Sheppard Road; 39206  Extended to: [200-499] Sheppard Road; 39206	5, extended to 30	Loss in water pressure
231	109-BWN-2021	12/29/2021	1/4/2022	[100-199] Park Circle; 39212 Park Dr.	30	Loss in water pressure
<b>2022 (Through October 21)</b>						
232	01-BWN-2022	1/5/2022	1/7/2022	[100-299] Melrose Drive; 39211 [100-299] Southbrook Dr.	80	Loss in water pressure
233	02-BWN-2022	1/7/2022	1/11/2022	[2800-2999] Fairhill Dr.; 39212	50	Loss in water pressure
234	03-BWN-2022	1/8/2022	1/11/2022	[1900-2099] Robinson St.; 39209	30	Loss in water pressure
235	04-BWN-2022	1/8/2022	1/11/2022	[1100-1299] Quinn St.; 39202	30	Loss in water pressure
236	05-BWN-2022	1/8/2022	1/11/2022	Woodland Hills Place; 39216	Not available	Loss in water pressure
237	06-BWN-2022	1/9/2022	1/13/2022	[1800-1899] Lyncrest Ave.; 39202	10	Loss in water pressure

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
238	07-BWN-2022	1/10/2022	1/13/2022	[1300-1399] Peachtree St.; 39202	5	Loss in water pressure
239	08-BWN-2022	1/11/2022	1/13/2022	Ridgeover Place; 39211	7	Loss in water pressure
240	09-BWN-2022	1/11/2022	1/13/2022	[2940-3040] Terry Road; 39212 Maple Ridge Dr. Rebel Woods Dr.	50	Loss in water pressure
241	10-BWN-2022	1/12/2022	1/14/2022	[2400-2599] Gunda St.; 39204 [800-899] Reaves St.	20	Loss in water pressure
242	11-BWN-2022	1/13/2022	1/18/2022	Lorraine Street; 39202	25	Loss in water pressure
243	12-BWN-2022	1/13/2022	1/18/2022	[4600-4699] Kirkley Dr.; 39206	30	Loss in water pressure
244	13-BWN-2022	1/13/2022	1/18/2022	Cedar Park Drive; 39206	Not available	Loss in water pressure
245	14-BWN-2022	1/20/2022	1/24/2022	[600-799] Claiborne Ave.; 39209	20	Loss in water pressure
246	15-BWN-2022	1/22/2022	1/25/2022	[900-1199] Valley St.; 39203	20	Loss in water pressure
247	16-BWN-2022	1/22/2022	1/25/2022	[300-499] St. Andrews Dr.; 39211 [240-299] Brae Burn Dr.	25	Loss in water pressure
248	17-BWN-2022	1/24/2022	1/26/2022	Moss Ave.; 39209	20	Loss in water pressure
249	18-BWN-2022	1/24/2022	1/28/2022	940 E. McDowell Road; 39204	1	Loss in water pressure
250	19-BWN-2022	1/24/2022	1/28/2022	[1800-1999] Hwy 80 West; 39204 [1800-1899] Hattiesburg St. Coach Fred Harris St. Isable St.	12	Loss in water pressure
251	20-BWN-2022	1/24/2022	1/28/2022	[1000-2099] Scanlon Dr.; 39204 [1200-1299] Anna Lisa Lane [1900-1999] Castle Hill Dr.	50	Loss in water pressure
252	21-BWN-2022	1/24/2022	2/3/2022	[600-699] W. McDowell Road; 39204 [2600-2999] Belvedere Dr.; 39212 Freemont St.	25	Loss in water pressure
253	22-BWN-2022	1/25/2022	1/27/2022	[4800-4899] McWillie Cir.; 39206	5	Loss in water pressure
254	23-BWN-2022	1/25/2022	1/27/2022	[3900-4599] I-55 South Frontage Rd.; 39212 (East Side of Interstate Only)	5	Loss in water pressure
255	24-BWN-2022	1/28/2022	2/1/2022	Olive Street; 39202	7	Loss in water pressure
256	25-BWN-2022	1/31/2022	2/2/2022	[4100-4399] Oaklawn Dr.; 39206 [300-399] Pine Ridge Road; Woodsia Lane	70	Loss in water pressure
257	26-BWN-2022	2/4/2022	2/8/2022	Holbrook Dr.; 39206 Holbrook Circle	25	Loss in water pressure
258	27-BWN-2022	2/8/2022	2/10/2022	[100-235] Parkside Place; 39209	7	Loss in water pressure
259	28-BWN-2022	2/10/2022	2/14/2022	[3200-3299] Washington St.; 39209 [1000-1099] Craft St.	40	Loss in water pressure
260	29-BWN-2022	2/11/2022	2/14/2022	[2400-2599] Belvedere Dr.; 39204	40	Loss in water pressure
261	30-BWN-2022	2/11/2022	2/15/2022	[2929-2999] I-55 South Frontage Road; 39212 (West Side of Interstate Only)	2	Loss in water pressure
262	31-BWN-2022	2/12/2022	2/15/2022	Broadview St.; 39209	50	Loss in water pressure
263	32-BWN-2022	2/15/2022	2/17/2022	[100-199] Woodsia Lane; 39206 [300-399] Pine Ridge Rd. 4314 Woodland Ave.	45	Loss in water pressure
264	33-BWN-2022	2/16/2022	2/18/2022	[2929-2999] I-55 South Frontage Road; 39212 (West Side of Interstate Only)	2	Loss in water pressure

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
265	34-BWN-2022	2/16/2022	2/18/2022	[3549-4099] West Capitol Street; 39209	35	Loss in water pressure
266	35-BWN-2022	2/18/2022	2/23/2022	[5100-5299] Hanging Moss Road; 39206 [300-399] Meadow Road	15	Loss in water pressure
267	36-BWN-2022	2/20/2022	2/23/2022	Flag Chapel Circle; 39213	20	Loss in water pressure
268	37-BWN-2022	2/20/2022	2/23/2022	[5300-5699] Terry Road; Byram, 39272 Magnolia Bluff Dr. Womack Dr. Burgess Cove Shorter Dr. Gunn Circle Vining Court	80	Loss in water pressure
269	38-BWN-2022	2/24/2022	2/28/2022	[1900-2299] Hill Ave; 39204 Isabel Street Coach Fred Harris St.	15	Loss in water pressure
270	39-BWN-2022	2/28/2022	3/2/2022	[115-199] Highland Circle; 39211 Pinevale St.	20	Loss in water pressure
271	40-BWN-2022	3/1/2022	3/3/2022	[3300-3399] Harley Street; 39209	2	Loss in water pressure
272	41-BWN-2022	3/3/2022	3/7/2022	[200-1499] Mayes St.; 39213 [300-499] Eminence Row [3100-3299] Marion Dunbar St. James Hill St. Johnson St. Tougaloo St. Lawson St. Oakpointe Apts. 4049 N. West St.	200	Loss in water pressure
273	42-BWN-2022	3/9/2022	3/11/2022	[100-699] Cedarhurst Dr.; 39206	50	Loss in water pressure
274	43-BWN-2022	3/14/2022	3/17/2022	[400-499] Downing St.; 39216	25	Loss in water pressure
275	44-BWN-2022	3/21/2022	3/23/2022	3100 Woodbine Street; 39212 Blossom Apartments	1	Loss in water pressure
276	45-BWN-2022	3/25/2022	3/29/2022	Caroline Dr.; 39209 St. Francis St.	15	Loss in water pressure
277	46-BWN-2022	3/29/2022	3/31/2022	[600-799] Chickasaw Ave.; 39206 [4100-4199] Robin Dr. [4100-4399] Council Circle Eagle Ave. Seminole Ave. Choctaw Road 4424 Kings Hwy.	85	Loss in water pressure
278	47-BWN-2022	4/2/2022	4/7/2022	[5400-5599] Wayneland Dr.; 39211	30	Loss in water pressure
279	48-BWN-2022	4/4/2022	4/7/2022	[2300-2414] River Oaks Blvd.; 39211 River Oaks Place Northtown Road	60	Loss in water pressure
280	49-BWN-2022	4/5/2022	4/7/2022	[4600-4699] Normandy Dr.; 39206	20	Loss in water pressure
281	50-BWN-2022	4/13/2022	4/15/2022	[1200-1699] Pinehurst St.; 39202	20	Loss in water pressure
282	51-BWN-2022	4/27/2022	4/29/2022	Presidential Hills; 39213 Natchez Trace Estates	2000	Loss in water pressure
283	52-BWN-2022	4/28/2022	5/2/2022	Shubuta Street; 39209	3	Loss in water pressure
284	53-BWN-2022	5/16/2022	5/18/2022	Council Cir.; 39206 Redwing Ave. Eagle Ave.	95	Loss in water pressure
285	54-BWN-2022	5/20/2022	5/25/2022	Fondren Green Cir.; 39216	7	Loss in water pressure
286	01-BWN-2022	6/2/2022	6/7/2022	[176-202] Brooklynn St.; Byram, MS 39272	15	Loss in water pressure
287	56-BWN-2022	6/3/2022	6/8/2022	[1100-1299] Greymont; 39202	20	Loss in water pressure
288	57-BWN-2022	6/4/2022	6/8/2022	[1000-1199] Blair St.; 39202	10	Loss in water pressure

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
289	58-BWN-2022	6/4/2022	6/9/2022	Eastline Drive; 39211	10	Loss in water pressure
290	59-BWN-2022	6/20/2022	6/22/2022	[720-853] S. Prentiss Street; 39209 [1204-1601] Robinson Street; 39203-09	30	Loss in water pressure
291	02-BWN-2022	6/21/2022	This notice was not lifted due to the issuance of the citywide boil water notice.	[ 6000-6199] Montgomery Drive; 39209	5	Loss in water pressure
292	60-BWN-2022	6/22/2022	This notice was not lifted due to the issuance of the citywide boil water notice.	[1700-1899] Howard Street; 39202	35	Loss in water pressure
293	61-BWN-2022	6/22/2022	This notice was not lifted due to the issuance of the citywide boil water notice.	[300-499] Mississippi Street; 39201	10	Loss in water pressure
294	03-BWN-2022	6/24/2022	7/8/2022	All City of Jackson Water Connections, Including the City of Byram and areas of Hinds County Served by the City of Jackson water system	All City of Jackson Water Connections, Including the City of Byram and areas of Hinds County Served by the City of Jackson water system	Loss in water pressure
295	62-BWN-2022	6/24/2022	7/9/2022 (7/8/2022 for well water connections)	City of Jackson	All City of Jackson Water Connections, Including the City of Byram and areas of Hinds County Served by the City of Jackson water system	Loss in water pressure
296	63-BWN-2022	7/9/2022	7/12/2022	Queens-Magnolia Terrace Community; [100-699] North Flag Chapel Rd; 39209 [5300-5799] Clinton Blvd. East Street Loden Place	1000	Loss in water pressure
297	64-BWN-2022	7/12/2022	7/15/2022	[1100-1299] Greymont	20	Loss in water pressure
298	65-BWN-2022	7/14/2022	7/22/2022	[3200-3599] Old Canton Road; 39216 [3400-3599] Kings Hwy. [3500-3699] Hawthorne Dr. Ridge Dr. Glenway Dr. Woodland Dr. Woodland Cir. Duling Ave.	200	Loss in water pressure
299	66-BWN-2022	7/14/2022	7/19/2022	[300-499] Mississippi St.; 39201	3	Loss in water pressure
300	67-BWN-2022	7/18/2022	7/21/2022	[3700-3799] Liberty St.; 39213	20	Loss in water pressure
301	68-BWN-2022	7/19/2022	7/21/2022	[1800-1999] Gordon St; 39203 [300-399] Jennings St. [300-399] Dewitt Ave.	50	Loss in water pressure
302	69-BWN-2022	7/20/2022	7/22/2022	[1700-1899] Howard St.; 39202	30	Loss in water pressure
303	70-BWN-2022	7/21/2022	7/25/2022	[3700-3799] Liberty St.; 39213	20	Loss in water pressure
304	71-BWN-2022	7/21/2022	7/25/2022	[400-799] West Amite St.; 39203	3	Loss in water pressure

BWN Count	BWN	Date Issued	Date Lifted	Affected Areas	Number of Connections Affected	Cause
305	72-BWN-2022	7/26/2022	7/29/2022	[1800-1899] St. Mary St.; 39202	15	Loss in water pressure
306	04-BWN-2022	7/27/2022 (extended)	7/29/2022	[5100-5299] Greenway Dr. Extension; 39209 [1800-2199] Greenway Dr. Woodland Way McDonald's 5669 MS Hwy 18	50	Loss in water pressure
307	State Boil-Water Alert	7/29/2022	Not available	City of Jackson in Hinds County	All City of Jackson in Hinds County connections	Turbidity level exceeded standard
308	73-BWN-2022	7/30/2022	9/15/2022	City of Jackson	All City of Jackson Surface Water Connections Including areas of Byram (46000 Connections)	Turbidity levels exceeded standard
309	MS0250008 CITY OF JACKSON SURFACE WATER SYSTEM HAS HIGH TURBIDITY LEVELS. BOIL YOUR WATER BEFORE USING	8/4/2022	Not available	City of Jackson	All City of Jackson Connections	Turbidity levels exceeded standard
310	05-BWN-2022	8/29/2022	9/1/2022	Gary Road Elementary School; Byram, 39272 Gary Road Intermediate School	2	Loss in water pressure
311	06-BWN-2022	9/14/2022	9/20/2022	[2000-2199] South Ridge Road; Byram, 39272	55	Loss in water pressure
312	74-BWN-2022	9/16/2022	9/20/2022	Vine Street; 39202	10	Loss in water pressure
313	75-BWN-2022	9/18/2022	9/20/2022	[1300-1399] Peachtree St.; 39202	5	Loss in water pressure
314	76-BWN-2022	9/20/2022	9/22/2022	[4200-4222] N. Honeysuckle Lane; 39211	7	Loss in water pressure
315	29-BWN-2020 [sic]	9/21/2022	Not available	[701-799] Ewing St. [1100-1200] Lewis St. [301-499] Line St.	30	Loss in water pressure
316	07-BWN-2022	9/22/2022	9/27/2022	[500-522] Golden Eagle Dr.; Byram, 39272 Canyon Cove Talon Cove	40	Loss in water pressure
317	08-BWN-2022	9/25/2022	Not available	Glenn oak Circle; Byram, 39272	20	Loss in water pressure
318	77-BWN-2022	9/25/2022 (corrected)	9/28/2022	[5300-5599] Highland Dr.; 39206 [4300-4599] El Paso St. Paso Cove	30	Loss in water pressure
319	78-BWN-2022	9/25/2022	9/28/2022	[1200-2399] North State Street; 39202 [1600-1899] Pine St. [700-799] Oakwood St. [700-799] Fairview St. [700-799] Arlington St. [700-799] Pinehurst St. [700-799] Gillespie St. Popcorn Alley Park Ave.	110	Loss in water pressure
320	79-BWN-2022	9/25/2022	9/29/2022	[1300-1399] Peachtree St.; 39202	5	Loss in water pressure
321	09-BWN-2022	9/26/2022	9/28/2022	[7300-8899] Gary Road; Byram, 39272, Gary Dr., Glenn Haven Subdivision, Glennhaven Dr., Glennhaven Ct., Glenn Oak Dr, Cedar Glenn Dr., Brand Creek Dr., Red Oak Cove, Cedar Glenn Cove, Trelles Cove, Highland Cove, Azalea Cove, Glennwood Cove, Ridge Pl., Redwood Cove, Holybush Pl., Glennoak Cir., Eagle Nest Subdivision, Eagle Nest Dr., Freedom Cove, Highpoint Dr., Mountain Crest Dr., Golden Eagle Dr., Talon Cove, Canyon Cove, Lake Ridgelea Subdivision, Turtle Road, Park Ave., Mary Lane, Lake Shore Dr., Oak Ave., Pike Ave., Ridgelea Rd., Lure Ave., Meadow Lane, S. Ridge Road, E. Ridge Road, Bob White St., Rod St., Reel St., Hook St., W. Ridge Rd., Horse Shoe Cir., Line St., Spinning St.	1000	Loss in water pressure

<b>BWN Count</b>	<b>BWN</b>	<b>Date Issued</b>	<b>Date Lifted</b>	<b>Affected Areas</b>	<b>Number of Connections Affected</b>	<b>Cause</b>
322	<b>80-BWN-2022</b>	9/27/2022	9/30/2022	[600-799] Cooper Road; 39212 Rosemary Ave. Norwood Ave. Comer St.	110	Loss in water pressure
323	<b>81-BWN-2022</b>	9/28/2022	9/30/2022	[1100-1199] Woodfield Dr.; 39211	30	Loss in water pressure
324	<b>10-BWN-2022</b>	9/29/2022	10/3/2022	[100-199] Plummer Circle; 39212	30	Loss in water pressure
325	<b>82-BWN-2022</b>	10/6/2022	10/12/2022	[1100-1199] Lyncrest Ave.; 39202	15	Loss in water pressure
326	<b>11-BWN-2022</b>	10/7/2022	10/12/2022	Lakeover Place; Terry, 39170	5	Loss in water pressure
327	<b>83-BWN-2022</b>	10/8/2022	10/12/2022	[3400-3799] Kings Hwy.; 39216	30	Loss in water pressure
328	<b>84-BWN-2022</b>	10/10/2022	10/13/2022	[1200-1299] Winnrose St.; 39211 Winnrose Ct.	30	Loss in water pressure
329	<b>85-BWN-2022</b>	10/11/2022	10/13/2022	Timberlain Dr.; 39211	20	Loss in water pressure
330	<b>86-BWN-2022</b>	10/14/2022	10/18/2022	[100-699] Cedarhurst Dr.; 39206	50	Loss in water pressure
331	<b>87-BWN-2022</b>	10/18/2022	10/20/2022	[400-1199] East McDowell Road; 39204 Meter Road Parcel Drive Swift Street	25	Loss in water pressure
332	<b>88-BWN-2022</b>	10/19/2022	10/22/2022	Patton Ave.; 39216	20	Loss in water pressure
333	<b>89-BWN-2022</b>	10/21/2022	10/25/2022	[700-799] Poplar Blvd.; 39202 [1200-1299] North St.	10	Loss in water pressure



Attachment C  
Amendment to the Emergency Order

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

<b>IN THE MATTER OF:</b>	)	Docket No. SDWA-04-2020-2300
	)	
City of Jackson, Mississippi,	)	<b>AMENDMENT TO</b>
	)	<b>EMERGENCY ADMINISTRATIVE</b>
Respondent.	)	<b>ORDER</b>
	)	
Public Water System, PWS ID. No. MS0250008.)	)	Proceeding pursuant to Section 1431(a) of
	)	the Safe Drinking Water Act, 42 U.S.C. §
<hr/>		300i(a).

**FIRST AMENDMENT TO EMERGENCY ADMINISTRATIVE ORDER**

1. The U.S. Environmental Protection Agency issued an Emergency Administrative Order (Order), effective April 2, 2020, to Respondent, City of Jackson, Mississippi (Respondent).
2. On April 28, 2020, the EPA and Respondent held the first meeting required under Paragraph 43(c) of the Order. During that meeting, Respondent requested clarification regarding the triggering event under Subparagraph 39(c)(ii) for implementation of the Alternative Water Source Plan (AWSP) required under Order.
3. Pursuant to the authority of Section 1431(a) of the Safe Drinking Water Act, 42 U.S.C. § 300i(a), **THE DIRECTOR HEREBY ORDERS THAT PARAGRAPH 39(c)(ii) OF THE ORDER BE REMOVED AND REPLACED WITH THE FOLLOWING:**
  - a. If, based upon Respondent's daily special purpose samples required under Paragraphs 37 and 38 of the Order, the PWS has a total coliform-positive sample the Respondent shall begin implementation of the AWSP within 24 hours of receiving such sampling results. Respondent shall continue implementing the AWSP until all daily special purpose sample results are total coliform negative. *Note:* The AWSP may consider, in certain situations as specified in 39(a), that only a portion of the population is impacted by the triggering event and therefore, alternative water only needs to be provided to those impacted.
4. Except as expressly agreed in the foregoing paragraphs, this First Amendment to the Order does not otherwise affect, alter, or amend the requirements of the Order.
5. This First Amendment to the Order shall become effective upon receipt by the Respondent.

**FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:**

**CAROL KEMKER**



Digitally signed by CAROL KEMKER  
Date: 2020.05.28 14:25:12 -04'00'

---

Carol L. Kemker, Director  
Enforcement and Compliance Assurance Division  
Region 4

Date

Attachment D  
Consent Order

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

<p><b>IN THE MATTER OF:</b></p> <p>City of Jackson, Mississippi,</p> <p>Respondent.</p> <p>Public Water System, PWS ID. No. MS0250008.</p>	<p>)</p> <p>)</p> <p>)</p> <p>)</p> <p>)</p> <p>)</p> <p>)</p>	<p>Docket No. SDWA-04-2020-2301</p> <p><b>ADMINISTRATIVE COMPLIANCE ORDER ON CONSENT</b></p> <p>Proceeding pursuant to Section 1414(g) of the Safe Drinking Water Act, 42 U.S.C. § 300g-3(g).</p>
--	--	---

---

**I. STATUTORY AUTHORITY**

1. This Administrative Compliance Order on Consent (“AOC”) is issued to the City of Jackson, Mississippi (“Respondent” or “City”) pursuant to the authority vested in the Administrator of the U.S. Environmental Protection Agency (“EPA”) by Section 1414(g) of the Safe Drinking Water Act (“SDWA”), 42 U.S.C. § 300g-3(g). The Administrator has delegated this authority to the Regional Administrator of EPA Region 4, who has, in turn, delegated this authority to the Director of the Enforcement Compliance and Assurance Division.

**II. EPA’s FINDINGS OF FACT AND CONCLUSIONS OF LAW**

2. Respondent is a municipality created under the laws of the State of Mississippi and is therefore a “person” as that term is defined in the SDWA. 42 U.S.C. § 300f(12); 40 C.F.R. § 141.2.

3. Respondent owns and/or operates a public water system located in the City of Jackson, Mississippi, PWS ID No. MS0250008 (“System”). The System provides water for human consumption to a population of approximately 173,514.<sup>1</sup>

4. The System is a “public water system” within the meaning of Section 1401(4) of the SDWA, 42 U.S.C. § 300f(4); 40 C.F.R. § 141.2.

5. The System regularly serves at least 25 year-round residents and is therefore a “community water system” (“CWS”) within the meaning of Section 1401(15) of the SDWA, 42 U.S.C. § 300f(15), and 40 C.F.R. § 141.2.

---

<sup>1</sup> Until approximately October 2014, there were two separately identified public drinking water systems owned by the City. One was supplied entirely by groundwater and identified under the PWS ID No. MS0250012; the other was supplied by surface water and identified under the PWS ID No. MS0250008. In or around October 2014, the City requested the removal of the PWS ID No. MS0250012, as the City intended to stop utilizing the groundwater sources as primary sources of drinking water. At the time of the EPA’s Civil Investigation (“Investigation”), the EPA identified that the groundwater sources were still being utilized as a primary source for a portion of the distribution and requested that the PWS ID No. MS0250012 be reinstated for the groundwater portion of the system. In or around July 2020, MSDH reinstated the PWS ID No. MS0250012. This Order addresses only those violations alleged to have occurred in the surface water system, PWS ID No. MS0250008.

6. Respondent's ownership and/or operation of the System makes it a "supplier of water" within the meaning of Section 1401(5) of the SDWA, 42 U.S.C. § 300f(5), and 40 C.F.R. § 141.2, and subject to the requirements of Part B of the SDWA, 42 U.S.C. § 300g, the National Primary Drinking Water Regulations ("NPDWRs") at 40 C.F.R. Part 141, and the Mississippi Primary Drinking Water Regulations ("MPDWRs"), promulgated pursuant to the Mississippi Safe Drinking Water Act of 1997 ("MSDWA"), Miss. Code Ann. § 41-26-1 et. seq.

7. Pursuant to SDWA Section 1413, 42 U.S.C. § 300g-2, the Mississippi State Department of Health ("MSDH" or the "State") has primary responsibility for the implementation and enforcement of the public water supply program in Mississippi.

8. Requirements of, or permits issued to Respondent under, the MSDWA and its implementing regulations are "applicable requirements" pursuant to Section 1414(i)(4) of the SDWA, 42 U.S.C. § 300g-3(i)(4), and may therefore be enforced by the EPA under Section 1414(g)(1) of the SDWA, 42 U.S.C. § 300g-3(g)(1).

9. The System consists of two water treatment plants, known as the O.B. Curtis Water Treatment Plant ("O.B. Curtis WTP")<sup>2</sup> and the J.H. Fewell Water Treatment Plant ("J.H. Fewell WTP"),<sup>3</sup> and appurtenant collection, treatment, storage, and distribution facilities.

10. The surface water sources that contribute to the System are the Ross Barnett Reservoir, which serves O. B. Curtis WTP, and the Pearl River, which serves the J. H. Fewell WTP.

11. The O.B. Curtis and J.H. Fewell WTPs employ conventional filtration with ultraviolet ("UV") systems to inactivate pathogens. The O.B. Curtis WTP also employs a membrane filtration system for a portion of the water that goes through this WTP. Finished water at the WTPs is disinfected using chloramines.

12. UV disinfection treatment is installed on each conventional individual filter effluent ("IFE") flow at the O.B. Curtis WTP and on each high service pump at the J.H. Fewell WTP to treat for viruses, including *Cryptosporidium* and *Giardia*. Pursuant to 40 C.F.R. § 141.720(d)(3)(ii), systems must treat at least 95% of the water delivered to the public during each month by UV reactors operating within validated conditions for the required UV dose.

13. The System is required to provide filtration pursuant to 40 C.F.R. §§ 141.73, 141.173, 141.719(b), and 141.720(d); and disinfection pursuant to 40 C.F.R. §§ 141.72(b) and 141.172.

14. The term "contaminant" means any physical, chemical, biological, or radiological substance or matter in water." 42 U.S.C. § 300f(6).

15. Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness (such as whether disease-causing organisms are present). Higher turbidity levels are often associated with the potential for higher levels of disease-causing microorganisms.

---

<sup>2</sup> To the EPA's knowledge and belief, the O.B. Curtis WTP was initially constructed in or around 1992.

<sup>3</sup> To the EPA's knowledge and belief, the J.H. Fewell WTP was initially constructed in or around 1914.

16. Lead, *E. coli*, *Cryptosporidium*, *Giardia*, haloacetic acids (HAA5), and total trihalomethanes (TTHM) are contaminants under the meaning of 42 U.S.C. § 300f(6) and are or may be present in the System.

17. On November 22, 2019, the EPA issued a Request for Information to Respondent, pursuant to Section 1445 of the SDWA, 42 U.S.C. § 300j-4, and 40 C.F.R. § 141.31, seeking information to determine Respondent's compliance with federal drinking water regulations.

18. On December 23, 2019, Respondent provided its response to the EPA's Request for Information.

19. On January 15 and 16, 2020, consistent with the requirements of Section 1445(b)(1), 42 U.S.C. § 300j-4(b)(1), the EPA notified MSDH and Respondent, respectively, of its intent to inspect the System.

20. On February 3 to 7, 2020, representatives of the EPA conducted an Investigation of the System, pursuant to its authority under Section 1445(b)(1) of the SDWA, 42 U.S.C. § 300j-4(b)(1).

21. On March 30, 2020, the EPA transmitted a copy of the Civil Investigation Report to the Respondent, which identified a number of concerns related to bacterial contamination and proper disinfection.

22. Effective April 2, 2020, the EPA issued Respondent an Emergency Administrative Order, Docket No. SDWA-04-2020-2300 ("Emergency Order"), pursuant to Section 1431 of the SDWA, 42 U.S.C. § 300i(a).

23. In the Emergency Order, the EPA found that Respondent had NPDWR violations and that conditions existed within the System that presented an imminent and substantial endangerment to the health of persons served by the System. The NPDWR violations alleged in the Emergency Order included, but were not limited to:

a. At the time of the Investigation, Respondent could not perform membrane integrity testing at O.B. Curtis WTP due to wear and breakage of the system components and compressor, in contravention of 40 C.F.R. § 141.719; and

b. NDPWRs require a system's combined filtered water at each plant be less than or equal to 0.3 NTU in at least 95% of the measurements taken each month, and the turbidity level of a system's combined filtered water at each plant must at no time exceed 1 NTU. Turbidity exceedances were reported at both the O.B. Curtis and J.H. Fewell WTPs in the January 2020 monthly operating report ("MOR"). Finished water turbidity reached 1.35 NTU at the O.B. Curtis WTP and 3.00 NTU at the J.H. Fewell WTP. Additionally, at the O.B. Curtis WTP, 93.5% of turbidity samples were equal to or less than the turbidity limit of 0.3 NTU. At the time of the Investigation, the EPA's inspectors observed that the continuous turbidity monitoring equipment at the O.B. Curtis WTP had read inaccurately for approximately three years due to a lack of calibration and maintenance, and that turbidity samples were taken during that time period at a frequency of once per shift, for a total of three times per day. Given that the turbidity monitoring equipment was not operational, the system, to maintain compliance with NPDWRs, should have



conducted grab sampling every four hours in lieu of continuous monitoring, but for no more than five working days following the nonoperation of the equipment.

24. In order to ensure that the System has appropriate treatment equipment and appropriate information to make treatment decisions, and that the water quality is properly measured for compliance with NPDWRs, the Emergency Order required Respondent to submit a Comprehensive Equipment Repair Plan (“CERP”) for the EPA’s review and approval, including a schedule of implementation, to repair and/or replace monitoring equipment and repair, replace, and/or perform maintenance on the appurtenant treatment equipment. The Emergency Order also required the Respondent to fix the dosing process for disinfection and pH control; to increase reporting and notice requirements for exceedances of turbidity requirements; provide boil water notices to the public as required under 40 C.F.R. Part 141, Subpart Q, and provide notice thereof to the EPA; develop and implement, after specific triggering events, an Alternative Water Source Plan; provide Revised Total Coliform Rule (“RTCR”) sampling data to the EPA; provide the information to be summarized in its monthly operating reports on a weekly basis to the EPA; and provide weekly updates on compliance with the Emergency Order.

25. Although Respondent developed a CERP, the EPA has not approved the CERP as of the Effective Date of this AOC because the parties have not reached mutual agreement on the schedules of implementation for the items included therein. Respondent has reported that some work, including repairs and/or replacement, has been completed or is ongoing. Respondent has not yet fully completed the tasks identified therein, including the repair, replacement and/or maintenance of much of the equipment identified as needing such work.

26. On May 11, 2020 and April 26, 2021, the EPA issued Notices of Noncompliance to Respondent detailing additional violations beyond those previously identified in the Emergency Order. The allegations contained in these Notices of Noncompliance are detailed more fully below, where such alleged noncompliance has not been fully resolved as of the Effective Date of this AOC and/or where the EPA believes additional compliance measures are required at this time to address such noncompliance.

27. Miss. Admin. Code § 15-20-72.2.2.1(5) requires that a certified Class A operator shall be onsite whenever the treatment plant for a Class A public water system treating surface water is in operation. The System is a Class A public water system because it has surface water treatment, groundwater under the direct influence of surface water, lime softening, or coagulation and filtration for the removal of constituents other than iron or manganese. See Miss. Admin. Code § 15-20-72.2.2.1(5).

A review of the City’s operating logbooks, provided to the EPA by MSDH on March 11, 2020, and records of discussions between the City, the EPA and MSDH indicate that the System is not always fully covered by a Class A certified operator. Therefore, the City is in noncompliance with the MPDWR, Miss. Admin. Code § 15-20-72.2.2.1(5), for failure to maintain certified operators to operate the facilities.

28. 40 C.F.R. § 141.719(b)(3) and Miss. Admin. Code § 15-20-72.1.7.1 require that a PWS must conduct direct integrity testing of membrane units at a frequency of not less than once per day that the membrane unit is in operation to demonstrate removal efficiencies.

During the February 2020 Investigation and upon review of the City's subsequent MORs, the EPA found that the City was unable to perform direct integrity testing of the membrane units at O.B. Curtis WTP on a number of occasions due to wear and breakage of components and/or malfunctioning equipment. Therefore, the City failed to comply with 40 C.F.R. § 141.719(b)(3) and Miss. Admin. Code § 15-20-72.1.7.1.

29. 40 C.F.R. § 141.719(b)(4) and Miss. Admin. Code § 15-20-72.1.7.1 require that a PWS conduct continuous indirect integrity monitoring on each membrane unit unless the system implements continuous direct integrity testing of membrane units in accordance with the criteria in 40 C.F.R. § 141.719 (b)(3)(i) through (v). If indirect integrity monitoring includes turbidity and if the filtrate turbidity readings are above 0.15 nephelometric units ("NTU"), the PWS must immediately perform direct integrity testing on the associated membrane unit in accordance with 40 C.F.R. § 141.719(b)(3). Pursuant to 40 C.F.R. § 141.719(b)(3), the direct integrity testing log removal value ("LRV") for the membrane units at the O.B. Curtis WTP must be greater than or equal to the control limit<sup>4</sup> of 4, or else it is considered to have failed the direct integrity testing and the System must remove the membrane unit from service, conduct a direct integrity test to verify any repairs, and may return the membrane unit to service only if the direct integrity test is within the control limit. See 40 C.F.R. § 141.719(b)(3)(v).

As indicated by a review of the City's MORs, on multiple days between March 2020 and April 2021, the indirect integrity monitoring of the membrane units at the O.B. Curtis WTP showed turbidity readings greater than 0.15 NTU. Subsequent direct integrity testing, when able to be performed, showed failures of several of the membrane units due to LRVs lower than the control limit of 4. As stated in the MORs for these periods, the City did not remove these membrane units from service, as required by 40 C.F.R. § 141.719(b)(3)(v). Therefore, the City failed to comply with 40 C.F.R. §§ 141.719(b)(3)(v) and 141.719(b)(4) and Miss. Admin. Code § 15-20-72.1.7.1.

30. Pursuant to 40 C.F.R. § 141.132(b)(2) and Miss. Admin. Code § 15-20-72.1.3.6, a PWS using chlorine dioxide for disinfection or oxidation must conduct daily monitoring for chlorite.

On February 5, 2020, the EPA observed the System treating with chlorine dioxide at the J.H. Fewell WTP. However, the February 2020 MOR stated that the System did not use chlorine dioxide at the J.H. Fewell WTP on February 5, 2020, nor did the report show that the System conducted the required monitoring on that date for chlorite.<sup>5</sup> Therefore, the City did not conduct daily monitoring and failed to comply with 40 C.F.R. §§ 141.132(b)(2) and Miss. Admin. Code § 15-20-72.1.3.6.

31. Pursuant to 40 C.F.R. § 141.80(c) and Miss. Admin. Code § 15-20-72.1.3.2, the lead action level is exceeded if the concentration of lead in more than 10% of tap water samples collected during any monitoring period conducted in accordance with 40 C.F.R. § 141.86 is greater than 0.015 mg/L, (i.e., if the "90th percentile" lead level is greater than 0.015 milligrams per liter ("mg/L") (or 15 parts per billion ("ppb"))). Under 40 C.F.R. § 141.80(e), any PWS exceeding the lead action level shall implement all applicable source water treatment requirements specified by the State under

<sup>4</sup> Under 40 C.F.R. § 141.719(b)(3)(iv), a System must establish a control limit within the sensitivity limits of the direct integrity test that is indicative of an integral membrane unit capable of meeting the removal credit awarded by the State. This control limit is known as the minimum log removal value and is set by the primary enforcement agency for membrane treatment systems (in this matter, MSDH).

<sup>5</sup> According to the State, Respondent currently has the ability to use chlorine dioxide (ClO<sub>2</sub>) for manganese removal at both the J.H. Fewell WTP and O.B. Curtis WTP, but not for disinfection.



40 C.F.R. § 141.83. Pursuant to 40 C.F.R. § 141.83, any PWS exceeding the lead action level must complete source water monitoring and make treatment recommendations to the State within 180 days after the end of the monitoring period during which the lead action level was exceeded. The State then makes a determination regarding source water treatment, and, if necessary, the State may require the PWS to install and operate such treatment.

The System exceeded the lead action level of 0.015 mg/L for the following monitoring periods: January – June 2015; January – June 2016; and July – December 2016. On February 12, 2016, MSDH issued a compliance plan to the City to address the lead action level exceedances (“ALEs”). As a result of the June 2015 lead ALE, the City conducted an optimal corrosion control treatment (“OCCT”) study between October 2016 and April 2017 and provided the recommended treatment to MSDH on June 13, 2017. MSDH concurred with the recommended treatment and provided a deadline of May 31, 2019 to complete source water treatment installation. MSDH later extended the completion date to December 2019; yet, the City failed to install OCCT at the J.H. Fewell WTP in accordance with the State’s deadline. Therefore, the City failed to comply with 40 C.F.R. §§ 141.80(e) and 141.83 and Miss. Admin. Code § 15-20-72.1.3.2, when it failed to install OCCT and provide applicable source water treatment by the December 2019 deadline. The City subsequently conducted an OCCT study amendment in 2021 and presented its results and recommended source water treatment to MSDH in a February 2021 report. MSDH accepted the results and recommended source water treatment plan on June 4, 2021. Given that the City’s report recommended a different source water treatment than identified in its initial 2017 OCCT study, and that MSDH established new deadlines for completion of the source water treatment, the OCCT remains unaddressed at J.H. Fewell WTP as of the Effective Date of this AOC.

32. Pursuant to 40 C.F.R. § 141.82(g) and Miss. Admin. Code § 15-20-72.1.4.3, all systems optimizing corrosion control shall continue to operate and maintain OCCT, including maintaining water quality parameters (“WQPs”) at or above minimum values or within ranges designated by the State under 40 C.F.R. § 141.82(f). A water system is out of compliance with the requirements of 40 C.F.R. § 141.82(g) for a six-month period if it has excursions for any State-specified WQP on more than nine days during the period. An excursion occurs whenever the daily value for one or more of the WQPs measured at a sampling location is below the minimum value or outside the range designated by the State. PWSs are required to report any WQP sampling results to the State, pursuant to 40 C.F.R. § 141.90(a). Additionally, PWSs must provide the public notice of treatment technique requirement violations (such as WQP excursions) within 30 days of learning of the violation, pursuant to 40 C.F.R. § 141.203 and Miss. Admin. Code § 15-20-72.1.5.2.

A review of the City’s WQP sampling records indicates that the City failed to comply with the lead and copper rule (“LCR”) treatment technique requirements for the applicable pH and/or alkalinity WQPs<sup>6</sup> for at least the following monitoring periods:

- January – June 2016 (144 days of excursions of WQPs);
- July – December 2016 (179 days of excursions of WQPs);
- January – June 2017 (183 days of excursions of WQPs);

---

<sup>6</sup> In its June 4, 2021 acceptance of the OCCT study amendment recommendations, MSDH set interim WQPs for the System, effective July 1, 2021, and final WQPs, to be effective January 1, 2023. The WQPs referenced in this paragraph are the WQPs in place as of June 4, 2021.

- July – December 2017 (186 days of excursions of WQPs);
- January – June 2018 (167 days of excursions of WQPs);
- July – December 2018 (183 days of excursions of WQPs);
- January – June 2019 (89 days of excursions of WQPs);
- July – December 2019 (59 days of excursions of WQPs);
- January – June 2020 (181 days of excursions of WQPs);
- July – December 2020 (63 days of excursions of WQPs); and
- January – June 2021 (42 days of excursions, through April 28, 2021).

According to the State, the City failed to report the WQP violations to the State and did not provide public notification for the following monitoring periods: July – December 2016; January – June 2017; and July – December 2017. Therefore, the City failed to comply with 40 C.F.R. §§ 141.82(g), 141.90(a), and 141.203 and Miss. Admin. Code §§ 15-20-72.1.4.3 and 72.1.5.2 for failure to maintain optimal WQPs and provide the appropriate public notification.

33. Pursuant to 40 C.F.R. § 141.723(d) and Miss. Admin. Code § 15-20-72.1.4.1, a PWS must correct any significant deficiencies identified in an EPA- or State-conducted sanitary survey in accordance with EPA- or State-approved schedules.

On November 18, 2016, MSDH conducted a sanitary survey, during which MSDH made a finding of inadequate application of treatment chemicals and techniques. On May 12, 2017, MSDH issued a significant deficiency report citing the System for failure to achieve the target hardness and alkalinity goals [*i.e.*, WQPs], and thereafter issued a compliance plan to the System, requiring improvements to the System be completed by December 29, 2019 to bring the System into compliance. The City failed to complete the required compliance measures at the System by the December 29, 2019 deadline established by the State, and, according to the State, has still not completed these compliance measures as of the Effective Date of this AOC. Therefore, the City is in noncompliance with 40 C.F.R. § 141.723(d) and Miss. Admin. Code § 15-20-72.1.4.1.

34. Pursuant to 40 C.F.R. §§ 141.80(f) and 141.84(a) and Miss. Admin. Code § 15-20-72.1.3.2, a water system that fails to meet the lead action level in tap samples taken pursuant to 40 C.F.R. § 141.86(d)(2), after installing corrosion control and/or source water treatment (whichever sampling occurs later), shall replace lead service lines in accordance with the requirements of 40 C.F.R. § 141.84 and Miss. Admin. Code § 15-20-72.1.1.6(8).

Pursuant to 40 C.F.R. § 141.84(b), a water system shall replace annually at least seven percent (7%) of the initial number of lead service lines in its distribution system. The initial number of lead service lines is the number of lead lines in place at the time the replacement program begins. The system shall identify the initial number of lead service lines in its distribution system, including an identification of the portion(s) owned by the system, based on a materials evaluation, including the evaluation required under § 141.86(a) and legal authorities (e.g., contracts, local ordinances) regarding the portion owned by the system. The first year of lead service line replacement shall begin on the first day following the end of the monitoring period in which the action level was exceeded.

The System exceeded the lead action level of 0.015 mg/L for the following monitoring periods: January – June 2015; January – June 2016; and July – December 2016. Therefore, the City

was required to commence its lead service line replacement program in June 2015. Despite exceeding the lead action level on several occasions, the City has failed to implement a lead service line replacement program at any time from June 2015 to the present.<sup>7</sup> Therefore, the City is in noncompliance with 40 C.F.R. §§ 141.80(f) and 141.84 and Miss. Admin. Code § 15-20-72.1.1.6(8).

35. Pursuant to 40 C.F.R. § 141.86(a)(1) and Miss. Admin. Code § 15-20-72.1.3.2, each water system shall complete a materials evaluation of its distribution system in order to identify a pool of targeted sampling sites that meets the requirements of this section, and which is sufficiently large to ensure that the water system can collect the number of lead and copper tap samples required in 40 C.F.R. § 141.86(c). Systems shall use the information on lead, copper and galvanized steel that it is required to collect under 40 C.F.R. § 141.42(d) when conducting a materials evaluation, including identifying the presence of certain construction materials in the distribution system.

As of the Effective Date of this AOC, Respondent has not provided EPA with a complete materials evaluation, utilizing the information specified in 40 C.F.R. § 141.86(a)(2), to identify potential lead service lines, which was required when the LCR was promulgated in 1991.

36. Pursuant to 40 C.F.R. § 141.64(b)(2) and Miss. Admin. Code 15-20-72.1.2.6, the maximum contaminant level (MCL) for total HAA5 is 60 micrograms per liter ( $\mu\text{g/L}$ ), determined as a locational running annual average<sup>8</sup> (LRAA) at each monitoring location. Systems must include the highest LRAA for HAA5 and the range of individual sample results for all monitoring locations expressed in the same units as the MCL. If more than one location exceeds the HAA5 MCL, the System must include the LRAA for all locations that exceed the MCL.

As stated in a public notice issued by the City to its consumers on March 31, 2021, as required under 40 C.F.R. § 141.629, the City's testing results from 4th Quarter 2020 and 1st Quarter 2021 show that the System exceeded the HAA5 MCL during those periods. The level of HAA5 averaged at one of the System's locations for 4th Quarter 2020 was 66  $\mu\text{g/L}$ , and for 1st Quarter 2021 was 65  $\mu\text{g/L}$ . Therefore, the City is in noncompliance with 40 C.F.R. § 141.64(b)(2) and Miss. Admin. Code 15-20-72.1.2.6.

37. Based on the findings above, the EPA has determined that the System has numerous SDWA violations, including violations of the NPDWRs.

### **III. AGREEMENT ON CONSENT**

Based on the foregoing FINDINGS, and pursuant to the authority of Section 1414(g) of the SDWA, 42 U.S.C. § 300g-3(g), the EPA is issuing this AOC, to place the Respondent on an enforceable schedule to comply with 40 C.F.R. Part 141 and applicable requirements of Miss. Admin. Code. **The EPA hereby ORDERS and Respondent hereby AGREES:**

---

<sup>7</sup> Although the City has prepared a draft Lead Service Line Replacement Program Plan for the EPA's approval, a review of the EPA's files and correspondence with the City indicates that the Plan has not been finalized, nor has it been implemented by the City to date.

<sup>8</sup> The locational running annual average is the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. 40 C.F.R. § 141.2.



38. Public Notification. Upon the Effective Date of this AOC, Respondent shall carry out the public notice requirements as required by 40 C.F.R. Part 141, Subpart Q for all future violations of the NPDWRs.

39. Comprehensive Staffing Plan. Within thirty (30) days of the Effective Date of this AOC, Respondent shall provide the EPA with a Comprehensive Staffing Plan. This Plan shall include the staff's primary duty location (i.e., either O.B. Curtis or J.H. Fewell), role(s), and years of experience in that role along with including date of original certification(s). Additionally, Respondent's Plan shall identify how it will ensure that a Class A operator is onsite at all times, including any backup plans in case staff are unavailable.

40. Comprehensive Equipment Repair Plan. The Comprehensive Equipment Repair Plan is incorporated herein as Appendix A, and includes items to be addressed by Respondent. Immediately upon receipt of this AOC, Respondent shall begin implementation of the tasks described in Appendix A in accordance with the schedules of implementation identified therein, including interim milestones, maintenance schedules, and completion deadlines. If, at any time after the Effective Date of this AOC Respondent determines that revisions are required, including extension of timeframes in accordance with Paragraph 50 below, Respondent shall submit a request for revision to the EPA at least ten (10) days prior to implementing any changes explaining why revisions are required and shall not begin implementing such revisions until EPA approval is received. If the EPA determines, during the term of this AOC, that revisions are required, the EPA will notify Respondent in writing of such revisions and Respondent shall submit such revisions to the EPA within thirty (30) days of receipt of the EPA's determination and shall implement such revisions in accordance with the EPA's approval and any associated schedule. Once a task is completed, Respondent shall submit documentation demonstrating completion. Documentation may include, but is not limited to, state concurrence, a contractor work completion acknowledgement, or another document approved by EPA.

41. Asset Management Plan Development and Implementation.

a. Within sixty (60) days of the Effective Date of this AOC, Respondent shall provide a scope of work for the EPA's review and approval for development of an Asset Management Plan. The Asset Management Plan shall include detailed asset inventories (including, at minimum, age, condition, and criticality), operation and maintenance tasks, and long-range financial planning. The scope of work shall include interim milestones and timeframes for completion of the Asset Management Plan. Completion of the Asset Management Plan shall be accomplished within nine (9) months of the EPA's approval of the scope of work. The Asset Management Plan must include an evaluation of all Respondent's assets to facilitate effective and efficient system-wide operational sustainability. See the attached, "*Asset Management: A Best Practices Guide*," for guidance on this topic.<sup>9</sup> The Asset Management Plan must be developed by a qualified entity, and Respondent shall include in its scope of work a description of the entity that will develop the Plan. See the attached, "*Building an Asset Management Team*,"<sup>10</sup> for

---

<sup>9</sup> Additional resources on Asset Management can be found at the following EPA website: <https://www.epa.gov/sustainable-water-infrastructure/asset-management-water-and-wastewater-utilities>. These resources are provided for informational purposes, and do not constitute regulatory requirements.

<sup>10</sup> Available at <https://nepis.epa.gov/Exe/ZyPDF.cgi/P1000LTZ.PDF?DockKey=P1000LTZ.PDF>.

guidance on this topic. Interim milestones and timeframes contained in the approved scope of work will be enforceable pursuant to this AOC.

b. The Asset Management Plan shall be submitted to EPA for review and approval in accordance with the timeframes contained in the above referenced scope of work. Upon the EPA's approval of the Asset Management Plan, the Plan shall become an enforceable requirement of this AOC. Respondent shall begin implementation of the Asset Management Plan immediately upon receipt of EPA's approval.

42. LCR Corrosion Control Treatment. Within seven (7) days the Effective Date of this AOC, Respondent shall submit to the EPA, for review and approval, a copy of the OCCT Study Amendment report. A proposed treatment plan shall be submitted as outlined in Appendix A, Item 40. Until EPA concurrence is received on the proposed treatment plan, Respondent shall make any revisions as requested by the EPA. Upon receipt of the EPA's concurrence on the proposed treatment plan, the plan will become an enforceable component of this AOC.

43. LCR Materials Evaluation and Lead Service Line Replacement.

a. Within thirty (30) days of the Effective Date of this AOC, Respondent shall submit to the EPA for review and approval a plan for development of an updated materials evaluation which complies with the requirements of 40 C.F.R. § 141.86 and Miss. Admin. Code § 15-20-72, and shall submit the completed materials evaluation within six (6) months of EPA's approval of the materials evaluation plan.

b. Within thirty (30) days of the completed materials evaluation, Respondent shall develop and provide to the EPA for review and concurrence an updated Lead Service Line Replacement Program Plan ("LSLRPP") that identifies timeframes for implementing the identified activities and addresses EPA's comments. The LSLRPP shall include how Respondent will address current inventory and future inventory; how Respondent plans to begin replacement as required by 40 C.F.R. § 141.84; and how the information gathered through the evaluation steps will be utilized to update the materials evaluation and sample siting plans, as necessary.

c. Within fifteen (15) days of receipt of the EPA's concurrence on the revised LSLRPP, Respondent shall begin implementation of the LSLRPP. This shall continue, at a minimum, until such time as Optimal Corrosion Control has been installed and is determined to be effective based on follow-up sampling.

44. Stage 2 Disinfection Byproducts Requirements.

a. Respondent shall conduct monitoring quarterly for TTHM and HAA5 in accordance with 40 C.F.R. § 141.621(a) and its state approved monitoring plan. Samples shall be analyzed in accordance with 40 C.F.R. § 141.621(b). Respondent shall calculate the LRAAs for TTHM and HAA5 using monitoring results collected, in accordance with 40 C.F.R. § 141.620(d). Specifically, Respondent must calculate compliance with the MCL based on the available data from the most recent four

quarters.

b. Within thirty (30) days of the Effective Date of this AOC, Respondent shall submit documentation that all public notice requirements specified in 40 C.F.R. Part 141, Subpart Q have been completed for the DBP MCL violations noted in this AOC. Thereafter, Respondent must continue to repeat public notice quarterly until the violations have been resolved.

c. Respondent shall submit to the EPA, in addition to routine reporting to MSDH, the results of the monitoring required pursuant to 40 C.F.R. § 141.621 by the 10<sup>th</sup> day of the month following the end of the calendar quarter within which the sample was collected in accordance with 40 C.F.R. § 141.629. Respondent shall report quarterly to the EPA until directed otherwise.

45. Reporting and Notification.

a. Effective immediately upon the Effective Date of this AOC and until further notice by the EPA, or termination of this AOC pursuant to Section IV, whichever comes first, Respondent shall submit MOR information weekly as follows:

- i. Reports must run from Sunday to Saturday each week;
- ii. Weekly reports must be submitted to the EPA by Tuesday of the following week (*e.g.*, for the monitoring timeframe of Sunday, July 5 through Saturday, July 11, the report must be submitted by Tuesday, July 14).
- iii. Respondent shall report the MOR in the formatting requested by the EPA.

b. Respondent shall continue to submit the WQP sampling data to the EPA for a period of twelve (12) months following the Effective Date of this AOC, which may be extended by the EPA if data indicates noncompliance or if submission of such data is not timely or complete at any time during this twelve (12)-month period. The data shall be reported as follows:

- i. WQP results for the entry points to the distribution system sampling shall be included with the weekly MOR submittals.
- ii. WQP results for the tap sampling shall be submitted within fifteen (15) days of the end of each month (*e.g.*, for the monitoring timeframe of July 1 through July 31, the results must be submitted by August 15, 2021).

c. Effective immediately upon the Effective Date of this AOC and until further notice by the EPA or Termination of this AOC pursuant to Section IV, whichever comes first, if and when Respondent uses chlorine dioxide for disinfection or oxidation at either J.H. Fewell WTP or O.B. Curtis WTP, Respondent shall conduct daily monitoring for chlorite on each such day. Respondent shall include chlorite

monitoring data on a weekly basis with its MOR information, as required under Paragraph 45(a) above.

- d. Effective immediately upon the Effective Date of this AOC and until further notice by the EPA, or termination of this AOC pursuant to Section IV, whichever comes first, Respondent shall submit weekly updates to the EPA as follows:
- i. Weekly updates shall include the Respondent's progress in complying with this AOC and identify any failures to comply with the AOC as well as any violations that occurred during the previous week.
  - ii. Reports must run from Sunday to Saturday each week;
  - iii. Weekly updates shall be submitted with the weekly MORs to the EPA by Tuesday of the following week (e.g., for the monitoring timeframe of July 1 through July 31, the results must be submitted by August 3, 2021).
  - iv. Weekly updates shall follow the format provided by the EPA and be submitted electronically.
- e. Respondent shall send all reports, notifications, documentation and submittals required by this AOC in writing via e-mail to:

U.S. EPA, Region 4  
Enforcement and Compliance Assurance Division  
Attn: Amanda Driskell  
Email: [driskell.amanda@epa.gov](mailto:driskell.amanda@epa.gov)

AND

U.S. EPA, Region 4  
Enforcement and Compliance Assurance Division  
Attn: Bryan Myers  
Email: [myers.bryan@epa.gov](mailto:myers.bryan@epa.gov)

- f. All reports, notifications, documentation, and submissions required by this AOC must be signed by a duly authorized representative of the Respondent and must include the following statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the



possibility of fine and imprisonment for knowing violations.”

#### **IV. FINAL REPORT AND TERMINATION OF AOC**

46. Within thirty (30) calendar days after Respondent has fully completed and implemented the actions required by Section III (Agreement on Consent) of this AOC, including work outlined in the CERP, Respondent shall submit for the EPA’s review and approval a final report (Final Report) that includes: (a) a description of all of the actions which have been taken toward achieving compliance with this AOC; (b) an assessment of the effectiveness of such actions; and (c) an analysis of whether additional actions beyond the scope of this AOC are necessary to further comply with the SDWA and this AOC.
47. If the EPA determines, after review of the Final Report, that all the requirements of this AOC have been completed and implemented in accordance with this AOC and no further actions are necessary to comply with the SDWA, the EPA will provide notice to Respondent and this AOC shall be deemed terminated.
48. If the EPA determines, after review of the Final Report, that, despite all the requirements of this AOC having been completed and implemented in accordance with this AOC, further actions are necessary to comply with the SDWA, the NPDWRs, and the MPDWRs, the Parties agree that this AOC may be amended to reflect such necessary additional actions. Such amendment must be agreed to in writing to become effective under this AOC.
49. If the EPA determines that any requirement has not been completed and implemented in accordance with this AOC, the EPA will notify the Respondent, provide a list of deficiencies, and may require Respondent to modify its actions as appropriate in order to correct such deficiencies. If so required, Respondent shall implement the modified and approved requirement(s) and submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement any of the approved modified requirement(s) shall be a violation of this AOC.
50. Notwithstanding the provisions above, the EPA may extend any timeframe contained in this AOC (including, but not limited to, Appendix A) upon a showing of good cause as to why such timeframe (interim or final) cannot be achieved. Such extensions of time to the tasks in Appendix A shall be in writing, but may be incorporated into a revision to Appendix A and not necessarily in a revision or amendment to this AOC.

#### **V. GENERAL PROVISIONS**

51. Nothing in this AOC shall constitute a waiver, suspension, or modification of SDWA, the MSDWA, their respective implementing regulations, or terms and conditions of any permit issued thereunder to Respondent, which remain in full force and effect.
52. Failure to comply with the requirements herein shall constitute a violation of this AOC and the SDWA, and may subject the Respondent to penalties as provided in Section



1414(g)(3) of the SDWA, 42 U.S.C. § 300g-3(g)(3), as amended by the Federal Civil Penalties Inflation Adjustment Act of 1990, as amended, and as codified by the EPA at 40 C.F.R. Part 19.

53. Respondent's compliance with this AOC does not necessarily constitute compliance with the provisions of the SDWA, 42 U.S.C. § 300f et seq.; the MSDWA, Miss. Code Ann. § 41-26-1 et. seq.; or their respective implementing regulations.
54. Any sampling done to comply with the terms of this AOC shall be done in a manner consistent with EPA approved methodologies. The EPA reserves the right to require Respondent to conduct additional sampling if the EPA determines that Respondent's sampling is not being conducted in accordance with EPA-approved methodologies.
55. This AOC addresses only those violations alleged herein. Nothing in this AOC shall be construed as relieving the Respondent of its obligation to comply with all applicable provisions of federal, state, or local law, nor shall it be construed to be a ruling on, or determination of, any issue related to any other federal, state, or local permit. Compliance with this AOC shall not be a defense to any actions subsequently commenced pursuant to federal laws and regulations administered by the EPA.
56. Issuance of this AOC shall not be deemed as prohibiting, altering, or in any way limiting the ability of the EPA to pursue any other enforcement actions available to it under law. Such actions may include, without limitation, any administrative, civil, or criminal action to seek penalties, fines, injunctive, or other appropriate relief, or to initiate an action for imminent and substantial endangerment under the SDWA or any other federal or state statute, regulation, or permit.
57. The EPA reserves all rights and remedies, legal and equitable, available to enforce any violation cited in this AOC and to enforce this AOC.
58. Nothing in this AOC is intended to nor shall be construed to operate in any way to resolve any criminal liability of Respondent, or other liability resulting from violations that were not alleged in this AOC.
59. This AOC applies to and is binding upon Respondent and its officers, directors, employees, agents, successors, and assigns.
60. Any change in the legal status of Respondent, including but not limited to any transfer of assets of real or personal property, shall not alter Respondent's responsibilities under this AOC.
61. Respondent admits to the jurisdictional allegations set forth within this AOC.
62. Respondent neither admits nor denies the factual allegations set forth within this AOC.
63. Respondent waives any and all claims for relief and otherwise available rights or remedies to judicial or administrative review which Respondent may have with respect to any issue

of fact or law set forth in this AOC, including, but not limited to any right of judicial review of the AOC under the Administrative Procedure Act, 5 U.S.C. §§ 701-706.

- 64. Each party shall bear its own costs and attorneys' fees in connection with the action resolved by this AOC.
- 65. Pursuant to Section 1414(g)(2) of the SDWA, 42 U.S.C. § 300g-3(g)(2), the EPA has conferred with and sent a copy of this AOC to the State of Mississippi.
- 66. Each undersigned representative of the parties to this AOC certifies that he or she is fully authorized to enter the terms and conditions of this AOC and to execute and legally bind that party to it.

**VI. EFFECTIVE DATE**


- 67. This AOC shall become effective on the date on which Respondent receives a fully executed copy of this AOC, after signature by the Director, EPA Region 4 Enforcement and Compliance Assurance Division.

**VII. MULTIPLE COUNTERPARTS**

- 68. This AOC may be executed in counterparts, each of which shall be deemed to be an original but all of which taken together shall constitute one and the same agreement.

FOR THE RESPONDENT:

6/30/2021  
Date

  
 Chokwe Antar Lumumba, Mayor *mayor*  
 City of Jackson, Mississippi

SO ORDERED this \_\_\_\_\_ day of 7/1/21, 20\_\_\_\_.

**CAROL KEMKER** Digitally signed by CAROL KEMKER  
 Date: 2021.07.01 10:07:19 -04'00'

\_\_\_\_\_  
 Carol L. Kemker, Director  
 Enforcement and Compliance Assurance Division  
 Region 4

**APPENDIX A**  
**Comprehensive Equipment Repair Plan (CERP) Schedule of Implementation**

<b>APPENDIX A</b>			
<b>Comprehensive Equipment Repair Plan (CERP) Schedule of Implementation</b>			
<b>Task#</b>	<b>Plant and/or Category</b>	<b>Task</b>	<b>Deadline or Timeframe</b>
<b>General Tasks</b>			
1	Operator/Staffing	City will hire an Instrument Technician for O.B. Curtis	Within 3 months of order effective date.
2	Operator/Staffing	2. Provide documentation of completion or 2.A. Submit documentation of funding for an additional two (2) operators for O.B. Curtis. 2.B. City will hire 2 unlicensed operators for O.B. Curtis in FY2020-21.	2. Within 1 month of order effective date. or 2.A and 2.B Within 6 months of order effective date.
3	Operator/Staffing	Both operations new hires should be eligible for licensure and must complete testing for Class A Waterworks	Within 7 months of order effective date.
<b>Fewell</b>			
4	Clari-Trac	Clari-Trac System shall be functioning and operational and repairs completed for all Basins including Butterfly Valves, Actuators, Drives, and Vacuum Hoses. 4. Provide documentation of completion or 4.A. Contact Manufacturer and identify necessary work/schedule and submit Scope of Work* to EPA; 4.B. Clari-Trac system shall be fully functional and operational with all repairs completed	4. Within 1 month of order effective date. or 4.A. Within 30 days of order effective date 4.B. Within 6 months of order effective date
5	UV Reactors	UV Sensors - Functional and fully operational. 5. Provide documentation of completion or 5.A. Order parts identified on the parts list provided by the Technician report from the 1/19/2021 evaluation. Provide the Technician Report/parts list and date parts were ordered to EPA. 5.B. Return all UV Sensors to fully functional/operational status.	5. Within 1 month of order effective date. or 5.A. Within 30 days of order effective date 5.B. Within 6 months of order effective date
6	Filters	6. COJ will develop a Scope of Work* with timeframes for returning filters to fully operational and functional status. Upon EPA approval of Scope of Work/plan, the CERP will be updated to include the individual tasks and timeframes.	Within 60 days of order effective date
7	Monitoring Equip	7.A. Flow Measurement Devices - Research and assessment completed 7.B Flow Measurement Devices -will be functional and fully operational.	7.A. Within 30 days of order effective date 7.B. Within 6 months of order effective date

APPENDIX A			
Comprehensive Equipment Repair Plan (CERP) Schedule of Implementation			
Task#	Plant and/or Category	Task	Deadline or Timeframe
8	Monitoring Equip	8. Provide documentation of completion or 8.A. Submit a status report for all turbidimeters, to include current status (operational or not) and what repairs/replacement is needed for each item. 8.B. Return all to fully operational status.	8. Within 1 month of order effective date. or 8.A. Within 30 days of order effective date 8.B. Within 3 months of order effective date
9	Intake Structure	Pedestrian Bridge	Within 6 months of order effective date
10	Entire Plant	Corrosion Control report	Within 30 days of order effective date
Curtis			
11	Conventional - Chlorine Room	Weight Indicator - 11.A Parts ordered 11.B Functional and fully operational.	11.A. Within 30 days of order effective date 11.B. Within 90 days of order effective date
12	Conventional - Chlorine Room	HS#1 - Documentation showing functioning and operational.	Within 30 days of order effective date
13	Conventional - All Conventional Basins	Clari-Trac System shall be functioning and operational and repairs completed for all Basins including Butterfly Valves, Actuators, Drives, and Vacuum Hoses. 13.A. Contact Manufacturer and identify necessary work/schedule and submit Scope of Work to EPA <sup>+</sup> ; 13.B. Clari-Trac system shall be fully functional and operational with all repairs completed	13.A. Within 30 days of order effective date 13.B. Within 7 months of order effective date
14	Conventional - Turbidimeters for Basis 1, 2, 3	14. Provide documentation of completion or 14.A. Submit a status report for all turbidimeters, to include current status (operational or not) and what repairs/replacement is needed for each item. 14.B. Return all to fully operational status.	14. Within 1 month of order effective date. or 14.A. Within 30 days of order effective date 14.B. Within 3 months of order effective date
15	Conventional - UV Filter Gallery	UV #5 - Operational and Fully functional	Within 30 days of order effective date
16	Membrane - HS#2	Chlorine analyzers - Operational and Fully functional. Provide documentation of replacement of one chlorine analyzer and installation of second chlorine analyzer	Within 1 month of order effective date.
17	Membrane - Blower Room	Blower C - 17. Provide documentation of completion or 17.A Assessment of root cause completed 17.B Submit plan to address the concerns identified in assessment. Upon EPA approval of the plan, Appendix A will be updated to include those individual tasks and timeframes	17. Within 1 month of order effective date. or 17.A. Within 30 days of order effective date 17.B. Within 60 days of order effective date
18	Conventional-Intake	Microscreens -18. Provide documentation of completion or 18.A. Submit status report for the microscreens, include current status and any needed repairs/replacement; 18.B. Complete any needed repairs/replacement	18. Within 1 month of order effective date. or 18.A. Within 30 days of order effective date 18.B. Within 60 days of order effective date
19	Conventional-Intake	60-inch sluice gate -19. Provide documentation of completion or 19.A. Submit status report, include current status and any needed repairs/replacement; 19.B. Complete any needed repairs/replacement	19. Within 1 month of order effective date. or 19.A. Within 30 days of order effective date 19.B. Within 60 days of order effective date



<b>APPENDIX A</b>			
<b>Comprehensive Equipment Repair Plan (CERP) Schedule of Implementation</b>			
<b>Task#</b>	<b>Plant and/or Category</b>	<b>Task</b>	<b>Deadline or Timeframe</b>
20	Conventional-Intake	72-inch sluice gate - 20. Provide documentation of completion or 20.A. Submit status report, include current status and any needed repairs/replacement; 20.B. Complete any needed repairs/replacement	20. Within 1 month of order effective date. or 20.A. Within 30 days of order effective date 20.B. Within 60 days of order effective date
21	Both - Intake	Roof Repairs/Potassium Permanganate feeder	Within 3 months of order effective date.
22	Membrane - Intake	Microscreens -22. Provide documentation of completion or 22.A. Submit status report for the microscreens, include current status and any needed repairs/replacement; 22.B. Complete any needed repairs/replacement	22. Within 1 month of order effective date. or 22.A. Within 30 days of order effective date 22.B. Within 60 days of order effective date
23	Membrane - Intake	60-inch sluice gate - 23. Provide documentation of completion or 23.A. Submit status report, include current status and any needed repairs/replacement; 23.B. Complete any needed repairs/replacement	23. Within 1 month of order effective date. or 23.A. Within 30 days of order effective date 23.B. Within 60 days of order effective date
24	Membrane - Sludge Plant Handling Facility	Gravity Thickener #1 and #2 - Functional and Fully Operational	Within 5 months of order effective date.
25	Both - Filters	Filter Rehab - Submit detailed Scope of Work*. Upon approval of the Scope of Work, the tasks will be updated to include additional milestones and final completion of this task.	Within 60 days of order effective date
26	Membrane - Trains #1-6	26.A. Submit a report on the current status and any needed repairs/replacement for each membrane train and its components including sluice gate, flocculator, centrifuge, reject valve, turbidimeter and rapid mixer. 26.B. Submit detailed Scope of Work* to address the identified concerns, including any sequencing. Upon approval of the Scope of Work, the tasks will be updated to include additional milestones and final completion of this task.	26.A. Within 30 days of order effective date 26.B. Within 60 days of order effective date
27	Membrane - Cover	Complete Membrane Basin Building Structure Project.	Within 6 months of order effective date
28	Conventional - Soda Ash System	dilution system - - Functional and Fully Operational - Provide documentation of completion or repair the dry powder level indicators	Within 30 days of order effective date
<b>Groundwater System-Storage Tank</b>			
29	Storage Tanks	Maddox Rd (Hwy 18) - Provide documentation that tank is fully functioning and operational.	Within 30 days of order effective date
30	Storage Tanks	TV Rd Booster Station - Submit plan for bringing back into service.	Within 6 months of order effective date



<b>APPENDIX A</b>			
<b>Comprehensive Equipment Repair Plan (CERP) Schedule of Implementation</b>			
<b>Task#</b>	<b>Plant and/or Category</b>	<b>Task</b>	<b>Deadline or Timeframe</b>
31	Wells	Provide a status and plan for each of the wells, include a status of each well, identify any need repairs/replacement, and propose timeframe for addressing these repairs/replacement including any interim steps. Upon EPA approval of the plan, Appendix A will be updated to include those individual tasks and timeframes for each well.	Within 60 days of order effective date
32	Well House	Well Houses - Submit Scope of Work* including proposed timeframes. Upon EPA approval of the Scope of Work, Appendix A will be updated to include those individual tasks and timeframes.	Within 60 days of order effective date
<b>Dosing Automation</b>			
33	Curtis	O.B. Curtis: Submit detailed Scope of Work*, that includes schedule of tasks and timeframes for completion of interim and final tasks. Upon approval of the Scope of Work, Appendix A will be amended to add additional tasks/timeframes for completion of automation.	Within 60 days of order effective date
34	Curtis	Ammonia/Chlorine Feeds: All chlorinator and ammoniator equipment and appurtenances will be fully functional with automatic, flow-pacing capabilities in service and redundancy present. Submit detailed Scope of Work*, that includes schedule of tasks and timeframes for completion of interim and final tasks. Upon approval of the Scope of Work, Appendix A will be amended to add additional tasks/timeframes for completion of automation.	Within 60 days of order effective date

APPENDIX A			
Comprehensive Equipment Repair Plan (CERP) Schedule of Implementation			
Task#	Plant and/or Category	Task	Deadline or Timeframe
35	Curtis	ACH (Aluminum Chlorohydrate) (coagulant): The treatment system was installed by using the same method as the Alum/lime system that was previously being used and not tweaked for the new ACH coagulant. Studying the coagulation system to determine if CO2 treatment addition will be helpful in improving the treatment system for future automation. Submit detailed Scope of Work*, that includes schedule of tasks and timeframes for completion of interim and final tasks. Upon approval of the Scope of Work, Appendix A will be amended to add additional tasks/timeframes for completion of automation.	Within 60 days of order effective date
36	Curtis	O.B. Curtis: Potassium Permanganate Feeds: flow pacing or feedback loop. Submit detailed Scope of Work*, that includes schedule of tasks and timeframes for completion of interim and final tasks. Upon approval of the Scope of Work, Appendix A will be amended to add additional tasks/timeframes for completion of automation.	Within 60 days of order effective date
37	Curtis	O.B. Curtis: Fluoride - Submit detailed Scope of Work*, that includes schedule of tasks and timeframes for completion of interim and final tasks. Upon approval of the Scope of Work, Appendix A will be amended to add additional tasks/timeframes for completion of automation.	Within 60 days of order effective date
38	Curtis	O.B. Curtis: pH metering information: Replaced/Repaired and are being calibrated as required. Information from the meters is not fed directly into the chemical feeding systems, but manually by operators. This can result in missing peaks. Submit detailed Scope of Work*, that includes schedule of tasks and timeframes for completion of interim and final tasks. Upon approval of the Scope of Work, Appendix A will be amended to add additional tasks/timeframes for completion of automation.	Within 60 days of order effective date

APPENDIX A			
Comprehensive Equipment Repair Plan (CERP) Schedule of Implementation			
Task#	Plant and/or Category	Task	Deadline or Timeframe
39	Curtis	O.B Curtis: Raw Water Flow Meter - Conventional plant (related to the Clari-Trac System): Not currently running automatically. Submit detailed Scope of Work*, that includes schedule of tasks and timeframes for completion of interim and final tasks. Upon approval of the Scope of Work, Appendix A will be amended to add additional tasks/timeframes for completion of automation.	Within 60 days of order effective date
40	Fewell	The dosing equipment has always been run in manual for disinfection and pH at the Fewell plant. 40.A. Submit a plan to complete research/assessment; 40.B. Based on research,submit work proposal, which should include a proposed treatment plan; 40.C. Complete work.	Task 40.A will be due one month after approval of OCCT Study Findings Plan and Task 40.B will be due two months after approval. Upon approval, Appendix A will be updated to include completion timeframe for Task40.C A proposed treatment plan shall include a scope of work, timeframes for completion of any necessary treatment modifications, and identify funding for implementation of the treatment plan.

\*The Scope of Work (SOW) submitted to the EPA must contain detailed descriptions of all work necessary to successfully complete the Task listed in this AOC. The SOW must include all interim steps, including completion dates and/or timeframes to complete each interim step. In addition to completion dates/timeframes for each interim step, the SOW must also contain the deadline (date) for the completion of the entire Task. Scope of Works may be combined if tasks will all be a part of same project.

The EPA understands that the City may not be able to provide exact completion dates due to the complex nature of some Tasks included in the AOC. If the City is unable to project exact dates of completion for each interim step necessary to complete a Task, the City must, at a minimum, describe the interim steps necessary to complete each Task, along with timeframes that the City reasonably expects to be necessary for each interim step to be completed. For example, if the City has a requirement to submit and receive approval of a "Plans and Specs" document to the MSDH as an interim step, the SOW could include a statement similar to, "The City will submit "Plans and Specs" document for review and approval to the MSDH. Within two (2) weeks of MSDH approval of "Plans and Specs" document, the City will put the work out for bid."

This level of detail must be provided for each interim step necessary to complete each Task identified in the AOC. Without specific, detailed SOWs, including interim steps and completion dates or timeframes for completion, the EPA is unable to adequately review and approve the SOW proposed by the City.