



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

**ELECTRONIC MAIL  
CONFIRMATION OF EMAIL RECEIPT REQUESTED**

City of Jackson  
c/o Robert Lee  
Acting Director, Department of Public Works  
P.O. Box 17  
Jackson, Mississippi 39205-0017  
rlee@city.jackson.ms.us

Re: Compliance Evaluation Inspection Report  
NPDES Permit No. MS0024295  
Savanna Street WWTP

Dear Mr. Lee:

The U.S. Environmental Protection Agency Region 4, the U.S. Army Corps of Engineers, and the Mississippi Department of Environmental Quality conducted a Compliance Evaluation Inspection (CEI) on the Savanna Street Wastewater Treatment Plant (WWTP) on March 21, 2023. The objective of the inspection was to assess the City of Jackson's compliance with the Clean Water Act and the National Pollutant Discharge Elimination System permit, and to evaluate the general condition of the WWTP. The inspection results have been summarized in the enclosed CEI Report.

The EPA appreciates Jackson's cooperation and courtesy. If you have specific questions about the inspection report, please contact Mr. Brad Ammons at [ammons.brad@epa.gov](mailto:ammons.brad@epa.gov). Please verify receipt of this letter and report by emailing Mr. Ammons at the email address provided.

Sincerely,

Sayre, Dennis

Digitally signed by Sayre,  
Dennis  
Date: 2023.05.18  
14:53:39 -04'00'

Dennis Sayre, Acting Chief  
Wastewater Enforcement Section  
Water Enforcement Branch

Enclosure

cc: Michelle Clark  
Mississippi Department of Environmental Quality  
mrclark@mdeq.ms.gov

Karl Fingerhood  
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**United States Environmental Protection Agency Region 4**  
Enforcement and Compliance Assurance Division  
Water Enforcement Branch  
61 Forsyth Street, SW  
Atlanta, Georgia 30303



**Compliance Evaluation Inspection Report**  
Project No. CV-MS0024295-03212023

Jackson Savanna Street WWTP  
3810 Interstate 55 South  
Jackson, Mississippi 39212  
NPDES Permit Number: MS0024295  
Date of Inspection: March 21, 2023

Title and Approval Sheet

Title: Jackson MS Savanna St POTW CV-MS0024295-03212023.docx

Approving Official:

Sayre, Dennis  Digitally signed by Sayre, Dennis  
Date: 2023.05.18 14:53:52 -04'00'

Dennis Sayre, Acting Chief  
Wastewater Enforcement Section  
Water Enforcement Branch

Inspector:

MICHAEL AMMONS  Digitally signed by MICHAEL AMMONS  
Date: 2023.05.18 07:42:31 -04'00'

Brad Ammons, Environmental Engineer  
Wastewater Enforcement Section  
Water Enforcement Branch

# COMPLIANCE EVALUATION INSPECTION REPORT

Jackson WWTP, Project # CV-MS0024295-03212023

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# COMPLIANCE EVALUATION INSPECTION REPORT

Jackson WWTP, Project # CV-MS0024295-03212023

## 1. Introduction

On March 21, 2023, representatives of the United States Environmental Protection Agency Region 4, and the Mississippi Department of Environmental Quality (MDEQ) conducted a Compliance Evaluation Inspection (CEI) on the Savanna Street Wastewater Treatment Plant (WWTP), owned and operated by the City of Jackson, Mississippi (Jackson/The City). The inspection was conducted under the authority of Section 308 of the Clean Water Act (CWA), as amended. This report provides a summary of the inspection.

## 2. Participants

| Name              | Organization                  | Contact Information               |
|-------------------|-------------------------------|-----------------------------------|
| Brad Ammons       | EPA Region 4 (Lead Inspector) | Ammons.Brad@epa.gov               |
| William Joyner    | EPA Region 4                  | Joyner.William@epa.gov            |
| Heidi Rausch      | EPA Headquarters              | Rausch.Heidi@epa.gov              |
| Greg Anderson     | USACE-Vicksburg               | Gregory.L.Anderson@usace.army.mil |
| Jamon Rucker      | USACE-Vicksburg               |                                   |
| Matthew Attman    | USACE-Vicksburg               |                                   |
| Robert Hite       | USACE-Vicksburg               |                                   |
| Brandon Griffin   | USACE-Vicksburg               | Brandon.M.Griffin@usace.army.mil  |
| James Gammill     | MDEQ                          | jgammill@mdeq.ms.gov              |
| Sandepa Gill      | MDEQ                          | sgill@mdeq.ms.gov                 |
| Dmitri Asamov     | MDEQ                          | dasamov@mdeq.ms.gov               |
| Nathan Mays       | MDEQ                          | nmays@mdeq.ms.gov                 |
| Shannon Moore     | Veolia (Lead Operator)        | Shannon.Moore@veolia.com          |
| Blake Boehringer  | Veolia                        | Blake.Boehringer@veolia.com       |
| Holly Weatherhead | Veolia                        | Holly.Weatherhead@veolia.com      |
| Terry Williamson  | City of Jackson               | twilliamson@city.jackson.ms.us    |

## 3. Facility Description

(Refer to Attachment 1 for Photo references)

This WWTP is an Ludzack-Ettinger activated sludge wastewater treatment plant with an anoxic zone for nutrient removal that is permitted to discharge 46 million gallons per day (MGD) during the dry season (May-October) and 60 MGD during the wet season (November-April) from outfall 001 (combined flow from the mechanical WWTP and the “storm cells”).

The WWTP consists of an influent pump station with a coarse bar screen (three 45 MGD pumps and one 100 MGD pump, which was out of service during this inspection), fine screens, grit removal, an anoxic tank, ten aeration basins, five secondary clarifiers, return activated sludge pumps (three pumps were in service and one was in the shop being rebuilt at the time of inspection); chlorine disinfection, sludge thickeners (out of service during this inspection), aerobic

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Jackson WWTP, Project # CV-MS0024295-03212023

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sludge digesters, two sludge belt filter presses and related appurtenances. The City is still renting 12 bypass pumps for higher flows because the 100 MGD influent pump is out of service (see Photo 5).

The City has upgraded the following equipment since the last EPA inspection:

- New motors for the three 45 MGD pumps at the influent pump station (see Photo 4);
- New fine screens (paid for with State Revolving Fund (SRF) loan; see Photo 9);
- New motor controls for the aeration basin blowers (see Photo 16);
- New generator that will power the entire WWTP (see Photo 17);
- Rehabilitated secondary clarifiers #1-3 (#4 is soon to be rehabilitated; see Photos 18-21 for clarifiers #1-4 respectively);
- New electrical controls for the Return Activated Sludge (RAS) pumps (all Variable Frequency Drive now; see Photo 23);
- New chlorine dosing equipment and piping (see Photo 24).

#### 4. Inspection Procedures.

The overall objective of this CEI was to evaluate the condition and operational performance of the WWTP and Jackson's self-monitoring program and to offer compliance assistance as needed. Specific tasks included conducting an opening conference, interviewing WWTP staff, reviewing WWTP laboratory records, conducting a site visit throughout the existing WWTP, and a closing conference.

#### 5. Findings & Conclusions

##### *A. Permit Review*

Jackson's NPDES permit for the WWTP has an effective date of May 16, 2022 and expires on April 30, 2027. The NPDES permit lists and describes three outfalls:

- Outfall 001 (Municipal Wastewater);
- Outfall 101 (Internal Outfall from Mechanical Treatment Plant); and,
- Outfall 201 (Internal Outfall from Storm Lagoons)

The NPDES permit contains Effluent Limitations and Monitoring Requirements tables for all three outfalls. Outfall 001 is reported as a combination of flow from Outfalls 101 and 201.

##### *B. Records and Reports*

The EPA's Enforcement Compliance History Online (ECHO) shows that the WWTP was in Significant Non-Compliance (SNC) for effluent limit exceedances of Ammonia-Nitrogen (NH<sub>3</sub>-N), Carbonaceous Biochemical Oxygen Demand, 5-day (CBOD<sub>5</sub>), and/or Total Suspended Solids (TSS) during 6 of the last 13 quarters (See Appendix A for effluent limit violations). Jackson also had non-SNC effluent limit exceedances for E. Coli., Residual Chlorine, Flow, Dissolved Oxygen, Total Phosphorus, as well as NH<sub>3</sub>-N, CBOD<sub>5</sub>, and TSS. This is due to the tremendous flows the WWTP receives during the wet season and/or when the Pearl River is flooding.

## COMPLIANCE EVALUATION INSPECTION REPORT

Jackson WWTP, Project # CV-MS0024295-03212023

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### ***C. Flow Measurement***

The influent pump station contains two flow meters, one for the flow from the West Bank Interceptor and the other from the Cany Creek sewershed. EPA did not record the effluent flowrate and the WWTP was not bypassing through the storm cells during this inspection. The effluent flow meter appeared in good condition.

### ***D. Sampling/Laboratory***

The laboratory at this facility analyzes the samples for all three WWTPs that Jackson owns. Waypoint Analytical analyzes for Mercury, Copper (required in Jackson's Trahon WWTP NPDES permit), Total Kjeldahl Nitrogen, Total Nitrogen and Total Phosphorus. The following observations were made in the laboratory:

- The TSS oven was at 104° Celsius and was last certified on 9/14/2022;
- The digital thermometer was last certified on 9/15/2022;
- The two refrigerators for storing samples were last certified on 9/25/2022;
- pH buffers will expire on 9/26/2023 (for pH 4); 9/23/2023 (for pH 7); and 8/23/2023 (for pH 10);
- Chlorine buffer will expire on 12/23/2023;
- E. Coli. water bath was at 44.5° Celsius and was last certified on 9/15/2022.

### ***E. Site Visit (Operation and Maintenance)***

A WWTP site visit started at the influent pump station and then to the storm cells. The site visit continued from the headworks and ended at the discharge point at the combined effluent chamber. The WWTP appeared well maintained. The following components were observed:

- The 54" force main from the influent pump station to the headworks has a leak (see Photo 1) and has a second leak that has caused a sinkhole on the outside of the influent pump station building (see Photo 3). The three 45 MGD pumps all have new motors (See photo 4) and the 100 MGD pump is out of service (see Photo 5). The coarse bar screens must be manually cleaned (see Photo 6).
- Veolia only samples the pH of septic haulers at a dump station outside of the influent pump station (see Photo 2).
- The storm cells are about 6.9 feet full of solids and have a depth of 10'-12' (see Photo 7). Veolia monitors the sludge depth annually.
- As noted above, the City is still renting 10 diesel and two electric bypass pumps until the 100 MGD pump is rehabilitated at a cost of \$100,000/month (see Photo 8).
- There is a new set of fine bar screens at the headworks (see Photo 9).
- The anoxic tank was in use during this inspection (RAS is pumped to mix here) (see Photo 10).
- The aeration basins appeared to be in good shape (see Photo 15) and the City recently installed new motors and controls on the blowers (see Photo 16).
- As discussed above, secondary clarifiers #1, 2, and 3 have recently been rehabilitated (see photos 18 - 21 of clarifiers #1, 2, 3 and 4 respectively).

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Jackson WWTP, Project # CV-MS0024295-03212023

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- There are eight banks of four chlorine gas cylinders for disinfection. The City has installed new chlorine dosing equipment and piping (see Photo 24).
- The effluent from the mechanical plant appeared clear and to be free of solids (see Photo 25). As noted above, the bypass channel was not in use (see Photo 26).
- The effluent sampler for the combined effluent is located inside the effluent pump building and appeared to be in good shape. The sampler was last calibrated in November of 2022 (see Photo 27 and 28).
- Three of the four RAS pump motors were new (see Photo 22). One of the four RAS pump motors is in the shop for repair (see Photo 23). There was new electrical controls for the RAS pumps (now all Variable Frequency Drive (VFD)).
- The City is using two of the aeration basins as aerobic digesters. As mentioned above, the sludge thickener was out of service (see Photo 14). Jackson is still renting two 2.2 meter sludge presses (see Photo 11) and the City gets to about 19% solids from the presses before either landfilling or land applying the sludge (see Photo 12).
- Veolia keeps spare pumps in a covered shed for pumps in both the WWTP and the collection system (see Photo 13).
- The City has installed a new generator that will run the entire WWTP (see Photo 17).

### ***F. Sludge Handling***

As noted above, sludge is aerobically digested and dewatered by two belt filter presses to an average of 19% solids and then landfilled or land applied.

### ***G. Effluent/Receiving Water***

The effluent at Outfall 101 was clear and void of solids. There was no discharge at Outfall 201. The receiving waterbody (Pearl River) was not readily accessible and not observed.

## **6. Discussion**

The City has made tremendous progress in rehabilitating the Savanna Street WWTP. However, there are still concerns about how much flow the plant receives during wet weather and/or during Pearl River high-water conditions. EPA encourages the City to continue work on rehabilitating the West Bank Interceptor and even up into the individual sewersheds to remove infiltration and inflow to prevent the WWTP from bypassing. Since West Rankin County Utility District has removed its flow from the storm cells, there are fewer and/or shorter durations of bypassing at the WWTP.

**END OF REPORT**

## Appendix A: Effluent Exceedances

| NPDES ID  | DSDG  | Monitoring Location Code | Monitoring Period End Date | Parameter Code | Parameter Desc                           | Violation Code | # of Viol: (180) |
|-----------|-------|--------------------------|----------------------------|----------------|------------------------------------------|----------------|------------------|
| MS0024295 | 001-A | 1                        | 05/31/2018                 | 00530          | Solids, total suspended                  | E90            | 1                |
| MS0024295 | 001-A | 1                        | 05/31/2018                 | 00610          | Nitrogen, ammonia total [as N]           | E90            | 4                |
| MS0024295 | 001-A | 1                        | 05/31/2018                 | 50050          | Flow, in conduit or thru treatment plant | E90            | 1                |
| MS0024295 | 001-A | 1                        | 05/31/2018                 | 80082          | BOD, carbonaceous [5 day, 20 C]          | E90            | 4                |
| MS0024295 | 001-A | 1                        | 01/31/2019                 | 00300          | Oxygen, dissolved [DO]                   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 01/31/2019                 | 00530          | Solids, total suspended                  | E90            | 1                |
| MS0024295 | 001-A | 1                        | 01/31/2019                 | 00610          | Nitrogen, ammonia total [as N]           | E90            | 2                |
| MS0024295 | 001-A | 1                        | 01/31/2019                 | 50050          | Flow, in conduit or thru treatment plant | E90            | 1                |
| MS0024295 | 001-A | 1                        | 02/28/2019                 | 00300          | Oxygen, dissolved [DO]                   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 02/28/2019                 | 00610          | Nitrogen, ammonia total [as N]           | E90            | 4                |
| MS0024295 | 001-A | 1                        | 02/28/2019                 | 74055          | Coliform, fecal general                  | E90            | 2                |
| MS0024295 | 001-A | 1                        | 04/30/2019                 | 00300          | Oxygen, dissolved [DO]                   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 04/30/2019                 | 00610          | Nitrogen, ammonia total [as N]           | E90            | 3                |
| MS0024295 | 001-A | 1                        | 04/30/2019                 | 50050          | Flow, in conduit or thru treatment plant | E90            | 1                |
| MS0024295 | 001-A | 1                        | 04/30/2019                 | 74055          | Coliform, fecal general                  | E90            | 1                |
| MS0024295 | 001-A | 1                        | 04/30/2019                 | 80082          | BOD, carbonaceous [5 day, 20 C]          | E90            | 1                |
| MS0024295 | 001-A | 1                        | 05/31/2019                 | 00300          | Oxygen, dissolved [DO]                   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 05/31/2019                 | 00610          | Nitrogen, ammonia total [as N]           | E90            | 4                |
| MS0024295 | 001-A | 1                        | 05/31/2019                 | 50050          | Flow, in conduit or thru treatment plant | E90            | 1                |
| MS0024295 | 001-A | 1                        | 05/31/2019                 | 74055          | Coliform, fecal general                  | E90            | 1                |
| MS0024295 | 001-A | 1                        | 05/31/2019                 | 80082          | BOD, carbonaceous [5 day, 20 C]          | E90            | 2                |
| MS0024295 | 001-A | 1                        | 06/30/2019                 | 50050          | Flow, in conduit or thru treatment plant | E90            | 1                |
| MS0024295 | 001-A | 1                        | 07/31/2019                 | 00300          | Oxygen, dissolved [DO]                   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 07/31/2019                 | 00610          | Nitrogen, ammonia total [as N]           | E90            | 1                |
| MS0024295 | 001-A | 1                        | 07/31/2019                 | 50050          | Flow, in conduit or thru treatment plant | E90            | 1                |
| MS0024295 | 001-A | 1                        | 07/31/2019                 | 74055          | Coliform, fecal general                  | E90            | 1                |
| MS0024295 | 001-A | 1                        | 08/31/2019                 | 00610          | Nitrogen, ammonia total [as N]           | E90            | 1                |
| MS0024295 | 001-A | 1                        | 08/31/2019                 | 50050          | Flow, in conduit or thru treatment plant | E90            | 1                |
| MS0024295 | 001-A | 1                        | 10/31/2019                 | 00610          | Nitrogen, ammonia total [as N]           | E90            | 1                |
| MS0024295 | 001-A | 1                        | 10/31/2019                 | 50050          | Flow, in conduit or thru treatment plant | E90            | 1                |
| MS0024295 | 001-A | 1                        | 10/31/2019                 | 80082          | BOD, carbonaceous [5 day, 20 C]          | E90            | 1                |
| MS0024295 | 001-A | 1                        | 11/30/2019                 | 00300          | Oxygen, dissolved [DO]                   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 11/30/2019                 | 00530          | Solids, total suspended                  | E90            | 1                |
| MS0024295 | 001-A | 1                        | 11/30/2019                 | 50050          | Flow, in conduit or thru treatment plant | E90            | 1                |
| MS0024295 | 001-A | 1                        | 01/31/2020                 | 00300          | Oxygen, dissolved [DO]                   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 01/31/2020                 | 00530          | Solids, total suspended                  | E90            | 2                |
| MS0024295 | 001-A | 1                        | 01/31/2020                 | 00610          | Nitrogen, ammonia total [as N]           | E90            | 2                |
| MS0024295 | 001-A | 1                        | 01/31/2020                 | 50050          | Flow, in conduit or thru treatment plant | E90            | 1                |
| MS0024295 | 001-A | 1                        | 01/31/2020                 | 50060          | Chlorine, total residual                 | E90            | 1                |
| MS0024295 | 001-A | 1                        | 01/31/2020                 | 74055          | Coliform, fecal general                  | E90            | 2                |
| MS0024295 | 001-A | 1                        | 02/29/2020                 | 00530          | Solids, total suspended                  | E90            | 2                |
| MS0024295 | 001-A | 1                        | 02/29/2020                 | 00610          | Nitrogen, ammonia total [as N]           | E90            | 2                |
| MS0024295 | 001-A | 1                        | 02/29/2020                 | 50050          | Flow, in conduit or thru treatment plant | E90            | 1                |
| MS0024295 | 001-A | 1                        | 02/29/2020                 | 50060          | Chlorine, total residual                 | E90            | 1                |
| MS0024295 | 001-A | 1                        | 02/29/2020                 | 74055          | Coliform, fecal general                  | E90            | 2                |
| MS0024295 | 001-A | 1                        | 03/31/2020                 | 00610          | Nitrogen, ammonia total [as N]           | E90            | 1                |
| MS0024295 | 001-A | 1                        | 03/31/2020                 | 50050          | Flow, in conduit or thru treatment plant | E90            | 1                |
| MS0024295 | 001-A | 1                        | 03/31/2020                 | 74055          | Coliform, fecal general                  | E90            | 2                |
| MS0024295 | 001-A | 1                        | 04/30/2020                 | 00300          | Oxygen, dissolved [DO]                   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 04/30/2020                 | 00610          | Nitrogen, ammonia total [as N]           | E90            | 1                |
| MS0024295 | 001-A | 1                        | 04/30/2020                 | 50050          | Flow, in conduit or thru treatment plant | E90            | 1                |
| MS0024295 | 001-A | 1                        | 04/30/2020                 | 50060          | Chlorine, total residual                 | E90            | 1                |
| MS0024295 | 001-A | 1                        | 04/30/2020                 | 74055          | Coliform, fecal general                  | E90            | 2                |
| MS0024295 | 001-A | 1                        | 05/31/2020                 | 00530          | Solids, total suspended                  | E90            | 2                |
| MS0024295 | 001-A | 1                        | 05/31/2020                 | 00610          | Nitrogen, ammonia total [as N]           | E90            | 4                |
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## Appendix A: Effluent Exceedances

| NPDES ID  | DSDG  | Monitoring Location Code | Monitoring Period End Date | Parameter Code | Parameter Desc                             | Violation Code | # of Viol: (180) |
|-----------|-------|--------------------------|----------------------------|----------------|--------------------------------------------|----------------|------------------|
| MS0024295 | 001-A | 1                        | 05/31/2020                 | 74055          | Coliform, fecal general                    | E90            | 2                |
| MS0024295 | 001-A | 1                        | 06/30/2020                 | 00610          | Nitrogen, ammonia total [as N]             | E90            | 1                |
| MS0024295 | 001-A | 1                        | 06/30/2020                 | 50050          | Flow, in conduit or thru treatment plant   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 07/31/2020                 | 00530          | Solids, total suspended                    | E90            | 1                |
| MS0024295 | 001-A | 1                        | 07/31/2020                 | 00610          | Nitrogen, ammonia total [as N]             | E90            | 3                |
| MS0024295 | 001-A | 1                        | 07/31/2020                 | 50050          | Flow, in conduit or thru treatment plant   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 10/31/2020                 | 50060          | Chlorine, total residual                   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 01/31/2021                 | 74055          | Coliform, fecal general                    | E90            | 2                |
| MS0024295 | 001-A | 1                        | 02/28/2021                 | 00530          | Solids, total suspended                    | E90            | 4                |
| MS0024295 | 001-A | 1                        | 02/28/2021                 | 00610          | Nitrogen, ammonia total [as N]             | E90            | 3                |
| MS0024295 | 001-A | 1                        | 02/28/2021                 | 74055          | Coliform, fecal general                    | E90            | 2                |
| MS0024295 | 001-A | 1                        | 02/28/2021                 | 80082          | BOD, carbonaceous [5 day, 20 C]            | E90            | 2                |
| MS0024295 | 001-A | 1                        | 03/31/2021                 | 00300          | Oxygen, dissolved [DO]                     | E90            | 1                |
| MS0024295 | 001-A | 1                        | 03/31/2021                 | 00610          | Nitrogen, ammonia total [as N]             | E90            | 2                |
| MS0024295 | 001-A | 1                        | 03/31/2021                 | 50050          | Flow, in conduit or thru treatment plant   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 03/31/2021                 | 74055          | Coliform, fecal general                    | E90            | 2                |
| MS0024295 | 001-A | 1                        | 04/30/2021                 | 00530          | Solids, total suspended                    | E90            | 2                |
| MS0024295 | 001-A | 1                        | 04/30/2021                 | 00610          | Nitrogen, ammonia total [as N]             | E90            | 1                |
| MS0024295 | 001-A | 1                        | 04/30/2021                 | 50050          | Flow, in conduit or thru treatment plant   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 04/30/2021                 | 50060          | Chlorine, total residual                   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 04/30/2021                 | 74055          | Coliform, fecal general                    | E90            | 2                |
| MS0024295 | 001-A | 1                        | 05/31/2021                 | 00610          | Nitrogen, ammonia total [as N]             | E90            | 3                |
| MS0024295 | 001-A | 1                        | 05/31/2021                 | 50050          | Flow, in conduit or thru treatment plant   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 05/31/2021                 | 74055          | Coliform, fecal general                    | E90            | 1                |
| MS0024295 | 001-A | 1                        | 05/31/2021                 | 80082          | BOD, carbonaceous [5 day, 20 C]            | E90            | 3                |
| MS0024295 | 001-A | 1                        | 06/30/2021                 | 00530          | Solids, total suspended                    | E90            | 4                |
| MS0024295 | 001-A | 1                        | 06/30/2021                 | 00610          | Nitrogen, ammonia total [as N]             | E90            | 3                |
| MS0024295 | 001-A | 1                        | 06/30/2021                 | 50050          | Flow, in conduit or thru treatment plant   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 06/30/2021                 | 74055          | Coliform, fecal general                    | E90            | 2                |
| MS0024295 | 001-A | 1                        | 06/30/2021                 | 80082          | BOD, carbonaceous [5 day, 20 C]            | E90            | 3                |
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| MS0024295 | 001-A | 1                        | 07/31/2021                 | 50050          | Flow, in conduit or thru treatment plant   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 07/31/2021                 | 74055          | Coliform, fecal general                    | E90            | 2                |
| MS0024295 | 001-A | 1                        | 07/31/2021                 | 80082          | BOD, carbonaceous [5 day, 20 C]            | E90            | 2                |
| MS0024295 | 001-A | 1                        | 08/31/2021                 | 00530          | Solids, total suspended                    | E90            | 2                |
| MS0024295 | 001-A | 1                        | 08/31/2021                 | 50050          | Flow, in conduit or thru treatment plant   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 09/30/2021                 | 00610          | Nitrogen, ammonia total [as N]             | E90            | 1                |
| MS0024295 | 001-A | 1                        | 09/30/2021                 | 74055          | Coliform, fecal general                    | E90            | 1                |
| MS0024295 | 001-A | 1                        | 09/30/2021                 | 80082          | BOD, carbonaceous [5 day, 20 C]            | E90            | 1                |
| MS0024295 | 001-A | 1                        | 05/31/2022                 | 00610          | Nitrogen, ammonia total [as N]             | E90            | 2                |
| MS0024295 | 001-A | 1                        | 08/31/2022                 | 00300          | Oxygen, dissolved [DO]                     | E90            | 1                |
| MS0024295 | 001-A | 1                        | 08/31/2022                 | 00610          | Nitrogen, ammonia total [as N]             | E90            | 1                |
| MS0024295 | 001-A | 1                        | 08/31/2022                 | 50050          | Flow, in conduit or thru treatment plant   | E90            | 1                |
| MS0024295 | 001-A | 1                        | 08/31/2022                 | 51040          | E. coli                                    | E90            | 1                |
| MS0024295 | 001-A | 1                        | 08/31/2022                 | 80082          | BOD, carbonaceous [5 day, 20 C]            | E90            | 1                |
| MS0024295 | 001-A | 1                        | 01/31/2023                 | 00530          | Solids, total suspended                    | E90            | 4                |
| MS0024295 | 001-A | 1                        | 02/28/2023                 | 00530          | Solids, total suspended                    | E90            | 1                |
| MS0024295 | 001-A | 1                        | 02/28/2023                 | 50050          | Flow, in conduit or thru treatment plant   | E90            | 1                |
| MS0024295 | 001-A | 2                        | 04/30/2019                 | 00600          | Nitrogen, total [as N]                     | E90            | 1                |
| MS0024295 | 001-A | 2                        | 01/31/2020                 | 00600          | Nitrogen, total [as N]                     | E90            | 1                |
| MS0024295 | 001-A | 2                        | 02/28/2021                 | 00665          | Phosphorus, total [as P]                   | E90            | 2                |
| MS0024295 | 001-A | K                        | 01/31/2019                 | 80091          | BOD, carb-5 day, 20 deg C, percent removal | E90            | 1                |
| MS0024295 | 001-A | K                        | 01/31/2020                 | 80091          | BOD, carb-5 day, 20 deg C, percent removal | E90            | 1                |

Appendix A: Effluent Exceedances

| NPDES ID  | DSDG  | Monitoring Location Code | Monitoring Period End Date | Parameter Code | Parameter Desc                             | Violation Code | # of Viol: (180) |
|-----------|-------|--------------------------|----------------------------|----------------|--------------------------------------------|----------------|------------------|
| MS0024295 | 001-A | K                        | 02/28/2021                 | 80091          | BOD, carb-5 day, 20 deg C, percent removal | E90            | 1                |
| MS0024295 | 001-A | K                        | 02/28/2021                 | 81011          | Solids, suspended percent removal          | E90            | 1                |
| MS0024295 | 001-A | K                        | 06/30/2021                 | 81011          | Solids, suspended percent removal          | E90            | 1                |
| MS0024295 | 001-A | K                        | 02/28/2023                 | 81011          | Solids, suspended percent removal          | E90            | 1                |

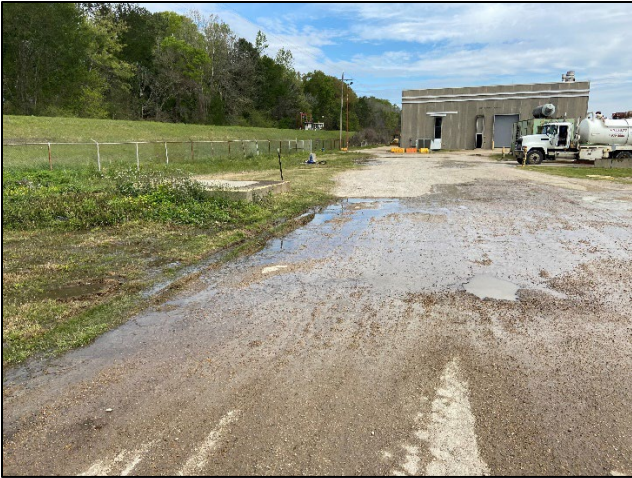


Photo 1. SSO from 54" force main.



Photo 2: Septic hauler dumping station.



Photo 3: Sinkhole at influent pump station.



Photo 4: New motor on 45 MGD influent pump.



Photo 5: 100 MGD pump (out of service).



Photo 6: Bar screen dumpster and bar screens.



Photo 7: Influent channel to storm cells.



Photo 8: Rented bypass pumps (background).

Attachment 1, Photographs.  
Jackson, MS WWTP, March 21, 2023  
Project No. CV-MS0024295-03212023



Photo 9: New fine screens.

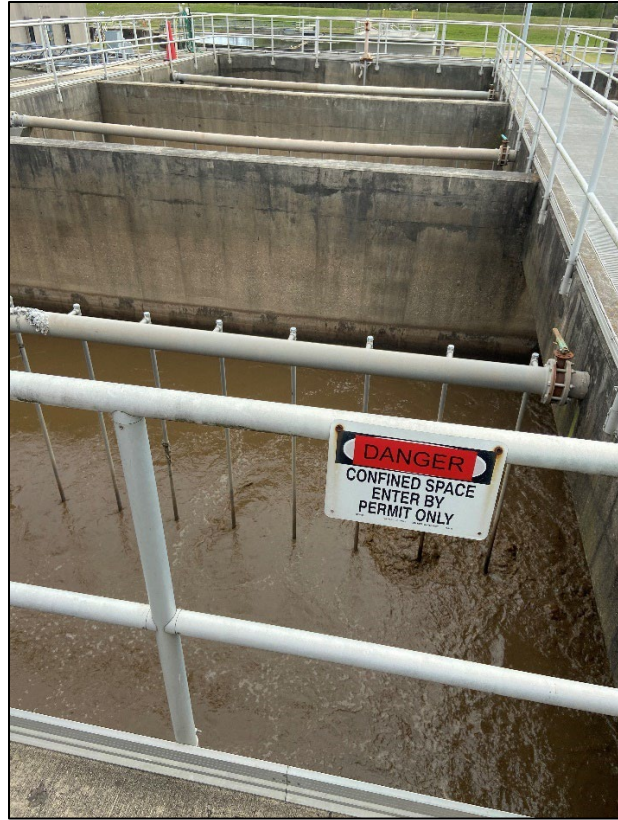


Photo 10: Anoxic tank.



Photo 11: Sludge filter press.



Photo 12: Sludge stockpile area.



Photo 13: Replacement pump inventory.



Photo 14: Sludge thickener (out of service).



Photo 15: Aeration basin



Photo 16: New blower controls.

Attachment 1, Photographs.  
Jackson, MS WWTP, March 21, 2023  
Project No. CV-MS0024295-03212023



Photo 17: New generator.



Photo 18: Clarifier #1.



Photo 19: Clarifier #2 (background).



Photo 20: Clarifier #3 (background).



Photo 21: Clarifier #4.



Photo 22: New RAS pump motors (three pumps in service).



Photo 23: RAS pump out of service.



Photo 24: New electrical controls.



Photo 25: Effluent from mechanical plant.



Photo 26: Bypass channel from storm cells.



Photo 27: Combined effluent composite sampler.



Photo 28: Effluent sampler calibration sticker.