



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. MS0044059
Trahon WWTP

Dear Mr. Lee:

The U.S. Environmental Protection Agency Region 4, the U.S. Army Corps of Engineers (USACE) and the Mississippi Department of Environmental Quality (MDEQ) conducted a Compliance Evaluation Inspection (CEI) on the Trahon Wastewater Treatment Plant (WWTP) on March 21, 2023. The objective of the inspection was to assess the City of Jackson's (Jackson) compliance with the Clean Water Act and the National Pollutant Discharge Elimination System (NPDES) 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. 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
14:54:18 -04'00'

Dennis Sayre, Acting Chief
Wastewater Enforcement Section
Water Enforcement Branch

Enclosure

cc: Michelle Clark
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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-MS0044059-03212023

Jackson Trahon WWTP
One Apache Drive
Jackson, Mississippi 39212
NPDES Permit Number: MS0044059
Date of Inspection: March 21, 2023

Title and Approval Sheet

Title: Jackson MS Savanna St POTW CV-MS0044059-03212023.docx

Approving Official:

Sayre, Dennis  Digitally signed by Sayre,
Dennis
Date: 2023.05.18
14:54:32 -04'00'

Dennis Sayre, Acting Chief
Wastewater Enforcement Section
Water Enforcement Branch

Inspector:

MICHAEL AMMONS  Digitally signed by
MICHAEL AMMONS
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Brad Ammons, Environmental Engineer
Wastewater Enforcement Section
Water Enforcement Branch

COMPLIANCE EVALUATION INSPECTION REPORT
Jackson Trahon/Big Creek WWTP, Project # CV-MS0044059-03212023

Contents

1. Introduction	1
2. Participants	1
3. Facility Description	1
4. Inspection Procedures.....	2
5. Findings & Conclusions	2
<i>A. Permit Review</i>	<i>2</i>
<i>B. Records and Reports</i>	<i>2</i>
<i>C. Flow Measurement</i>	<i>2</i>
<i>D. Sampling/Laboratory.....</i>	<i>2</i>
<u> <i>E. Site Visit (Operation and Maintenance)</i></u>	<u>2</u>
<i>F. Sludge Handling</i>	<i>3</i>
<i>G. Effluent/Receiving Water</i>	<i>3</i>
6. Discussion.....	3

COMPLIANCE EVALUATION INSPECTION REPORT
Jackson Trahon/Big Creek WWTP, Project # CV-MS0044059-03212023

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 Trahon 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. In addition, the United States Army Corps of Engineers (USACE) attended the CEI as they have \$125 million in grants to give the City with a 25% match (75% USACE money).

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
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Matthew Attman	USACE-Vicksburg	
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Shannon Moore	Veolia	Shannon.Moore@veolia.com
Blake Boehringer	Veolia (Lead Operator)	Blake.Boehringer@veolia.com
Holly Weatherhead	Veolia	Holly.Weatherhead@veolia.com
Terry Williamson	City of Jackson	twilliamson@city.jackson.ms.us
Robert Lee	City of Jackson	rlee@city.jackson.ms.us

3. Facility Description

(Refer to Attachment 1 for Photo references)

This WWTP is an oxidation ditch activated sludge wastewater treatment plant with that is permitted to discharge 4.5 million gallons per day (MGD). It serves the Jackson industrial park and the City of Byram and was built in 1994.

The WWTP consists of a coarse bar screen, grit removal (both grit classifiers were out of service; Photos 1 and 2), two blowers (Photo 3); two oxidation ditches (one was out of service; Photos 5 and 6), two secondary clarifiers (Clarifier #1 out of service; Photos 7 and 8), return activated sludge pumps; chlorine disinfection (Photos 10 and 16), sulfur dioxide dechlorination (Photos 9 and 17), aerobic sludge digester (Photo 18), one portable, trailer mounted sludge belt filter press (owned by Veolia and shared with a nearby town; Photo 19) and related appurtenances.

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

- Clarifier #2 has a new skimmer arm (Photo 8).
- New controls for chlorine (Photo 10) and sulfur dioxide (Photo 9).

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 sampling 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 August 17, 2021 and expires on July 31, 2026. The NPDES permit lists only one outfall (001) that discharges to Big Creek, a tributary to the Pearl River.

B. Records and Reports

The EPA's Enforcement Compliance History Online (ECHO) shows that the WWTP was in non-compliance for effluent limit exceedances of Biochemical Oxygen Demand, 5-day (BOD₅), Total Recoverable Copper, E. Coli., Total Suspended Solids (TSS), TSS percent removal and/or Total recoverable zinc during five of the last 13 quarters (See Appendix A for effluent limit violations). This WWTP's records are kept at the City's Savanna Street WWTP, which also houses the City's lab for all 3 WWTPs it owns.

C. Flow Measurement

EPA did not record the effluent flowrate, but the average flow to the WWTP averages 2.5 MGD. The effluent flow meter appeared in good condition.

D. Sampling/Laboratory

As discussed above, all three of the City's WWTPs are analyzed at the Savanna Street's laboratory.

E. Site Visit (Operation and Maintenance)

A WWTP site visit started at the headworks and ended at the outfall. The site visit continued from the headworks and ended at the sludge digester. The WWTP appeared well maintained. The following components were observed:

- The two grit classifiers were out of service (see Photo 2).
- The City-owned sludge belt filter press has been moved to the Savanna Street WWTP.

- Oxidation ditch #2 has been out of service for over 10 years (see Photo 6). While the WWTP can handle increased flows/Infiltration/Inflow with just one oxidation ditch in service, EPA is concerned about not having a backup ready.
- Clarifier #1 has been out of service for approximately two months and needs an upgrade (see Photo 7). As with the oxidation ditches, EPA is concerned about not having a backup ready. The splitter box to the clarifiers has four chambers for any expansion needs (could add two additional clarifiers).
- The City has installed new chlorine and sulfur dioxide dosing controls (see Photos 9 and 10).
- The effluent automatic sampler was last calibrated in November of 2022 and the refrigerator was at 2.5° Celsius (see Photos 14 and 15).
- There is an on-site generator that can power the administration building and the chlorine dosing equipment (see Photo 20).

F. Sludge Handling

As noted above, sludge is aerobically digested and dewatered by a trailer mounted belt filter press and then landfilled or land applied. During the summer, the City disposes of about 1 truck of sludge per day and only 1-2 trucks/week in the winter.

G. Effluent/Receiving Water

The effluent at Outfall 101 was clear and void of solids. The receiving waterbody (Big Creek) was not readily accessible and not observed.

6. Discussion

The City has made several upgrades to the Trahon WWTP. However, there is still concern about not having backup appurtenances ready in case of failure.

END OF REPORT

Attachment A: Effluent Exceedances

NPDES ID	DSDG	Monitoring Location Code	Monitoring Period End Date	Parameter Desc	Violation Code	# of Viol: (24)
MS0044059	001-A	1	11/30/2018	Copper, total recoverable	E90	1
MS0044059	001-A	1	12/31/2018	pH	E90	1
MS0044059	001-A	1	12/31/2018	Copper, total recoverable	E90	1
MS0044059	001-A	1	06/30/2020	BOD, 5-day, 20 deg. C	E90	1
MS0044059	001-A	1	07/31/2020	Copper, total recoverable	E90	2
MS0044059	001-A	1	05/31/2021	Zinc, total recoverable	E90	1
MS0044059	001-A	1	08/31/2021	Copper, total recoverable	E90	2
MS0044059	001-A	1	08/31/2022	BOD, 5-day, 20 deg. C	E90	4
MS0044059	001-A	1	08/31/2022	Solids, total suspended	E90	4
MS0044059	001-A	1	08/31/2022	E. coli	E90	1
MS0044059	001-A	K	04/30/2019	Solids, suspended percent removal	E90	1
MS0044059	001-A	K	01/31/2020	Solids, suspended percent removal	E90	1
MS0044059	001-A	K	02/29/2020	Solids, suspended percent removal	E90	1
MS0044059	001-A	K	03/31/2020	Solids, suspended percent removal	E90	1
MS0044059	001-A	K	07/31/2020	Solids, suspended percent removal	E90	1
MS0044059	001-A	K	08/31/2022	Solids, suspended percent removal	E90	1

Attachment 1, Photographs.
Jackson, MS Trahon/Big Creek WWTP, March 21, 2023
Project No. CV-MS0044059-03212023



Photo 1. Influent grit chamber.



Photo 2: Grit classifiers (out of service).



Photo 3: Blowers.



Photo 4: Splitter box to oxidation ditches.

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Photo 5: Oxidation ditch #1.



Photo 6: Oxidation ditch #2.



Photo 7: Clarifier #1 (out of service).



Photo 8: Clarifier #2.

Attachment 1, Photographs.
Jackson, MS Trahon/Big Creek WWTP, March 21, 2023
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Photo 9: Sulfur Dioxide controls.



Photo 10: Chlorine gas controls.



Photo 11: Chlorine contact chamber #1



Photo 12: Chlorine contact chamber #2 (not in use).



Photo 13: Stair-step aeration of final effluent.



Photo 14: Effluent automatic sampler.



Photo 15: Gaseous chlorine cylinders.



Photo 16: Gaseous sulfur dioxide cylinders.



Photo 17: Sludge digester.



Photo 18: Trailer-mounted sludge filter press.



Photo 19: On-site generator.