



REGION 4
ATLANTA, GA 30303

April 3, 2024

Nichole Harris
Mayor
Town of Tutwiler
201 Tallahatchie Avenue
Tutwiler, MS 38963
mayornharris@gmail.com

Dear Nichole Harris:

The U.S. Environmental Protection Agency Region 4, conducted a Compliance Evaluation Inspection (CEI) on the Town of Tutwiler Wastewater Treatment Plant (WWTP) on February 22, 2024. The objective of the inspection was to assess the Town of Tutwiler's (Tutwiler) 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.

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,

**DENNIS
SAYRE**

Digitally signed by
DENNIS SAYRE
Date: 2024.04.03
10:54:13 -04'00'

(for)

Jairo Castillo, P.E., Chief
Wastewater Enforcement Section
Water Enforcement Branch

ENCLOSURES

1. Tutwiler MS POTW CV-MS0025054.docx

cc: James Gammill
Mississippi Department of Environmental Quality
jgammill@mdeq.ms.gov

K.T. Newman
Contract Operator, Town of Tutwiler
Utilitycontractors@yahoo.com

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

Tutwiler POTW
Highway 49 East,
Tutwiler, MS 38963
NPDES Permit Number: MS0025054

Project No. CV-MS0025054-02222024

Date of Inspection:

February 22, 2024

Inspectors:

Brad Ammons, EPA Region 4
Andrew Gunderson, EPA Region 4
Mel-Chilecee Taylor, EPA Region 4
James Gammill, MDEQ
Justin Berry, MDEQ

Inspection Report Prepared by:

Brad Ammons

April 2, 2024

Title and Approval Sheet

Title: Tutwiler MS POTW CV-MS0025054-02222024.docx

Project No. CV-MS0025054-02222024

Approving Official:

DENNIS
SAYRE

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DENNIS SAYRE
Date: 2024.04.03
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(for)

Jairo Castillo, P.E., Chief
Wastewater Enforcement Section
Water Enforcement Branch

Enforcement Officer:

MICHAEL AMMONS

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MICHAEL AMMONS
Date: 2024.04.03
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Brad Ammons, Environmental Engineer
Wastewater Enforcement Section
Water Enforcement Branch

COMPLIANCE EVALUATION INSPECTION REPORT
Tutwiler MS WWTP, Project # CV-MS0025054-02222024

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COMPLIANCE EVALUATION INSPECTION REPORT
Tutwiler MS WWTP, Project # CV-MS0025054-02222024

1. Introduction

On February 22, 2024, 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 Town of Tutwiler Wastewater Treatment Plant (WWTP), owned by the Town of Tutwiler, Mississippi (Tutwiler/The Town) and operated by Mr. KT Newman, Contract Operator. 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
Andrew Gunderson	EPA Region 4	Gunderson.Andrew@epa.gov
Mel-Chilecee Taylor	EPA Region 4	Taylor.Melchilecee@epa.gov
James Gammill	MDEQ	jgammill@mdeq.ms.gov
Justin Berry	MDEQ	jberry@mdeq.ms.gov
KT Newman	Utility Contractors	utilitycontractors@yahoo.com

3. Facility Description

The Tutwiler WWTP is an activated sludge (oxidation ditch) wastewater treatment plant located at Highway 49 East in Tutwiler, MS. The facility is currently permitted under NPDES permit number MS0025054 to discharge 0.75 million gallons per day (MGD) from outfall 001 to Hopson Bayou. Construction at the facility is currently underway under a Clean Water State Revolving Fund (CWSRF) loan from MDEQ to replace mechanical equipment in the oxidation ditch and secondary clarifiers, with a start date of July 2023 and a projected completion date of March 2024. At the time of this CEI, the contractor was out at the WWTP doing final punch-list items. The WWTP also serves the Tallahatchie County jail, as well as some customers from Rome Water Association.

The WWTP consists of a bar screen, an auger grit removal system (out of service during this CEI), oxidation ditch, two secondary clarifiers (one out of service during this CEI), return activated sludge pumps, waste activated sludge pumps, chlorine disinfection, and related appurtenances. In addition, there are 2 lagoons on-site which serve as equalization and as a backup WWTP during the construction on the oxidation ditch and clarifiers.

The facility's current wastewater plant operational staff are as follows:

- One Mississippi Wastewater Treatment Class 4 Operator;
- One Mississippi Wastewater Treatment Operator (Contractor);
- One Service Worker.

4. Inspection Procedures.

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

5. Findings & Conclusions

A. Permit Review

Tutwiler's NPDES permit for the WWTP has an effective date of July 11, 2019, and expires on June 30, 2024. The NPDES permit lists and describes the outfall as Outfall 001 (Treated Domestic Wastewater) to Hopson Bayou.

The NPDES permit contains Effluent Limitations and Monitoring Requirements table for Outfall 001 at the WWTP's current capacity of 0.75 MGD.

B. Records and Reports

The EPA's Enforcement Compliance History Online (ECHO) shows that the WWTP was in Non-Compliance (NC) or Significant Non-Compliance (SNC) for effluent limit exceedances as listed:

- Biochemical Oxygen Demand, 5-day (BOD₅) – exceeded 5 of the last 13 quarters.
- BOD₅ % Removal – exceeded 7 of the last 13 quarters.
- E. coli – exceeded 1 the last 13 quarters.
- Nitrogen Ammonia Total - exceeded 8 the last 13 quarters.
- Dissolved Oxygen – exceeded 1 of the last 13 quarters.
- Total Suspended Solids Percent Removal - exceeded 4 the last 13 quarters.

Mr. Newman does all field analytics (pH, Dissolved Oxygen and Residual Chlorine) and he had buffers within the expiration date. Recent Discharge Monitoring Reports (DMRs) and analytical results from Tutwiler's contract laboratory (Waypoint Analytical in Ridgeland, MS) were reviewed onsite. All reviewed paperwork (January – June 2023), including the analytical results, chain of custody, and DMRs met permit required retention times and was well organized. In addition, Mr. Newman had a copy of the Town's NPDES permit. Finally, Mr. Newman stated that prior to 2023, the Town's Public Works Office kept all maintenance logs, but are now kept by the Utility Contractor's operator.

C. Flow Measurement

The effluent flow meter was not evaluated during this inspection.

D. Sampling/Laboratory

Mr. Newman samples/analyzes all the field parameters for the Town (pH, Dissolved Oxygen and Residual Chlorine). The Town contracts with Waypoint Analytical in Ridgeland, MS to analyze BOD₅, Ammonia-Nitrogen, Total Nitrogen, E. Coli., Total Phosphorus and Total Suspended Solids. The following observations were made of Mr. Newman's field analytic equipment/:

- All pH buffers were noted to be in date.
- Headworks was bypassed during the construction (straight to the lagoons), so no influent samples were taken.

E. Site Visit (Operation and Maintenance)

A WWTP site visit started at the headworks and then to the oxidation ditch. The site visit continued from the oxidation ditch, through the secondary clarifiers and ended at the discharge point from the chlorine contact chamber. The following components were observed:

- The bar screen noted at the headworks was clean and operational (Photo 1).
- The auger grit removal system was out of service (Photo 1).
- Flow was low enough that the bypass to the lagoons was not being used at the time of inspection (Photo 2).
- Oxidation ditch appeared well maintained with the CWSRF rehabilitation. However, Mr. Newman noted that the brushes were now tied to a Dissolved Oxygen meter and he has concerns about solids settling when the 3rd brush is not in use (Photo 3).
- One of the two secondary clarifiers is out of service for rehabilitation (photo 4).
- One of the return activated sludge pumps was noted to be out of service.
- The old lagoons were necessary to schedule and complete the construction going on in the oxidation ditch and clarifiers (Photo 5).
- The newly constructed chlorine contact chamber was in use (Photo 6). While Mr. Newman mentioned that the upgrade shortened detention time, the Chlorine and Sulfur Dioxide (de-chlorination) are now dosed based upon effluent flow.

F. Sludge Handling

Wasted sludge is stored in the on-site lagoons.

G. Effluent/Receiving Water

The effluent at the end of treatment leading to Outfall 001 appeared to be clear and void of solids. The receiving waterbody (Hopson Bayou) was relatively clear and void of solids, at least from the view from behind the fence of the WWTP.

6. Discussion

COMPLIANCE EVALUATION INSPECTION REPORT

Tutwiler MS WWTP, Project # CV-MS0025054-02222024

The Tutwiler WWTP is operating with a lot of backup treatment capacity with the on-site lagoons. Most of the effluent limit violations are likely tied to peak flow during and shortly after rainfall events. In addition, the WWTP receives a lot of items that shouldn't be flushed from the jail, which can clog up the headworks. If the WWTP has been operating without the 3rd brush being on in the oxidation ditch, that would explain the ammonia-nitrogen and BOD₅ effluent limit exceedances.

END OF REPORT



Figure 1. Aerial View of Facility (Oxidation ditch and secondary clarifiers to the north; lagoons to the south). Hopson Bayou to the west.



Photo 1: Auger (Left) and bar screen (Right).



Photo 2: Bypass weir to lagoons at headworks.



Photo 3: Oxidation ditch.



Photo 4: Clarifiers (clarifier on right out of service).



Photo 5: Lagoons.



Photo 6: New chlorine contact chamber.