



**STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
JACKSON ENVIRONMENTAL FIELD OFFICE
1625 HOLLYWOOD DRIVE
JACKSON, TENNESSEE 38305-4316
PHONE (731) 512-1300 STATEWIDE 1-888-891-8332 FAX (431) 661-6283**

March 7, 2024

The Honorable John Holden
Mayor, City of Dyersburg
425 West Court Street
Dyersburg, TN 38025-1358

RE: Compliance Evaluation Inspection
Dyersburg STP
NPDES Permit No. TN0023477
Dyer County

Dear Mayor Holden:

On February 29, 2024, as representatives of the Tennessee Department of Environment and Conservation, Division of Water Resources (The Division), Jackson Environmental Field Office, Libby Williams and I conducted a Compliance Evaluation Inspection (CEI) of the Dyersburg sewage treatment plant (STP). During the inspection, the wastewater treatment lagoon and the wastewater laboratory were evaluated to determine the status of compliance with your National Pollutant Discharge Elimination System (NPDES) permit. The Division thanks Operators Tony White and Rodney Shelton for their time and assistance.

I. Permit

The permit covers the discharge of treated municipal wastewater from Outfall 001 to the North Fork Forked Deer River at mile 2.8. The discharge consists of treated municipal wastewater from the Dyersburg STP with a design capacity of 9.45 MGD. Dyersburg STP is on a major inspection schedule of once every two years. Before the CEI, the EPA CDX system and State Compliance records from April 2022 to January 2024 showed the facility to be compliant with their NPDES permit.

II. Records/Reports

A review of the facility's self-monitoring and collection system records was performed. Consistently, records were available upon request, efficiently filed, backed up electronically, accurately transcribed, complete and current.

III. Facility Site Review, Self-Compliance Program, Operations & Maintenance, and Sanitary Sewer Overflows

The plant is described as a 2- stage activated sludge plant consisting of primary, intermediate, and final clarifiers with chlorine bleach disinfection, sulfur dioxide de-chlorination and post disinfection aeration. The headworks of the plant is equipped with two bar screens for trash/grit removal. The collection system consists of 18 pump stations with the main pump station being equipped with a bar screen for solids and one centrifugal unit for grit removal. The treatment plant is properly operated and maintained. Operation and maintenance manuals are available and standard operating procedures (SOPs) are followed consistently. Dyersburg STP experienced no effluent violations of their NPDES permit from April 2022 to January 2024. The plant experienced no hydraulic or organic overloads during the 2- year period covered by this inspection.

IV. Effluent/Receiving Waters

The outfall location at the receiving stream (North Fork Forked Deer River at mile 2.8) was not observed during this inspection.

V. Flow Measurement

The influent primary flow monitoring device is a 30-inch Parshall Flume. The effluent primary flow monitoring device is a 36-inch rectangular weir with contractions. Both devices are installed on a level plane, appropriately sized, provide for a smooth approach to the measuring point and equipped with totalizing ultrasonic secondary devices. Primary devices and flow meters are calibrated monthly by plant personnel.

VI. Laboratory

Laboratory standard operating procedures are followed consistently by laboratory staff. All analytical methods employed in the laboratory are approved in Title 40 CFR Part 136. In-house testing includes the following parameters: pH, dissolved oxygen, total residual chlorine, carbonaceous biochemical oxygen demand (CBOD), *E.coli*, total suspended solids and settleable solids. Nitrogen as Ammonia, Phosphorus as Total Phosphorus and whole effluent toxicity are being subcontracted to Waypoint Analytical in Jackson and Memphis, TN for analyses. The subcontract laboratory was not evaluated as part of this inspection. Overall, laboratory quality assurance and quality control practices are performed according to their methods for all the in-house testing required by the permit.

VII. Sludge Handling/Disposal (or Biosolids Handling/Disposal)

Waste sludge from Dyersburg STP is currently digested aerobically and the remainder is sent to land application systems located at the wastewater facility as per permit TNB023477.

VIII. Additional Comments and Recommendations

The Dyersburg STP is extremely well maintained with redundancy for all parts of the treatment plant and the collection system. Staff are to be commended for their effort to keep the facility running in such an exemplary manner. Planned work includes rehabilitation of one of their digester basins along with new skirts and rakes for their clarifiers. Continual work on the collections system to decrease inflow and infiltration and preventive maintenance on pump stations is ongoing.

IX. Conclusion

Compliance with your NPDES requirements helps ensure discharges that are protective of downstream fish and aquatic life and water quality. On behalf of the Division, we want to thank you and your staff for your efforts to ensure permit compliance and to protect state water quality. If we may be of assistance in matters concerning this report, please contact Tammy Miller via telephone at (731) 478-7080 or via email at Tammy.Miller@tn.gov.

Sincerely,



Tammy Miller
Environmental Consultant
Division of Water Resources
Jackson Environmental Field Office

cc: Tony White twhite@dyersburgtn.gov
Rodney Shelton rsheldon@dyersburg.gov
Waterlog