

# 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

November 5, 2021

The Honorable Eric Jordan Mayor, Town of Bells E copy: BellsMayorJordan@yahoo.com P. O. Box 760 Bells, Tennessee 38006

**RE:** Compliance Evaluation Inspection

City of Bells Wastewater Lagoon NPDES Permit No.TN0026247 Crockett County

Dear Mayor Jordan:

On October 28, 2021, as a representative of the Tennessee Department of Environment and Conservation, Division of Water Resources (The Division), Jackson Environmental Field Office, I conducted a Compliance Evaluation Inspection (CEI) of the City of Bells' Wastewater Lagoon. 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 Marlon Jordan, Jr. and Angel West for their time and assistance.

#### I. Permit

The permit covers the discharge of treated municipal wastewater from Outfall 001 to the South Fork Forked Deer River at mile 36. The discharge consists of treated municipal wastewater from the City of Bells' wastewater collection and treatment system as well as the influent from PictSweet Corporation. The treatment lagoon has a design capacity of 2.75 MGD. A copy of the permit was on file and available for review.

# 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.

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

Bells Wastewater Lagoon is a major municipal facility that operates a five-cell lagoon system. Domestic influent and Pictsweet influent combine to enter the influent pump station. The lagoon system consists of cell #1 being an anerobic covered lagoon, cell #2 being an aerated lagoon, and cell # 3-5 being facultative lagoons. A clarifying pond follows the lagoons and the effluent discharges through pumps to the South Fork Forked River at mile 36. If the pH reaches a low level, sodium hydroxide is dripped at the influent pump station. The Bells Wastewater Lagoon does have an emergency generator capable of running the influent pump station should loss of power be an issue. The Bells Wastewater Lagoon currently has one certified operator that holds certification for Biological Natural Systems and Grade Two Collections. The collection system was not a part of this inspection. Before this CEI, the EPA CDX system and State Compliance records from December 2019 through September 2021 were reviewed and showed the facility to have had 7 exceedances of their permit effluent limits: One for BOD effluent, three for *E. coli*, one for Dissolved Oxygen, one for Total Suspended Solids and one for pH.

# **IV. Effluent/Receiving Waters**

The outfall location at the receiving stream (South Fork Forked River at mile 36) was not observed during this inspection.

### V. Flow Measurement

Influent and Effluent flow is measured by magnetic meters that are calibrated when needed and is examined annually by BAM2.

#### 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, settleable solids, carbonaceous biochemical oxygen demand (CBOD), *E. coli*, and total suspended solids. Nitrogen total as N, phosphorus total as P, ammonia as N, and biomonitoring are being subcontracted to Waypoint Analytical in Jackson. The subcontract laboratory was not evaluated as part of this inspection. Two areas that need to be brought into compliance in the laboratory were identified:

- 1. Method Detection Limits (MDL) were not being generated for Total Suspended Solids (TSS). The TSS method requires MDLs to be performed on the Method Blank.
- 2. Quality assurance/Quality control (QA/QC) measures need to be added to the performance of *E. coli* testing according to Title 40 CFR Part 136 guidelines.

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<u>VII. Sludge Handling/Disposal (or Biosolids Handling/Disposal)</u>During the period evaluated for the purpose of this inspection no sludge was removed from the treatment lagoons.

## **VIII. Additional Comments and Recommendations**

The City of Bells is making strides to control their inflow and infiltration. During the inspection, I had the chance to observe a cure in place pipe lining for inflow and infiltration. Bells is making progress on having lines smoked and relined. Eleven aerators were functioning in the second lagoon and repairs are being made to two surface aerators at this time. Spare parts are stocked to maintain the aerators. The Black Bottom lift station is due to be replaced soon. Bells is installing one quarter mile of new force main and expanding the size from four to six inches. The City of Bells does not currently chlorinate but is looking into disinfection types to implement in order to avoid further E. coli exceedances. The Division recommends that the City of Bells Wastewater facility has the Tennessee Association of Utility Divisions for a site visit and to assist with getting the QA/QC measures in alignment with Title 40 CFR Part 136 guidelines.

In addition, the City of Bells is under Director's Order No. WPC20-0021 issued on October 13, 2020 for significant non-compliance due to effluent limitation violations. Please continue to complete the required action steps in the required timeframes as outlined in the Order.

# 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, I want to thank you and your staff for your efforts to ensure permit compliance and to protect state water quality. If I may be of assistance in matters concerning this report, please contact me via telephone at (731) 478-7080 or via email at <a href="mailto:Tammy.Miller@tn.gov">Tammy.Miller@tn.gov</a>.

Sincerely,

Tammy Miller

**Environmental Scientist** 

January Miller

Division of Water Resources

Jackson Environmental Field Office

cc: Marlon Jordan, Jr, Certified Operator (via email)

Waterlog