

TOWN OF ROWLAND, NORTH CAROLINA
2022 - 2023 System Performance Annual Report
Wastewater Treatment Plant
Collection System

This report provides performance information on the Town of Rowland wastewater treatment plant and collection system for fiscal year 2022 - 2023. This report is required under the provisions of the Clean Water Act of 1999, House Bill 1160 ratified on July 20, 1999.

WASTEWATER TREATMENT PLANT

I. General Information

Facility Name: Rowland Wastewater Treatment Plant
Responsible Entity: Town of Rowland
Person in Charge: Joe McGirt, Operator in Responsible Charge
Contact Information: 910/422-3211
Applicable Permit: NPDES # NC0069612

Facility Name: Rowland Collection System
Responsible Entity: Town of Rowland
Person in Charge: Joe McGirt, Operator in Responsible Charge
Contact Information: 910/422-3211
Applicable Permit: WQCS00212

II. System Description

DESCRIPTION OF TREATMENT PROCESS:

The Town's Wastewater Treatment plant is located on West Cherry Street, Rowland. The discharge from the wastewater plant is regulated by an NPDES Permit issued by the NC Division of Water Resources. The wastewater plant is permitted to discharge 0.387 million gallons per day. The original plant was constructed in 1984. Major treatment components consist of:

- Mechanical bar screen
- Mechanical grit removal
- Influent flow measurement
- 3.6 million-gallon treatment lagoon
- Effluent pump station
- Chlorine disinfection system
- Post-aeration cascade
- 5.4 miles of discharge force main to Big Shoe Heel Creek

DESCRIPTION OF THE SANITARY SEWER COLLECTION SYSTEM:

The wastewater collection system consists of approximately 15.25 miles of gravity sewer, approximately 6.5 miles of force main, 3 duplex pump stations, and all associated piping, valves, and appurtenances required to make a complete and operational wastewater collection system to serve the Town of Rowland.

III. Performance

The NPDES has effluent limitations and monitoring requirements for the discharge from the wastewater treatment plant. The permit contains both monthly average limits and weekly average limits for the following parameters: Biochemical Oxygen Demand (BOD₅), Flow, Total Suspended Solids, Ammonia Nitrogen, Total Residual Chlorine, Fecal Coliform, Dissolved Oxygen, and pH. In addition to these parameters, the permit also requires monitoring only for Total Nitrogen, Total Phosphorus, Mercury and Temperature. To meet the permit monitoring requirements, effluent testing is conducted approximately 448 times during the year by a state certified laboratory. Plant staff will also conduct numerous process control testing. The flow to the wastewater plant is monitored continuously. The total gallons treated for the fiscal year was approximately 74,000,000 gallons with an average daily flow of 0.203 mgd.

For this report period, the wastewater plant had two (2) permit violations that related to the quality of the discharged effluent. The wastewater had two (2) months in which the monthly average flow limit was exceeded. The sewer collection is subject to inflow and infiltration (I&I) of rainwater and groundwater. Rainwater/Groundwater may enter the collection system thru cracks in the pipes, missing cleanouts, manholes and other defects. State regulatory staff were notified of each violation and town staff was in regular contact with regulatory staff during the year. No environmental impacts were observed due to any of the violations. The Town is working to identify and repair sources of I&I into the collection system.

A summary of the NPDES violations:

<u>Date</u>	<u>Violation</u>	<u>Permit Limit</u>	<u>Reported Value</u>
February 2023	Flow	0.387 mgd	0.406 mgd
April 2023	Flow	0.387 mgd	0.394 mgd
January 2023 (Chlorine)	Daily Max	28.0 ug/L	50.0 ug/L
February 2023 (Chlorine)	Frequency	2 X week	1 X week

The frequency violation for February 2023 was due to the town pulling these samples consistently on Tuesday and Wednesday of each week. For this particular week the dates happen to be January 31 and February 1, 2023.

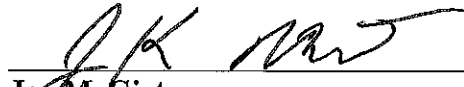
On June 22 – 23, 2023 the Town experienced a rain event that caused the treatment lagoon to surge and top the lagoon wall. The town notified the regional office, Hughie White; Environmental Program Consultant, that a pump was placed in the lagoon to bring the level down to keep the flow from spilling over and breaching the lagoon. A total of 792,000 gallons were pumped over the lagoon wall to a tributary of Mitchell Swamp.

IV. Notification

This report is published on the Town of Rowland's website at <http://www.townofrowland.com/>. In addition, copies are available for review at the Town Hall offices at 202 W. Main Street, in Rowland.

V. Certification

I certify under penalty of law that this report is complete and accurate to the best of my knowledge. I further certify that this report has been made available to the users or customers of the named system and that those users have been notified of its availability.



Joe McGirt
Operator in Responsible Charge
Town of Rowland