

**Town of Murphy**

**Wastewater Treatment Plant Annual Report**

**July 2021- June 30, 2022**

**Prepared: July 18, 2022**

Town of Murphy

P.O. Box 130

Murphy NC 28906

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WWTP ORC- Tyler White – 828-557-1267

WWTP Permit # NC 0020940

## 1) Description of system of Treatment Process

The Town of Murphy Wastewater Treatment Plant (WWTP) utilizes a 1.4 MGD biological treatment process that includes two 730,000-gallon sequencing batch reactors (SBR), a 175,000-gallon post equalization basin, a chlorine contact basin which uses sodium hypochlorite for disinfection and a dichlorination basin which uses sodium bisulfite for dichlorination. The headworks consist of one mechanical bar screen and one manual bar screen bypass channel used as needed. There are two digestors that are combined 300,000-gallons which feed into a 2.2 meter Phoenix belt press for dewatering. There is one Grundfos pump that is used to transfer the sludge to the belt press. The backup power system for the treatment plant is a 300KW Spectrum Detroit Diesel generator with an automatic transfer switch. The influent pumps used to feed the treatment plant are two 100HP submersible pumps with dual high-level alarms and SCADA system.

## 2) System Performance

The following summary of performance for the year July 1st, 2021, through June 30<sup>th</sup>, 2022. The system was in continuous operation for the time period reported. SBR #1 was fully rehabbed in August of 2021, with the diffusers being completely cleaned and rebuilt. In March of 2022 SBR #2 was fully rehabbed in the same way. They were offline during this process to ensure that no raw wastewater was discharged into the river. The town rebuilt everything in house. The new chlorine contact chamber was turned online in September of 2022.

### Violations of permit conditions and parameters

July 2021- No Violations

August 2021- No Violations

September 2021- No Violations

October 2021- No Violations

November 2021- No Violations

December 2021- Annual Frequency Violation

January 2022- Weekly Fecal Coliform Geometric Mean Exceeded

February 2022- No Violations

March 2022- No Violations

April 2022- No Violations

May 2022- No Violations

June 2022- No Violations

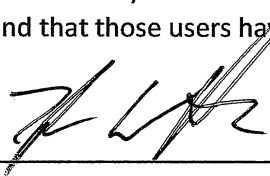
There were no bypass or spill violations.

3.) Notification

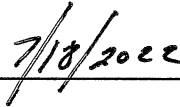
The Town of Murphy will notify if there are any.

4.) 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.



Tyler White, WWTP ORC



Date