

**Cliffside Sanitary District WWTP
&
Sewer Collection System
NPDES Permit NC0004405 & Collection System Permit WQCSD0287
Rutherford County NC; Annual Performance Report
For Year July 1, 2021 to June 30, 2022**

I. General Information

Regulated Entity: Cliffside Sanitary District

Responsible Entity: Cliffside Sanitary District

Contact persons: Local Government Commission, Mr. David Erwin
Phone No. 919-814-4308

Operator / ORC, Donald R. Price
Phone No. 828-919-0624

Cliffside Sanitary District Sewer Collection System consists of ‘2’ sewer pump station(s), the Main/Bridge with ‘2’ 1400 gpm Gorman-Rupp pumps, and Haynes with ‘2’ 250 gpm Gorman-Rupp Pumps; 199 manholes of which only 155 are active, and about 7 miles (36,960 ft.) of gravity lines and force mains. Sewer is pumped from the main pump station to the 500,000 gpd converted activated sludge WWTP located at 136 Hawkins Loop Rd, Cliffside NC 28024. The wastewater is treated by that facility through operation as a ‘Partial Mix-Lagoon’ consisting of screening and flash mixing, aeration, chlorination and de-chlorination and discharged into the 2nd Broad River, a class ‘C’ stream in the Broad River Basin. Cliffside Sanitary District sewer system is in the process of completing an asset inventory and operational assessment of the pump stations, collection system, and WWTP. A report with results of that assessment was sent to NCDEQ-DWR, the Local Gov’t. Commission with request for funding for I & I abatement, plant and pump station(s) upgrade, and are awaiting confirmation from SWIA. We are hoping for approval by finalization by fall of 2022, if all paperwork requirements are met.

II. Performance

Cliffside Sanitary District Sewer Collection System continued excellence in compliance and observed no overflows for the the entire reporting year of July 1, 2021 to June 30, 2022. Cliffside Sanitary District recognizes the (I & I) Inflow and Infiltration problems in the system. These problems are being addressed and corrected through studies and continued sewer collection system physical observations via pulling manhole lids and reviewing invert flow observances, to allow for determination of the best options for Cliffside Sanitary to address sewer rehabilitation projects. Cliffside Sanitary District is keeping Local Government Commission aware of the ongoing sewer collection system review and making them aware of options as available from the viewpoint of Grade 4 Sewer Collection operator, Mr. Don Price – Grade 4 Collection number:991335. This includes a complete system wide cleaning via small jet machine, and re-grouting of pipe into and out of manholes in addition to repair and retrofit of manhole rings and lids, and replacement of deteriorated lines and manholes. Cliffside Sanitary District acquired ‘2’ Mission Cellular Radios, for use in monitoring both lift stations and began a lift station inspection and maintenance log to include ‘both’ generators. Only one generator is currently operational, but Cliffside is awaiting parts to complete the work on the Haynes pump station generator.

Sanitary Sewer Overflows (SSO)

Cliffside Sanitary District Sewer Collection had ‘**NO**’ overflows during this reporting period nor for the entire period of July 1, 2021 to June 30, 2022; and only ‘3’ complaint calls for a service lateral back-up.

Wastewater Treatment Plant Operation (WWTP)

- Cliffside Sanitary District WWTP consists of a modified 500,000 gal./day activated sludge WWTP with average daily flows equal to about 7,500 gpd, but due to the heavy influx of I & I, flows will increase, especially during times of rainfall to over 100,000 gpd. A new ‘Flowmotion’ flow meter has been purchased from ‘KDT Services’ in Hendersonville, NC; and a new ISCO 5800 composite sampler was obtained from the CDC/WEF collaboration for addressing COVID-19. We have also recently ‘PM’d’ (lube and oil change, along with station bubbler control maintenance) the pump stations, and are in process of getting ‘5’ of the existing 10 hp aerators at the WWTP rebuilt/retrofitted, and have visually reviewed all the high priority lines, and 55 of the manholes in the system. We are also in pricing discussions with Harris Construction to clean/clear the existing outfall rights-of-way for Cliffside Sanitary District. The attached Influent and Effluent data from our contract lab, WaterTech, in Granite Falls, NC, shows compliance with current limitations of permit and water quality standards. We have had 2 instances where the WWTP did not meet 85% removal of BOD and TSS, as required by permit NC0004405, but feel that was due to a malfunctioning Sulfuric Acid tank left over for 18 years from time Cone Mills operated plant. We lost some of the residual acid into the pond/old aeration basin, causing pH issues, but added lime, soda ash, and 50% caustic to correct and address.
- We are continuing to monitor all equipment and the entire sewer collection system in addition to needs at the WWTP for any issues that could create a non-compliance condition.

This annual report and notice is required by NPDES permit NC0004405. For further information contact Mr. Don Price at (828) 919-0624

III. Notification

A ‘FOG’ flyer was developed and made available to BRWA, who does billing for CSD, to request it be made available for CSD customers.

IV. Certification

I certify under penalty of law that this report is complete and accurate to the best of my knowledge. I further certify that every effort has been made to have this report made available to the customers of Cliffside Sanitary District’s WWT system, and that those customers have been notified of its availability.



Donald R. Price, ORC WWTP

July 19, 2022

Date