Performance Annual Report FY 2023/2024 Town of Rose Hill Duplin County

I. General Information

Facility/System Name: Rose Hill Wastewater Treatment Plant

Responsible Entity: Town of Rose Hill

Person in Charge/Contact: William Carl Wheeler

Applicable Permit: NC 0056863

II. Performance

The treatment facility has a permitted flow of 0.45 MGD which consists of influent screw pumps 6", 15hp Barnes submersible pump, bar screen, oxidation ditch, three (3) clarifiers, aerated sludge holding tank, five (5) sludge drying beds, chlorine disinfection basin and post aeration basin with sodium bisulfate infused.

The Rose Hill Wastewater Treatment Plant's NPDES Permit was set to expire on January 31, 2022. However, The Town of Rose Hill submitted a renewal application package on 22 JULY 2020 for a five-year permit, starting 01 FEB 2022, and expiring 31 JAN 2027. The permit renewal fee (\$3,440) was paid on 14 DEC 2021.

Influent enters the system by gravity or pumps/force main to the headworks of the plant. From this unit, flow is conveyed by two screw pumps and or the back-up submersible pump to a channel containing two bar screens. Wastewater then flows to an oxidation ditch which provides secondary treatment utilizing the activated sludge process. Oxidation ditch effluent flows in equal proportion to three clarifiers acting in parallel. Flow from the clarifiers then travels through piping to a chlorine contact chamber where disinfection is achieved by gas chlorine injection. The effluent is then dechlorinated and discharged by gravity outfall to Reedy Creek which is classified as Class C – Swamp waters in the Cape Fear River Basin.

Return Activated Sludge (RAS) from the clarifiers flows to a wet well which is then pumped into the aerobic digester (sludge holding tank). RAS/supernate flows back to the headworks and the process is then repeated. The waste sludge is diverted to a sludge holding tank and/or sludge is intermittently transferred to five sludge drying beds. The waste sludge is periodically hauled from the plant site by a contractor to a permitted land disposal site.

A. PRETREATMENT

The Town of Rose Hill currently monitors 2 SIU's (Significant Industrial Users) in its Pretreatment Program. The processed water is conveyed through the collection system to the WWTP.

B. HIGHLIGHTS:

The ORC cleaned and daily checked bar screen. Under contract by a licensed electrician, the WWTP was inspected, and repairs were made. All five dry beds were cleaned and relined May 03, 2022.

III. Notification

Notification of this report will be noted on October 31st, 2023, monthly utility bill, placed on the Town's Website October 31st, 2023.

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 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.

William Carl Wheeler

Town of Rose Hill

Wastewater Treatment ORC

Date

Blake Parker

Public Works Director

10-31-2024

Date