

## Public Works Department

1100 Vance St., Reidsville, NC 27320

Phone: 336.349.1070 • Fax: 336.634.1738



THE CITY OF  
**Reidsville**  
NORTH CAROLINA

February 3, 2021

System Performance Annual Report  
North Carolina Division of Water Quality  
1617 Mail Service Center  
Raleigh, NC 27699-1617

Re: City of Reidsville  
Consolidated Annual Performance Reports  
Rockingham County

Dear Sirs:

Enclosed you will find the City of Reidsville's 2020 Consolidated Annual Performance Report. The systems covered by this report include the:

Wastewater Treatment Plant	Permit No.: NC0024881
Collection System	Permit No.: WQCS00049
Water Treatment Plant	Permit No.: NC0046345

We believe the report to be complete and accurate. Customers and citizens will be notified of the reports' availability through the local newspaper and posted on the city's website at [www.Reidsvillenc.gov](http://www.Reidsvillenc.gov).

If there are any questions, please contact me at (336) 349-1070.

Sincerely,

Chuck Smith  
City of Reidsville  
Public Works Director

# 2020 ANNUAL PERFORMANCE REPORT FOR THE CITY OF REIDSVILLE WASTEWATER TREATMENT PLANT

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## I. GENERAL INFORMATION

**Facility / System Name:** City of Reidsville Wastewater Treatment Plant

**Responsible Entity:** City of Reidsville

**Plant Location:** 407 Broad Street Reidsville, NC 27320

**Plant Grade:** IV

**Contact Information:** Chuck Smith  
Public Works Director  
1100 Vance Street  
Reidsville, North Carolina 27320  
(336) 349-1070

## II. DESCRIPTION OF TREATMENT PROCESS

The City of Reidsville, North Carolina operates a 7.5 million gallon per day (MGD) design capacity wastewater treatment plant (WWTP). The facility treats a combination of industrial and domestic wastewaters, with the industrial fraction representing approximately 46% of the influent wastewater flow. In 2020, the facility treated a total of 954.56 million gallons of wastewater with an average of 2.608 million gallons per day. The treatment process includes preliminary treatment, extended aeration activated sludge, and secondary clarification followed by tertiary filtration. The treated effluent is chlorinated/dechlorinated and discharged into the Haw River which is a tributary of the Cape Fear River Basin. The waste sludge is thickened by a rotary drum thickener before stabilization in two aerobic digesters. The stabilized sludge is then land applied (by a certified contractor) onto permitted agricultural lands. Occasionally, the waste sludge is dewatered and land applied as well.

#### IV. SUMMARY OF PERMIT VIOLATIONS

During the year 2020, the Division of Water Resources (DWR) of the North Carolina Department of Environmental Quality (NCDEQ) issued no notices of violation (NOVs) to the City of Reidsville's Wastewater Treatment Plant.

#### 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 of customers of the City of Reidsville System and those users have been notified of its availability.



Scott Bryan  
Plant Superintendent/ORC  
City of Reidsville WWTP

1/27/2021  
Date



# 2020 Annual Performance Report *for the* City of Reidsville Collection System

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## I. General Information

<b>Facility / System Name:</b>	City of Reidsville Wastewater Collection System WQCS 00049
<b>Responsible Entity:</b>	City of Reidsville
<b>Contact Information:</b>	Lindsey Tuttle Public Services Superintendent 1100 Vance Street Reidsville, North Carolina 27320 (336) 349-1070

## I. Description of Collection System

The City of Reidsville's wastewater collection system currently consists of 93.64 miles of gravity lines with approximately 6,500 service connections. In addition there are 17 pump stations with approximately 12 miles of force main lines.

The Sewer Collection division of Public Works is responsible for maintenance of the gravity lines and force mains in the system. That division consists of 4 full time employees who routinely flush the mains to prevent blockages and also handle maintenance needs on service lines within public right of way provided a cleanout at the property line is available. As part of their maintenance activities they mow outfall easements and maintain access to these areas. Line repairs and replacement along with installation of new lines are also handled by this division.

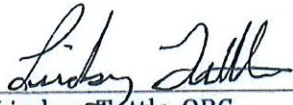
The Lift stations are maintained by the Public Services Utility Lines Department. Two employees are dedicated to the lift stations full time. Their responsibilities are to insure proper operation of the lift stations by testing backup systems and performing preventative maintenance on the pumps and electronic controls.

## II. Compliance Performance

The wastewater collection system had no sanitary sewer spills in 2020.

## III. 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 and customers of the City of Reidsville System and those users have been notified of its availability.



Lindsey Tuttle, ORC  
City of Reidsville Public Services  
1100 Vance Street  
Reidsville, NC 27320

January 12, 2021

Date

# 2020 Annual Performance Report *for the* City of Reidsville Water Treatment Facility

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## I. General Information

**Facility / System Name:** City of Reidsville Water Treatment Plant

**Responsible Entity:** City of Reidsville

**Contact Information:** Chuck Smith  
Public Works Director  
1100 Vance Street  
Reidsville, North Carolina 27320  
(336) 349-1070

## II. Description of Treatment Process

The wastewater discharged by the Reidsville Water Plant is generated by the filter backwash operation. The filter backwash is settled in two lagoons and discharged through Pipe 002. The settled water is discharged from either one or both lagoons by use of telescopic valves located in each of the two lagoons. The wastewater travels through the valves and empties into a wet well where it is pumped out by one of two submersible pumps. The wastewater is dechlorinated by the addition of sodium bisulfite or calcium thiosulfate prior to discharging to Little Troublesome Creek. Sludge, which is settled from the wastewater, is pumped out of the lagoons by use of a floating dredge. While the slurry is being pumped through the dredge, polymer is injected in the line to the sludge slurry and the dewatered sludge is deposited in a sand drying bed adjacent to the lagoons. The sludge is allowed to dry to a denser cake and is periodically collected and disposed. Sludge is also removed from the lagoons via a licensed, certified professional third party. The sludge is pumped into tanker trucks and land applied utilizing farm land and a specialized permit authorized and approved by the state of North Carolina and the EPA.

## III. Compliance Performance

The North Carolina Department of Environment and Natural Resources (NCDENR) regulates the City of Reidsville's effluent discharge under the National Pollutant Discharge Elimination System (NPDES). The NCDENR issued to the City a NPDES Permit, which includes water quality limits, sampling and monitoring requirements. The NPDES Permit requires the City to test more than 6



different constituents in the treated water. The monitoring frequency for these constituents are set at various intervals such as continuous, daily, weekly, monthly and quarterly. During the previous year, the City conducted 672 tests of the discharged treated water. Following is a summary of the testing for the parameters, which are assigned Water Quality standards by the NPDES Permit. Please note the summary does include parameters which incorporate permit monitoring requirements, and it does not include all process control testing.

#### IV. NPDES Permit

The current 5-year NPDES permit will expire on April 30, 2021. Application for the renewal of the NPDES permit was successfully submitted to the State on 10-23-2020.

##### Pipe 002

Constituent	# Tests Required	# Conducted
Flow	365	365
Total Suspended Solids	52	52
Turbidity	52	52
pH	52	52
Chlorine	52	52
Temperature	52	52
Aluminum	4	4
Iron	4	4
Copper	4	4
Manganese	4	4
Fluoride	4	4
Zinc	4	4
Total Phosphorus	4	4
Hardness	4	9
Total Nitrogen	4	4
Toxicity	4	6

##### Summary of Permit Violations

There were no permit violations in 2020.

  
C. Scott Jewell/ORC (Operator Responsible-In-Charge)

2-4-2021  
Date