

CITY OF LENOIR, NORTH CAROLINA



ANNUAL PERFORMANCE REPORT of the WASTEWATER COLLECTION SYSTEM and the WASTEWATER TREATMENT FACILITIES

(This report has been produced to make available information concerning the performance of the City of Lenoir wastewater collection system and treatment facilities during the fiscal year beginning on July 1, 2022 and ending on June 30, 2023)

WASTEWATER COLLECTION SYSTEM

(Collection System Performance)

I. General Information

Facility Name:

City of Lenoir Wastewater Collection System

Responsible Entity:

City of Lenoir

Person in Charge:

Richard Williams, ORC

Applicable Permits:

WQCS00035

The City of Lenoir wastewater collection system consists of approximately 209 miles of sewer line and 16 pump stations. A radio signal monitoring and control system has been installed in the pump stations. This system notifies personnel of any pump station problems that may occur.

One spill from the collection system reached surface waters during the fiscal year. In accordance with state regulations, the spill was reported to the North Carolina Department of Environmental Quality - Division of Water Quality - Asheville Regional Office. Pertinent information concerning the spill is as follows:

1. 11/23/22

Rags and paper towels caused a blockage and overflow of 400 gallons at a manhole behind 367 Harper Avenue in Lenoir. The main was cleared and cleaned and flow was restored.

WASTEWATER TREATMENT FACILITIES

(Lower Creek Wastewater Treatment Plant Performance)

II. General Information

Facility Name:

Lower Creek Wastewater Treatment Plant

Responsible Entity:

City of Lenoir

Person in Charge:

Elisa Triplett, Superintendent

Donnie Hawkins, ORC/Asst. Supt.

Applicable Permits:

NPDES Permit #: NC0023981

Class A Residuals Permit #: WQ0010059

The Lower Creek Wastewater Treatment Plant is monitored for the following parameters: pH, Residual Chlorine, Fecal Coliform, Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), Ammonia as N (all have permit limits); Temperature, Conductivity, Dissolved Oxygen, Total Nitrogen, Total Phosphorous; Total Cyanide, eleven metals of which (Cadmium, Copper, Lead, and Zinc have permit limits), and Chronic Bioassay.

In addition, an extensive Priority Pollutant Analysis is conducted during most years, which includes a full range of organic compounds, expanded metals and various other parameters.

Total influent flow for the period of July 1, 2022 to June 30, 2023 was 837,524,900 gallons. The average flow during this period was 2.29 MGD.

For the period of July 1, 2022 to June 30, 2023, there were zero (0) permit condition violations and zero (0) permit violation of effluent limits.

The annual removal efficiencies (from July 1, 2022 to June 30, 2023) for the plant are listed below:

BOD: 99.2%

TSS: 96.1%

Ammonia as N: 95.8%

Class A biosolids production is in full use. 8.79 MG sludge was dewatered July 1, 2022 – June 30, 2023 with an average of 2.81% solids the amount of sludge is equivalent to 1,019 dry tons.

There were no wastewater spills within the plant during the period.

WASTEWATER TREATMENT FACILITIES

(Gunpowder Creek Wastewater Treatment Plant Performance)

III. General Information

Facility Name:

Treatment Plant

Responsible Entity:

Person in Charge:

Applicable Permit:

Gunpowder Creek Wastewater

City of Lenoir

Elisa Triplett, Superintendent

Donnie Hawkins, ORC/Asst. Supt.

NPDES Permit #: NC0023736

The Gunpowder Creek Wastewater Treatment Plant is monitored for the following parameters: pH, Residual Chlorine, Fecal Coliform, Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), Ammonia as N (all have permit limits); Temperature, Conductivity, Dissolved Oxygen, Total Nitrogen, Total Phosphorous, eleven metals of which (Copper, Lead and Zinc have permit limits) and Chronic Bioassay.

In addition, an extensive Priority Pollutant Analysis is conducted during most years, which includes a full range of organic compounds, expanded metals and various other parameters.

Total influent flow for the period of July 1, 2022 to June 30, 2023 was 443,886,810 gallons. The average flow during this period was 1.216 MGD.

For the period of July 1, 2022 to June 30, 2023, there were zero (0) permit condition violation and zero (0) permit violations of effluent limits.

Permit limit for Cu is 18.8 ug/l daily maximum and 15.4 ug/l monthly average. November 2022 the plant experienced a 21.0 ug/l monthly average for Cu. February 2023 the plant experienced a 29.0 ug/l monthly average for Cu. March 2023 the plant experienced a 23.0 ug/l monthly average for Cu

The facility is under a 3-year compliance schedule to help the plant to get the Cu coming into the plant reduced to meet the permit requirements on Cu. A Water Effects Ratio (WER) study has been conducted for the plant to give a more accurate range of Copper the plant can handle. The results are favorable, and we are awaiting the State's approval for a higher permit limit for Copper, concerning alleviating the Cu limit violations.

The annual removal efficiencies (July 1, 2022 to June 30, 2023) for the plant are listed below:

BOD: 97.8 %

TSS: 95.8 %

Ammonia as N: 99.1%

There were no wastewater spills within the plant during the period.

IV. Summary

During the 2022-2023 fiscal year the City of Lenoir Wastewater System treated 1,281,411,710 gallons of wastewater with reportable spills totaling only 400 gallons.

V. Notification

Copies of this report have been placed in public buildings throughout the Lenoir and Hudson area including: Lenoir and Hudson Municipal Buildings, the Caldwell County Libraries, the Caldwell County Chamber of Commerce and the Caldwell County Offices and is also available on the city web site at www.cityoflenoir.com. Notification of availability of this report has also been made through the local press.

VI. 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.

Richard Williams

ORC – Wastewater Collection

System

Donnie Hawkins

ORC - Wastewater Treatment

Date

Data

Contact Persons:

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