

SANITARY SEWER OVERFLOWS (UNTREATED)

During the reporting period, the Collection & Transmission System experienced fifteen (15) discrete overflow events at various locations in the City. The estimated total volume of the overflows for the reporting period is 60,600 gallons. The number of operating days affected by these events totaled eight (8) days for the reporting period. Events were primarily due to infiltration of rainfall into the system affecting the transport capacity of the lines.

Each overflow event estimated to be in excess of 1,000 gallons or any overflow making its way to a storm drain, stream, or body of water was reported to NCDEQ and a press release was issued. The City responded to each event to provide control, impact minimization, and clean up activities. Additional actions were taken by the City as directed by NCDEQ as well as the City self initiated actions to minimize future overflow occurrences.

WASTEWATER TREATMENT PLANT UPSETS (PARTIALLY TREATED)

During the reporting period, the Long Creek Wastewater Treatment Facility experienced two (2) discrete plant upset event resulting in the discharge of approximately 73,800 gallons of partially treated wastewater. The causes of these upsets were primarily due to elevated flows from infiltration into the collection system during high rainfall events.

Upset events were reported to NCDEQ. The City responded to this event to provide control, impact minimization, and clean-up activities. Additional actions were taken by the City as directed by NCDEQ as well as the City self initiated actions to minimize future upset occurrences.

All NPDES exceedance's were reported to NCDEQ in a timely manner.

The facility conducts toxicity testing of the effluent quarterly. This testing provides an indication of the potential of the discharge from the facility to affect the mortality and birth rates of one particular aquatic species. Events indicated compliant results for all toxicity parameters.

QUESTIONS?

Please contact:
City of Albemarle
Public Utilities Department
144 North Second Street
PO Box 190
Albemarle, NC 28001
704.984.9605

Annual Report Availability

This report is made available in our customer's utility bill. Additional copies of this report are available in the offices of the Public Utilities Department at Albemarle City Hall, 144 N. Second St., Albemarle, NC, 28001

This report is also available online at www.albemarlenc.gov/wastewaterreport

CITY OF ALBEMARLE PUBLIC UTILITIES DEPARTMENT

ANNUAL WASTEWATER REPORT 2023/2024

SYSTEMS DIVISION PLANTS DIVISION



ALBEMARLE
NORTH CAROLINA
Water. Air. Land. Opportunity.

WHY IS THIS REPORT PUBLISHED?

The General Assembly of the State of North Carolina through the General Statutes require all entities that operate wastewater collection and transmission systems and wastewater treatment facilities make an Annual Report to their customers.

SANITARY SEWER COLLECTION & TRANSMISSION SYSTEM

The Sanitary Sewer Collection and Transmission System for the City of Albemarle is comprised of approximately 7,432 connections that serve residential, commercial, and industrial customers. There are approximately 200 miles of sanitary sewer lines in the system with sizes that vary from six inches to 72 inches in diameter. Eight pump stations are also part of the system where flow in the collection system by gravity cannot be obtained. The purpose of the system is to collect and transport wastewater generated by our customers for treatment and discharge.

LONG CREEK WASTEWATER TREATMENT FACILITY

Long Creek Wastewater Treatment Facility Wastewater from the collection system ultimately is transported to the Long Creek Wastewater Treatment Facility for treatment before being discharged into Long Creek. The facility has a rated capacity to treat up to 12 million gallons per day. In 2023/2024 the facility treated 1,639,154,000 gallons, averaging 4.49 million gallons per day. The facility is based on an extended aeration aerobic sludge process with tertiary filtration to augment the treatment process.

LONG CREEK WASTEWATER TREATMENT FACILITY CONT.

As a result of the treatment process, bio-solids are generated as a waste material and are currently being dewatered and incinerated at the Rocky River Wastewater Treatment Facility in Concord, NC.

OPERATING PERMITS

The wastewater treatment facility operates under a permit issued by the State of North Carolina through the US Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) program. The permit includes monitoring requirements and discharge limits for pollutants. Some of these limits vary with seasons and may have different limits for monthly average, weekly average, and daily maximum. The limits are primarily based on the receiving streams ability to maintain aquatic life.

The collection and transport system operates under a permit issued by the State of North Carolina through the NC Department of Environment Quality. The permit contains specific requirements for the operation and maintenance of the system. Among those requirements are the response and reporting of Sanitary Sewer Overflows (SSO).

NC Statutes require that professional oversight of the respective facilities and systems be provided to ensure compliance with the permits. The individuals responsible for this oversight are referred to as the "Operator in Responsible Charge" (ORC). These are individuals that are licensed by the State of North Carolina and have demonstrated competency through training, experience, and testing requirements. Continuing education is also a requirement to maintain the individual's license.

CITY OF ALBEMARLE WASTEWATER OPERATING PERMITS

Long Creek Wastewater Treatment Facility

NPDES Permit No. – NC0024244
ORC – Brandon Plyler, Treatment Plant ORC/Supervisor
Backup - James Lamp
Backup - Jeffrey Poplin

Sanitary Sewer Collection & Transmission System

NCDEQ Permit No. – WQCS00016
ORC – Bryan Hinson, Assistant Director of Public Utilities
Backup – Christopher Palmer, Distribution and Collections Superintendent
Backup – Tim Poole

2023-2024 (JULY 1 – JUNE 30) COMPLIANCE SUMMARY

The operating permits require that a compliance summary be provided in the Annual Report discussing all sanitary sewer overflows (SSOs), and excursions of discharge limits and in reporting requirements contained in any state issued permit. The City of Albemarle strives to maintain compliance with the conditions and requirement of all federal and state permits involved in wastewater collection and treatment. Unfortunately, the City did experience SSO's, wastewater treatment plant upsets, and excursions of its discharge limits. However, the general health and welfare of the public was not threatened and impacts to the receiving streams were considered as none to minimal.

COMPLIANCE SUMMARY CONT.

