



# KINSTON PUBLIC SERVICES

Buildings & Grounds, Business Office, Electric, Engineering, Environmental Services,  
Fleet Maintenance, Meter Reading, Stormwater, Streets, Wastewater, and Water



*Kinston, the right place ... Kinston Public Services, the right choice.*

## City of Kinston Annual Operations and Performance Report 2017

### **Kinston Regional Water Reclamation Facility (KRWRF)**

|                 |                       |
|-----------------|-----------------------|
| NPDES           | # NC0024236           |
| Design Capacity | 11.85 Million Gallons |
| Treatment Type  | Johannesburg Process  |
| Service Date    | 2006                  |

#### **Facility Comments:**

The last annual inspection report for the Kinston Regional Water Reclamation Facility, dated July 26, 2017, was found to be in compliance with its discharge permit. There were no Notices of Violation during calendar year 2017.

### **SANITARY SEWER COLLECTION SYSTEM**

During calendar year 2017, the collection system reported four sanitary sewer overflows (SSO's) and spills.

Any spill of 1,000 gallons or more and any reaching surface waters are required to be reported to the DWQ.

On April 25, 2017, the City of Kinston had a wastewater spill of an estimated 22,070 gallons from manhole MH 3BC which is located behind the old power plant and Pollock street lift station. The City of Kinston area received a severe rainfall event the night before the SSO was noticed. The rainfall event included approximately 7" of rain over a short period of time causing flash flooding in many areas. This rain event flooded parts of the City's collection system and its right of way areas. The SSO was found during an inspection of sewer lines in the area and other outfalls prompted by an SSO at a different manhole. At this manhole, there was a small hole in the side of the manhole near ground level that was leaking due to the manhole being surcharged as a result of the rain event. Once the abnormal flows in the system subsided to a level below the hole, the SSO was stopped. The SSO appears to have been a result of the abnormal rain event. Spill did not reach surface waters.

Also on April 25, 2017, the City of Kinston had a wastewater spill of 180,000 gallons from manhole MH 114J located at the corner of Springhill street and Herritage street. As previously stated, the City of Kinston received a severe rainfall event the night before the SSO was noticed. This rain event flooded parts of the City's collection system for a period of time causing the flows in the system to exceed its current capacity, and therefore result in a temporary overflow. As soon as the SSO was detected, City staff began working at the contributing lift stations to equalize the flow at the manhole until the SSO was stopped. Once the SSO was stopped, staff began an inspection of all sewer lines in the area and other outfalls to check for any other conditions that could have contributed to the event. The SSO appears to have been a result of the abnormal rain event. The spill did reach surface waters (unnamed tributary to the Neuse River). The affected area was disinfected with lime and vacuumed up by the City's Jet/Vac truck.

On May 02, 2017, the City of Kinston had a wastewater spill of 101,700 gallons from manhole MH 114J located at the corner of Springhill street and Herritage street and MH 115AD located on Springhill Street; Utility Cut approximately 200 feet south of the intersection of Herritage Street and South Street. The Neuse River rose to flood stage and above (expected peak = approximately 23 feet), inundating major outfall areas and other areas of the City's sewer collection system. The added flows to the system caused by the flooding resulted in an overflow at the manhole at Herritage Street and Springhill Street, the manhole on Springhill Street, and the utility cut on Herritage Street. As soon as the SSO was detected, staff began working to install concrete riser sections over the manhole at Springhill and Herritage to contain the overflow. Staff also installed approximately 7 vertical feet of concrete middle sections over the existing manhole and compacted sandclay material around the outside base of the concrete extensions. This implementation prevented loss of sewer from the manhole at Springhill and Herritage, but once a certain head level was reached, sewer began to leave the system at an upstream manhole on Springhill Street and from a utility cut in Herritage Street approximately 200 feet south of South Street. We further inspected the sewer lines in the area from a boat, but no conclusive evidence was found in regards to a cause of the overflow. Staff monitored the situation throughout the days until the event ended. The SSO appears to be a result of the Neuse River Flooding as there was a direct correlation between the event and the Neuse River Levels. The spill did reach surface waters (unnamed tributary to the Neuse River). The affected area was disinfected with lime and cleaned up.

On June 06, 2017, the City of Kinston had a wastewater spill of 1,800 gallons from manhole MH 114J located at the corner of Springhill street and Herritage street. The Kinston area received a severe rainfall event the night of the SSO causing flash flooding in many areas and several streets to become non-passable. The rain event flooded parts of the City's collection system for a period of time causing the flows in the system to exceed its current capacity, and therefore result in a temporary overflow. As soon as the SSO was detected, staff began working at the contributing lift stations to equalize the flow at the manhole as much as possible until the SSO stopped. The spill did reach surface waters (unnamed tributary to the Neuse River). The affected area was disinfected with lime and cleaned up.

In all referenced spills in 2017, the City of Kinston Public Services Department confirmed that all spills, repairs and cleaning of the surrounding areas were properly addressed. The City also notified the Division of Water Quality in all incidents.

As of this report, the City believes that none of the above referenced SSOs resulted in any fish kill or impairments of the surface waters.

The City of Kinston received a Notice of Violation on June 29, 2017, in reference to the spill events of April 25, May 02, and June 24, 2017. No fines were associated with the NOV.

The last annual inspection report for the collection system is dated September 27, 2017.

# Responsible Person Contact Listing

## General:

|   |              |
|---|--------------|
| Rhonda Barwick - Public Services Director         | 252-939-3303 |
| Steve Miller – Assistant Public Services Director | 252-939-3285 |
| Brian Lucas - Water Resources Manager             | 252-939-3316 |

## Stormwater Utility:

|   |              |
|---|--------------|
| Brian Lucas - Water Resources Manager   | 252-939-3316 |
| Gilbert Acevedo - Street Superintendent | 252-939-3314 |

## Water Reclamation (Wastewater Utility):

|   |              |
|---|--------------|
| Kenneth R. Stevens, Jr. - Water Reclamation Facility Superintendent (ORC) | 252-939-3375 |
| Swindell Flowers - Residual Management Coordinator (ORC-Land Application) | 252-939-3248 |
| Jimmy Garvey – Water Operations Superintendent                            | 252-939-3299 |
| Steve Miller- ORC - Wastewater Collections                                | 252-939-3285 |

## Water Utility:

|  |              |
|--|--------------|
| Joey Pittman - Water Production Superintendent (ORC-Wells)           | 252-939-3286 |
| Jimmy Garvey – Water Operations Superintendent                       | 252-939-3299 |
| Steve Miller- ORC – Distribution                                     | 252-939-3285 |
| Kelvin Harrison - Water Production Supervisor (ORC-Cross Connection) | 252-939-3156 |