

City of Clinton: Wastewater Systems
Annual Performance Report
(January 2010 through December 2010)

Norman H. Larkins Wastewater Treatment Plant and Collection System

I. General Information

Facility/System Name: City of Clinton

Responsible Entity: John F. Connet, City Manager

Person(s) in Charge/Contact: Jeff Vreugdenhil, Director
Neil D. Carroll, Wastewater Superintendent
Ed Pietrolaj, Water/Sewer Line Superintendent

Applicable Permit(s): Collection System Permit WQCS00079
NPDES Permit NC0020117
Land Application Permit WQ0002890

Description of Collection System or Treatment Process:

The City of Clinton maintains approximately 87 miles of wastewater collection lines with 13 lift stations and approximately 3,252 connections. The collection system discharges to the Norman H. Larkins Wastewater Treatment Plant. This plant is permitted to treat five (5) million gallons of wastewater per day by tertiary biological methods. The effluent is filtered, disinfected and returned to the Old Williams Mill Branch. Wasted biosolids are aerobically digested and disposed of by land application.

II. Performance: Summary of performance for reporting period

The table below shows plant performance in relationship with NPDES permitted limits.

NORMAN H. LARKINS WASTEWATER TREATMENT PLANT EFFLUENT ANALYSIS

Parameter	Summer		Winter	
	NPDES Limits	Actual Values Average	NPDES Limits	Actual Values Average
pH	6 to 9	6.72 – 7.34	6 to 9	6.96 – 7.97
Residual Chlorine	17.0 ug/L	< 10.0 ug/L	17.0 ug/L	< 10.0 ug/L
BOD ₅	5.0 mg/L	3.2 mg/L	10.0 mg/L	2.9 mg/L
Ammonia Nitrogen	1.0 mg/L	0.50 mg/L	1.9 mg/L	0.33 mg/L
Total Suspended Residue	30.0 mg/L	13.13 mg/L	30 mg/L	2.13 mg/L
Fecal Coliform	200/100 ml	118/100 ml	200/100 ml	35/100 ml
Dissolved Oxygen	6.0 mg/L minimum	6.89 mg/L	6.0 mg/L minimum	8.60 mg/L
Cyanide	5.0 mg/L	< 5.0 mg/L	5.0 mg/L	< 5.0 mg/L
Flow	5 MGD	2.53 MGD	5 MGD	2.89 MGD

The Norman H. Larkins Wastewater Treatment Plant had the following violations for the 2010 reporting period.

January 2010

Weekly BOD₅ average exceeded; industrial interference of treatment.

May 2010

(2) weekly Ammonia Nitrogen averages exceeded, monthly Ammonia Nitrogen average exceeded; influent to the treatment works was greater than the treatment capability of the system.

September 2010

Weekly and monthly BOD₅ average exceeded; weekly and monthly Total Suspended Residue average exceeded; weekly fecal coliform average exceeded; Dissolved Oxygen lower limit not met. A severe natural condition, including heavy rain, occurred September 29 and 30, 2010. Volume of treatment plant was exceeded and solids were lost during the washout. Treatment capability was impaired.

October 2010

Weekly BOD₅ average exceeded; treatment capability was still impaired due to severe natural condition of September 2010.

December 2010

Total Residual Chlorine daily maximum limit was exceeded; an element or compound was present in the effluent that increased the residual reading during analysis. There were no treatment issues related to this violation.

The collection system reported the following spills of wastewater during the 2010 reporting period.

December 2010

- 12/29 Spill of approximately 1,620 gallons entered Bass Lake from a manhole due to grease accumulation in the lines. There was no known environmental impact.

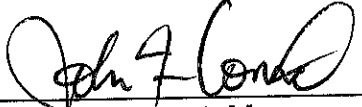
- 12/29 Spill of approximately 300 gallons did not reach surface waters. The spill occurred from a manhole on Dogwood Circle due to the accumulation of grease that blocked the line between Bass Lake Drive and Dogwood Circle. There was no known environmental impact.

III. Notification

This report has been included on the City of Clinton internet page and published in the Sampson Independent.

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.



John F. Connet, Manager
City of Clinton

3-18-11

Date