



CLAREMONT NORTH CAROLINA

Annual Wastewater Quality Report July 1, 2013 to June 30, 2014

Mission Statement: *To promote and protect the environment, health and natural resources of our customers through responsible stewardship in the treatment of wastewater returned to our streams and lakes.*

The City of Claremont is pleased to present you, our customers, with this year's Annual System Performance Report. This report is required by House Bill 1160, the Clean Water Act of 1999. The purpose of this report is to display the past year's wastewater treatment performance. The following data includes average concentrations discharged into streams and any events of permit noncompliance.

The City of Hickory Public Utilities Department contract operates two (2) wastewater treatment facilities, five (5) lift stations, and contract ORC of Collection System in the City of Claremont. The North Wastewater Treatment Facility and the McLin Creek Wastewater Treatment Facility are staffed with state certified operators. These facilities and the collection system were designed and constructed to properly transport wastewater and then treat the water to meet stringent discharge requirements. The effluent discharge from all plants is disinfected prior to entering the receiving streams. As this report indicates we are committed to protecting our most valuable resources, water and people.



828-466-7255 City Hall
3288 East Main Street- Post Office Box 446- Claremont, NC 28610

McLIN CREEK WASTEWATER TREATMENT FACILITY

City of Claremont

NPDES Permit Number: NC0081370

McLin Creek Wastewater Treatment Plant
J&B Road Claremont NC

Operator in Responsible Charge: Jody Ledford
Telephone Number: (828) 459-1092

The McLin Creek Plant is a .300 MGD wastewater treatment system that utilizes an Intermittent Cycle Extended Aeration System [ICEAS]. Flow enters the plant and is split into two basins. While in the basins, the influent wastewater goes through aeration, settling and decant cycles. The effluent is then sent to three tertiary sand filters and finally chlorinated and dechlorinated before discharge into the receiving waters. The Bio-solids residuals removed as part of the treatment process are transported to the Regional Compost Facility for processing into Class A-EQ compost.

Permit Parameters	Limits			Actual Monthly Average July 1, 2013 to June 30, 2013											
	Monthly	Weekly	Daily	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14
Flow (MGD)	0.300	-		.209	.199	.155	.143	.153	.186	.176	.173	.186	.172	.137	.142
BOD Summer	8.0mg/l	12.0mg/l		16	16	14	6.7						15	5.4	18
BOD Winter	16.0mg/l	24.0mg/l						3.6	2.9	5.3	5.3	5.8			
NH3 Summer	2.0 mg/l-	6mg/l		1.08	0.20	0.15	0.12						0.20	0.15	3.10
NH3 Winter	4.0 mg/l	12 mg/l						0.13	0.46	1.29	0.31	1.41			
TSS (solids)	30 mg/l	45 mg/l		4.4	5.6	5.0	3.7	2.0	2.0	3.1	4.1	4.6	11.0	5.4	5.5
DO	-	-	Over 5	7.7	7.9	8.1	7.4	7.3	7.5	8.3	7.9	7.7	7.4	6.6	6.9
Fecal Coliform	200 ml	400 ml		7	1	12	4	1	3	2	1	2	2	1	230
Total Chlorine	-	-	28 ug/l	0	0	0	0	0	0	0	0	0	0	0	0

Noncompliance Violations

Date	Violation	Actual	Reason	Environmental Impact
7/11/13	BOD	21 mg/l	Heavy Rain	None
7/16/13	BOD	16 mg/l	Heavy Rain	None
7/22/13	BOD	16 mg/l	Heavy Rain	None
7/31/13	BOD	18 mg/l	Heavy Rain	None
July 2013	BOD	16 mg/l	Heavy Rains	None

Date	Violation	Actual	Reason	Environmental Impact
8/12/13	BOD	18 mg/l	Recovery from Heavy Rain	None
8/19/13	BOD	16 mg/l	Recovery from Heavy Rain	None
8/26/13	BOD	13 mg/l	Recovery from Heavy Rain	None
August 2013	BOD	16 mg/l	Recovery from Heavy Rain	None
9/3/13	BOD	13 mg/l	Industrial Discharge	None
9/9/13	BOD	18 mg/l	Industrial Discharge	None
9/22/13	BOD	15 mg/l	Industrial Discharge	None
September 2013	BOD	14 mg/l	Industrial Discharge	None
4/21/14	BOD	25 mg/l	Heavy Rains	None
4/28/14	BOD	17mg/l	Heavy Rains	None
April 2014	BOD	15mg/l	Heavy Rains	None
6/9/14	NH3	8.69 mg/l	Plant Upset, decreasing Flow	None
June 2014	NH3	3.10 mg/l	Plant Upset, decreasing Flow	None
6/2/14	BOD	22 mg/l	Plant Upset, decreasing Flow	None
6/9/14	BOD	14 mg/l	Plant Upset, decreasing Flow	None
6/17/14	BOD	18mg/l	Plant Upset, decreasing Flow	None
6/24/14	BOD	14mg/l	Plant Upset, decreasing Flow	None
6/24/14	BOD	14mg/l	Plant Upset, decreasing Flow	None
6/24/14	Fecal Coliform	>6000 ml	Unknown	None
June 2014	Fecal Coliform	230 ml	Unknown	None

Reportable Collection System Failures

Date	Location	Spill	Cause

NORTH WASTEWATER TREATMENT FACILITY

City of Claremont
 North Wastewater Treatment Facility
 Centennial Boulevard Claremont NC

NPDES Permit Number: NC0032662
 Operator in Responsible Charge: Jody Ledford
 Telephone Number: (828) 459-1092

The North Plant is a 0.100 MGD wastewater treatment system that accepts and treats wastewater from locations in the City of Claremont. The facility is a conventional activated sludge facility, which utilizes microorganisms to treat the wastewater. The effluent is chlorinated to remove pathogenic bacteria that might be present and then dechlorinated to remove the chlorine residual before it is discharged into the receiving stream. The Bio-solids residuals removed as part of the treatment process are transported to the Regional Compost Facility for processing into Class A-EQ compost.

Permit Parameters	Limits			Actual Monthly Average July 1, 2013 to June 30, 2014											
	Monthly	Weekly	Daily	Jul -13	Aug -13	Sep -13	Oct -13	Nov -13	Dec -13	Jan -14	Feb -14	Mar -14	Apr -14	May -14	Jun -14
Flow (MGD)	.100	-	-	.084	.065	.060	.061	.066	.077	.077	.076	.082	.078	.068	.069
BOD	30.0 mg/l	45 mg/l	-	6.8	7.7	9.3	6.5	5.7	13	17	17	23	10	8.7	15
TSS (solids)	30.0 mg/l	45 mg/l	-	14.2	8.5	14.2	10.3	19.0	20.0	17.8	22.3	27.3	12.8	5.3	17.9
Fecal Coliform	200/100 ml	400/100 ml	-	3	2	2	2	2	2	38	20	2	10	2	3
Total Chlorine	-	-	28 ug/l	0	0	0	0	0	0	0	0	0	0	0	0
DO	-	-	Over 5	7.8	8.2	7.8	7.9	7.4	7.7	8.3	7.9	7.9	7.5	6.6	7.0

Noncompliance Violations

Date	Violation	Actual	Reason	Environmental Impact

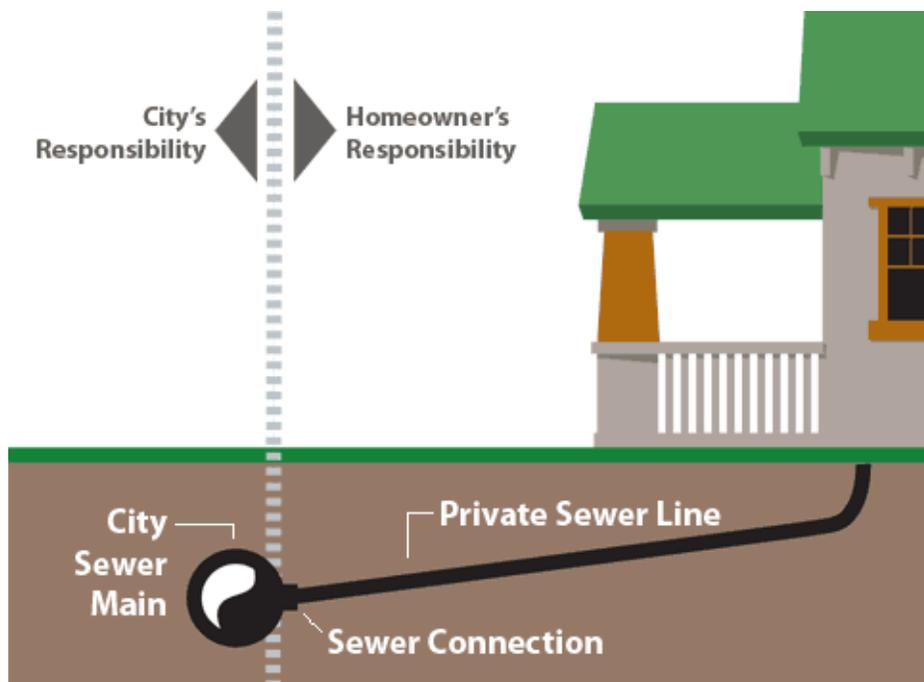
Reportable Collection System Failures

Date	Location	Spill	Cause
4/10/14	End of Phifer St	2,000 gallons	Pipe failure / Erosion

In the preceding tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:

- **mg/L** – Milligrams per liter or parts per million
- **ug/L** – Micrograms per liter or parts per billion
- **DO** – Dissolved Oxygen. DO is the molecular (atmospheric) oxygen dissolved in water or wastewater.
- **BOD** – The rate at which organisms use the oxygen in wastewater while stabilizing decomposable organic matter under aerobic conditions. In decomposition, organic matter serves as food for the bacteria and energy results from its oxidation. BOD measurements are used as a measure of the organic strength of wastes in water.
- **TSS** – Total suspended residue in wastewater
- **MGD** – Million gallons per day
- **NH₃ as N** – Ammonia
- **Fecal Coliform** – Indicator organisms used to measure the effectiveness of the disinfection process
- **Summer Months** – April 1st to October 31st
- **Winter Months** – November 1st to March 31st

TYPICAL RESIDENTIAL CITY SEWER CONNECTION



If you have any further questions in regards to this report you are encouraged to contact the Claremont City Hall at 828-459-7255 for any questions, concerns or comments.

