



City of Claremont Annual Wastewater Quality Report July 1, 2012 to June 30, 2013

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

McLin Creek Wastewater Treatment Plant
J&B Road Claremont NC

NPDES Permit Number: NC0081370

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.

Permit Parameters	Limits			Actual Monthly Average July 1, 2012 to June 30, 2013											
	Monthly	Weekly	Daily	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13
Flow (MGD)	0.300	-		.137	.141	.155	.133	.113	.119	.161	.157	.132	.154	.135	.141
BOD Summer	8.0mg/l	12.0mg/l		3.2	3.7	5.8	3.0						15	17	19
BOD Winter	16.0mg/l	24.0mg/l						3.3	5.0	4.7	3.4	9.70			
NH3 Summer	2.0 mg/l-	6mg/l		0.05	0	0	0.05						2.04	2.55	4.99
NH3 Winter	4.0 mg/l	12 mg/l						0.11	0.15	0.017	0.08	1.36			
TSS (solids)	30 mg/l	45 mg/l		0.6	1.6	1.6	2.2	3.0	4.1	2.9	2.0	7.2	3.6	8.4	6.0
DO	-	-	Over 5	7.7	7.4	8.0	7.7	7.5	7.5	7.6	8	7.9	8.1	7.3	7.4
Fecal Coliform	200 ml	400 ml		6	1	3	1	1	2	2	1	1	4	3	4
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
September 4, 2012	BOD	16mg/l	Heavy Unknown Organic Loading	None
April 1, 2013	BOD	13mg/l	Industrial Discharge	None
April 22, 2013	BOD	19mg/l	Industrial Discharge	None
April 29, 2013	BOD	23mg/l	Industrial Discharge	None
April 2013	BOD	15.mg/l	Industrial Discharge	None

April 2013	NH3	2.04mg/l	Industrial Discharge	None
May 6, 2013	BOD	21mg/l	Industrial Discharge	None
May 20, 2013	BOD	21mg/l	Industrial Discharge	None
May 28, 2013	BOD	16mg/l	Industrial Discharge	None
May 2013	BOD	17mg/l	Industrial Discharge	None
May 28, 2013	NH3	9.39mg/l	Industrial Discharge	None
May 2013	NH3	2.55mg/l	Industrial Discharge	None
June 11, 2013	BOD	>34mg/l	Industrial Discharge, Heavy Rainfall	
June 19, 2013	BOD	25mg/l	Industrial Discharge, Heavy Rainfall	None
June 2013	BOD	19mg/l	Industrial Discharge, Heavy Rainfall	None
June 2013	BOD Percent Removal	82%	Industrial Discharge, Heavy Rainfall	None
June 3, 2013	NH3	14.2mg/l	Industrial Discharge, Heavy Rainfall	None
June 2013	NH3	4.99mg/l	Industrial Discharge, Heavy Rainfall	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 residuals are hauled to the Regional Compost Facility for further treatment.

Permit Parameters	Limits			Actual Monthly Average July 1, 2012 to June 30, 2013											
	Monthly	Weekly	Daily	Jul -12	Aug -12	Sep -12	Oct -12	Nov -12	Dec -12	Jan -13	Feb -13	Mar -13	Apr -13	May -13	Jun -13
Flow (MGD)	.100	-	-	.054	.057	.061	.104	.076	.104	.076	.075	.069	.079	.076	.63
BOD	30.0 mg/l	45 mg/l	-	5.2	6.0	4.4	8.8	8.1	11	12	9.9	16	11	12	7.1
TSS (solids)	30.0 mg/l	45 mg/l	-	5.4	8.9	12.3	13.7	13.8	14.7	11.6	21.6	11.5	11.6	13.7	17.8
Fecal Coliform	200/100 ml	400/100 ml	-	2	1	2	3	1	3	15	2.3	2	2	1	8
Total Chlorine	-	-	28 ug/l	0	0	0	0	0	0	0	0	0	0	0	0
DO	-	-	Over 5	7.9	7.8	7.8	7.8	7.7	8.1	7.8	8.6	8.1	8.5	7.5	7.2

Noncompliance Violations

Date	Violation	Actual	Reason	Environmental Impact
December 2012	Flow	0.104	Waterline Break	None
February 11, 2013	BOD	74mg/l	Unknown Heavy Organic Loading	None
February 2013	BOD	38mg/l	Unknown Heavy Organic Loading	None

Reportable Collection System Failures

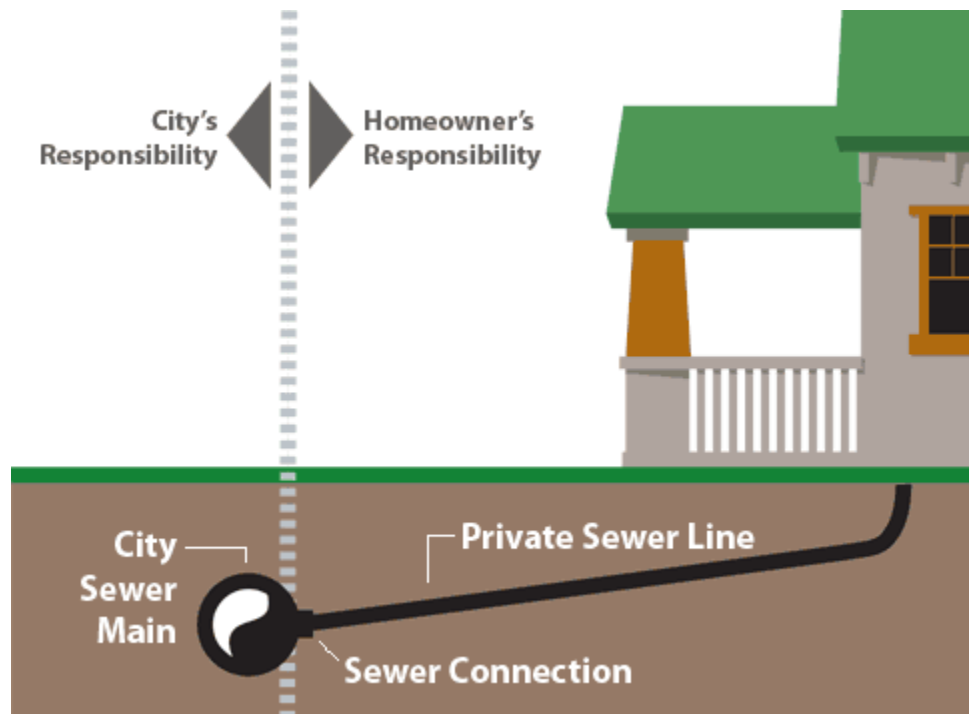
Date	Location	Spill	Cause

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.