# TOWN OF BLOWING ROCK, NORTH CAROLINA 2013 SYSTEM PERFORMANCE ANNUAL REPORT

Collection System and Wastewater Treatment Plant

This report provides performance information on the Town of Blowing Rock sewer collection system and wastewater treatment plant in the year 2013. It is required under the provisions of the Clean Water Act of 1999, House Bill 1160 ratified on July 20, 1999.

## COLLECTION SYSTEM

### I. General Information

Facility Name:

Town of Blowing Rock

Responsible Entity:

Town of Blowing Rock

Person in Charge:

Marshall J. Townsend, Collection System ORC

Applicable Permits: WQCS00142

### II. **System Description**

The collection system consists of approximately 15.8 miles of gravity sewer lines and 3.4 miles of pressure sewer. There are four lift-stations; Mayview, Chetola, and Chestnut Hill, and Quail Hollow which are checked weekly.

### III. Performance

Sixteen spills that reached surface waters occurred in the collection system during the year. In accordance with State regulations, all were reported to the State of North Carolina, Department of Environment and Natural Resources. The table below gives the spill volume and the date it occurred.

Location	<u>Date</u>	Volume (gal)
Manhole 275 feet SE of Country Club Snack Shack	*1/15/13	500
Manhole Adjacent to Mayview Liftstation	1/30/13	3,600
Manhole Adjacent to Mayview Liftstation	5/8/13	26,250
Manhole 200ft S of Sunset Dr. on Ransom St.	5/8/13	15,750
Manhole 130ft E. of Hwy 321 Bus. On Cornish Rd	5/8/13	4,800
Manhole 300ft N. of Cornish Rd. Bridge	5/8/13	1,800
Manhole 200ft S of Sunset Dr. on Ransom St.	6/11/13	4,200

Manhole Adjacent to Mayview Liftstation	6/11/13	4,800
Manhole 150ft SW of Hwy 221 and Hwy 321 bypass	*6/14/13	58,500
Manhole Adjacent to Mayview Liftstation	7/5/13	13,500
Manhole 200ft S of Sunset Dr. on Ransom St.	7/5/13	6,000
Manhole 130ft E. of Hwy 321 Bus. On Cornish Rd	7/5/13	6,000
Manhole Adjacent to Mayview Liftstation	7/8/13	12,000
Manhole 130ft E. of Hwy 321 Bus. On Cornish Rd	7/8/13	3,000
Manhole 300ft N. of Cornish Rd. Bridge	7/8/13	3,000
Manhole 200ft S of Sunset Dr. on Ransom St.	7/8/13	3,000

<sup>\*</sup> The spills which occurred on 1/15/13 and 6/14/13 were caused by debris in the system. All others were associated with abnormally heavy rainfall.

## BLOWING ROCK WASTEWATER TREATMENT PLANT

## I. General Information

Facility Name:

Town of Blowing Rock Wastewater Treatment Plant

Responsible Entity:

Town of Blowing Rock

Person in Charge:

Mark D. Griffin, Wastewater Treatment Plant ORC

Applicable Permits:

NPDES Permit No: NC0027286

Plant Capacity:

.800 MGD

## II. System Description

Wastewater is physically screened through a mechanical bar rack and then enters the equalization basin. It is then pumped by three influent pumps to four aeration basins where diffused air is added by five blowers. It then enters two clarifiers where a part of the sludge is returned to the head of the plant by two new return sludge pumps. The clear water on top of the clarifiers then enters the chlorine contact chamber where chlorine is fed to kill the bacteria. De-chlorine chemical is then added to take the chlorine out of the water before entering the river.

Solids are wasted to the new 200,000-gallon digester daily. Honeywell Septic Tank Service hauls sludge to Lenoir WWTP for disposal.

# III. Performance

# Average Daily Flow for 2013

Month	Total WW Treated	Average Daily	Maximum Flow	Total Rainfall (Inches)
January	13.39	.432	1.056	10.4
February	13.757	.479	1.046	4.5
March	11.707	.377	.581	9.2
April	10.071	.335	.503	6.4
May	18.135	.585	1.159	14.0
June	20.73	.691	1.372	10.4
July	24.211	.781	1.305	26.7
August	13.702	.442	.790	6.7
September	10.77	.359	.471	1.8
October	12.369	.399	.623	2.4
November	12.542	.418	.885	5.8
December	12.155	.392	.704	9.1
Total	173.539	5.69	10.495	107.4
Average	14.462	.474	.8746	9.0

# 2013 Results For Permit NPDES Parameters

Parameter	Limit	Violations	Date of Violation
PH	6.0-9.0 Units	0	
BOD	30/45 mg/l	0	
Total Suspended Solids	30/45 mg/l	0	
Ammonia Nitrogen	No Limit	0	
Dissolved Oxygen	>5.0 mg/1	2	2/22 & 2/28
Fecal Coliform	200/400 mg/l	.1	2/2
Conductivity	No Limit	0	
Flow	.800 MGD	31	1/16, 1/18, 1/31 2/1 5/7, 5/8, 5/9 6/12 thru 6/20, 6/25 7/4 thru 7/12, 7/27 thru 7/30 11/27
Chronic Toxicity	Pass/Fail	0	
Chlorine	28 ug/l	0	
Total Nitrogen	NL	0	
Total Phosphorus	NL	0	

## IV. Notification

This report is available online at the website <u>www.townofblowingrock.com</u> for the Town of Blowing Rock. In addition copies are available for review at the Town Hall Office at 1036 Main Street, Blowing Rock, NC.

## V. 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.

Mark D. Griffin

Water and Wastewater Treatment Plant ORC

Marshall J. Townsend

Collection System ORC

7-//-/4 Date