

**TOWN OF BLOWING ROCK, NORTH CAROLINA**  
**2009 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 2009. 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: Johnny K. Lentz, 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 daily.

**III. Performance**

Four 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.

| <u>Location</u>  | <u>Month</u> | <u>Volume (gal)</u> |
|--|--------------|---------------------|
| Manhole 200 feet south of<br>Sunset Drive on Ransom Street | 05/27/09     | 2,500               |
| Manhole 100 feet East of 321<br>Business on Cornish Road   | 05/27/09     | 4,000               |
| Manhole 100 feet East of 321<br>Business on Cornish Road   | 05/28/09     | 4,800               |
| Manhole 200 feet South of<br>Sunset Drive on Ransom Street | 05/28/09     | 4,500               |

# 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: Thomas McRary, Wastewater Treatment Plant Manager  
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 2009

| Month          | Total WW Treated | Average Daily | Maximum Flow | Minimum Flow | Total Rainfall (Inches) |
|----------------|------------------|---------------|--------------|--------------|-------------------------|
| January        | 7.848            | .253          | .609         | .154         | 3.9                     |
| February       | 4.648            | .166          | .238         | .104         | 3.4                     |
| March          | 5.580            | .180          | .368         | .108         | 4.9                     |
| April          | 7.980            | .266          | .539         | .144         | 4.7                     |
| May            | 13.485           | .435          | *1.017       | .187         | 11.7                    |
| June           | 12.270           | .409          | .735         | .123         | 6.4                     |
| July           | 7.905            | .255          | .376         | .026         | 3.6                     |
| August         | 8.060            | .260          | .432         | .075         | 9.5                     |
| September      | 9.480            | .316          | .592         | .173         | 10.5                    |
| October        | 10.380           | .346          | .622         | .261         | 7.2                     |
| November       | 9.669            | .322          | .645         | .212         | 6.9                     |
| December       | 11.287           | .364          | .659         | .204         | 12.7                    |
| <b>Total</b>   | 108.5920         | 3.386         | 6.832        | 1.771        | 85.4                    |
| <b>Average</b> | 9.049            | .2821         | .5693        | .1475        | 7.11                    |

\*Flow violation 1.017 due to excessive rainfall.

## 2009 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/l     | 0          |                   |
| Fecal Coliform         | 200/400 mg/l  | 0          |                   |
| Conductivity           | No Limit      | 0          |                   |
| Flow                   | .800 MGD      | *1         | 05/30/09          |
| 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 [www.townofblowingrock.com](http://www.townofblowingrock.com) 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

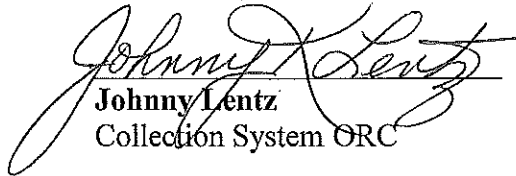
I certify under penalty of law that this report is complete and accurate to the best of my knowledge. I further certify that this report has been made available to the users or customers of the named system and that those users have been notified of its availability.



**Thomas McRary**

Water and Wastewater Treatment Plant Manager

1/12/2010  
Date



**Johnny Lentz**

Collection System ORC

1-12-2010  
Date