

Salisbury – Rowan Utilities

2011 ANNUAL WASTEWATER SYSTEM REPORT

This report covers the calendar year from January 1 through December 31, 2011

On July 21, 1999, North Carolina's Governor signed into law House Bill 1160 (currently N.C. General Statute Chapter 143, Article 21, Part 1, 143-215.1C), placing reporting requirements on municipalities that operate wastewater collection and treatment systems. This legislation mandates that Salisbury – Rowan Utilities publish an annual report informing system users of specific items such as the number of system overflows, violations of permit conditions or environmental regulations, the impact of any such violations on the environment, and corrective measures taken to minimize recurrences.



This year the National Association of Clean Water Agencies recognized the Salisbury-Rowan Wastewater Treatment Plant with the Platinum 7 Award for an outstanding compliance record. The treatment plant had no NPDES violations and was 100% compliant in 2010. The Second Creek WWTP received the Silver Award for 2010 which is given to treatment plants with no more than 5 NPDES permit violations.

This report is available on-line at www.salisburync.gov. Any questions pertaining to this report should be directed to Environmental Services Manager, *Sonja Basinger* at 704-638-5375.

Salisbury-Rowan Utilities Treatment and Collection Staff Contacts:

Treatment Plants Manager – *Martin Trexler* – 704-638-5374

Operator in Responsible Charge of Salisbury-Rowan WWTP – *Martin Trexler* – 704-638-5374

Operator in Responsible Charge of Second Creek WWTP – *Charles Wood* – 704-638-5374

Operator in Responsible Charge of Residuals Management - *Eric Helms* – 704- 638-5379

Operator in Responsible Charge of Collection System - *Randy Allman* – 704-638-5390

Salisbury-Rowan Utilities (SRU) provides wastewater treatment at the Town Creek treatment train located near Interstate 85 and the Grant Creek treatment train off of Grubb Ferry Road. The effluents at both trains are disinfected with sodium hypochlorite and then the combined effluents from both trains are dechlorinated with sodium bisulfite at the Salisbury-Rowan Wastewater Treatment Plant (WWTP) and discharged into the Yadkin River.

SRU treats industrial, commercial and residential waste from Salisbury, Landis, China Grove, Spencer, East Spencer, Rockwell, Faith and Granite Quarry. Gravity sewer lines, force mains and lift stations collect and pump the wastewater to the treatment trains. An average of 7 million gallons per day is treated using a process called activated sludge. Trash and rags are first removed by bar screens. Heavy particles such as sand and grit settle out as the flow slows in the grit chamber. The wastewater is then pumped to aeration basins, which contain *activated sludge*. The microorganisms or “bugs” feed on the wastewater particles. The process then moves to clarifiers where the “bugs” settle out leaving clear treated wastewater or *effluent*. Sodium hypochlorite is used for disinfection at the Salisbury-Rowan WWTP.

Solids “left over” from the treatment process are separated from the treated effluent by a filter belt press. The solid material or “biosolids” that is left is applied to permitted farmland in Rowan County as a substitute for fertilizer. Only crops grown for animal feed can be raised after biosolids are applied. SRU's Land Application Program (Permit # WQ001956), Residuals Management, experienced another successful year in 2011. A combined total of 1,508.37 dry tons were land applied across 438.6 acres of farmland. Salisbury-Rowan Utilities has a total of 1,441.90 acres of land permitted.

SRU operates a North Carolina certified municipal laboratory where tests are analyzed 6 days per week. The laboratory is supervised by *Tim Brown*. He can be reached at 704-638-5376.

Salisbury-Rowan WWTP (Permit NC0023884)

The Salisbury-Rowan WWTP had no permit violations in 2011.

Salisbury-Rowan WWTP had no reportable overflows (bypasses) in 2011:

Second Creek WWTP (Permit NC0078361)

The package plant treats an average of 13,000 gallons per day in essentially the same manner as the Salisbury-Rowan WWTP but on a smaller scale. Sodium hypochlorite is used for disinfection and ascorbic acid is used for dechlorination of the effluent, which is then discharged into Second Creek. Solids are pumped and hauled to the Town Creek treatment train.

The Second Creek WWTP had no permit violations in 2011:

Second Creek WWTP had no reportable overflows (bypasses) in 2011.

Salisbury-Rowan Utilities Collection System Sanitary Sewer Overflows (Permit WQCS00019)

Date	Location	Gallons	Gallons into stream	Receiving Stream	Cause
2/11/11	300 Blk Grove St	200	190	UT to Grant Creek	Pipe failure
3/16/11	119 Military Ave	15	15	UT to Town Creek	Storm drain pipe collapsed damaging sewer line
4/25/11	304 N. Milford Dr	200	200	UT to Grant Creek	Roots
6/4/11	300 N. Yadkin Ave	50	50	UT to Grant Creek	Debris in line
9/23/11	1700 Blk Park Rd	200	200	UT to Grant Creek	Roots
11/16/11	1026 S. Main St	350	350	UT to Town Creek	Grease
11/17/11	Hollywood Dr Outfall	12,400	12,400	Grant Creek	Severe Natural Condition
11/29/11	Hollywood Drive Outfall	600	600	Grant Creek	Inflow & Infiltration
12/25/11	St. Luke's Church Rd	6,800	6,800	UT to Church Creek	Pipe failure
12/28/11	506 Fairbluff Ave	10	10	UT to Town creek	Debris in line
	Total Gallons	20,825	20,815		

All discharges of any amount that reach surface waters are reported to the Division of Water Quality at the Mooresville Regional Office.

In addition, any spills to the ground that exceed 1,000 gallons are reported. Salisbury-Rowan Environmental Services checks all receiving streams for dissolved oxygen, pH, temperature and any environmental impacts at upstream and downstream sites of each spill. If a discharge of 1,000 gallons or more reaches surface waters, a notice is placed in The Salisbury Post within 48 hours. If a discharge is more than 15,000 gallons, a notice is also placed in The Stanly News and Press to notify the affected area downstream of Salisbury.

East Spencer Collection System Sewer Overflows (Permit No. WQCS00342)

The East Spencer Collection System had no sanitary sewer overflows in 2011.

WHAT CAN YOU DO TO HELP?



Help Greasy with



- ✓ **DO** put grease in a soup can, freeze it and then throw it in the trash can!
 - ✗ **DON'T** pour grease or cooking oil in the kitchen sink.
 - ✓ **DO** use a paper towel to wipe out a frying pan, then put the paper towel and food scraps in the trash.
 - ✗ **DON'T** use hot water to rinse grease off cooking utensils or eating utensils.
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Never put any item in the toilet except toilet tissue!

These items and others can cause problems in the lines and treatment plants:
Paper towels, Kleenex, disposable diapers, tampon applicators, feminine hygiene pads, syringes, cotton swabs, razors, surgical gloves, anything plastic, etc.



Please report anyone dumping any type of material into manholes to Environmental Services at 704-638-5375.

It is against the law!