

**SOUTH GRANVILLE WATER and SEWER AUTHORITY  
2011-2012 SYSTEM PERFORMANCE  
ANNUAL REPORT**

**I. General Information**

**Facility/System Name:** South Granville Water and Sewer Authority Wastewater Treatment Plant  
**Responsible Entity:** South Granville Water and Sewer Authority  
**Person in Charge/Contact:** Wilmer Lawson  
 South Granville Water and Sewer Authority  
 415-B Central Avenue  
 Butner, NC 27509  
 (919) 575-3111  
**Applicable Permit(s):** NPDES Permit No. NC0026824

**Description of Treatment Process and Collection System:**

- A. The design capacity of the wastewater treatment plant is 5.5 mgd. This facility consists of fine screening, extended aeration, biological nutrient removal, clarification, tertiary filtration, chlorination, dechlorination, sludge thickening, two-stage digestion and disposal of sludge by land application.
- B. The South Granville Water and Sewer Authority wastewater collection system consists of approximately 25-miles of force main and 50 miles of gravity flow pipe ranging from 8 to 30 inches in diameter. There are 33 pumping stations in the system, which lift wastewater from lower areas up to the main outfall lines to the wastewater treatment plant. Each pumping station is equipped with a standby generator for emergency power and a SCADA system to monitor pumping station conditions and standby generator status. The wastewater collection system for the South Granville Water and Sewer Authority was constructed in the 1940's.

**II. Performance**

**Summary of System Performance for Fiscal Year July 1, 2011 thru June 30, 2012**

The South Granville Water and Sewer Authority Wastewater Treatment Plant operates under NPDES Permit No. NC0026824 with the following permit limitations:

<u>Parameter</u>	<u>Permitted Level</u>
Flow	5.5 MGD
Biological Oxygen Demand	5 mg/L summer, 10mg/L winter
Total Suspended Residue	30 mg/L
Ammonia	2 mg/L summer, 4 mg/L winter
Dissolved Oxygen	6 mg/L minimum
Fecal Coliform	200/100 ml
Total Phosphorus	2 mg/L Quarterly Average
Total Nitrogen	58,600 lbs/year
Chloride	253 mg/L
Total Mercury	0.012 ug/L weekly average
PH	6 minimum 9 maximum Standard Unit
Chronic Toxicity	Pass/Fail 90% Chronic (Ceriodaphnia)
Total Residual Chlorine	17.0 ug/L
Total Cadmium	2.0 ug/L weekly average
Total Antimony	6.0 ug/L weekly average

A review of the discharge monitoring reports for the period of July 2011 through June 2012 was conducted. The next page is a monthly list of the number and type of all violations of permit limits, monitoring and reporting violations, illegal bypass of treatment facilities and sanitary sewer overflows.

	Permit Limit		Illegal Bypass of Treatment Facilities		Sanitary Sewer Overflows Estimated Total		
	Month	Type	Qty	Type	Qty	Volume/Gallons	Location
July			0		0	0	
August			0		0	0	
September			0		0	0	
October			0		0	0	
November			0		0	5,400 720	Intersection of East D St. and 8th St Manhole #3379
December			0		0	0	
January			0		0	0	
February			0		0	0	
March			0		0	0	
April			0		0	0	
May			0		0	0	
June			0		0	0	

**III. Notification**

A mailing list was developed from customer billing records and each customer was mailed a copy of the Performance Annual Report as part of the monthly bill in August 2012.

**IV. 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.



Lindsay L. Mize, Executive Director  
415-B Central Avenue  
Butner, NC 27509