

TOWN OF SOUTHERN PINES  
WATER TREATMENT FACILITY

**ANNUAL PERFORMANCE REPORT**

For the Calendar Year 2015

prepared: January 2016

2015 Annual Performance Report  
for the  
Town of Southern Pines  
Water Treatment Facility

I. General Information

Facility/System Name: Town of Southern Pines Water Treatment

Responsible Entity: Town of Southern Pines

Person in Charge/Contact: Adam Lindsay  
Assistant Town Manager Director of Public Services  
140 Memorial Park Court  
Southern Pines, NC 28387  
(910) 692-1983

Description of Collection System or Treatment Process:

The wastewater discharged by the Southern Pines Water Plant is generated by the filter backwash operation. The filter backwash enters a 180,000 gallon circular sedimentation basin. The water is allowed to settle and sludge concentrates on a conical shape bottom. The sludge that settles is conditioned and transferred via two 200 gpm sludge pumps to one of six 300 foot sand drying beds. The clarified water is collected at the top of the basin through two ports, one at the top of the column and one 12 feet below the surface. Normal operations have the second level closed and the top port open. The clarified effluent is collected in a pump chamber and with sufficient level increase, is pumped to discharge via two 800 gpm discharge pumps. The flow is metered by a mechanical meter on an "6" inch discharge line. The effluent enters Aberdeen Creek approximately 2 miles away.

II. Compliance Performance

The North Carolina Department of Environment and Natural Resources (NCDENR) regulates the Town of Southern Pines effluent discharge under the National Pollutant Discharge Elimination System (NPDES). The NCDENR issued to the Town a NPDES Permit, which includes water quality limits and sampling and monitoring requirements. The NPDES Permit requires the Town to test more than 17 different constituents in the treated water. The monitoring frequency for these constituents are set at various intervals such as continuous, daily, weekly, monthly, and quarterly. During the reporting period, the Town conducted 556 tests of the treated water before it was discharged to the creek. The WWTP achieved a compliance level of 100% with the NPDES Permit requirements. Following is a summary of the testing for the parameters, which are assigned Water Quality standards by the NPDES Permit. Please note the summary does

not include parameters, which incorporates a monitoring requirement only, nor does it include daily process control testing.

Constituent	Number of Test Required	Number of Test Conducted*
Flow	Continuous	Continuous
Total Suspended Solids (TSS)	24	24
pH	24	52
Chlorine	24	52
Iron	4	4
Aluminum	4	4
Total Copper	4	4
Manganese	4	4
Total Phosphorus	4	4
Total Nitrogen	4	4
Toxicity	4	4

\*Testing is not required on holidays or during inclement weather.

In addition to the required testing, the Town conducted over 208 in-house tests to ensure the proper operation of the wastewater treatment plant.

There were no permit violations during 2015.

III. Certification

I have personally examined and am familiar with the information submitted in this document and attachments. Based upon my inquiry of those individuals immediately responsible for obtaining the information reported herein, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information.

Signed this 10<sup>TH</sup> day of February, 2016.

Adam Lindsay  
(Name) Director of Public Works

  
(Signature)