Moore County Water Pollution Control Plant  
Wastewater Annual Performance Report  
Fiscal Year July 2017- June 2018

General Information

Facilities Names: Moore County Water Pollution Control Plant  
Moore County Interceptor & Collection System

Permits Issued to Moore County: Water Pollution Control Plant NC0037508  
Pinehurst WQCS00034

Contact Persons: Randy Gould, PE, Public Works Director (910) 947-6315  
Andrew McNeill, Wastewater Collection ORC (910) 947-6315  
Janna Scherer Nall, Wastewater Plant ORC (910) 281-3146

Treatment Plant & Collection System Description:
The Moore County Water Pollution Control Plant (WPCP) is located at 1094 Addor Road in Aberdeen, North Carolina and operates under Permit No. NC0037508. The facility is currently permitted to treat 10 MGD. Flow entering the plant passes through 1 of 2 bar screens to the raw sewage influent pumps that transport the wastewater up to the grit removal units. Treatment is accomplished by splitting the flow between 3 trains, each consisting of a primary clarifier, 1st stage aeration basins, intermediate clarifier, 2nd stage aeration basins and a final clarifier. All flow then passes through sand filtration followed by UV disinfection. The treatment plant uses a biological treatment process to remove pollutants in the wastewater that can potentially be harmful to the environment and to the receiving stream. The facility uses anaerobic digestion to treat the sludge removed from the wastewater treatment process. The method used to dry sludge is belt filter press; the dried sludge is hauled to a landfill. These processes are maintained by operators certified by the State of North Carolina and are inspected annually by the North Carolina Department of Environment Quality (NCDEQ). Reports are submitted monthly to NCDEQ that contain all the results of testing done on the incoming raw wastewater and treated water discharged from the plant.

The treated water is discharged from the facility into Aberdeen Creek in the Lumber River Basin. The wastewater enters the facility from an interceptor sewer, a collection system that is made up of approximately 15 miles of gravity sewer lines that is capable of handling 32 MGD. This interceptor system receives wastewater from the collection systems of the following municipalities: Aberdeen, Carthage, Pinebluff, Pinehurst, Southern Pines and Vass. The WPCP facility also receives flow from Camp MacKall via force main that discharges directly into the WPCP raw sewage pump station. As part of this interceptor system, there are 19 flow monitoring stations that record flow information for bulk billing purposes to the municipalities.
Moore County is also responsible for the Pinehurst Collection system. All together the interceptor and Pinehurst collection system consist of 28 miles of force mains, 207 miles of gravity lines, and 43 pumping stations.

**Performance:**

**July 2017**

No overflows or permit violations to report

**August 2017**

Moore County Public Works had a discharge of untreated wastewater on August 20, 2017, of an estimated 9,696 gallons at LS 10-3 at 60 Sugar Gum Lane in Pinehurst, NC. The spill was reported at 1 p.m. and continued for approximately 3 hours while repairs were made. The untreated wastewater entered Pinehurst Lake a tributary to Horse Creek. The spill was due to Pipe failure. The NCDEQ was notified of the event on August 21, 2017 at 11:00 a.m. For more information contact Moore County Public Works at (910) 947-6315.

**September 2017**

Moore County Public Works had a discharge of untreated wastewater from our wastewater collections system at LS 10-3 located at 60 Sugar Gum Lane in Pinehurst, N.C. of approximately 10,125 gallons. The discharge occurred on September 15, 2017 for approximately one hour while repairs were made. The untreated wastewater entered Pinehurst Lake a tributary to Horse Creek. The spill was due to Pipe failure. The NCDEQ was notified of the event on September 15, 2017 at 4:30 pm. For more information contact Moore County Public Works at (910) 947-6315.

**October 2017**

No overflows or permit violations to report

**November 2017**

No overflows or permit violations to report

**December 2017**

No overflows or permit violations to report

**January 2018**

No overflows or permit violations to report

**February 2018**

Moore County Public Works had a discharge of untreated wastewater at 3728 US-1 Bus. in Vass, North Carolina on February 22, 2018, of an estimated 900 gallons. The spill was due to Debris in the line. The spill was reported at 12:30 p.m. and continued for approximately 1 hour while repairs were made. The untreated wastewater entered an unknown tributary to Little River. This notice was required by North Carolina General Statutes Article 21, Chapter
143.215C. The NCDEQ was notified of the event on February 23, 2017 at 9:15 am. For more information contact Moore County Public Works at (910) 947-6315.

**March 2018**
No overflows or permit violations to report

**April 2018**
Moore County Public Works had a discharge of untreated wastewater from our wastewater collection system just north of 114 St. Mellions Drive in Pinehurst, NC of approximately 3,500 gallons. The discharge occurred on April 9, 2018 and continued for approximately 1 hour while repairs were made. The untreated wastewater entered Aberdeen Creek a tributary to Drowning Creek. The discharge was due to roots in the line. The NCDEQ was notified of the event April 9, 2018 at 3:00 pm. For more information contact Moore County Public Works at (910)947-6315. This notice is required by North Carolina General Statutes Article 21, Chapter 143.215C.

The Water Pollution Control Plant was non-compliant for BOD for the month of April 2018. The BOD monthly average was 5.6 mg/L which exceeded the permit monthly average of 5.0mg/L. This was believed to be due to damage to the water line by the contractor replacing the Addor Road bridge and the purchased water that was delivered to the WPCP beginning April 5th.

**May 2018**
Moore County Public Works had a discharge of untreated wastewater from a Force Main located at 285 Sugar Gum Lane (LS 10-3) in Pinehurst, North Carolina on May 16, 2018, of an estimated 29,000 gallons. The spill was due to Pipe failure. The spill was reported at 12:30 a.m. and continued for approximately 1 hour while repairs were made. The untreated wastewater entered Pinehurst Lake a tributary to Horse Creek. This notice was required by North Carolina General Statutes Article 21, Chapter 143.215C. The NCDEQ was notified of the event on May 16, 2018 at 12:29 p.m. and is reviewing the matter. For more information contact Moore County Public Works at (910) 947-6315.

**June 2018**
Moore County Public Works had a discharge of untreated wastewater from a Force Main located at 140 Sugar Gum Lane (LS 10-3) in Pinehurst, North Carolina on June 12, 2018, of an estimated 30,000 gallons. The spill was due to Pipe failure. The spill was reported at 7:00 p.m. and continued for approximately 1 hour while repairs were made. The untreated wastewater entered Pinehurst Lake a tributary to Horse Creek. This notice was required by North Carolina General Statutes Article 21, Chapter 143.215C. The NCDEQ was notified of the event on June 13, 2018 at 11:05 a.m. and is reviewing the matter. For more information contact Moore County Public Works at (910) 947-6315.

**Improvements to the System:**

- Alma Street Regional Pump Station construction in Vass
- Received funding for Vass Sewer Phase II
➢ Installed Bladder Tank at Pump Station 10-3 on Sugar Gum to dampen surge pressures

➢ Manhole Replacement Project

➢ Pump Station PW-1 installed new panel, hood & generator

**Improvements to the Water Pollution Control Plant:**

➢ Rehab of Influent Pump Station:
  Two influent pumps were rebuilt.

➢ Replaced In-plant flume and channel:
  Flume size was increased to accommodate upgrade of the plant and additional flow.

➢ Purchase of Hyundai loader:
  Loader was purchased to decrease price of bio-solids hauling. Operators will now load bio-solids into hauler’s trucks.

➢ Purchase of second bar rake:
  Second bar rake was purchased for influent pump station. This will serve as a backup to the original bar rake installed in FY16. Installation should be complete by end of FY19.

**Notification:**
The availability of this report will be advertised in the local papers circulated in the Moore County area, and a Public Notice will be placed at the Moore County Public Works Building. This notice will inform all users and/or customers of the Moore County Water Pollution Control Plant that a report on the performance of this facility is available for their review. A copy of the report will be posted on the Moore County website or may be picked up at the Moore County Department of Public Works located at 5227 Highway 15-501 in Carthage, North Carolina. If you wish to receive a copy by mail please call (910) 947-6315.
Certification:
I certify under penalty of law this report is complete and accurate to the best of knowledge. I further certify this report will be made available to all users and/or customers of the Moore County Water Pollution Control Plant upon their request and advertised as noted above.

Randy G. Gould, PE
Public Works Director

Andrew McNeill
Wastewater Collection ORC

Janna Scherer Nall
Wastewater Plant ORC

7/17/18
Date

7/18/18
Date

7/18/18
Date