

Moore County Water Pollution Control Plant Wastewater Annual Performance Report Fiscal Year July 2023– June 2024

➤ 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
Daniel Gwyn, Wastewater Collection ORC: (910) 947-6315
Stephen Morgan, Wastewater Plant ORC: (910) 947-4345

➤ 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 basin, intermediate clarifier, 2nd stage aeration basin 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 stored on-site then 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 the results of testing done on the incoming raw wastewater and treated effluent discharged from the plant.

The treated water is discharged from the Plant into Aberdeen Creek in the Lumber River Basin. The wastewater enters the Plant 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 sewer 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 and the Town of Hoffman via force mains that discharge 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 Public Utilities (MCPU) is responsible for the Pinehurst Collection system. All together the interceptor sewer and Pinehurst collection system consist of 28 miles of force mains, 207 miles of gravity lines, and 43 pumping stations.

➤ **Performance:**

July 2023

No Sanitary Sewer overflows (SSO's) or permit violations to report

August 2023

Moore County Public Works had a discharge of untreated wastewater at Manhole RI-2, located at 1094 Addor Road in Aberdeen, NC on August 14, 2023, of an estimated 700,000 gallons. The spill was due to Pump Station Equipment Failure and 3-Stage Bypass Pump System failure by contracted services. The spill was reported at 3:30 p.m. and lasted for approximately four hours, while repairs to the contracted bypass pumps were made. The untreated wastewater did not reach surface water.

WPCP received DEQ Notice of Violation (downstream) conductivity: frequency violation for March DMR & Notice of Violation (effluent) 1,4, dioxane: frequency violation March DMR & Notice of Violation conductivity: frequency violation March DMR.

September 2023

No Sanitary Sewer overflows (SSO's) or permit violations to report

October 2023

No Sanitary Sewer overflows (SSO's) or permit violations to report

November 2023

No Sanitary Sewer overflows (SSO's) or permit violations to report

December 2023

No Sanitary Sewer overflows (SSO's) or permit violations to report

January 2024

No Sanitary Sewer overflows (SSO's) or permit violations to report

February 2024

WPCP received DEQ Notice of Deficiency (influent) solids, total suspended: frequency violation for December DMR.

March 2024

WPCP received DEQ Notice of Violation (effluent) conductivity: frequency violation & nitrogen, total: frequency violation for January DMR.

April 2024

No Sanitary Sewer overflows (SSO's) or permit violations to report

May 2024

Moore County Public Works had a discharge of untreated wastewater at a manhole located beside Hwy. 15-501 between highway and Pinehurst National Golf Course in Pinehurst NC on May 16, 2024, of an estimated 500 gallons. The spill was due to grease, roots, and debris in the line. The spill was reported at 9:30 a.m. and lasted for approximately one-half hour, while repairs were made. The untreated wastewater entered surface water of Aberdeen Creek.

WPCP received DEQ Notice of Violation (effluent) coliform, fecal: frequency violation for March DMR.

June 2023

No Sanitary Sewer overflows (SSO's) or permit violations to report

➤ **Improvements to the System:**

17 Manholes rehabbed and 2 Wet Wells
10-3 New Pump installed/upgrade.
4-1 Electrical upgrade
16-1 & B-1 Generators installed.
Grinder installed at 9-1
PW-5 New Pump installed.
17-1 New Generator tap, and transfer switch installed.
14-3 New generator tap and transfer switch.
Air mixer installed in wet well at LR-2 for odor and debris issues.

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

Final Clarifier troughs coated (all three FC's).
Generator Switchgear PLC upgraded.
Septic station (septic haulers) installed.
New electronic front gate & security cameras installed.
Hydro tank decommissioned; system upgraded.

➤ **Notification:**

This annual 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 and 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

Date

Daniel Gwyn
Wastewater Collection ORC

Date

Stephen Morgan
Wastewater Plant ORC

Date