

UTILITY REPORT



NOVEMBER 2024

Town of Bowling Green, VA

Authored by:

Inboden Environmental Services, Inc.



WATER

Water Quality

The treatment facilities and distribution system maintained compliance with all required sampling.

Bacteriological Analysis:

Location	Date	Result
020 – Pizza Hut 150 East Broadus Avenue	11/6/2024	Absent
050 – Dr. Hylton’s Office 135 South Main Street	11/6/2024	Absent

Water Treatment

The water treatment plant met the Town’s water demand with a total monthly well yield of 3.4345 MG for an average daily production rate of 0.1145 MGD.

Operational Notes:

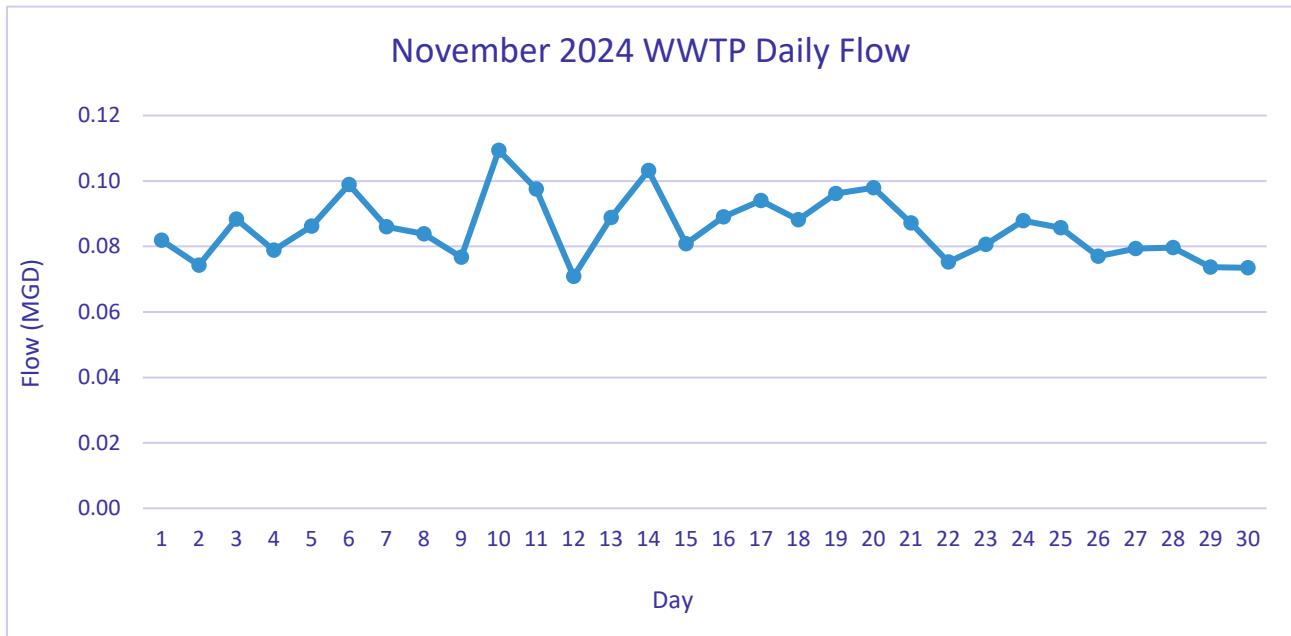
Treatment plants were visited, and an analysis of water quality was performed every day. Testing Instruments were calibrated at least twice a week.

- Effectively dosing sodium hypochlorite for proper disinfection for drinking water.
- All P/A samples collected and passed.
- Monthly report sent to VDH successfully.
- The faulty meter at Well 5 was successfully repaired by Ferguson.
- Well 1, Well 5, and booster pump building pressure gauges are scheduled for replacement.

WASTEWATER

Wastewater Treatment

The wastewater treatment plant had an average daily flow of 0.086 MGD for a total monthly effluent discharge of 2.571 MG.



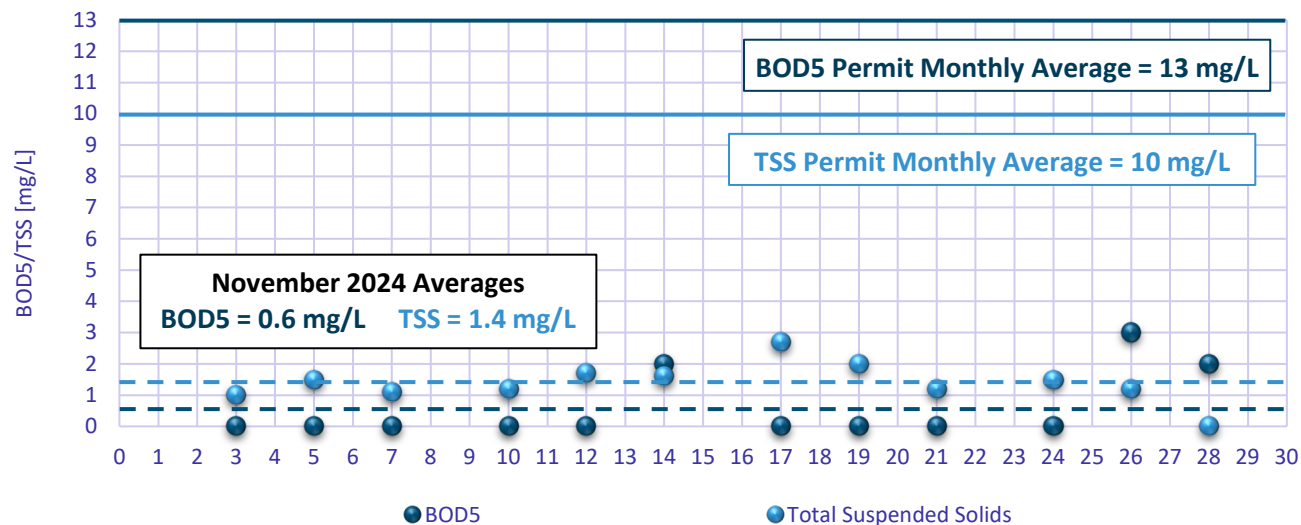
Operational Notes:

Testing instruments were calibrated every day. BOD, TSS, Ammonia, TKN, and E. Coli samples were collected in compliance with the WWTP permit.

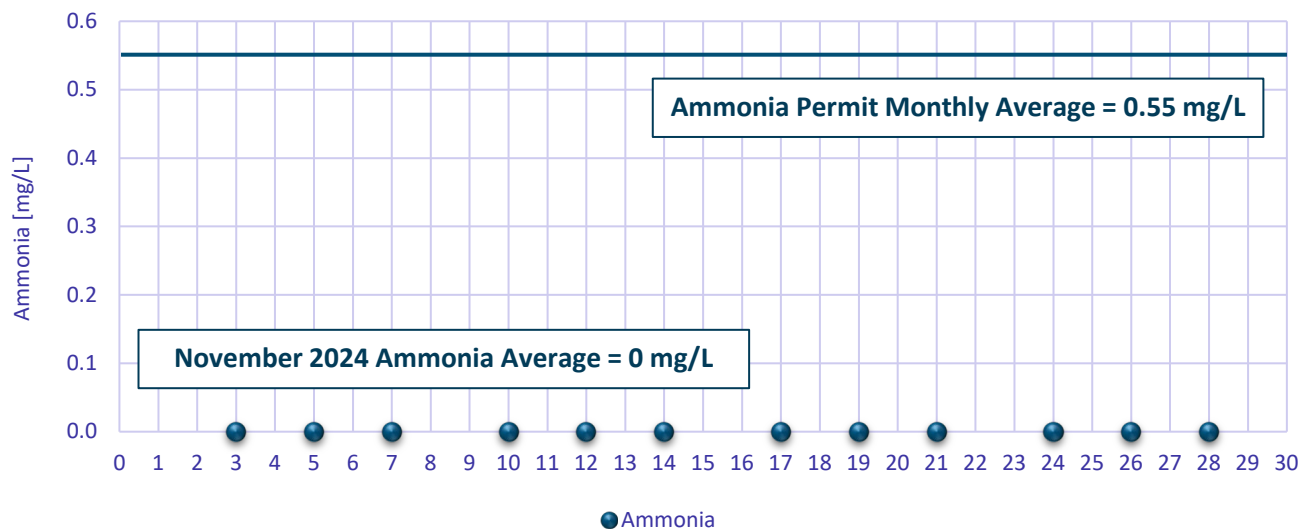
- Increased wasting rates to combat lingering filamentous and grease issues.
- IES quoted blower packages; BG maintenance ordered them. Scheduled to install at Bowling Green Meadows, Maury Heights, and Heritage Pines. IES quoted bacteria to inoculate the lift stations with the proper bacteria to oxidize grease.
- IES Introduced the idea of starting a FOG inspection program to help reduce the grease coming into the wastewater plant.
- IES staff increased the frequency of cleaning the UV system.
- Still alternating clarifiers in and out of service for operational efficiency.
- Pumping and hauling sludge from the digester has been reduced to one load on Monday and one load on Friday.

Sample Results:

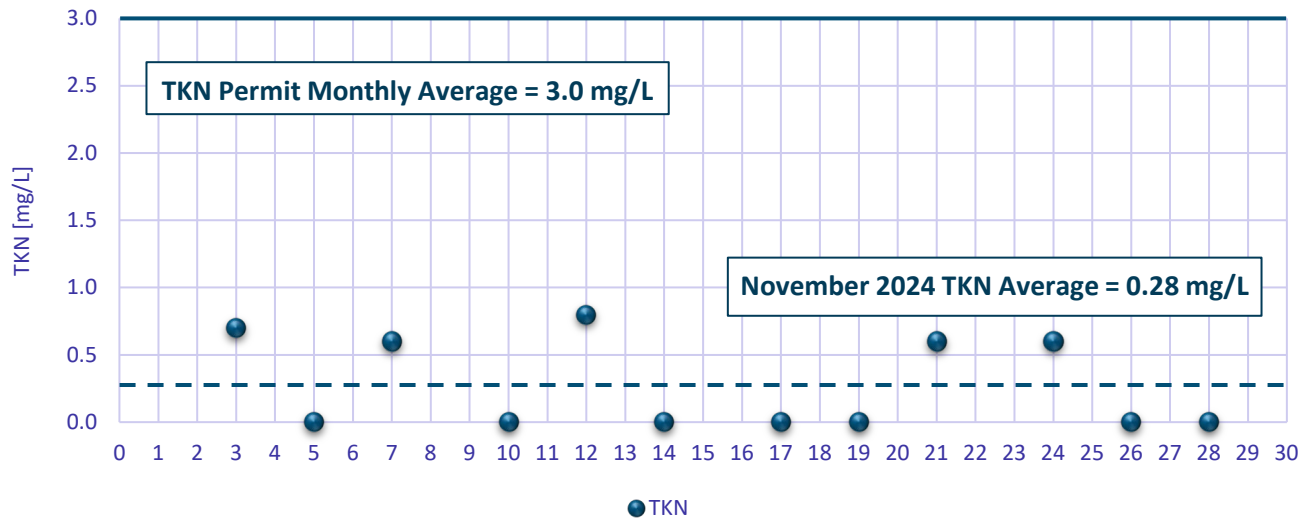
BOD5/TSS November 2024



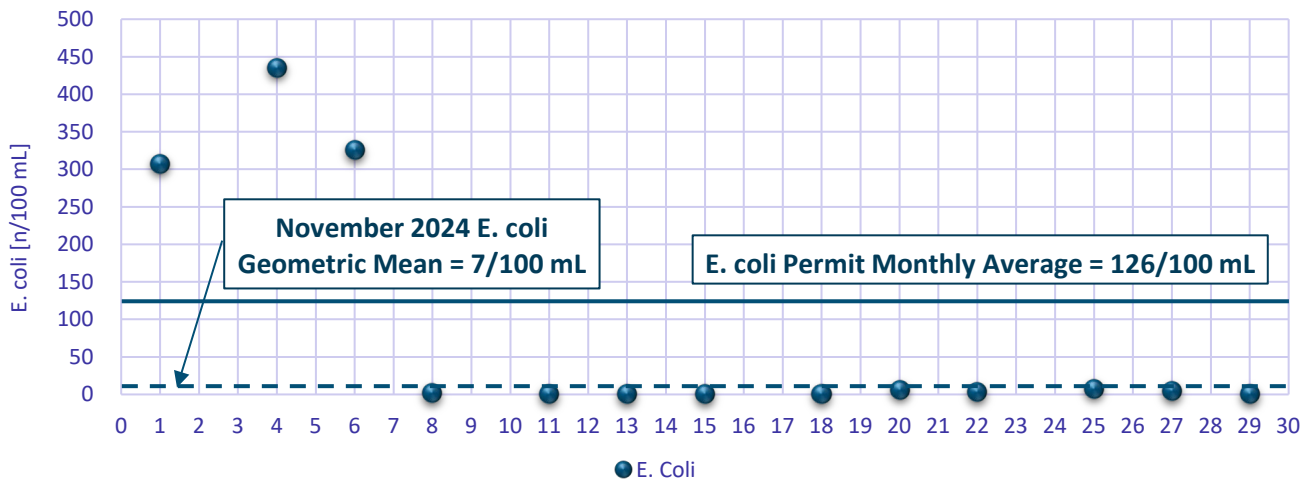
Ammonia November 2024



TKN November 2024



E. coli November 2024



Glossary

Bacteria	E.coli and/or Total Coliform
BOD5	5-day Biochemical Oxygen Demand
CBOD	Carbonaceous Biochemical Oxygen Demand
cfu	colony forming unit
CIP	Capital Improvement Plan or Cast/cleaned-in-place
Cl	Chloride Ion
Cl2	Chlorine
CMF	Continuous Membrane Filtration?
D.O.	Dissolved Oxygen
F/M ratio	Food to Microorganism ratio
FOG	Fats, Oil and Grease
GST	Ground Storage Tank
HWTP	Harmony Water Treatment Plant
I&I	Infiltration and Inflow
Inorganic Nitrogen	Nitrate + Nitrite
LS	Lift Station
mg/L	Milligrams per Liter
MGD	Million Gallons Per Day
mL	Milliliters
MLSS	Mixed Liquor Suspended Solids
MLVSS	Mixed Liquor Volatile Suspended Solids
MPN	Most Probable Number -bacteriological well sample
MW	Monitoring Well
N/N	Nitrate/Nitrite
Organic Nitrogen	TKN
P/A	Presence/Absence- bacteriological samples for drinking water
PFAS	polyfluoroalkyl substances
PLC	Programmable Logic Controller
POE	Point of Entry
RAS	Return Activated Sludge
SCADA	Supervisory Control and Data Acquisition
STEP	Septic Tank Effluent Pump
TKN	Total Kjeldahl Nitrogen
TN	Total Nitrogen
TP	Total Phosphorous
TR-6	Copper sequestering chemical for wastewater
TSS	Total Suspended Solids
UV	Ultraviolet Light
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant