

UTILITY REPORT



DECEMBER 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
030 - Bowling Green Health Care 120 Anderson Ave	12/17/2024	Absent
060 - VDOT	12/17/2024	Absent

Water Treatment

The water treatment plant met the Town's water demand with a total monthly well yield of 4.101 MG for an average daily production rate of 0.132 MGD.

Operational Notes:

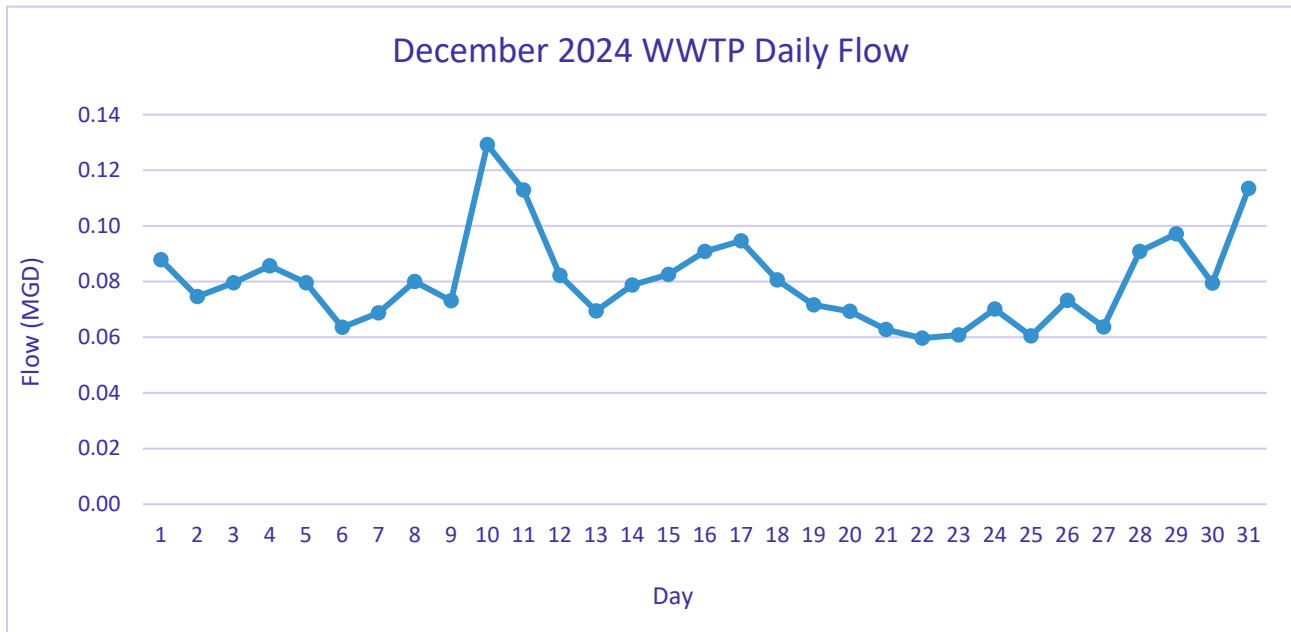
Treatment plants were visited, and an analysis of water quality was performed every day.

- 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.
- VFD quotes for well pumps have been submitted to the town for consideration.

WASTEWATER

Wastewater Treatment

The wastewater treatment plant had an average daily flow of 0.080 MGD for a total monthly effluent discharge of 2.487 MG.

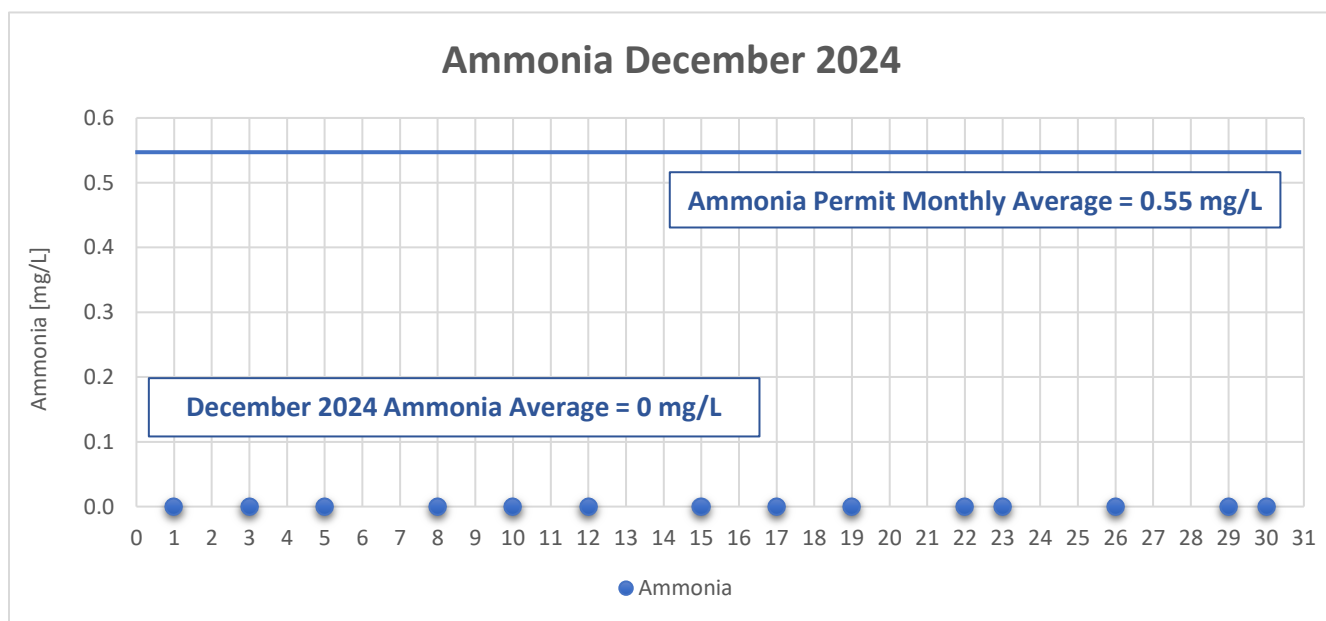
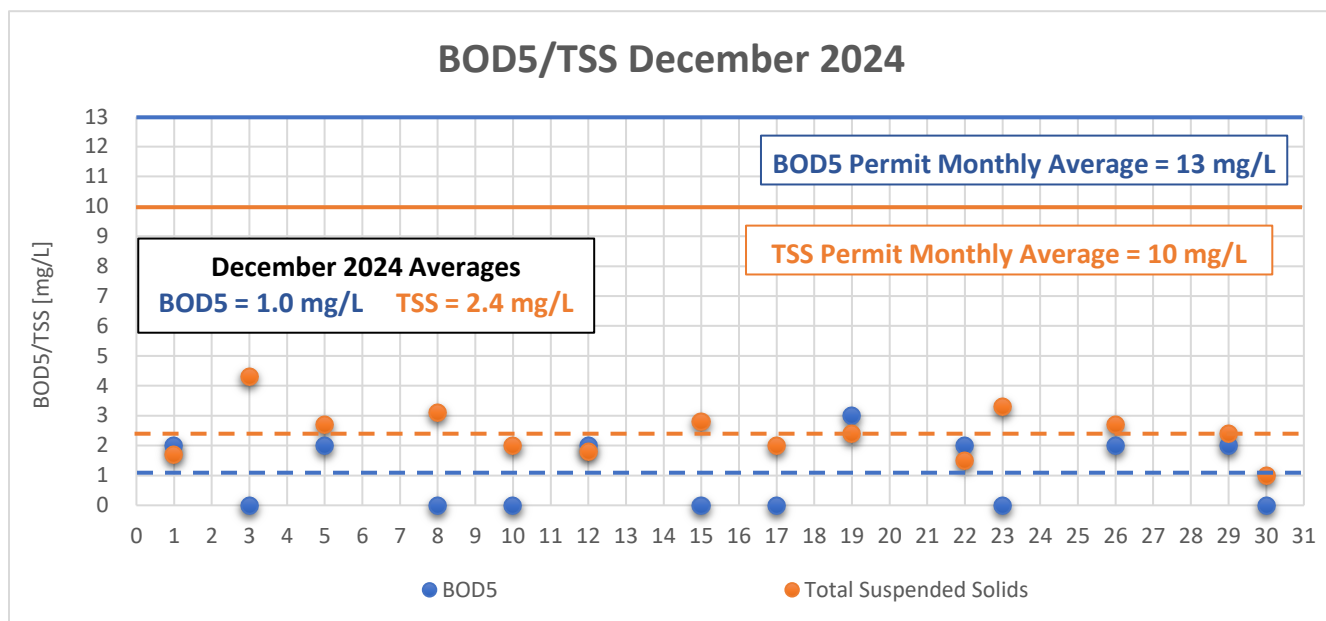


Operational Notes:

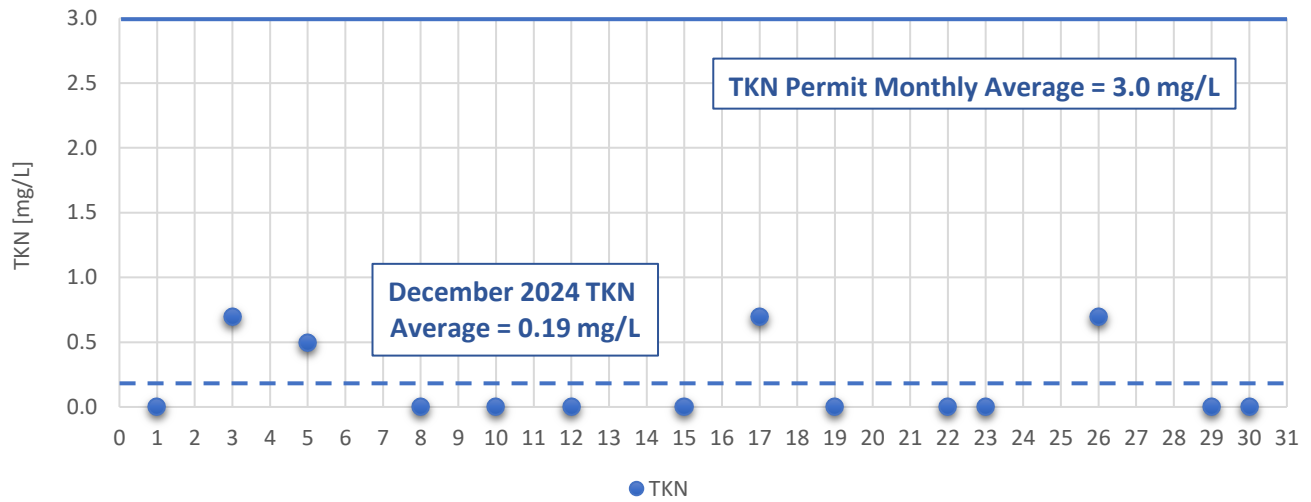
BOD, TSS, Ammonia, TKN, and E. Coli samples were collected in compliance with the WWTP permit.

- Effectively managing solids inventory.
- All blowers have been ordered for FOG management at lift stations.
- IES, Town of Bowling Green, and Monnshot met to discuss Gross Alpha issues in the water. An operational wish list was also discussed for better solids management and other equipment to increase treatment efficiency at the wastewater plant.
- VFD quotes for the oxidation ditch rotors have been submitted to the town for consideration.
- 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.

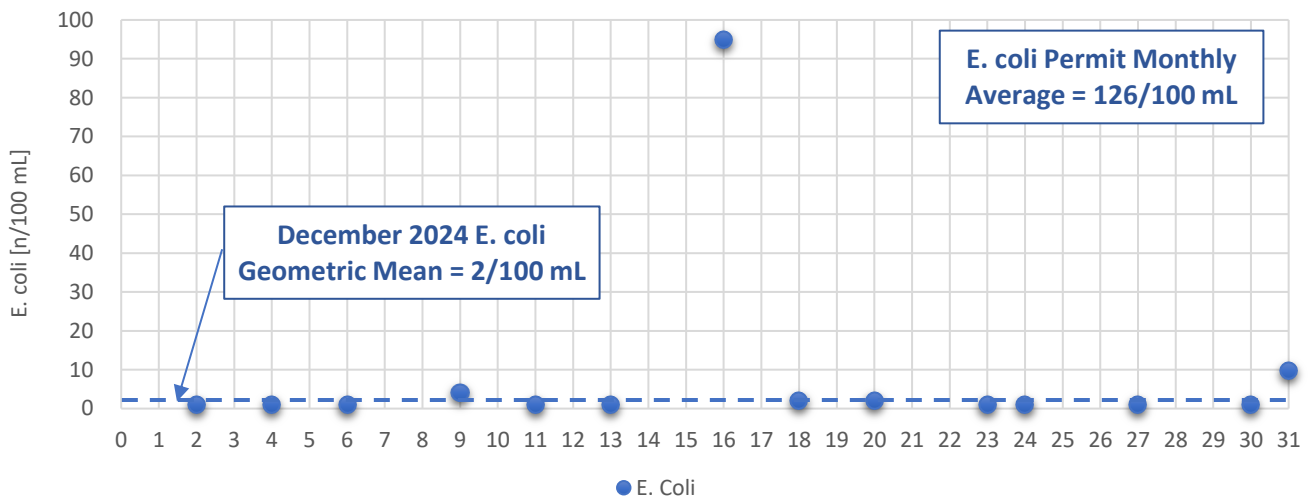
Sample Results:



TKN December 2024



E. coli December 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