

UTILITY REPORT



JULY 2024

Town 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
010 – 4A Jefferson Drive	7/10/24	Absent
040 – Town Hall	7/10/24	Absent

Water Treatment

The water treatment plant met the Town's water demand with an average daily production rate of 0.161 MGD for a total monthly finished water volume of 4.993 MG.

Operational Notes:

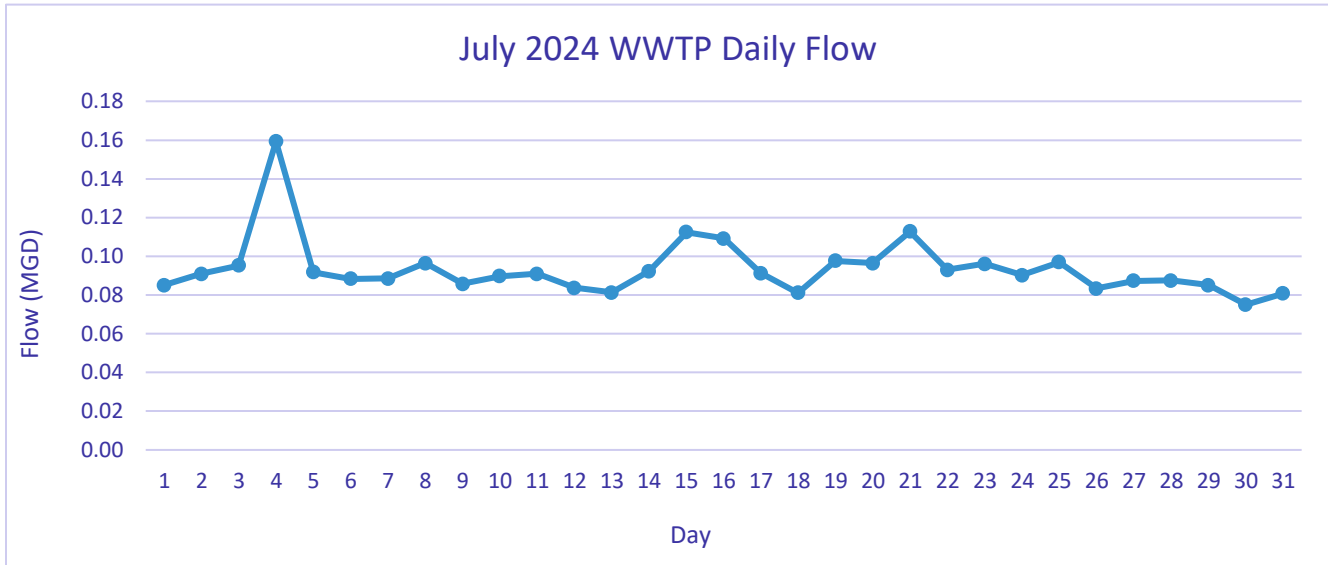
Treatment plants were visited, and an analysis of water quality was performed every day. Testing Instruments were calibrated at least twice a week.

- Monthly report was sent to VDH.
- All P/A samples were collected and passed.
- All annual MPNs have been collected and submitted.
- Effectively dosing sodium hypochlorite for proper disinfection of drinking water.
- Bowling Green should consider storing sodium hypochlorite in a temperature-controlled area so the chemical does not lose its potency. [Note: Every degree above 60°F increases the rate at which sodium hypochlorite off-gases.]
- Looking into ordering automatic de-gassing heads for the sodium hypochlorite dosing pumps.

WASTEWATER

Wastewater Treatment

The wastewater treatment plant had an average daily flow of 0.094 MGD for a total monthly effluent discharge of 2.814 MG.



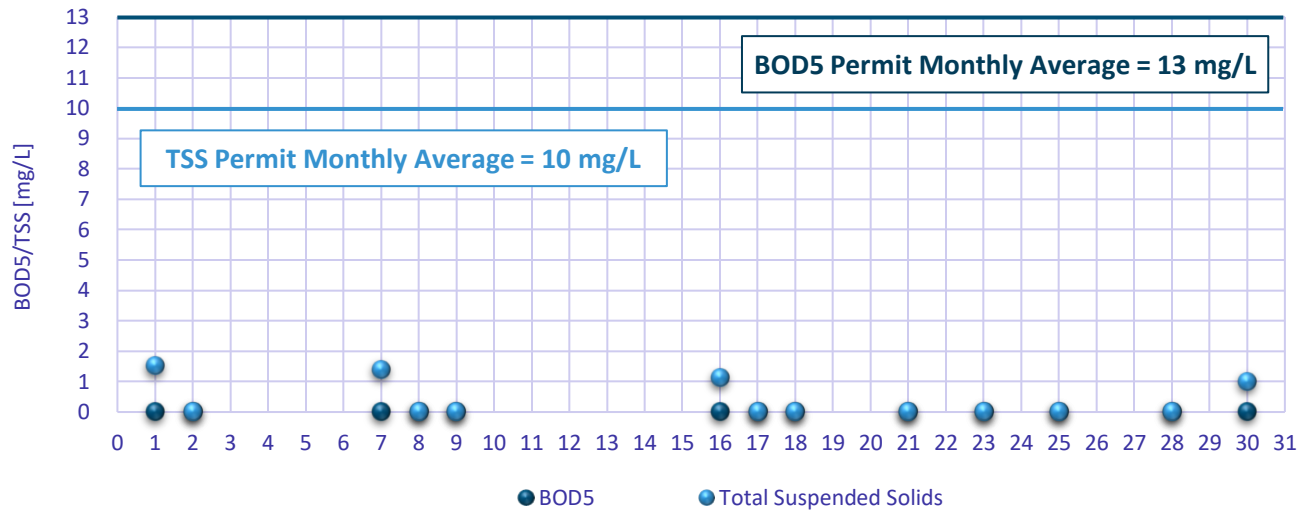
Operational Notes:

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

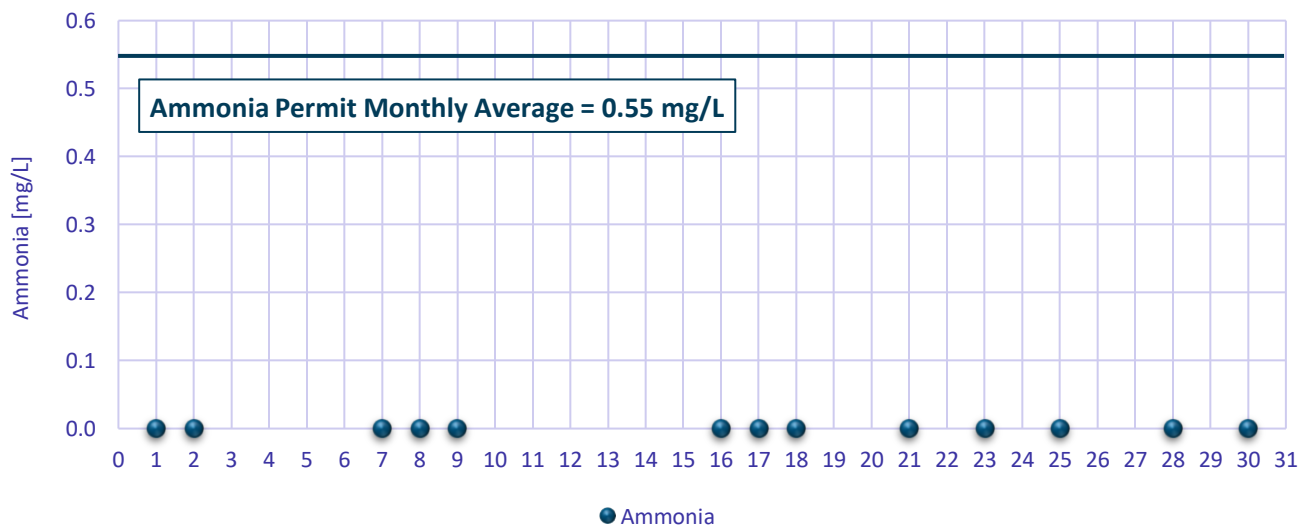
- Managing the solids have resulted in even further improvement in the settling characteristics of the floc yielding a great-looking supernatant.
- All parameters being sampled in the final effluent are now at or below the QLs indicating a much healthier biomass community.
- IES and Bowling Green staff inspected the lift stations for grease and identified which pump stations will require the most attention.
- IES is quoting a small blower and diffuser set up for Heritage Pines and Meadows lift stations.
- Digester blowers have been put on a timer to facilitate lower nutrient numbers in supernatant.
- The comminutor had broken down and Bowling Green maintenance ordered a new one. It is scheduled to be installed on August 28th by the Bowling Green electrical contractor.
- To assure successful operations during high flows, solids must be retained in the plant. To help facilitate this, Missions offers a tank and well system that controls the rotors based on flow (some additional hardware may be necessary). This system could also integrate DO monitoring equipment to allow real-time data to be remotely accessible (assuming power and internet are available) at a fraction of the cost compared to a full-blown SCADA system.

Sample Results:

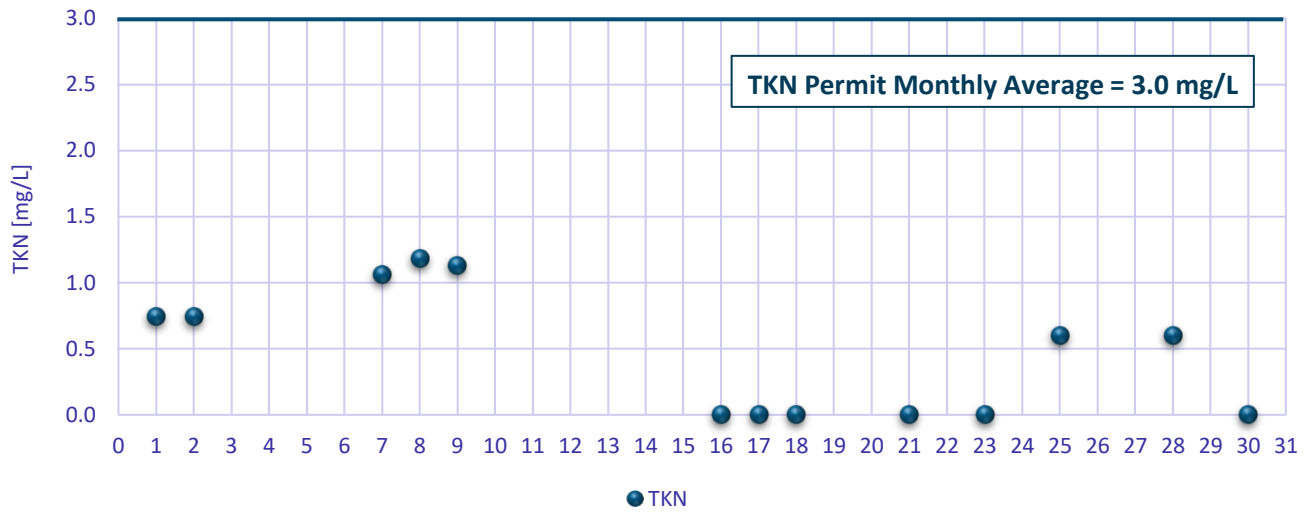
BOD5/TSS July 2024



Ammonia July 2024



TKN July 2024



E. coli July 2024

