



STATUS REPORT

Progress and Improvements

DPW BUREAU/OFFICE Back River Wastewater Treatment Plant (Back River)

Date 9/30/2022

Parameters	Week ending 9/16/22	Week ending 9/22	Permit limit	Meeting Requirement
Total Suspended Solids (TSS)	2 mg/l	2 mg/l	15 mg/l	Yes
Biochemical oxygen demand (BOD)	<2.0 mg/l	<2.0 mg/l	15 mg/l	Yes
Total phosphorus (TP)	0.10 mg/l	0.10 mg/l	0.30 mg/l	Yes
Ammonia (NH3)	0.1 mg/l	<0.1 mg/l	3.0 mg/l	Yes
Total nitrogen (TN)	2.5 mg/l	1.6 mg/l	4.0 mg/l	Yes
E-coli	9 MPN/100 ml	22 MPN/100 ml	126 MPN/100 ml	Yes

MPN = Most Probable Number

Maintenance Updates

Per an updated schedule, Back River will have a fourth Primary Settling Tank, ("PST") #7, in service in October. Two other PSTs, #2 and #9, will be in service by January 2023. PST #2 has concrete and mechanical repairs that will need to be performed before it can be returned to service. Overall, plant operations require 4 small PSTs in service for full treatment operations; BRWWTP has 11 PSTs total, including 2 large PSTs and 9 small PSTs.

In-Ground Digester cleaning and repairs for Digestors #1 and #4 are underway. This will provide the needed redundancy during the capital project to rehabilitate the remaining In-Ground and egg-shaped digesters. This rehabilitation will improve the digestion process, further reduce the amount of biosolids requiring treatment prior to removal, and increase methane production for the plant co-generation efforts which supply power to the plant facilities.

DPW is prioritizing major equipment in each process area of the plant. Preventative maintenance and continual lubrication will extend the performance and life of equipment. To support these efforts, we have procured contractors to assist with personnel focus shifting to preventive maintenance by outsourcing of large repairs.

Summary

DPW has made substantial progress toward full compliance at Back River. **More specifically, suspended solids, biochemical oxygen demand, total phosphorus, ammonia, and total nitrogen have decreased significantly since March 2022.** We are excited that Back River has consistently been under the permit levels for the last 18 weeks.

DPW recognizes that Back River is a valuable asset to the Baltimore region and we are happy about the path forward to sustained compliance.