



STATUS REPORT

**Progress and Improvements**

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

Date 10/28/2022

Parameters	Week ending 10/14/22	Week ending 10/21/22	Permit limit	Meeting Requirement
Total Suspended Solids (TSS)	2 mg/l	<1.0 mg/l	15 mg/l	Yes
Biochemical oxygen demand (BOD)	<2.0 mg/l	3.0 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)	2.7 mg/l	2.0 mg/l	4.0 mg/l	Yes
E-coli	4 MPN/100 ml	4 MPN/100 ml	126 MPN/100 ml	Yes

MPN = Most Probable Number

**Maintenance Updates**

The plant’s fourth Primary Settling Tank (PST), #7, is still scheduled to be in service by the end of October, and two others, #2 and #9, by January 2023. Plant operations require 4 small PSTs in service for full treatment. Back River has 11 PSTs total (2 large and 9 small).

In-Ground Digester cleaning and repairs for #1 and #4 are ongoing. Timeline for completion is on schedule for early 2023. The digestion process reduces the amount of biosolids requiring treatment prior to removal while improving methane production for the plant co-generation efforts, which supply power to the plant facilities.

There are now 32 of 48 sand filters in service. These sand filters provide one last treatment for solids removal, or “polishing,” of the effluent prior to disinfection, neutralization of the chlorine, and discharge to the receiving waters.

**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. **All monthly parameters are currently under permit limits, and Back River has maintained compliance since June.**

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