

STATUS REPORT Progress and Improvements

DPW BUREAU/OFFICE: Patapsco Wastewater Treatment Plant

Date: 1/13/2023

Parameter	Week ending 12/19/22	Week ending 12/28/22	Weekly Permit Limit	Monthly Permit Limits	Weekly Limits Met?	Monthly Limits Met?
Total Suspended Solids (TSS)	6 mg/L	5 mg/L	45mg/L	30mg/L	Yes	Yes
Biochemical Oxygen Demand (BOD)	9 mg/L	13 mg/L	45mg/L	30mg/L	Yes	Yes
Total Phosphorus (TP)	.24 mg/L	.17 mg/L	3.0mg/L	2.0mg/L	Yes	Yes
Ammonia (NH₃)	1.55 mg/L	0.94 mg/L	N/A	N/A	N/A	N/A
Enterococci	9 MPN/100 mls	9 MPN/100 mls	N/A	35 MPN/100 mls	N/A	Yes

N/A= Not Applicable MPN= Most Probable Number XX=Awaiting Official Results NOTE: WEEKLY AMMONIA PERMIT IS SEASONAL FROM 5/1-10/31. THERE IS A MONTHLY PERMIT LIMIT OF 6.3MG/L DURING THE SUMMER SEASON AND NO MONTHLY PERMIT THE REST OF THE YEAR.

Maintenance Updates

Maintenance staff continue to focus on the preventive maintenance (PM) of the process areas.

Repairs to Gravity Sludge Thickener (GST) #4 began 11/29/22. Completion of this repair will be the first quarter of 2023. This will provide further redundancy and sludge storage capacity to aid in biosolids handling.

Four High Purity Reactors Aerators have been installed. The existing Liquid Oxygen Plant has had the motor and compressor repaired. The remaining work for it's operation is the repair of the chiller, which is being handled by an outside contractor. In the interim, the plant is feeding dri-ox which is sufficiently reducing the ammonia levels and improving the nitrification process.

After temporarily being hampered by supply chain issues with methanol, the plant has succeeded in procuring sufficient inventory to return the Denitrification Facility to automatic operation and reducing the Total Nitrogen dramatically to below permit parameters. Plant personnel and on-site engineering support are closely monitoring to maintain consistent inventory and performance.

The reduction in hydrocarbons within the biosolids has allowed the Synagro pelletizing operation to begin their dryer restart. The dryers have run continuously since 1/10/23 without issues. Returning the dryers to full operation will curtail the current biosolids hauling efforts.

Patapsco maintenance employees attended lubrication training on January 4, 2023. The Office of Environmental Regulatory Compliance and Safety (ERCS) provided classroom training and hands on field training to Patapsco operators. Training was provided in lubrication quality control and quality assurance sampling methods. The maintenance and calibration of sampling equipment was reviewed. ERCS identified and implemented improvements in quality control documentation.

Workforce Development

The B'More WISE program started the first cohort of 11 participants on January 9, 2023. The Training program will run through June, 2023 when successful participants will be transitioned to apprenticeship positions at either a Water or Wastewater Treatment Plant. The participants will have two days a week of class room instruction and three days of follow through at one of the plants to gin field experience. The Department anticipates that successful participants will be able to matriculate into full time employees with a high level of skill as Water and Wastewater Operators.

Summary

As we continue, we are confident in a clear path forward to compliance at the Patapsco Wastewater Treatment Plant. The Patapsco is an asset to the greater Baltimore Region and DPW is excited about its path forward to sustained compliance.

Given the substantial progress made towards maintenance in compliance at our plants, DPW will move to release monthly reports in order to provide more robust updates. Our next report will be released on February 10, 2023.