



STATUS REPORT

Progress and Improvements

DPW BUREAU/OFFICE Patapsco WTPP

Date 12/9/2022

Parameter	Week ending 11/28/22	Week ending 12/5/22	Weekly Permit Limit	Monthly Permit Limits	Weekly Limits Met?	Monthly Limits Met?
Total Suspended Solids (TSS)	4 mg/L	XX mg/L	45mg/L	30mg/L	Yes	Yes
Biochemical Oxygen Demand (BOD)	6 mg/L	XX mg/L	45mg/L	30mg/L	Yes	Yes
Total Phosphorus (TP)	0.2 mg/L	XX mg/L	3.0mg/L	2.0mg/L	Yes	Yes
Ammonia (NH ₃)	0.4 mg/L	XX mg/L	N/A	N/A	N/A	N/A
<i>Enterococci</i>	6 MPN/100 mls	XX 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: The Ammonia permit requirement is only seasonal from 5/1-10/31 each year. No limit otherwise)

Training Updates

The B'More Wise program has a signing event on December 8 at City Hall to officially kickoff. This program will help to bring potential staff in with a mix of classroom and on-the-job training.

Operator Certification classes were held December 6-8 to help operations staff attain necessary credits for their operator certification. Lubrication training for mechanical staff at both plants was held December 6-7. This class is designed to help improve preventive maintenance practices to keep critical assets in service.

Maintenance Updates

Maintenance staff continues to focus on the preventive maintenance (PM) of the process areas. The Cityworks Computerized Maintenance Management Software (CMMS) was deployed on November 28, 2022. Regular updates of preventive maintenance and corrective work orders are reviewed weekly for sufficiency.

The City continues moving toward a Reliability Centered Maintenance culture. This culture change focuses on critical assets, identifying potential problems with these assets and determining what should be done to make

sure those assets continue to produce at maximum capacity. The maintenance team will analyze breakdowns to determine maintenance methods and unique maintenance schedules for individual assets. In support of this effort, the maintenance teams are taking a lubrication course on December 6 and 7. This is being taught by Des-Case, an industry leader in lubrication support of equipment life.

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.

Two fine screens will be picked up in December for repair and replace with coarse screens in order to be used during high flows and reduce any flow restriction. Upon return of these two screens (tentatively February 2022), the last fine screen will be removed for rehabilitation. This will then account for all 8 screens receiving rehabilitation. Two new conveyors and compactors have been ordered and once the Purchase Order is issued, the timeline for delivery is approximately 6 months. The current conveyors and compactors continue to be operational but are coming to the end of their useful life so replacements are needed.

The Industrial Plant Influent (IPI) has had the motors to both screens repaired. There is a gate stem repair and the City is awaiting a quote from Rotork to address.

The Liquid Oxygen (LOX) plant backup compressor will begin December 12. The LOX plant will be ready to return to service once completed. Until such time, the plant will continue to feed dri-ox as the redundant backup.

The plant has devised a process for removing the media from the mud wells within the Biological Aerated Filters (BAF) utilizing the overflow piping and allowing for capture upstream of the BAF. This has proven successful in the first and will be repeated for the second. Removal of the excess media is important as solids can attach and be difficult to remove from the treatment process.

Compliance Updates

Proactive efforts to improve the health and safety conditions for all employees are well underway. This month we completed safety assessments to ensure that we are addressing concerns proactively. DPW continues planning and developing optimized and uniform Standard Operating Procedures (SOP) related to sampling, chain of custody, analysis, and reporting. Staff are reviewing updated industrial stormwater guidance from the Maryland Department of the Environment (MDE).

Plant representatives will attend training for the new 20-SW permit. The 20-SW permit is a National Pollution Discharge Elimination System (NPDES) permit for stormwater from industrial activities. Authorization under the permit is required for both plants and is to be submitted to MDE by July 2023.

Summary

As we continue, we are confident in a clear path forward to compliance at the Patapsco Wastewater Treatment Plant.