

### **Maryland Department of Environment**

Water and Science Administration Compliance Program 1800 Washington Blvd, Suite 420 Baltimore, MD 21230-1719 410-537-3510, 1-800-633-6101

**Inspector:** Shailaja Polasi

**AI ID:** 3076

Site Name: Patapsco WWTP

Facility Address: 3501 Asiatic Ave, Curtis Bay, MD 21226

**County:** Baltimore City County

**Start Date/Time:** October 19, 2021 10:00 AM **End Date/Time:** October 19, 2021 1:30PM

Media Type(s): NPDES Municipal Major Surface Water

Contact(s):

Michael Hallmen-Division Chief, Baltimore DPW
Kevin McFadden, Supervisor Patapsco WWTP
Neal Jackson, Plant Manager, Patapsco WWTP
Eric Johnson-Acting Plant Manager, Patapsco WWTP
Marvin Young-Acting Plant Operations Engineer, Patapsco WWTP
Donald Taylor-Acting Plant Operations Engineer, Patapsco WWTP
Clarence Flight-Supervisor (Primary), Patapsco WWTP

## NPDES Municipal Major Surface Water

Permit / Approval Numbers: 15DP0580 Inspection Reason: Routine Scheduled

Site Status: Active

Compliance Status: Noncompliance Site Condition: Noncompliance

Recommended Action: Continue Routine Inspection

Evidence Collected: Photos or Videos Taken, Samples Taken, Visual Observation

**Delivery Method:** Email

Weather: Dry

### **Inspection Samples**

Parameter	Result	Units	Method	Location	Date	Taken by
Oxygen,	7.17	mg/L	Recorder	Final Effluent	2021-10-19 12:39 PM	Donald, operator
Dissolved				Chamber		
pН	7.60	standard units	Recorder	Final Effluent	2021-10-19 12:39 PM	Donald, operator
				Chamber		_
Chlorine, Total	0.00	mg/L	Recorder	Final Effluent	2021-10-19 12:39 PM	Donald, operator
Residual				Chamber		•

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#### **Inspection Findings:**

An announced compliance evaluation inspection was scheduled on this date. I met on site with Michael Hallmen-Division Chief; Kevin McFadden, Supervisor; Neal Jackson, Plant Manager; Eric Johnson-Acting Plant Manager; Marvin Young-Acting Plant Operations Engineer; Donald Taylor-Acting Plant Operations Engineer and Clarence Flight-Supervisor (Primary) representing Patapsco WWTP. After preliminary introductory meeting I began the inspection with the site walk of the treatment plant. No records were reviewed on this date. The sky was sunny clear at the time of the inspection.

The following was observed during the site walk of the facility.

- 1. Mr. Jackson stated the Patapsco WWTP receives wastewater from Baltimore County, part of Anne Arundel County and part of Howard County. The facility receives 6-7MGD wastewater from adjacent industrial park.
- 2. Mr. Jackson stated the grit removal process is handled at different building across the street from the Patapsco WWTP. The grit handling process is unmanned and the operations are monitored by outside contractor. The grit removal process was not reviewed on this day.
- 3. Mr. Jackson stated they have plans to add new screening ahead of the grit removal process and is part of upgrade. The upgrade to the grit building is scheduled for spring next year and is a 3 year project.
- 4. Mr. Jackson stated 6 aerator grit chambers of which 5 are online at the time of the inspection. The influent flow is monitored after the grit removal process prior entering the wastewater treatment plant.
- 5. On this day I observed the waste water after the grit removal enters the bar screens. The trash/rags are taken to landfill. On this day I observed the operators are manually raking trash/rags from the conveyor belts.
- 6. On this day I observed the facility has 8 bar screens, off which 3 are online and 5 needed repair and are offline. Pictures are taken.
- 7. Mr. Jackson stated ferric chloride is added to the influent in the wetwell where industrial and domestic and waste water combine.
- 8. Mr. Jackson stated the facility has 6 primary settling tanks, PST's of which 4 are online. The PSTs are manually alternated. On this day I observed sheen and grit balls floating in the PSTs. Pictures are taken. **Corrective Action:** Submit a letter to the Department explaining the current operating procedure in place to clean the sheen, grit balls in the PSTs. The letter should include steps taken to minimize the sheen, grit balls from leaving the PSTs and entering different treatment process.
- 9. Mr. Jackson stated the Brooklyn pump station that serves Cherry Hill community has high Fats, Oil and Grease, FOG in the wastewater which is causing sheen and grit balls observed in PSTs. Mr. Jackson stated each channel has its own grease/scum collection trough and the scum pits are manually cleaned. Mr. Jackson stated they have plans to upgrade the scum collection pits. On this day I observed crack to the concrete in the joint wall in PST#5. Pictures are taken. **Corrective Action**: Necessary repairs to the concrete wall should be completed immediately.
- 10. Mr. Jackson stated the facility has 6 reactors, of which 4 are online (1, 3, 5 and 6). The reactors are enclosed. On this day I observed leak/water bubbles near the #6 reactor plate on top of the roof. Pictures are taken. **Corrective Action**: The cause for the leak/water bubbles are the reactor plate on top of the roof should be inspected and necessary repairs should be completed.
- 11. The treatment plant has 4 small clarifiers, and 4 large clarifiers and on this day 7 clarifiers are online. I observed excessive vegetation growth, scum and goose droppings near the

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weirs of the clarifier and near the scum collection trough area. Mr. Jackson stated operators manually clean the scum, algae and goose droppings manually and have a contract to clean the vegetation growth in the clarifier. **Corrective Action**: The vegetation growth; scum and grit in the clarifier should be cleaned immediately. The clarifiers should be operated efficiently as per manufacturer recommendation.

- 12. On this day I observed the grass clippings floating near the weirs of the clarifier. **Corrective Action**: The floating grass clippings in the clarifier should be cleaned and necessary steps should be taken while mowing the area around the clarifiers.
- 13. On this day I observed the skimmer arm in the #2 clarifier, clarifier 5 A are not working effectively to capture the scum and floating particles to the collection area. I observed the skimmer arm is raised to prevent damage to the skimmer arm mechanism. I observed the scum/grit collected away from the scum collection area in the clarifier. **Corrective Action**: Submit a letter to the Department when the skimmer arms, scum troughs repairs to the clarifiers will be completed. Submit a letter to the Department identifying the clarifiers that are in disrepair; maintenance work required for each clarifier and tentative schedule time when the repairs will start for each clarifier.
- 14. Mr. Jackson stated the effluent from the clarifiers is pumped to Enhanced Nutrient Removal, ENR process which includes biological aerated filters and denitrification process. Chlorine is added in the denitrification building.
- 15. On this day I observed scum/grit balls and foam in the chlorine contact tank. Mr. Jackson stated the scum is manually cleaned and the potable water is sprayed to break the floating foam in the chlorine contact tank. Mr. Jackson stated they have boom in the final chlorination tank to capture any foam and grit floating. Pictures are taken.
- 16. The thermometer in the composite sampler was calibrated on 10/13/21. The calibration day is noted on the thermometer. On this day I observed algae deposits and discoloration inside the suction hose to the sampler. **Corrective Action**: Replace the suction hose to the composite sampler immediately.
- 17. Mr. Jackson stated daily the final effluent grab samples are collected daily at 9AM, 6PM and 2 AM. On this day final effluent samples are analyzed and the sample results are included in the report.
- 18. I observed DO meter used for the final effluent analysis was not calibrating. A potable hand held meter was used on this day for DO analysis. **Corrective Action:** The DO meter used for effluent sample analysis should be serviced by manufacturer immediately. A new meter should be used until the repairs to the DO meter are completed.
- 19. On this day I observed buffer 4 and 7 in use are expired. Buffer 10 was found to be OK. **Corrective Action**: Advised Mr. Jackson to replace the Ph buffers 4 and 7 immediately.

## <u>With respect to the above MDE NPDES Permit, violations of the Environmental Article,</u> Title 9 were observed on this date:

1. Failed to operate the treatment to minimize upsets and unauthorized discharges as required by NPDES permit General Condition B-3"Facility Operation and Quality Control".

# To bring this site into compliance with Environmental Article Title 9, the following corrective action should be made immediately upon receipt of this report.

- 1. All the above mentioned corrective actions mentioned above should be corrected immediately.
- 2. Submit a letter to the Department with the current status of the plant upgrades including when the repairs are scheduled; time when the repairs will be completed.

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Contact this inspector upon implementation of the requested corrective actions, reasonably necessary to bring the site into compliance. If the corrective actions cannot be completed within the prescribed time frames above, you should continue to advise this inspector, at least every 30 days, of the status of the measures taken to complete the corrective actions.

If you have any questions, need assistance or to request a re-inspection, please contact this inspector at or in writing at <u>410-537-3521</u> or by e-mail at <u>shailaja.polasi@maryland.gov</u>.

Inspector:	Shailaja Polasi	Received by:
•	Shailaja, Polasi/Date shailaja.polasi@maryland.gov 410-537-3510	Signature/Date
		Print Name