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: 8449

Site Name: Back River WWTP
Facility Address: 8201 Eastern Ave, Baltimore, MD 21224
County: Baltimore County

Start Date/Time: October 20, 2021 10:00AM
End Date /Time: October 20, 2021 2:00 PM

Media Type(s): NPDES Municipal Major Surface Water

Contact(s):
Elizabeth (Betty) Jacobs- Operations Supervisor
Charmayne Payton-Plant Supervisor
Ronald Turner, Operations Engineer
Chris Krout-Operations Engineer

**NPDES Municipal Major Surface Water**

Permit / Approval Numbers: 15DP-0581
Inspection Reason: Routine Scheduled
Site Status: Active
Compliance Status: Noncompliance
Recommended Action: Continue Routine Inspection
Evidence Collected: Photos or Videos Taken, Samples Taken, Visual Observation
Delivery Method: Email
Weather: Sunny, Clear

### Inspection Samples

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Result</th>
<th>Units</th>
<th>Method</th>
<th>Location</th>
<th>Date</th>
<th>Taken by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen, Dissolved</td>
<td>8.12</td>
<td>mg/L</td>
<td>Recorder</td>
<td>Final Effluent Chamber</td>
<td>2021-10-20 01:08 PM</td>
<td>David Burgers, operator</td>
</tr>
<tr>
<td>pH</td>
<td>7.33</td>
<td>standard units</td>
<td>Recorder</td>
<td>Final Effluent Chamber</td>
<td>2021-10-20 01:27 PM</td>
<td>David Burgers, operator</td>
</tr>
<tr>
<td>Chlorine, Total Residual</td>
<td>0.00</td>
<td>mg/L</td>
<td>Recorder</td>
<td>Final Effluent Chamber</td>
<td>2021-10-20 01:05 PM</td>
<td>David Burgers, operator</td>
</tr>
</tbody>
</table>

### Inspection Findings:

An announced compliance evaluation inspection was scheduled on this day. I met on site with Elizabeth (Betty) Jacobs- Operations Supervisor; Charmayne Payton-Plant Supervisor; Ronald Turner, Operations Engineer; Chris Krout-Operations Engineer representing Back River Wastewater treatment
plant. After preliminary introductory meeting I began the inspection with the site walk of the treatment plant. No DMRs were reviewed on this date. The sky was sunny clear at the time of the inspection.

Ms. Jacobs, Mr. Turner and Mr. Krout accompanied me during the site walk of the facility. The following was observed during the site walk of the facility

1. Ms. Jacobs stated hydrogen peroxide is added to the influent for odor control.
2. On this day I met on site with Tony De Giacomo, Supervisor Fine Screens and Grit Removal. The preliminary treatment includes coarse and fine screens. Mr. De Giacomo stated they had plywood jammed in one of the coarse screens and is currently out of service. Repairs to 4th coarse screen was completed recently to remove rags efficiently. Pictures are taken. The influent from the coarse building is pumped to fine screens building. The facility has 8 pumps and during normal operations 2 pumps are online. The facility has 6 fine screens, 3 screens, 1-3 on south side and remaining 3 screens, 4-6 on the north side. On this day south side screens are offline and screens 5, 6 north side are online and screen #4 is in auto. Later, the influent enters the grit building. The facility has 8 grit units, and all units are online. Rags and Grit is land applied.
3. Mr. Turner stated the facility has 11 primary clarifiers of which 3 are fully in service. Mr. Turner stated the other 8 primary clarifiers are in disrepair and are scheduled for repairs. Corrective Action: Submit a letter to the Department explaining when the repairs on the clarifiers will begin and the scope of work scheduled on the clarifiers.
4. Ms. Jacobs stated the facility has new reactors and new secondary clarifiers are under construction. Ms. Jacobs stated the construction project is delayed due to structural issues. Corrective Action: Submit a letter to the Department on the current status of the construction of the new reactors and new clarifiers. The letter should include when the repairs will be complete and units will be bought online.
5. The treated wastewater from the primary clarifier enters reactors via gravity. Ferric Chloride is added to the influent entering the reactors. On this day I observed vegetation growth in the reactors. Pictures are taken. Ms. Jacobs stated they have project scheduled to clean the vegetation in the reactors. Corrective Action: Submit a letter to the Department explaining when the vegetation growth in the reactors will be cleaned immediately.
6. On this day I observed excessive vegetation growth, algae and duck week to the weirs of the clarifiers. Ms. Jacobs stated they have project scheduled to clean the vegetation in the clarifiers. Corrective Action: Submit a letter to the Department explaining when the vegetation growth, algae and duck weed in the clarifiers will be cleaned immediately.
7. On this day I observed the sand filter process area. On this day I observed, the sand filter process area is covered with spider webs; it was unclear how many sand filter cells are in operative condition and how many cells are online. Corrective Action: Submit a letter to the Department identifying how many sand filter cells are part of treatment process; how many cells are online and operating condition of the sand filter cells.
8. On this day I observed the door to the composite sampler is broken and ice buildup inside the composite sampler. Pictures are taken. Corrective Action: Necessary repairs to the composite sampler should be completed immediately or the composite sampler should be replaced.
9. Final effluent samples were collected on this date. All the sample results are found be acceptable and included in the report.
10. On this day I observed the Ph meter took long time to stabilize while analyzing final effluent sample results. Corrective Action: Advised Mr. Burgess to replace the Ph probe immediately or replace the Ph meter.
11. On this day I observed hydraulic fluid leak from the pump outside the final effluent sampling shed building. Absorbent pads are placed around the fluid leak. Corrective
**Action:** The hydraulic leak near the pump should be repaired immediately and the absorbent pads should be replaced.

**With respect to the above MDE NPDES Permit, violations of the Environmental Article, 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 repairs to the denitrification filters.

**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 410-537-3521 or by e-mail at shailaja.polasi@maryland.gov.**