Inspector: Andrea Buie-Branam
AI ID: 8449

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

Start Date/Time: March 18, 2022 07:30 PM
End Date/Time: March 18, 2022 09:10 PM

Complaint Number: NPDES Municipal Major Surface Water
Media Type(s): NPDES Municipal Major Surface Water
Contact(s): Michael Hallman, Division Manager/Rachael King, Supervisor/Carl Barnhill, Operator

NPDES Municipal Major Surface Water - 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>Chlorine</td>
<td>0.0</td>
<td>mg/L</td>
<td>Grab Sampling</td>
<td>Outfall 001</td>
<td>3/18/2022 8:39:00 PM</td>
<td>A. Buie</td>
</tr>
</tbody>
</table>

NPDES Municipal Major Surface Water

Permit / Approval Numbers:
Inspection Reason: Complaint
Site Status: Active
Compliance Status: Not Evaluated
Recommended Action: Additional Investigation Required
Evidence Collected: Photos or Videos Taken, Record Review, Samples Taken, Visual Observation

Inspection Findings:
An investigation was conducted in regard to a citizen’s complaint. The complainant stated that numerous dead shad (presumed to be gizzard shad) and "black poop" was observed floating at the head of Back River in Baltimore County, near the sewage plant. I walked the area of investigation with Ms. King. A review of the sampling log for the day was conducted.

Effluent Outfall 001A discharges from underneath a pier, on the west side, to Back River (a Use II waterway). Effluent Outfall 002A discharges to High Head Lake at the Sparrows Point, Trade Point Property, and from there, is pumped to the existing outfalls to Bear Creek, a Use II waterway.

The concrete pier has multiple locked gates along its length. Keys were not available and only the first gate could be circumvented. The investigation was conducted after sundown. Approximately
100 fish were observed floating on the south side of the pier and along the shoreline on the south side of the pier. No fish were observed on the north side of the pier. The area was observed again an hour later. No changes were observed.

The operator and the supervisor are not aware of anything out of the ordinary regarding the plant’s operation. The Outfall 001A effluent was sampled for chlorine and found to be within limits.

A review of the residual sampling data sheet and the chemical usage data sheet for the day was conducted. The chlorine sampling results differ between the two data sheets at: 8 AM, 10 AM, and 12 PM. The lowest flow rate for Outfall 001 was 66MGD at 6 AM. The highest flow rate was at 140 MGD at 12 PM. The data sheet notes the same amount of bleach to the influent and the same amount of bisulfite to Outfall 001 was used throughout the day.

The cause of the fish kill could not be determined. Additional investigation will be conducted by MDE staff on March 19th.

Inspector: Andrea Buie-Branam /Date andrea.buie-branam@maryland.gov 410-537-3510

Received by: Signature/Date

Print Name