



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: Kari Hanson
AI ID: 8449

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

Start Date/Time: March 15, 2023 01:50 PM
End Date /Time: March 15, 2023 04:15 PM

Media Type(s): NPDES Municipal Major Surface Water

Contact(s): Andrea Buie- Chief, Baltimore City DPW/ERC Section
Michael Hallman – Chief, Baltimore City Wastewater Facilities
Charles Ray – Haz-Mat Response Officer, MDE/ERD
Paul Schlotterbeck – Hazardous Materials Response Officer, MDE/ERD
Ron Turner – Plant Superintendent, Back River WWTP

NPDES Municipal Major Surface Water

Permit / Approval Numbers: 15-DP-0581

NPDES Numbers: MD0021555

Inspection Reason: Follow-up (Non-Compliance)

Site Status: Active

Compliance Status: Noncompliance

Recommended Action: Additional Investigation Required

Evidence Collected: Photos or Videos Taken, Visual Observation

Delivery Method: Email

Weather: sunny, windy, 50°F

Inspection Findings:

On this date, Samantha Coffman and I, both Environmental Compliance Specialists with the MDE/WSA/Compliance Program, responded to a reported explosion and fire at the Back River WWTP.

Upon arrival at 1:50 p.m., Ms. Coffman and I checked in at the office. We were allowed to drive to the Synagro facility unescorted. Once at the Synagro pelletizer facility, we began to walk around. We observed multiple fire units at the facility. Holes were blown through three walls of the facility, and smoke was exiting the top of the building. Water was exiting the building as well.

We met with Andrea Buie, Chief of Baltimore City DPW Environmental, Regulatory and Compliance Section. She provided the following information:

- Around noon today, an explosion occurred in the Synagro pelletizer building causing a fire.
- Synagro leases the building from Baltimore City.

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- Mineral oil is used in the building's closed loop system to keep the loop at 350-370 degrees Fahrenheit so that the solids may be dried out to make pellets.
- The working theory is that there may have been a hole in the loop system which allowed the mineral oil to escape and hit the pellets thereby causing the explosion.
- Currently the oil pipes have been shut down. Since they are gravity fed, some oil remains in the pipe, so the Baltimore County Fire Department in consultation with MDE's ERD is letting the residual oil burn off.
- Booms are in place to catch oil.
- There is no impact to wastewater treatment plant operations.
- The WWTP can dry solids in the centrifuges. Two of the four centrifuges are working and can process the solids during normal operations. A third centrifuge is on stand-by and the fourth centrifuge is waiting for repairs.

At the 3:00 p.m. briefing, Chief Schwartz of the Baltimore County Fire Department provided the following information:

- The fire was out.
- They were cooling down the steel to prevent reignition.
- There is 6-8 inches of water on the first floor of the building.
- They are working on shutting down the fire suppression sprinklers.
- No foam was used in the firefighting effort.
- Baltimore City Police and Fire units will secure the area and start their investigation tomorrow morning.

After the briefing, Ms. Coffman and I walked the perimeter of the fire scene with Ms. Buie. Next to the centrifuge building is a building where dried sludge is loaded into trucks. Water was observed entering a storm drain inlet at the front of this building. We walked to the rear of the building and observed water accumulating at the bay doors. Mr. Turner met with us to look inside the building. There was water inside the building as well. He stated that there are trench drains across the rear of the building and that a pump sends the water from the trench drains back to the head of the plant. He confirmed that the pump was operating, but the volume of water entering the area overwhelmed the pump causing the water to flow through the building and exit out the front where it entered the storm drain inlet. He stated that the storm drain inlet outfalls to Bread & Cheese Creek which is a Use I & Use II waterway.

As water flowed down to this building from the fire scene, it also ran across vegetated areas where it entered culverts. We observed water exiting the culverts into a wetland area adjacent to Bread & Cheese Creek.

We followed the flow path of the water back up to the fire scene. We observed a hose hooked up from a potable water fire hydrant to a fire truck and water was flowing out from beneath the truck. A fire department employee stated that they were filling the truck and they continue to let it run once it is full to maintain the level in the truck.

The runoff water consisted of fire suppression water, potable water and dried sludge debris. An oily sheen was observed along the water's flow path. No dead or stressed vegetation was observed at this time. Impacts to Bread & Cheese Creek as well as Back River were undetermined at this time.

Power to the Synagro area was shut off during firefighting activities. Ms. Buie and Mr. Turner stated that once power is restored, the centrifuges will be operational. They reconfirmed that two centrifuges would be able to handle the solids from the WWTP.

After leaving the WWTP at 4:15 p.m. Ms. Coffman and I received photos from Ms. Buie at 4:56 p.m. via email. She stated that the fire suppression system was finally shut off. The pump was able to drain the water at the truck loading building.

There appears to be no impact to the liquid stream of the wastewater treatment process operations, but the solids processing will be affected, and an alternate plan needed. Since the Back River WWTP remains in violation of Environment Article Title 9 for failure to efficiently operate and maintain the treatment works at the facility, MDE requests the following information:

1. **Within five business days of receiving this report, provide MDE with a plan on how the WWTP plans to handle solids while the Synagro pelletizers are down.**

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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 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 410-537-3519 or by e-mail at kari.hanson@maryland.gov*.

Inspector: *Kari Hanson* 3/17/2023 Received by: _____
Kari Hanson /Date Signature/Date
kari.hanson@maryland.gov
410-537-3510

Print Name