



Maryland Department of Environment
Water and Science Administration
Compliance Program
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Inspector: Samantha Coffman
AI ID: 8449

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

Start Date/Time: March 16, 2023 02:15 PM
End Date /Time: March 16, 2023 04:50 PM

Media Type(s): NPDES Municipal Major Surface Water

Contact(s): Ronald Turner, Plant Superintendent, Back River WWTP
Andrea Buie-Branam, Chief of ERCS, Baltimore City DPW
Joe Hurt, Sr. Plant Manager, Synagro
Michael Hallmen, Chief of Wastewater Facilities Division, Baltimore City DPW

NPDES Municipal Major Surface Water

Permit / Approval Numbers: 15DP0581
NPDES Numbers: MD0021555
Inspection Reason: Follow-up (Non-Compliance)
Site Status: Active
Compliance Status: Noncompliance
Site Condition: Noncompliance
Recommended Action: Additional Investigation Required
Evidence Collected: Photos or Videos Taken, Visual Observation
Delivery Method: Email
Weather: Clear, Windy

Inspection Findings:

On this date, a follow-up inspection was conducted in response to the reported explosion and fire at the Synagro facility that occurred on 3/15/23.

Upon arrival, I met on site with Ronald Turner and Andrea Buie-Branam. Mr. Turner and Ms. Buie-Branam escorted me to the Synagro facility, where we met with Joe Hurt.

According to Joe Hurt, ATF has turned the pelletech building back over to Synagro and they have been cleared to go back into the building (they were able to re-enter as of 12:30 PM on 3/16/23). Mr. Hurt stated that they will not turn the power back on in the building until tomorrow (3/17/23). According to Andrea Buie-Branam, Risk Management will be conducting an investigation of the incident.

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According to Joe Hurt, Synagro staff add fluorescent green dye to the mineral oil used for heating in the loop system. Mr. Hurt stated that there is only about 5 gallons of dye in 12,000 gallons of thermal fluid in the system. According to Mr. Hurt, the dye is used to determine if there are any leaks in the loop system, and staff test/check the sludge with a blacklight for the dye at least once a week. On March 22, 2023, Mr. Hurt provided (via email to MDE) the Safety Data Sheet (acc. to OSHA HCS) for Uniglow® F4HF. Under “12 Ecological information,” the Safety Data Sheet states, “Water hazard class 1 (Self-assessment): slightly hazardous for water...Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.” Under “9 Physical and chemical properties,” the Safety Data Sheet lists the color as dark red. On March 27, 2023, Mr. Hurt stated via email, “We spoke to our supplier again and he said yes the dye is a dark red. Apparently, as it is heated it turns to the yellow/ green color and glows with the use of a black light.”

During inspection today, water was observed flowing from the pelletech building. An oily sheen and green-ish color were observed in the flow water along the flow path from the pelletech building towards the dried sludge loading building. South-east of the dried sludge loading building, some of the flow water was observed to be flowing to a stormwater management culvert. The stormwater management culvert drains toward a Nontidal Wetland area between the site and Bread & Cheese Creek (which is a Use I & Use II waterway). The flow leaving the site was observed to have an oily sheen. I informed Andrea Buie-Branam on site of the oily sheen observed leaving the site.

In front of the dried sludge loading building, no water was observed entering the storm drain inlet. The area in front of the building was observed to be dry. Trench drains were observed behind the building. According to Andrea Buie-Branam, the trenches direct flow back to the head of the plant. According to Ms. Buie-Branam, as soon as the fire suppression system was turned off, the pooled area at the trenches began draining/clearing out. An area of pooled water was observed behind the building past the trench drains.

Ronald Turner, Andrea Buie-Branam, and I then went into the centrifuge building to view and discuss the status of the centrifuges. During my discussion with Ronald Turner, Mr. Turner informed me of the following:

- Centrifuge #3 was running last night.
- Centrifuge #2 was running today from about 12-2 PM.
- When they shut down the centrifuge building during the explosion (on 3/15/23), the sludge built up.
- All the centrifuges are down right now because the building maintenance team has to clean up the sludge built up.
- They expect to have #1 and #3 running by the end of the day, but are still working on #2.
- Centrifuge #4 is waiting for parts/repair, which is a long-term issue due to supply issues.
- They plan to have all 3 centrifuges running about 5 to 7 days a week as needed until the amount/demand decreases.
- Synagro may bring portable centrifuges down from Delaware.
- Prostart will be supplying operators to help run the centrifuges until Jacob's Engineering takes over the sludge line.

After leaving the centrifuge building, Ronald Turner, Andrea Buie-Branam, and I met on site with Joe Hurt again near the pelletech building. According to Mr. Hurt, today (3/16/23) they found a potable water line in the pelletech building that was left on (they believe that yesterday, 3/15/23, it may have been stepped on during firefighting activities and the line broke), so they closed it. According to Mr. Hurt, they believe that this was the source of the water still draining from the building, and it should clear up now.

Andrea Buie-Branam informed Ronald Turner on site of the oily sheen observed by MDE at the stormwater management culvert outlet. Joe Hurt stated that they do not have booms at the Synagro facility to use. According to Ronald Turner, he will try to get a control (i.e. booms, etc.) from the spill kit to put at the pelletech building to deal with the oil coming out.

On March 24, 2023, Michael Hallmen provided (via email to MDE) the “Solids Handling Plan during Synagro Shutdown” (dated March 23, 2023 and signed by Michael Hallmen).

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. Report daily to MDE: the processing of solids, including the amount and class of solids processed onsite and the amount and class of solids that were transported offsite.

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The following violation was observed under Environment Article Title 9 for the Back River WWTP:

1. Failure to contain oily runoff from leaving the site and entering waters of the State.

To bring this site into compliance with Environment Article Title 9, the Back River WWTP should make the following corrections:

1. Responsible parties should ensure that all spilled materials are cleaned up immediately to prevent pollution of waters of the State.
2. Responsible parties should ensure that there is a SOP for responding to and managing spills and leaks. Responsible parties should follow spill protocols and immediate response for spills.

Contact this Inspector upon implementation of the requested corrective actions, reasonably necessary to bring this site into compliance. If the corrective actions cannot be completed within the prescribed time frame above, you should continue to advise the 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 by phone, 410-537-4188 or email, samantha.coffman1@maryland.gov.

STATE LAW PROVIDES FOR PENALTIES FOR VIOLATIONS OF MARYLAND ENVIRONMENT ARTICLE TITLE 9 FOR EACH DAY THE VIOLATION CONTINUES. THE MARYLAND DEPARTMENT OF THE ENVIRONMENT MAY SEEK PENALTIES FOR THE AFOREMENTIONED VIOLATIONS OF TITLE 9 ON THIS SITE FOR EACH DAY THE VIOLATION CONTINUES.

Inspector: *Samantha Coffman* 3/28/23
Samantha Coffman /Date
samantha.coffman1@maryland.gov
410-537-4188

Received by: _____

Signature/Date

Print Name