Maryland Department of Environment

Water and Science Administration
Compliance Program - Western Division
91 Eastern Blvd, Hagerstown, MD 21740
301-665-2850

AI ID: 1919 **Inspector:** Renato Cuizon

Site Name: **GenOn Chalk Point Generation Station**
Facility Address: 25100 Chalk Point Road, Aquasco, MD 20608
County: Prince George's County

Inspection Date: April 20, 2021 **Start Date/Time:** April 20, 2021**,** 10:00 AM
End Date /Time: April 20, 2021, 01:00 PM

Media Type(s): NPDES Industrial Stormwater

Contact(s): **Mark Nitz, P.E. Environmental Specialist** **Phone #: 301-843-4439**
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Justin P. Vick, PEPCO, Principal Env. Scientist **Office #: 202-872-3430**
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NPDES Industrial Stormwater

Permit / Approval Numbers: 12SR3417A
NPDES #: MD002658

Site Status: Active

Site Condition: Corrective Actions Recommended

Recommended Action: Additional Investigation Required

Inspection Reason: Complaint

Evidence Collected: Photos/Videos Taken, Visual Observation

Weather: Clear, 68°F, zero precipitation from the last 24 hours

Inspection Findings:

Chalk Point Generation Station Stormwater Discharge Site Inspection – April 20, 2021

This inspection is in response to a complaint from the Town Mayor of Eagle Harbor regarding a Chalk Point Generation Station Facility discharging stormwater runoff to flow into a natural stream (Coleman Creek) within the Town of Eagle Harbor. The complaint focuses on the stormwater runoff discharge coming from the Chalk Point Generation Station Facility which has contributed to the Town's flooding and soil erosion that is getting progressively worse with every storm.

During the site visit, I met Mr. James D. Crudup Sr, Mayor of Town of Eagle Harbor; Mr. Mark Nitz, P.E, Chalk Point Environmental Specialist; Mr. Justin P. Vick, PEPCO, Environmental

Specialist; Mr. Kenneth Krantz, Jr., Prince George's County Department of the Environment, Stormwater Management Division; and Mr. James Jones, Town of Eagle Harbor property owner.

The Town of Eagle is in the process of planning to upgrade their stormwater management system and discovered a discharge pipe from the neighboring Chalk Point Facility. The Town Mayor was not aware of the discharge pipe and requested MDE to investigate if the discharge pipe has permit to discharge runoff to the Town. The concerned Outfall is identified as Outfall # 15 located on the North side of the property's boundary fence between Chalk Point Generation Station and Town of Eagle Harbor property. The runoff discharges from this Outfall comes directly from the drainage area (29 acres) at the northern portion of PEPCO switchyard, located inside the Chalk Point Generation Station. The Chalk Point Generation Station holds a *General Permit for Discharges from Stormwater Associated with Industrial Activities*, Permit # 12SR3417A which was issued on September 18, 2020, and a renewed NPDES Industrial Surface Water Discharge Permit # MD0002658, and State Discharge Permit # 14-DP-0627. The new permit became effective on September 1, 2018 and valid until August 31, 2023. Under Special Conditions AA of the new Permit requires the Permittee to apply for coverage under the *General Permit for Discharges from Stormwater Associated with Industrial Activities*. Until Chalk Point is covered under the General Permit, Chalk Point was maintaining and implementing an up-to-date Stormwater Pollution Prevention Plan (SWP3), which was prepared in accordance with the requirements of the previous NPDES Industrial Surface Water Discharge Permit, 06-DP-0627.

Chalk Point property covers approximately 1,160 acres with a total of 111 acres of impervious surface area. The Chalk Point Generation Station is subject to the Chesapeake Bay Restoration requirements of 20% restoration of the impervious surface area. The Chalk Point Generation Station developed a Storm Water Pollution Prevention Plan (SWP3) in 1995 to comply with the storm water pollution prevention regulations. The plan was based on guidance provided in the EPA publication Storm Water Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices (EPA/832/R-92/006). The plan has been revised since the time to reflect the changes in operating procedures, regulatory language and permit revisions. The most recent SWP3 was revised on January 2020 as a requirement for the Notice of Intent to apply for a *General Permit for Discharges from Stormwater Associated with Industrial Activities*. The purpose of the SWP3 is to identify potential sources of pollution that may affect the quality of storm water discharges associated with industrial activity at Chalk Point. It also identifies best management practices (BMP's) to reduce these pollutants in storm water and outlines employee training program to ensure that employees are familiar and understand the Plan. The Permit also requires the Permittee to conduct quarterly visual inspections as well as comprehensive annual evaluations of all designated Outfalls in their SWP3. I reviewed the inspection records for the Chalk Point Stormwater Outfalls for the last three years and found that Outfalls # 15 & 16 used by PEPCO switchyards were not included in their checklist. I found out the that the Chalk Point Generation Station does not include the SMECO and PEPCO switchyards in their SWP3. These areas are managed by respective companies and are covered by Plans specific to those areas. I received a copy of the PEPCO SWP3. The PEPCO SWP3 was initially developed in 1997 and the last revision was done in December 2015. Mirant Mid-Atlantic purchased the Chalk Point Generation Station (excluding the switchyards) in December 2000. Mirant merged with RRI Energy in December 2010 to become GenOn Energy. NRG completed their merger with GenOn in 2012. On December 14, 2018, GenOn completed reorganization and emerges from Chapter 11

with new management team. GenOn is the current Permit Holder for the Chalk Point Power Generation Station.

PEPCO's switchyards at the Chalk Point facility consist of a 230/69 kV and a 500 kV site. The PEPCO switchyards are situated on approximately 140 acres. Storm water runoff from the switchyards is conveyed through a storm drain system and overland flow to the Patuxent River. The majority of the stormwater runoff from PEPCO switchyard is conveyed through Outfall 001 (the discharge canal) to the Patuxent River. There is no process wastewater flows associated with the PEPCO switchyard at Chalk Point. All processed/treated wastewater generated in the Chalk Point Facility are discharged via several Outfalls to Patuxent River and Swanson Creek. The PEPCO listed outfalls as detailed in the Stormwater Plan is not required to collect and analyzed samples resulting from one storm event within one year of the effective date of the permit. PEPCO conducts inspections and keep records directly from the potential source of a release at the transformer containment areas shown in SWP3. PEPCO also implements best management practices and good housekeeping. At this point, the concerned stormwater outfall has not been required to be inspected and monitored by either PEPCO or Chalk Point Generation Station as required for process wastewater flows.

Requirements for Facilities that Discharge through Municipal Separate Storm Sewer Systems (MS4, i.e., systems serving populations of 100,000 or more) must comply with applicable requirements of storm water management programs developed as part of the municipality's NPDES storm water permit provided that the facilities have been notified of such requirements. In addition, the facilities must provide operators of municipal separate storm sewer systems with copies of their SWP3 upon request. The Chalk Point switchyards (PEPCO and SMECO) discharge storm water to the Patuxent River. Although this river is not considered part of the County's storm drain system, the Chalk Point Generation Station switchyards are located in Prince George's County. Therefore PEPCO maybe required to comply with applicable requirements (if any) of the Prince Goerge's County storm water management program and provide a copy of PEPCO's SWP3 to the appropriate County officials upon request.

During the inspection, I noticed that the concerned Outfall #15 is in poor condition where gullies formed approaching the Outfall inlet of the 36 inches diameter culvert pipe. The culvert crosses the access road and discharges stormwater runoff approximately 50 feet below to the riprapped outfall, and then flows to the Coleman Creek. The Coleman Creek runs through both undeveloped and developed properties and makes its way to the Patuxent River via a culvert beneath Patuxent Blvd. The width and depth of the creek vary along its length, and changes over time, reaching its shallowest point about 40 to 50 feet from the river, which is part of Mr. James Jones' property. During the visit, I noticed some sand/silt deposits in the property and adjacent properties. Mr. Jones informed us that he noticed more significant addition of sand/silt deposits occurred sometime last year.

We walked along the Coleman Creek channels from Mr. Jones property back to the woods where the Outfall #15 discharges. I noticed some portion in the channel where bank erosions have occurred. I observed one particular area which is located before the convergence zone of the runoff discharge and Coleman Creek meets has significant slope erosion. This area has visible groundwater flowing from underneath. Overtime, the groundwater has weakened that portion of the

hill. On top of the eroded hill is the unpaved access road inside the Chalk Point Facility leading to the Outfall # 15. The side of the access road towards the fence line also has some rill erosions and need additional stabilization.

During the walk through, I did not see or smell any petroleum products like appearing in the creek, however I observed some areas in the creek that has brown-tea like color which is natural occurrence from decaying plant materials.

AREAS OF CONCERN – RECOMMENDED ACTIONS

Based on my visual observations I have determined that the stormwater runoff discharges from Chalk Point Facility used by PEPCO switchyard through Outfall #15 is likely contributing to the town's flooding from stormwater runoff and overtime has created adverse impact to the Coleman Creek. The additional stormwater runoff overwhelms Coleman Creek causing channel bank erosions and has resulted to siltation downstream. The areas of concern are not in violations of the current Discharge Permit, however, MDE advises Chalk Point Generation Station to address the following:

1. In coordination with PEPCO and consultation with Prince George's County Department of the Environment, Stormwater Management Division to come up with engineering solutions to ensure that Outfall #15 cease additional impact to Coleman Creek.
2. Consider updating Chalk Point Generation Station's SWP3 to include Outfalls #15 &16 used by PEPCO as part of *General Permit for Discharges from Stormwater Associated with Industrial Activities*' monitoring and inspection requirements.
3. Repair the gullies approaching Outfall #15 and stabilize slopes to prevent additional sediments be carried in the runoff.
4. Repair existing rill erosions and provide more stabilization on the side of the access road that leads to Outfall #15.
5. Coordinate with the Mayor of Town of Eagle Harbor to help resolve the adverse impacts from stormwater discharges from Chalk Point Facility to the Town and Coleman Creek.

The above recommended actions are shared responsibility between Chalk Point Generation Station and PEPCO. MDE requests a written response to this findings and recommendations within 14 days indicating what actions Chalk Point and PEPCO intend to take and in what time frame. Please note that the lower portion of the Town is still prone from coastal flooding and needs additional shoreline protection.

Inspector: _____ 04/28/2021
Renato Cuizon/Date
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301-665-2850

Received by: _____
Signature/Date

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