

Application Type Major Amendment
 Facility Type Industrial
 Major / Minor Minor

NPDES PERMIT FACT SHEET

Application No. PA0272591 A-1
 APS ID 1041611
 Authorization ID 1359057

Applicant and Facility Information			
Applicant Name	<u>Hickory Run Energy LLC</u>	Facility Name	<u>Hickory Run Energy Station</u>
Applicant Address	<u>7500 College Boulevard Suite 400</u> <u>Overland Park, KS 66210-4016</u>	Facility Address	<u>4900 Edinburg Road</u> <u>New Castle, PA 16102</u>
Applicant Contact	<u>Brock Shealy</u>	Facility Contact	<u>Jason Fox</u>
Applicant Phone	<u>(913) 754-5800</u>	Facility Phone	<u>(724) 840-9970</u>
Client ID	<u>298697</u>	Site ID	<u>765898</u>
SIC Code	<u>4911</u>	Municipality	<u>North Beaver Township</u>
SIC Description	<u>Trans. & Utilities - Electric Services</u>	County	<u>Lawrence</u>
Date Application Received	<u>June 11, 2021</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>August 11, 2021</u>	If No, Reason	<u></u>
Purpose of Application	<u>Amendment of Individual NPDES Permit.</u>		

Summary of Review
<p>This is a major amendment requesting to include the authorized non-stormwater discharges from the general permit for stormwater associated with industrial activity (PAG-03) to outfalls 002 & 003. Specifically, the language from Part C. Special Conditions 1. General. B.</p> <p>This facility uses grey water received from the New Castle Sanitation Authority, which is treated at Hickory Run and used as plant service water in steam turbine systems as well as the fire hydrants ("Service Water"). Based on the use of this service water, Hickory Run Energy Station has requested to include authorized non-stormwater discharges that will allow the use of this service water in hydrant flushings and be allowed as non-stormwater discharges. The service water contains no known pollutants at levels of concern.</p> <p>Part A effluent limitations for outfalls 002 & 003 will be modified to allow authorized non-stormwater discharges. "Type of Effluent" will be changed from "Stormwater" to "Stormwater Associated with Industrial Activity, Incidental Wind-Blown Mists from Cooling Towers & Potential, Non-Continuous Miscellaneous Wastewater". The following potential, non-continuous miscellaneous wastewater description will be incorporated below the limit table as a footnote:</p> <p>** Potential miscellaneous non-continuous wastewater from outfalls 002 & 003 consists of the following:</p> <ul style="list-style-type: none"> - Uncontaminated potable water that do not contain measurable concentrations of total residual chlorine, including water line flushings, emergency showers, safety eyewash stations, and unplanned releases/leaks; - Uncontaminated service water discharges, including from planned and unplanned fire protection activities, water line flushings, hydrant flushings, pavement wash waters, external building and equipment wash waters/power wash waters, and unplanned releases/leaks;

Approve	Return	Deny	Signatures	Date
X			Jon F. Bucha Jonathan F. Bucha / Project Manager	May 9, 2022 AJP 5/11/2022
X			Justin C. Dickey Justin C. Dickey, P.E. / Environmental Engineer Manager	May 20, 2022

Summary of Review

- Uncontaminated non-contact cooling water and miscellaneous low volume wastewater, including from unplanned releases/leaks from piping and containment;
- Uncontaminated condensate from air conditioners, coolers, chillers, and compressors;
- Uncontaminated ground water or spring water;

Due to the addition of the wind-blown mists from the cooling towers being indicated as a daily estimated discharge from these two outfalls, a design flow of 0.001 MGD will be assigned to both of these outfalls in the permit.

No additional monitoring requirements or effluent limits will be added to the permit as a result of the addition of these additional wastestreams.

The facility submitted a HRE hydrant flushing plan on September 13, 2021, which was determined to be adequate. A hydrant flushing was performed in October 2021 using the service water. Parameters from Part A of the NPDES permit for outfall 001 were analyzed before and after the hydrant flushing, where no exceedances were reported.

New Castle WWTP grey water effluent to the Mahoning River is treated at Hickory Run Energy Station to become "Service Water" through a beneficial use permit (General Permit No. WMGM049), which holds New Castle WWTP responsible to sell only effluent that meets their NPDES permit limits and has a ten year permit term. This treatment consists of running the grey water through a bio-treatment process called a moving bed bio-reactor (MBBR) for BOD removal and nitrification. It then passes through chlorine treatment and chemical filtration to remove particulates, pH adjustment, clarifier, filtration and then pumped to a holding tank. The water in this holding tank is known as "Treated Water", which is the cooling tower makeup water ultimately discharged through outfall 001. The treated water is then refined to become "Service Water" by passing it through ultra-filtration system and then reverse osmosis. This service water is held in a holding tank for fire water and other uses.

Hickory Run Energy Station is a natural gas-fired combined cycle electric generation facility, SIC Code: 4911, which is included under appendix H of the PAG-03 general stormwater permit for industrial activities.

Three chemical additive notification forms were received along with this NPDES permit amendment for Biosperse CN4200 Microbiocide, Ameroyal C610 Cleaning Treatment, and Sodium Bisulfate 38%. The department has no objections for the use of these chemicals as described, which were on the DEP's approved chemical additives list.

Sludge use and disposal description and location(s): Septage must be pumped and hauled off-site by a septage hauler for land application under a general permit authorized by DEP or disposal at an STP.

Subject client no. 298697 has 7 open violations in WMS as of 5/9/2022 with the NWRO Air Quality Program. It is currently being determined if there is a plan in place to resolve these open violations.