pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0011681**
Facility Type	**Industrial**	APS ID	**1097030**
Major / Minor	**Minor**	Authorization ID	**1455239**

NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

Applicant and Facility Information

Applicant Name	**PECO Energy Co.**	Facility Name	**PECO W Conshohocken Gas Plant**
Applicant Address	300 Front Street	Facility Address	300 Front Street
	W Conshohocken, PA 19428-2723		W Conshohocken, PA 19428-2723
Applicant Contact	Timothy Flanagan	Facility Contact	Noelle Kownurko
Applicant Phone	(267) 969-0054179	Facility Phone	(267) 916-9769
Client ID	337938	Site ID	237777
SIC Code	4932	Municipality	West Conshohocken Borough
SIC Description	Trans. & Utilities - Gas And Other Services Combined	County	Montgomery
Date Application Received	August 31, 2023	EPA Waived?	Yes
Date Application Accepted		If No, Reason	
Purpose of Application	Renewal.		

Summary of Review

The permittee has submitted a renewal application for their wastewater discharge from two outfalls into Gulph Creek (001) and Schuylkill River (002).

The facility known as Natural Gas Distribution facility.
The plant's operations are divided to 2 (two) seasons ("summer" and "winter"):

- "Summer" operations include piped Liquefied Natural Gas (LNG) to be stored in 15-million-gallon tank.
- "Winter" operations include vaporizing of LNG and distribution through pipe system to supplement the natural gas supply for heating. The frequency and duration of the vaporization process depends on demand.

Based on application's transmitting letter there are changes in the discharge's characteristics for Outfall 001 and 002 Discharge Flows:

Historically, the flow from Outfall 001 has been estimated at a consistent 20,000 gallons per day (0.02 million gallons per day [mgd]). All steady flow was made up of a combination of non-contact cooling water from the vaporizer system and groundwater flow. The Outfall also sees intermittent flow from semi-annual fire suppression system testing and stormwater run-off. The permanent decommissioning of the existing vaporizer system is ongoing, meaning that the steady flow from Outfall 001 will no longer contain any non-contact cooling water. This has resulted in an adjusted steady flow estimate of 5,000 (0.005 mgd) gallons per day from exclusively groundwater.

Additionally, Outfall 002 flow has historically been estimated at a consistent 26,000 gallons per day (0.026 mgd) when discharge occurs. The water discharged through Outfall 002 is almost exclusively non-contact cooling water from the cooling tower blowdown when the Plant is liquefying. The cooling towers typically operate a minimum of one month per year but can operate up to nine months per year if needed. Due to adjusted Facility operating parameters, the estimated design flow from Outfall 002 has been re-estimated at a consistent 44,000 gallons per day (0.044 mgd) during periods when the Facility is

Approve	Deny	Signatures	Date
X		Begay Omuralieva Begay Omuralieva / Environmental Engineering Specialist	July 16, 2024
X		Pravin Patel Pravin C. Patel, P.E. / Environmental Engineer Manager	07/16/2024

Summary of Review

liquefying.

There are two chemical additives (Stabrex ST70 and 3DT230) that were used "as needed" for microorganism control and cooling Water treatment in the cooling towers which discharges to Outfall 002. Two chemical usage notification forms are submitted with the renewal application. The usage rate for Stabrex ST70 is controlled by daily maximum of 0.2 mg/l of TRO and for 3DT230 is based on calculated 18,170 lbs/day (PA DEP Toxic management Spreadsheet is used for calculations).

The current permit consists of monitoring for TDS along with all previously established limits and effluent monitoring of the parameters of concern listed on pages 7-8 of this factsheet.

DRBC 's input has been requested based on the previous permit's Part C I. Other Requirements – E:

E. Please note that Total Dissolved Solids (TDS) concentrations in the effluent at Outfall 002 is above 1500 mg/l. PA Chapter 93.7 has specific Water Quality Criteria for TDS 500 mg/l to be applied at Public Water Supply intake. Also, Delaware River Basin Commission (DRBC) has discharge requirements for TDS not to exceeds 133% of the background concentrations of the receiving stream unless waiver is granted by DRBC. It is DEP's recommendation to get waiver on the 133% requirements by requesting TDS determination from DRBC, otherwise numerical limit of 1000 mg/l will be established at the next permit renewal.

DRBC's Project Review Manager Mr. Kovach has replied with:
The discharge flow of the facility meets the DRBC exemption threshold for review for industrial wastewater treatment facilities (<0.05 MGD). DRBC's policy is that only discharges that DRBC regulates in the Schuylkill Watershed get a TDS limit. I am fine with continued TDS monitoring based on specific conductivity and appropriate factor just to keep an eye on things. Otherwise, DRBC has no comments on the permit.

Therefore, all previously established limits and monitoring requirements are proposed in the draft permit for both outfalls.

ACT 14 Notification: Montgomery County Board of Commissioners – September 1, 2023
West Conshohocken Borough - September 1, 2023

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.005
Latitude	40Âº 4' 24.50"	Longitude	-75Âº 19' 0.21"
Quad Name		Quad Code	
Wastewater Description:	Groundwater, Stormwater		
Receiving Waters	Gulph Creek (WWF, MF)	Stream Code	00934
NHD Com ID	25985430	RMI	0.1200
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-F	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	FLOW REGIME MODIFICATION, FLOW REGIME MODIFICATION, METALS, SILTATION		
Source(s) of Impairment	CHANNELIZATION, HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION, SOURCE UNKNOWN, URBAN RUNOFF/STORM SEWERS		
TMDL Status		Name	

Changes Since Last Permit Issuance: flow is reduced due to vaporizer system being deconditioned.

Other Comments: flow rate is 0.005 MGD

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	.044
Latitude	40Âº 4' 33.10"	Longitude	-75Âº 18' 58.47"
Quad Name		Quad Code	
Wastewater Description:	Noncontact Cooling Water (NCCW)		
Receiving Waters	Schuylkill River (WWF, MF)	Stream Code	00833
NHD Com ID	133228929	RMI	20.9600
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-F	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final	Name	Schuylkill River PCB TMDL

Changes Since Last Permit Issuance: Flow changed from 0.026 to 0.044 MGD

Compliance History

DMR Data for Outfall 001 (from May 1, 2023 to April 30, 2024)

Parameter	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23
Flow (MGD) Average Monthly	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.02	0.02	0.02	0.02	0.02
Flow (MGD) Daily Maximum	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.02	0.02	0.02	0.02	0.02
pH (S.U.) Instantaneous Minimum	7.64	7.22	7.61	8.04	7.36	7.43	6.73	8.3	7.5	7.48	7.6	7.7
pH (S.U.) Instantaneous Maximum	7.64	8.11	7.61	8.04	7.36	7.43	6.73	8.3	7.5	7.96	7.6	7.7
TRO (mg/L) Semi-Annual Average					0.03						< 0.02	
TRO (mg/L) Instantaneous Maximum					0.03						< 0.02	
Conductivity (µmhos/cm) Daily Maximum		2890			517			1075			987	
Temperature (ºF) Instantaneous Maximum	55.2	53	49.4	50.9	56.2	60.4	64.2	75.3	73.0	71.4	66.2	60.2
TSS (mg/L) Daily Maximum					42.4						18.2	
Total Dissolved Solids (mg/L) Daily Maximum		1936			346			720			661	
Oil and Grease (mg/L) Daily Maximum					< 5.0						< 5.6	

DMR Data for Outfall 002 (from May 1, 2023 to April 30, 2024)

Parameter	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23
Flow (MGD) Average Monthly								0.044				
Flow (MGD) Daily Maximum								0.044				

pH (S.U.) Instantaneous Minimum								6.57				
pH (S.U.) Instantaneous Maximum								7.67				
TRO (mg/L) Average Monthly								0.06				
TRO (mg/L) Instantaneous Maximum								0.1				
Conductivity (µmhos/cm) Average Monthly								2330				
Temperature (ºF) Instantaneous Maximum								81				
Total Dissolved Solids (mg/L) Average Monthly								1715				

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Daily Maximum	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
TRO	XXX	XXX	XXX	0.2 SEMI AVG	XXX	0.5	See Permit	Grab
Conductivity (µmhos/cm)	XXX	XXX	XXX	Report	XXX	XXX	1/quarter	Measured
Temperature (ºF)	XXX	XXX	XXX	XXX	XXX	110	1/month	I-S
TSS	XXX	XXX	XXX	Report	XXX	XXX	1/6 months	Grab
Total Dissolved Solids	XXX	XXX	XXX	Report	XXX	XXX	1/quarter	Calculation
Oil and Grease	XXX	XXX	XXX	Report	XXX	XXX	1/6 months	Grab

Compliance Sampling Location: Outfall 001

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 002, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
TRO	XXX	XXX	XXX	0.2	XXX	0.5	1/month	Grab
Conductivity (µmhos/cm) Apr 1 - Oct 31	XXX	XXX	XXX	Report	XXX	XXX	1/month	Measured
Temperature (ºF)	XXX	XXX	XXX	XXX	XXX	110	1/month	I-S
Total Dissolved Solids Apr 1 - Oct 31	XXX	XXX	XXX	Report	XXX	XXX	1/month	Calculation

Compliance Sampling Location: Outfall 002