

Application Type Renewal Facility Type Industrial Maior / Minor Minor

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

 Application No.
 PA0011231

 APS ID
 1021499

 Authorization ID
 1323474

Applicant and Facility Information

-, -	Facility Name	Farm				
920 Cherry Tree Road	Facility Address	920 Cherry Tree Road				
Aston, PA 19014-9997	_	Aston, PA 19014-9997				
Christine Shorokey	Facility Contact	John Bowen				
(610) 364-8187	Facility Phone	(484) 816-3303				
298743	Site ID	502590				
4613	Municipality	Upper Chichester Township				
Trans. & Utilities - Refined Petroleum Pipelines	County	Delaware				
ed August 12, 2020	EPA Waived?	Yes				
ed	If No, Reason					
	920 Cherry Tree Road Aston, PA 19014-9997 Christine Shorokey (610) 364-8187 298743 4613 Trans. & Utilities - Refined Petroleum Pipelines ed August 12, 2020	920 Cherry Tree Road Facility Address Aston, PA 19014-9997 Facility Contact Christine Shorokey Facility Contact (610) 364-8187 Facility Phone 298743 Site ID 4613 Municipality Trans. & Utilities - Refined Petroleum County Pipelines County ed August 12, 2020 EPA Waived? If No, Reason If No, Reason				

Summary of Review

The applicant requests renewal of an NPDES permit to discharge stormwater runoff and treated groundwater from Chelsea Pipeline Station and Tank Farm to Boozers Run, a tributary to Marcus Hook Creek in Upper Chichester Township, Delaware County.

The Chelsea Station is spread over an area of 153.732 acres of land in Aston Township, Bethel Township and Upper Chichester Township. Most of the area and the outfalls are located in Upper Chichester Township. Therefore, the station is considered located in Upper Chichester Township.

Based on the DMR review, the discharge is in compliance with the permit limits and the facility is operating well according to the Operations Section. There are no changes in the treatment units, influent quality, and the stream designation.

The outfalls at the site are discussed below:

Outfall 001: discharges stormwater from pipeline manifold area. The stormwater from the pipeline manifold area flows to an oil water separator and eventually discharges to Boozers Run. The capacity of the separator is 700 gpm.

Outfall 002: discharges stormwater from tank dike areas. Stormwater from tank dikes 704, 706 and 707 flows to a 700 gpm oil water separator and stormwater from tank dike 715 flows to a 110 gpm oil water separator. These two oil water separators discharge to Pond no 2. Eventually the overflow from Pond no. 2 discharges to Boozers Run.

Outfall 003: discharges stormwater from tank dike areas and treated groundwater from the groundwater treatment system at the site. Stormwater from tank dikes 700, 701, 702, 703, 708, 709, 710, and 711 flows to two oil water separators in parallel and then to Pond no. 3. The capacities of the oil water separators are 700 gpm each. The overflow from the Pond discharges

Approve	Deny	Signatures	Date
Х		Sara Abraham Sara Reji Abraham, E.I.T. / Project Manager	August 27, 2020
		Pravin C. Patel, P.E. / Environmental Engineer Manager	

Summary of Review

to Boozers Run.

The parameters in the existing permit; Flow (monitoring), Oil and Grease (15 mg/l) and TRPH (15 mg/l) are recommended for the new permit. TSS monitoring requirement and pH limit (6.0 to 9.0 SU) are also included in the new permit. These are appropriate and consistent with the requirements of similar type of discharges.

Monitoring Point 103: discharges treated groundwater to the stormwater drainage system as part of the ongoing environmental cleanup activities at the site. The groundwater treatment system consists of a dual phase vacuum extraction system (DPVES) to extract vapor and groundwater from 12 extraction wells. Total recovered groundwater is pumped directly to the DPVES via underground HDPE lines for processing through the oil-water separator and then to a transfer tank. From the transfer tank the groundwater is pumped to two sediment bag filters and then to a low-profile air stripper. The treated groundwater from the air stripper is pumped to two 500-pound liquid phase GAC vessels in series with final effluent discharged to the tank 703 secondary containment dike which ultimately leads to Boozers Run through outfall 003.

The existing limits are recommended to continue as follows:

Parameter	<u>Limit (mg/l)</u>
рН	6.0 to 9.0 SU
TSS	30
Oil and Grease	15
Dissolved Iron	7.0 (Inst. Max.)
Ethylbenzene	Report
Benzene	0.001
Total BTEX	0.1
Toluene	Report
Total Xylenes	Report
MTBE	Report

These requirements are consistent with the General Permit requirements for discharges from Petroleum (Gasoline) Contaminated Groundwater Remediation Systems.

The receiving stream is not named on the topographical map. However, based on the information provided, it is called Boozers Run, a tributary to Marcus Hook Creek and is classified as warm water and migratory fishery.

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.

Act 14 Notifications:

Upper Chichester Township	-	July 10, 2020
Bethel Township	-	July 8, 2020
Aston Township	-	July 7, 2020
Delaware County	-	July 7, 2020

Permit Conditions:

- A. Acquire Necessary Property Rights
- B. Proper Sludge Disposal

Summary of Review

- C. WQM Permit Requirement D. BAT/ELG Reopener
- E. BTEX Measurement
- F. No Stripper Tower Cleaning WaterG. Continuous Operation of Treatment Facility
- H. Stormwater RequirementsI. Petroleum Marketing Terminals Requirements

Discharge, Receiving	g Waters and Water Supply Inform	mation			
Outfall No. <u>001</u> Latitude <u>39º 5</u> Quad Nama Ma	1' 22.96"	Design Flow (MGD) Longitude	0 75º 27' 3.45" 		
		Quad Code	2042		
wastewater Descrip	ption: Stormwater				
Receiving Waters	Unnamed Tributary to Marcus Hook Creek (Boozers Run) (WW MF)	F, Stream Code	00514		
NHD Com ID	25602641	RMI	1.33		
Watershed No.	3-G	Chapter 93 Class.	WWF, MF		
Assessment Status	Impaired				
Cause(s) of Impairn	nent cause unknown, flow regi	me modification, habitat alteration	ons, siltation		
Source(s) of Impair	ment habitat modification - othe	er than hydromodification, urban	runoff/storm sewers		

Discharge, Receiving	g Waters and Water Supply Information	on			
Outfall No. 002		Desian Flow (MGD)	0		
Latitude 39° 5	1' 25.30"	Longitude	-75º 27' 8.32"		
Quad Name Ma	arcus Hook	Quad Code	2042		
Wastewater Descrip	ption: Stormwater				
Receiving Waters	Unnamed Tributary to Marcus Hook Creek (Boozers Run) (WWF, MF)	Stream Code	00514		
NHD Com ID	25602871	RMI	1.51		
Watershed No.	3-G	Chapter 93 Class.	WWF		
Assessment Status	Impaired				
Cause(s) of Impairn	nent cause unknown, flow regime n	nodification, habitat alteration	ons, siltation		
Source(s) of Impair	ment habitat modification - other that	n hydromodification, urban	runoff/storm sewers		

ischarge, Receiv	ing Water	s and Water Supply Information	on	
Outfall No. 00	3		Design Flow (MGD)	.00864
Latitude <u>39</u>	9º 51' 22.95" Marcus Hook		Longitude	-75º 27' 4.11"
Quad Name			Quad Code	2042
Wastewater Des	cription:	Stormwater and treated ground	d water*	
	Unna	med Tributary to Marcus		
Receiving Waters	Hook s <u>MF)</u>	Creek (Boozers Run) (WWF,	Stream Code	_00514
Receiving Water	Hook s <u>MF)</u> 25602	Creek (Boozers Run) (WWF,	Stream Code RMI	00514
Receiving Water NHD Com ID Watershed No.	Hook s <u>MF)</u> <u>25602</u> <u>3-G</u>	Creek (Boozers Run) (WWF, 2641	Stream Code RMI Chapter 93 Class.	00514 1.7 WWF
Receiving Water NHD Com ID Watershed No. Assessment Stat	Hook MF) 25602 3-G	Creek (Boozers Run) (WWF, 2641 Impaired	Stream Code RMI Chapter 93 Class.	00514 1.7 WWF
Receiving Water NHD Com ID Watershed No. Assessment Stat Cause(s) of Impa	Hook MF) 25602 3-G tus airment	Creek (Boozers Run) (WWF, 2641 Impaired cause unknown, flow regime n	Stream Code RMI Chapter 93 Class. nodification, habitat alteration	00514 1.7 WWF ons, siltation

*Groundwater from dual phase vacuum extraction system via IMP 103

Compliance History

DMR Data for Outfall 001 (from July 1, 2019 to June 30, 2020)

Parameter	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19
Flow (GPD)												
Daily Maximum	00			00			00					
Oil and Grease (mg/L)												
Average	< 5.00			< 5			< 5.00					
Oil and Grease (mg/L)												
Instantaneous												
Maximum	< 5.00			< 5			< 5.00					
TRPH (mg/L)												
Average	< 5.0			< 5			< 5.0					
TRPH (mg/L)												
Instantaneous												
Maximum	< 5.0			< 5			< 5.0					

DMR Data for Outfall 002 (from July 1, 2019 to June 30, 2020)

Parameter	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19
Flow (GPD)												
Daily Maximum	00			00			50					
Oil and Grease (mg/L)												
Average	< 5.00			< 5			< 2.1					
Oil and Grease (mg/L)												
Instantaneous												
Maximum	< 5.00			< 5			< 2.1					
TRPH (mg/L)												
Average	< 5.0			< 5.0			< 2.1					
TRPH (mg/L)												
Instantaneous												
Maximum	< 5.0			< 5.0			< 2.1					

DMR Data for Outfall 003 (from July 1, 2019 to June 30, 2020)

Parameter	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19
Flow (GPD)												
Daily Maximum	00			00			50					
Oil and Grease (mg/L)												
Average	< 5.0			< 5			< 2.2					

NPDES Permit Fact Sheet Chelsea Pipeline Station and Tank Farm

Oil and Grease (mg/L)								
Instantaneous								
Maximum	< 5.0		< 5		< 2.2			
TRPH (mg/L)								
Average	< 5.00		< 5		< 2.2			
TRPH (mg/L)								
Instantaneous								
Maximum	< 5.00		< 5		< 2.2			

DMR Data for Outfall 103 (from July 1, 2019 to June 30, 2020)

Parameter	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19
Flow (GPD)												
Average Monthly	2076.90	944.13				419.33	425.56	723.26	2043.37	2456.55	2582.1	2988.92
pH (S.U.)												
Instantaneous												
Minimum	6.6	6.4				6.78	6.35	6.0	6.5	6.79	6.7	6.9
pH (S.U.)												
Instantaneous												
Maximum	6.9	6.7				6.89	6.5	6.5	6.8	6.89	6.8	7.4
TSS (mg/L)												
Average Monthly	< 2.5	< 2.5				< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
TSS (mg/L)												
Instantaneous												
Maximum	< 2.5	< 2.5				< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Oil and Grease (mg/L)												
Average	< 1.4						< 1.4					
Oil and Grease (mg/L)												
Instantaneous												
Maximum	< 1.4						< 1.4					
Dissolved Iron (mg/L)												
Instantaneous												
Maximum	< 0.0768	< 0.0768				< 0.0768	< 0.0768	< 0.0264	< 0.0264	< 0.111	< 0.111	< 0.111
Ethylbenzene (mg/L)	<	<							<			
Average Monthly	0.00030	0.00030				< 0.0003	< 0.0003	< 0.0003	0.00030	< 0.0003	< 0.0003	< 0.0003
Ethylbenzene (mg/L)												
Instantaneous	<	<							<			
Maximum	0.00030	0.00030				< 0.0003	< 0.0003	< 0.0003	0.00030	< 0.0003	< 0.0003	< 0.0003
Benzene (mg/L)	<	<							<		<	<
Average Monthly	0.00020	0.00020				< 0.0002	< 0.0002	< 0.0002	0.00020	< 0.0002	0.00009	0.00009
Benzene (mg/L)												
Instantaneous	<	<							<		<	<
Maximum	0.00020	0.00020				< 0.0002	< 0.0002	< 0.0002	0.00020	< 0.0002	0.00009	0.00009

NPDES Permit Fact Sheet Chelsea Pipeline Station and Tank Farm

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Total BTEX (mg/L)	<	<		<	<	<	<	<	<	<
Average Monthly	0.00153	0.00153		0.00153	0.00153	0.00153	0.00153	0.00153	0.00092	0.00092
Total BTEX (mg/L)										
Instantaneous	<	<		<	<	<	<	<	<	<
Maximum	0.00153	0.00153		0.00153	0.00153	0.00153	0.00153	0.00153	0.00092	0.00092
Toluene (mg/L)	<	<		<	<	<	<	<	<	<
Average Monthly	0.00038	0.00038		0.00038	0.00038	0.00038	0.00038	0.00038	0.00025	0.00025
Toluene (mg/L)										
Instantaneous	<	<		<	<	<	<	<	<	<
Maximum	0.00038	0.00038		0.00038	0.00038	0.00038	0.00038	0.00038	0.00025	0.00025
Total Xylenes (mg/L)	<	<		<	<	<	<	<	<	<
Average Monthly	0.00065	0.00065		0.00065	0.00065	0.00065	0.00065	0.00065	0.00028	0.00028
Total Xylenes (mg/L)										
Instantaneous	<	<		<	<	<	<	<	<	<
Maximum	0.00065	0.00065		0.00065	0.00065	0.00065	0.00065	0.00065	0.00028	0.00028
MTBE (mg/L)	<	<		<	<	<	<	<	<	<
Average Monthly	0.00047	0.00047		0.00047	0.00047	0.00047	0.00047	0.00047	0.00013	0.00013
MTBE (mg/L)										
Instantaneous	<	<		<	<	<	<	<	<	<
Maximum	0.00047	0.00047		0.00047	0.00047	0.00047	0.00047	0.00047	0.00013	0.00013

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" (362-0400-001), SOPs and/or BPJ.

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

		Monitoring Requirements						
Paramotor	Mass Units	(lbs/day) ⁽¹⁾		Concentrat	Minimum ⁽²⁾	Required		
Farameter	Average Monthly	Average Weekly	Minimum	Daily Maximum Maximum		Instant. Maximum	Measurement Frequency	Sample Type
Flow (GPD)	ХХХ	Report Daily Max	xxx	XXX	xxx	xxx	1/quarter	Measured
рН (S.U.)	ХХХ	xxx	6.0 Inst Min	XXX	XXX	9.0	1/quarter	Grab
TSS	ххх	xxx	xxx	Report	xxx	ххх	1/quarter	Grab
Oil and Grease	ххх	xxx	xxx	15 Avg Qrtly	XXX	30	1/quarter	Grab
TRPH	XXX	XXX	XXX	15.0 Avg Qrtly	XXX	30.0	1/quarter	Grab

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

		Monitoring Requirements						
Baramotor	Mass Units	(lbs/day) ⁽¹⁾		Concentrat	Minimum ⁽²⁾	Required		
Faiametei	Average Monthly	Average Weekly	Minimum	Daily Maximum	Maximum	Instant. Maximum	Measurement Frequency	Sample Type
	<u>,</u>	Report						
Flow (GPD)	XXX	Daily Max	XXX	XXX	XXX	XXX	1/quarter	Measured
pH (S.U.)	xxx	xxx	6.0 Inst Min	xxx	xxx	9.0	1/quarter	Grab
TSS	XXX	XXX	XXX	Report	XXX	XXX	1/quarter	Grab
Oil and Grease	XXX	XXX	XXX	15 Avg Qrtly	XXX	30	1/quarter	Grab
TRPH	xxx	XXX	XXX	15.0 Avg Qrtly	XXX	30.0	1/quarter	Grab

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" (362-0400-001), SOPs and/or BPJ.

Outfall 003, Effective Period: Permit Effective Date through Permit Expiration Date.

		Monitoring Requirements						
Baramotor	Mass Units	(lbs/day) ⁽¹⁾		Concentrat	Minimum ⁽²⁾	Required		
Faiametei	Average Monthly	Average Weekly	Minimum	Daily Maximum	Maximum	Instant. Maximum	Measurement Frequency	Sample Type
Flow (GPD)	xxx	Report Daily Max	XXX	XXX	XXX	XXX	1/quarter	Measured
рН (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/quarter	Grab
TSS	xxx	xxx	xxx	Report	xxx	xxx	1/quarter	Grab
Oil and Grease	xxx	xxx	xxx	15 Avg Qrtly	XXX	30	1/quarter	Grab
TRPH	xxx	xxx	xxx	15.0 Avg Qrtly	XXX	30.0	1/quarter	Grab

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" (362-0400-001), SOPs and/or BPJ.

Monitoring Point 103, Effective Period: Permit Effective Date through Permit Expiration Date.

		Monitoring Requirements						
Baramotor	Mass Units	(lbs/day) ⁽¹⁾		Concentrat	tions (mg/L)		Minimum ⁽²⁾	Required
Farameter	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum	Measurement Frequency	Sample Type
Flow (GPD)	Report	Report Daily Max	xxx	XXX	XXX	XXX	2/month	Measured
рН (S.U.)	XXX	xxx	6.0 Inst Min	xxx	xxx	9.0	2/month	Grab
TSS	XXX	xxx	xxx	30	xxx	75	2/month	Grab
Oil and Grease	xxx	xxx	xxx	15 SEMI AVG	xxx	30	1/6 months	Grab
Dissolved Iron	XXX	xxx	ХХХ	xxx	xxx	7.0	2/month	Grab
Ethylbenzene	XXX	XXX	ххх	Report	XXX	Report	2/month	Grab
Benzene	XXX	XXX	ххх	0.001	XXX	0.0025	2/month	Grab
Total BTEX	XXX	ххх	ххх	0.1	ххх	0.25	2/month	Grab
Toluene	XXX	ххх	ххх	Report	ххх	Report	2/month	Grab
Total Xylenes	XXX	XXX	ххх	Report	XXX	Report	2/month	Grab
МТВЕ	XXX	XXX	XXX	Report	XXX	Report	2/month	Grab