pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0096474**
Facility Type	**Storm Water**	APS ID	**1036563**
Major / Minor	**Minor**	Authorization ID	**1350184**

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

Applicant and Facility Information

Applicant Name	**Buckeye Terminals, LLC**	Facility Name	**Coraopolis/Pittsburgh Terminal**
Applicant Address	3200 University Boulevard	Facility Address	3200 University Boulevard
	Coraopolis, PA 15108-2531		Coraopolis, PA 15108-2531
Applicant Contact	Shawn Roberts	Facility Contact	Shawn Roberts
Applicant Phone	(412) 299-7033	Facility Phone	(412) 299-7033
Client ID	241053	Site ID	244671
SIC Code	4226	Municipality	Coraopolis Borough
SIC Description	Trans. & Utilities - Special Warehousing And Storage, Not Elsewhere Classified	County	Allegheny
Date Application Received	April 1, 2021	EPA Waived?	Yes
Date Application Accepted	April 20, 2021	If No, Reason	N/A

Purpose of Application: Renewal of NPDES permit PA0096474.

Summary of Review

Background

The Department received a timely NPDES renewal application from Buckeye Terminals, LLC (Buckeye) for their Coraopolis/Pittsburgh Terminal (Terminal) on April 1, 2021. The current permit was issued on September 22, 2016 and expires September 30, 2021. Half of the facility was formerly owned and operated by BP Products North America prior to the purchase of the adjacent property by Buckeye in 2011. The western half of the property is in Moon Township and the eastern half is in Coraopolis Borough in Allegheny County along the Ohio River.

Facility Description

The facility's primary Standard Industrial Classification (SIC) Code is 4226 – Special Warehousing and Storage, Not Elsewhere Classified. The secondary listed SIC Codes are 5171 – Petroleum Bulk Stations and Terminal Establishments and 4613 – Refined Petroleum Pipeline. The facility consists of one barge dock 350' long that contains process piping designed to load or offload petroleum products to/from barges through one 10-inch pipeline. There are two incoming pipelines and two pumping units. From the 10-inch pipeline, the products travel to a tank/pump distribution manifold and into aboveground storage tanks. The facility has a total of fourteen (14) large storage tanks with a total capacity of 913,275 barrels. The tanks are located in one of two clay lined earthen dikes. The stored petroleum products are loaded into transport trucks from one of two loading racks (seven loading bays) for distribution to offsite customers. Refined petroleum products include gasoline and diesel fuel. Additives, which are blended with refined products at the loading rack, are also

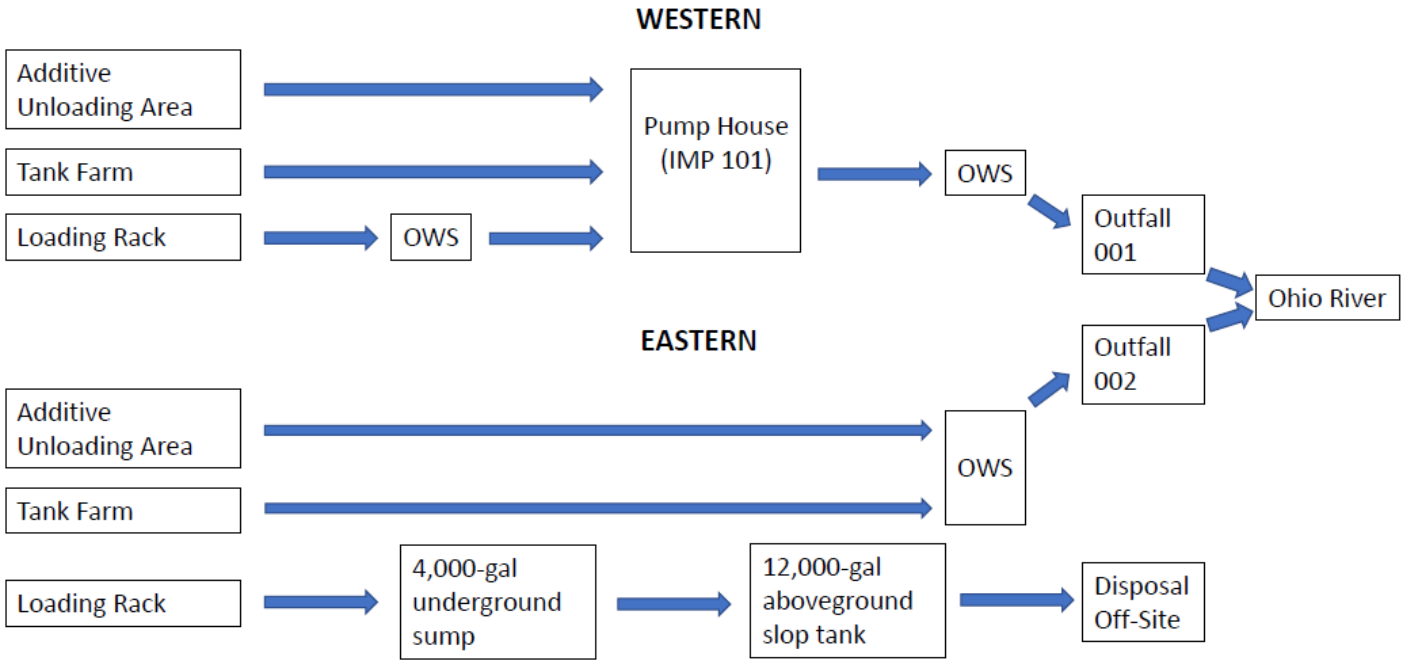
Approve	Deny	Signatures	Date
X		Nicole H. Benoit, P.E. / Environmental Engineering Specialist	November 19, 2021
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	November 19, 2021

Summary of Review

stored onsite. The facility performs hydrostatic testing only occasionally and discharges stormwater intermittently based on weather conditions. There are three API oil/water separators across the property. There is no rail car operations or vehicle washing at the facility.

Stormwater Drainage and Outfall Description

The Terminal has two Outfalls, 001 and 002. The following is a stormwater flow diagram provided by the permittee as part of the renewal application.



The western side of the facility discharges through Outfall 001. The western additive unloading area precipitation flows into a series of catch basins and underground piping to a sump pit in the pump house. Stormwater in the western tank diked containment area (Tanks 201 through 209) flows to a catch basin in the southwestern edge of the containment area. A valve must be manually opened to allow the stormwater to flow on to the sump pit. The western loading rack is fully roofed and so precipitation does not contact the ground. The loading rack roof water flows to an oil/water separator where oil is skimmed for offsite disposal. The outlet of the separator enters the sump pit in the pump house and combines with the additive unloading area and tank farm precipitation. This combined stormwater will be sampled in the pit in the pump house (IMP 101). Currently, the stormwater was sampled from a difficult to access and pit just before the oil/water separator. After reviewing with the permittee, it was determined to be best to move the location to the pump house where flow can be measured based on the pump output and sampling will not be of a stagnant dip-type. From the pump house, stormwater flows through an underground pipe to another oil/water separator on the northeast edge of the site and discharges through Outfall 001 overland at the bank of the Ohio River.

The eastern side of the facility discharges through Outfall 002. The petroleum products loading rack is roofed to prevent stormwater contact with the rack and ground below. Stormwater at the eastern additive unloading area flows over pavement towards a series of catch basins and then on to an 8,000-gallon oil/water separator (OWS). Stormwater in the diked containment area (Tanks 1 through 7) flows to a catch basin in the eastern corner of the diked area and through an underground storm drain. A valve in the southern dike wall must be manually opened to release the water to the 8,000-gallon OWS. The combined stormwater then flows northeast through Outfall 002 and discharges over riprap in a drainage ditch towards the Ohio River. Incidental stormwater at the eastern loading rack is collected in a sump and pumped to a slop tank for offsite disposal of the oil and oily water.

Post Construction Stormwater Management (PCSM) Best Management Practices (BMPs) are maintained in accordance with the approved Erosion and Sedimentation Control Plan from the 2016 construction project that expanded the containment

Summary of Review

dike. The inside of the diked containment area is crushed stone and a non-erosive cover is maintained on the expanded berm. The diked containment areas are the only unpaved portions of the terminal.

Hydrostatic Testing Discharge

On occasion the facility performs hydrostatic testing for the installation and maintenance of the storage tanks in diked containment. Tanks previously containing product will be cleaned, to the best practicable extent, prior to hydrostatic testing. The wash/rinse water and tank bottom water will not be discharged to the diked area and instead disposed of offsite. Hydrostatic discharge wastewater bypasses the oil/water separators so as not to create a hydraulic overload and displace separated oil and/or solids into the final discharge.

Hydrostatic testing water from the western diked containment area will be monitored within the dike at IMP 102, and testing water from the eastern diked containment area will be monitored within the dike at IMP 201. The IMP 102 wastewater discharges via Outfall 001 and ties in past the IMP 101 sampling point. IMP 201 discharges through Outfall 002.

Receiving Water Designation

The Ohio River is designated for two water uses, a Warm Water Fishery (WWF) and navigation, per Pa Code Chapter 93.9w. Listed as an exception to specific criteria is the ORSANCO Pollution Control Standards which may be more stringent than the sitewide criteria established in 25 Pa. Chapter 93. The Ohio River is impaired for dioxin, pathogens, and polychlorinated biphenyls (PCBs) with no known source. A TMDL was established on March 6, 2001 for PCBs and Chlordane in the Ohio River from the Point in Pittsburgh (confluence of the Allegheny River and Monongahela River) to the State Border of Ohio.

Additional Information

The permittee submitted Act 14 notifications to Allegheny County Manager, Borough of Coraopolis Council President, and Moon Township Assistant Manager/Planner, all of which were dated March 19, 2021 and postmarked March 22, 2021. Certified mail receipts were returned to the permittee and no comments were received.

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.

Conclusion

It is recommended that a draft permit be issued for public comment for renewal of NPDES permit PA0096474.

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	**001**	Design Flow (MGD)	Precipitation Induced
Latitude	40º 31' 41"	Longitude	-80º 10' 49"
IMP No.	**101**	Design Flow (MGD)	Precipitation Induced
Latitude	40º 31' 35.6"	Longitude	-80º 10' 49.85"
IMP No.	**102**	Design Flow (MGD)	4.7
Latitude	40º 31' 41"	Longitude	-80º 10' 49"
Quad Name	Ambridge	Quad Code	1404
Wastewater Description:	Stormwater (001, IMP 101) and Hydrostatic Test Water (IMP 102)		
NHD Com ID	134396149	RMI	969.5
Outfall No.	**002**	Design Flow (MGD)	Precipitation Induced
Latitude	40° 31' 34"	Longitude	-80° 10' 43"
IMP No.	**201**	Design Flow (MGD)	4.2
Latitude	40° 31' 34"	Longitude	-80° 10' 43"
Quad Name	Ambridge	Quad Code	1404
Wastewater Description:	Stormwater (002) and Hydrostatic Test Water (IMP 201)		
NHD Com ID	134396149	RMI	969.7
Receiving Waters	Ohio River	Stream Code	32317
Drainage Area	19,500 square miles	Yield (cfs/mi^2)	0.24
Q_{7-10} Flow (cfs)	4,730	Q_{7-10} Basis	U.S. Army Corps of Engineers / ORSANCO
Elevation (ft)	692	Slope (ft/ft)	0.0001 (Montgomery Dam)
Watershed No.	20-G	Chapter 93 Class.	WWF
Existing Use	WWF	Existing Use Qualifier	N/A
Exceptions to Use	Navigation	Exceptions to Criteria	ORSANCO
Assessment Status	Impaired		
Cause(s) of Impairment	Dioxins, PCB, Pathogens		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final	Name	Ohio River TMDL

Background/Ambient Data		Data Source
pH (SU)	7.0	Not Provided, Default
Temperature (°F)	Ambient	Not Provided, Default
Hardness (mg/L)	100	Not Provided, Default
Other:	N/A	Not Provided, Default

Nearest Downstream Public Water Supply Intake	Moon Township Municipal Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	4730
PWS RMI	969.1	Distance from Outfall (mi)	0.44

Changes Since Last Permit Issuance: Installation of new fuel additive tanks. No changes to outfalls. Corrected river elevation to pool elevation per U. S. Army Corps of Engineers. Moved IMP 101 to pump house after oil/water separator instead of prior.

Other Comments: The Moon Township Municipal Authority intake in Ambridge serves a population of 38,000 and has a pumping capacity of 5.2 MGD.

The Ohio River flow is regulated by the U. S. Army Corps of Engineers. The discharge is between the Emsworth Lock and Dam (RMI 974.8) and the Dashields Lock and Dam (RMI 967.7). The upper pool elevation of the Dashields Lock and Dam is 692.0 ft. ORSANCO has defined further reduced critical flows for modeling of water quality criteria. From Pittsburgh to the Montgomery Dam the Minimum 7-day, 10-year low-flow is 4,730 cfs.

Compliance History	
Summary of DMRs:	Outfall 001, 002 and IMP 101 require semiannual reporting. Although there have been no effluent violations, there have been elevated concentrations. • Outfall 001 and 002 had elevated TSS in the first half of 2017 (greater than 100 mg/L). • Outfall 001 had BTEX greater than 0.01 mg/L in the second half of 2019 and Outfall 002 had BTEX greater than 0.01 mg/L the first half of 2020 and 2018. • IMP 101 had elevated TSS in four of the most recent nine sampling periods. Oil and grease was elevated once and BTEX was elevated twice. Moving the sampling point to after the oil/water separator will better reflect the effectiveness of the BMP which will impact and reduce these three pollutants. The permittee scheduled removal of sediment from the pump house pit in October 2021 and plans to pump out the pit annually. The upstream oil/water separator is inspected daily for oil and solids are gauged monthly. IMP 201 and 102 discharge very infrequently. In March 2017, IMP 201 discharged at 80 gpm for 12 hours. The reported concentrations were within the effluent limitations except for TRC which was 0.10 mg/L and exceeded the 0.02 mg/L limit. IMP 102 has not discharged during this permit period. The permittee believes well water, not city water, was used for the hydrostatic testing. The permittee plans to use only well water moving forward. The well pump is rated for 1200 gpm for hydrostatic water filling. Water is not pumped from the Ohio River.
Summary of Inspections:	The most recent inspection was conducted on March 3, 2020. A Notice of Violation (NOV) was issued in conjunction with the respective inspection report. Four of the violations were all related to completing and submitting required forms, and the other one violation was for failing to utilize an accredited environmental laboratory for testing and/or sample analysis. The following were potential violations: 1. Ensure fuel additives containment dike valve devices comply with SPCC requirements. 2. Facility should ensure outfall signs comply with permit language. 3. Ensure facility retains all records onsite or made readily available to satisfy records retention requirements. The NOVs and outstanding compliance issues have been resolved. The facility does not have any open violations.

Operations Compliance Check Summary Report

Facility: Buckeye Coraopolis Terminal
NPDES Permit No.: PA0096474
Compliance Review Period: 08/03/2016 – 08/03/2021
Open Violations by Client Summary None.

Inspection Summary

INSP ID	INSPECTED DATE	INSP TYPE	AGENCY	INSPECTION RESULT DESC	# OF VIOLATIONS
3007717	03/03/2020	Compliance Evaluation	PA Dept of Environmental Protection	Violation(s) Noted	5

Violation Summary

VIOL ID	VIOLATION DATE	VIOLATION TYPE DESC	RESOLVED DATE	VIOLATION COMMENT
879387	03/03/2020	NPDES - Violation of Part C permit condition(s)	03/03/2020	Failure to submit supplemental form (Additional Information for Stormwater Discharges)
879388	03/03/2020	NPDES - Violation of Part C permit condition(s)	03/03/2020	Failure to complete and submit Annual Stormwater Inspection Form
879389	03/03/2020	NPDES - Violation of Part C permit condition(s)	03/03/2020	Failure to complete operation and maintenance inspections of Oil/Water separators.
879390	03/03/2020	NPDES - Failure to utilize an accredited environmental laboratory for testing or analysis of environmental samples	03/03/2020	Facility collects and analyzes samples onsite for PH without laboratory registration
879399	03/03/2020	NPDES - Failure to submit monitoring report(s) or properly complete monitoring reports	03/03/2020	Incorrectly completed DMRs. Incorrectly used NODI codes. Incorrect reporting of non-detect values, and sample results mixed from outfall to the other.

Enforcement Summary

ENF ID	ENF TYPE DESC	EXECUTED DATE	VIOLATIONS	# OF VIOLATIONS
384541	Notice of Violation	03/06/2020	252.4(A); 92A.46	4

DMR Violation Summary

MONITORING END DATE	OUTFALL	PARAMETER	SAMPLE VALUE	PERMIT VALUE	UNIT OF MEASURE	STATISTICAL BASE CODE
03/31/2017	201	Total Residual Chlorine (TRC)	- 0.10	0.02	mg/L	Daily Maximum

Compliance Status: Facility has no current compliance issues.

Completed by: David Roote
Completed date: 08/03/2021

Compliance History

DMR Data for Outfall 001 (from January 1, 2017 to June 30, 2021)

Parameter	Limit	JUN-21	DEC-20	JUN-20	DEC-19	JUN-19	DEC-18	JUN-18	DEC-17	JUN-17
Flow (MGD) Average Monthly	Report	0.0432	0.0432	0.0432	0.0432	0.0432	0.0432	0.0432	0.0432	0.0432
Flow (MGD) Daily Maximum	Report	0.0432	0.0432	0.0432	0.0432	0.0432	0.0432	0.0432	0.0432	0.0432
pH (S.U.) Minimum	6.0	7.7	7.2	7.9	8.0	7.0	7.1	7.0	7.0	7.0
pH (S.U.) Instantaneous Maximum	9.0	8.0	7.6	8.1	8.3	8.0	8.3	7.0	7.0	7.6
TSS (mg/L) Average Monthly	Report	16	46	< 4	35	4.0	9.0	7	29	**208**
TSS (mg/L) Daily Maximum	Report	26	65	< 4	52	4.0	13.0	10	36	**252**
Oil and Grease (mg/L) Average Monthly	15.0	<4.8	< 4.8	< 4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Oil and Grease (mg/L) Instantaneous Maximum	30.0	<4.8	< 4.8	< 4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Dissolved Iron (mg/L) Average Monthly	Report	<0.07	< 0.07	< 0.07	0.0560	<0.07	0.03935	<0.07	<0.07	0.205
Dissolved Iron (mg/L) Instantaneous Maximum	7.0	<0.07	< 0.07	< 0.07	0.112	<0.07	0.0787	<0.07	<0.07	0.41
Total BTEX (mg/L) Average Monthly	Report	<0.001	< 0.00165	< 0.001	**0.0406**	<0.001	<0.001	<0.001	<0.001	<0.001
Total BTEX (mg/L) Daily Maximum	Report	<0.001	< 0.0033	< 0.001	**0.0812**	<0.001	<0.001	<0.001	<0.001	<0.001

DMR Data for Outfall 002 (from January 1, 2017 to June 30, 2021)

Parameter	Limit	JUN-21	DEC-20	JUN-20	DEC-19	JUN-19	DEC-18	JUN-18	DEC-17	JUN-17
Flow (MGD) Average Monthly	Report	0.0432	0.0432	0.0432	0.0432	0.0432	0.0432	0.0432	0.0400	0.0432
Flow (MGD) Daily Maximum	Report	0.0432	0.0432	0.0432	0.0432	0.0432	0.0432	0.0432	0.0320	0.036
pH (S.U.) Minimum	6.0	7.8	7.4	7.5	7.8	7.0	6.8	6.5	7.2	7.4

pH (S.U.) Instantaneous Maximum	9.0	7.9	7.8	8.4	8.2	7.5	7.5	8.2	8.0	7.8
TSS (mg/L) Average Monthly	Report	17	28	7.5	3	3.0	3.0	4	8	**154**
TSS (mg/L) Daily Maximum	Report	34	56	15	6	6.0	6.0	8	8	**276**
Oil and Grease (mg/L) Average Monthly	15.0	<4.8	< 4.8	< 4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Oil and Grease (mg/L) Instantaneous Maximum	30.0	<4.8	< 4.8	< 4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Dissolved Iron (mg/L) Average Monthly	Report	0.04495	0.054	< 0.0645	0.0565	<0.07	0.0870	0.1075	<0.07	<0.07
Dissolved Iron (mg/L) Instantaneous Maximum	7.0	0.090	0.108	0.129	0.113	<0.07	0.174	0.116	<0.07	<0.07
Total BTEX (mg/L) Average Monthly	Report	<0.001	< 0.001	**0.02295**	<0.001	<0.001	<0.001	**0.01155**	<0.001	0.000650
Total BTEX (mg/L) Daily Maximum	Report	<0.001	< 0.001	**0.0378**	<0.001	<0.001	<0.001	**0.0231**	<0.001	0.0013

DMR Data for Internal Monitoring Point 101 (from January 1, 2017 to June 30, 2021)

Parameter	Limit	JUN-21	DEC-20	JUN-20	DEC-19	JUN-19	DEC-18	JUN-18	DEC-17	JUN-17
Flow (MGD) Average Monthly	Report	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Flow (MGD) Daily Maximum	Report	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
pH (S.U.) Minimum	6.0	7.0	7.4	7.8	7.8	7.8	6.2	7.5	7.8	7.9
pH (S.U.) Instantaneous Maximum	9.0	7.6	7.8	8.2	8.2	8.2	7.1	7.5	8.1	8.2
TSS (mg/L) Average Monthly	Report	86	**265.5**	21	**289.5**	25	33.5	3.5	40	**222**
TSS (mg/L) Daily Maximum	Report	**154**	**266**	29	**567**	26.0	55.0	7	69	**390**
Oil and Grease (mg/L) Average Monthly	15.0	<4.8	< 4.8	< 4.8	**12.6**	<4.8	<4.8	<4.8	<4.8	<4.8
Oil and Grease (mg/L) Instantaneous Maximum	30.0	<4.8	< 4.8	< 4.8	**25.2**	<4.8	<4.8	<4.8	<4.8	<4.8
Dissolved Iron (mg/L) Average Monthly	Report	0.45025	0.10615	<0.07	0.2825	<0.07	<0.07	0.072	0.114	0.04895

Dissolved Iron (mg/L) Instantaneous Maximum	7.0	0.85	0.130	<0.07	0.46	<0.07	<0.07	0.144	0.228	0.0979
Total BTEX (mg/L) Average Monthly	Report	0.00415	**0.1068**	0.0034	**0.4065**	<0.001	<0.001	<0.001	0.00315	<0.001
Total BTEX (mg/L) Daily Maximum	Report	0.0042	**0.2136**	0.0068	**0.813**	<0.001	<0.001	<0.001	0.0045	<0.001

Development of Effluent Limitations

Outfall No.	001	**Design Flow (MGD)**	Precipitation Induced
Latitude	40º 31' 41"	**Longitude**	-80º 10' 49"
Wastewater Description:	Stormwater		

IMP No.	101	**Design Flow (MGD)**	Precipitation Induced
Latitude	40º 31' 36"	**Longitude**	-80º 10' 50"
Wastewater Description:	Stormwater		

Outfall No.	002	**Design Flow (MGD)**	Precipitation Induced
Latitude	40º 31' 34"	**Longitude**	-80º 10' 43"
Wastewater Description:	Stormwater		

Technology-Based Effluent Limitations (TBELs)

Section 304(b) of the Federal Clean Water Act (CWA) requires technology limits to be considered. Section 301(b)(1) of the CWA requires compliance with best practicable control technology (BPT) by July 1, 1977. Section 301(b)(2)(E) of the CWA requires compliance with best conventional pollutant control technology (BCT) by March 31, 1989. Section 301(b)(2)(C) of the CWA requires compliance with best available technology (BAT) by March 31, 1989.

Anti-backsliding

Section 402(o) of the CWA states "…a permit may not be renewed, reissued, or modified … subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit." Similarly, 40 CFR 122.44(l)(1) states "(l) *Reissued permits*. (1) Except as provided in paragraph (l)(2) of this section when a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under §122.62.)"

Per the 2016 Fact Sheet the effluent limitations were developed solely on Technology-Based Effluent Limitations as the water quality analysis determined no Water Quality-Based Effluent Limitations were needed. The following table is the current effluent limits from Part A of the 2016 NPDES permit. The measurement frequency is 2/6 months.

Table 1. Current Permit Effluent Limitations for Outfalls 001, 002 and IMP 101

Parameter	Minimum	Average Monthly	Daily Maximum	IMAX
Flow (MGD)		Report	Report	
pH (S.U.)	6.0			9.0
Total Suspended Solids (TSS)		Report	Report	
Oil and Grease		15.0		30.0
Iron, Dissolved		Report		7.0
BTEX, Total		Report	Report	

Flow was to be monitored and reported per 25 Pa. Code Chapter 92a.61(b). Per §95.2(1), industrial wastes must meet effluent standards, including a pH of not less than 6 and not greater than 9. Per §95.2(2), oil-bearing wastewater shall have no more than 15 mg/L oil as a daily average and no more than 30 mg/L at any time. Per §95.2(4), there shall be no more than 7 mg/L of dissolved iron. Per *SOP – Establishing Effluent Limitations for Individual Industrial Permits* paragraph III.B, regarding effluent limits and monitoring requirements for industrial stormwater discharges, "application managers will consider, where appropriate, applying treatment standards contained in Chapter 95".

Applicable PAG-03 General Permit – Best Professional Judgment (BPJ)

The stormwater discharges from the Buckeye Coraopolis/Pittsburgh Terminal are not subject to any federal ELGs. Section III.C of DEP's IW Effluent Limit SOP recommends that permit writers consider the minimum standards in the applicable appendix of the PAG-03 General Permit for limits and monitoring requirements. The application manager may include other limits and monitoring requirements as justified in the fact sheet.

The facility is categorized by SIC Code 4226 – Special Warehousing and Storage, Not Elsewhere Classified. This code falls within Appendix L – Land Transportation and Petroleum Stations and Terminals. The monitoring requirements from the permit are:

Table 2. PAG-03 Appendix L – Minimum Monitoring Requirements

Discharge Parameter	Units	Sample Type	Measurement Frequency	Benchmark Value
Total Suspended Solids	mg/L	Grab	1/6 months	100
Oil and Grease	mg/L	Grab	1/6 months	30

Oil and grease is already limited in the permit which is more stringent than monitoring only. Total Suspended Solids (TSS) will continue to be monitored and the benchmark value will be included. The language from the PAG-03 regarding the Benchmark Values and Corrective Action Plan will be added to Part C of the permit.

Additional Parameters - BTEX

While the Total Benzene, Toluene, Ethylbenzene and Xylene (BTEX) concentration was non-detect during several monitoring periods at all of the outfalls, there were some monitoring periods at detectable levels indicating that BTEX parameters were present in the discharge. BTEX will continue to be monitored in the renewed permit.

25 Pa Code Chapter 95

§95.2(3) contains specific requirements for petroleum marketing terminals. Per (i) the ability to remove oil must be present, including stormwater runoff, per (ii) a pollution incident prevention plan must be developed, implemented and kept up to date, and per (iii) the oil removal technology must consist of an A.P.I. listed oil separator or equivalent. The facility has A.P.I. oil/water separators for both Outfall 001, 002 as well one for the additive loading rack runoff prior to IMP 101. These specific requirements will be included in Part C of the permit.

Renewal Application Sampling and DMRs

There are no additional pollutants of concern for which an effluent limit should be developed. The established limits and monitoring are sufficient.

Water Quality-Based Limitations

Section 302(a) of the CWA allows establishment of water quality effluent limits. Section 303(a)(1) of the CWA allows states to adopt water quality standards. Section 303(d) of the CWQ requires states to designate water uses (e.g., Chapter 93 of PA Code). Section 303(c) of the CWA requires states to develop water quality criteria (e.g., Chapters 16 and 93 of PA Code).

Water quality-based effluent limitations (WQBELs) are applicable to outfalls and not internal monitoring points. This section does not apply to IMP 101, unless stated otherwise.

Water Quality Analysis

The water quality analysis for storm water outfalls differs from the water quality analysis for other point source discharges because storm water discharges have a variable flow rate and—unless they are flow-controlled using valves or detention

ponds—generally do not discharge at Q_{7-10} design conditions (stream flow is augmented above Q_{7-10} flow by the same rainfall that caused the storm water discharge). Section III.D of DEP's IW Effluent Limit SOP states: "In general, if actual stormwater concentrations exceed 100 times the most stringent Chapter 93 criterion (or a lesser amount for large industrial areas that drain to small streams), or exceed 100 mg/L for pollutants without criteria, the application manager should consider applying effluent limits for the applicable parameters and/or the implementation of BMPs with compliance schedules as necessary to achieve the limits or otherwise reduce stormwater concentrations."

The renewal sampling data is a limited set of parameters for stormwater. Neither this data nor the DMR data exceeds 100 times the most stringent of Chapter 93 criterion. BTEX is comprised of benzene, toluene, ethylbenzene and xylene and does not have a direct criterion. The sum of the most stringent benzene (0.58 ug/L), toluene (57 ug/L), ethylbenzene (68 ug/L), and xylene (210 ug/L) criteria is 335.58 ug/L, or 0.33 mg/L. The maximum BTEX concentration recorded at the site from either Outfall 001 or 002 is approximately 0.08 mg/L (80 ug/L). Since reporting of BTEX requires testing for each of the four component pollutants and is already reported on the laboratory reports, reporting of each of the four individual pollutants will be required in the renewed permit. Since reporting is required at IMP 101 for BTEX, the component pollutant monitoring will be applied there too.

TSS does not have a water quality criterion. The concentration exceeded 100 mg/L in the first half of 2017 but has been much lower since. The maximum TSS at Outfall 001 since that time was 65 mg/L and the maximum at Outfall 002 has been 56 mg/L. The vast majority of months are less than 50 mg/L. Establishment of a limit is not warranted at this time and continued monitoring will be sufficient.

ORSANCO

The Ohio River Valley Water Sanitation Commission (ORSANCO) sets Pollution Control Standards for industrial and municipal wastewater discharges to the Ohio River. The standards designate specific uses for the Ohio River and establish guidelines to ensure that the river can support these uses. The most current revision of the Pollution Control Standards was issued in 2019. Where water quality standards are more stringent than the Chapter 93 water quality criteria, the Pollution Control Standards are imposed as criteria and is the basis for determining if a stormwater parameter concentration exceeds 100 times the most stringent criterion.

The inspection report dated March 3, 2020 noted that facility outfall signs were not observed and that the permittee should ensure outfall signs comply with permit language. Part C of the renewed permit will continue to impose ORSANCO signage requirements.

Total Maximum Daily Loads (TMDL)

The Ohio River has a final approved Total Maximum Daily Load (TMDL) for PCBs and chlordane. The TMDL applies to the entire segment of the Ohio River in the Commonwealth of Pennsylvania. The Ohio River TMDL was developed following fish tissue surveys that showed long-term unrestricted consumption of fish in this river could potentially lead to human health problems. PCB and chlordane are probable human carcinogens, and these are human health criteria developed to protect against excess cancer risk. PCB was produced in the past for use in synthetic oils for electrical transformer insulating fluids, cutting oils and carbonless paper. PCB production and use was banned in 1979, but entered the environment during its unrestricted use and current soils contaminations at facilities historically handling PCBs. A petroleum marketing terminal is not expected to use PCBs or have a history of handling them. PCB monitoring will not be implemented. Chlordane is a man-made organochlorine compound for use as an agricultural pesticide before it was restricted to termite control around building foundations. All uses of chlordane have now been banned since April 1988. The petroleum marketing terminal is either paved or gravel, and does not have a history of using pesticides in this manner that would result in a background concentration of chlordane in the surrounding soil. Like PCBs, chlordane will not be monitored at this facility. With that, EPA waives draft permit review.

Sampling Frequency and Types

The sampling frequency will continue to be imposed as 2/6 months for all parameters.

The required sample types will remain as grab samples for all parameters except flow which will be measured at the time of grab sample collection.

Development of Effluent Limitations

Outfall No.	102	**Design Flow (MGD)**	4.7
Latitude	40º 31' 41"	**Longitude**	-80º 10' 49"
Wastewater Description:	Hydrostatic Test Water		

Outfall No.	201	**Design Flow (MGD)**	4.2
Latitude	40º 31' 34"	**Longitude**	-80º 10' 43"
Wastewater Description:	Hydrostatic Test Water		

Hydrostatic test waters on each side of the facility discharge through either Outfall 001 or 002. As these outfalls will primarily discharge stormwater, the discharge of hydrostatic test water will be controlled under IMP 102 for Outfall 001 and IMP 201 for Outfall 002. As both IMPs receive hydrostatic test water from petroleum terminal storage tanks, the pollutants of concern are expected be the same and at approximately the same concentration. Therefore, the same limits and monitoring will apply to both IMPs and can be evaluated simultaneously.

Hydrostatic test water has not been discharged at the facility since 2017. The data included in the prior permit application in 2016 and the 2017 DMR data for IMP 201 will be considered in establishing the effluent limits.

Technology-Based Effluent Limitations (TBELs)

Section 304(b) of the Federal Clean Water Act (CWA) requires technology limits to be considered. Section 301(b)(1) of the CWA requires compliance with best practicable control technology (BPT) by July 1, 1977. Section 301(b)(2)(E) of the CWA requires compliance with best conventional pollutant control technology (BCT) by March 31, 1989. Section 301(b)(2)(C) of the CWA requires compliance with best available technology (BAT) by March 31, 1989.

Anti-backsliding

Section 402(o) of the CWA states "…a permit may not be renewed, reissued, or modified … subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit." Similarly, 40 CFR 122.44(l)(1) states "(l) *Reissued permits*. (1) Except as provided in paragraph (l)(2) of this section when a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under §122.62.)"

Per the 2016 Fact Sheet the effluent limitations were developed solely on Technology-Based Effluent Limitations as the water quality analysis determined no Water Quality-Based Effluent Limitations were needed based on dilution in the Ohio River. The following table is the current effluent limits from Part A of the 2016 NPDES permit. The measurement frequency is 1/discharge.

Table 3. Current IMP 201 and 102 Effluent Limitations

Parameter	Minimum	Average Monthly	Daily Maximum	IMAX
Flow (MGD)			Report	
Duration of Discharge (hours)			Report	
pH (S.U.)	6.0			9.0
Dissolved Oxygen (mg/L)	5.0			
Total Residual Chlorine (mg/L)			0.02	
Total Suspended Solids (TSS)			60.0	
Oil and Grease (mg/L)			30.0	
Iron, Dissolved (mg/L)			7.0	
Benzene (mg/L)			0.0025	
BTEX, Total (mg/L)			0.25	

Applicable General Permit Monitoring

In addition to stormwater discharges, Appendix L of the PAG-03 General Permit also addresses hydrostatic test water discharge from the petroleum storage tanks. The concentration limits from Appendix L are shown in Table 5.

Table 5. PAG-03 Appendix L – Hydrostatic Test Water Discharge Concentrations

Discharge Parameter	Units	Discharge Concentration
Benzene	mg/L	0.0025
BTEX	mg/L	0.25
Oil and Grease	mg/L	30
Total Suspended Solids (TSS)	mg/L	60
Dissolved Iron	mg/L	7.0
Total Residual Chlorine (TRC)	mg/L	0.05
Dissolved Oxygen (DO)	mg/L	5.0
pH	S.U.	6.0 to 9.0

These recommended limits are the same as the current permit, except for a less stringent TRC limit. Per anti-backsliding, the 0.02 mg/L limit for TRC will continue to be imposed.

The hydrostatic test water will be analyzed before discharge from the diked area. If the water does not meet these limits prior to the onset of discharge, the water will be retained in the diked area until the limits are met. The discharge of hydrostatic test water should not occur at the same time as a storm event so that the testing can be isolated and will not be blended or diluted, nor will the test water contribute to even higher storm event flows in the Ohio River.

The Appendix L Sector Specific BMPs have been developed for Petroleum Marketing Terminals and include BMPs for both stormwater as well as hydrostatic test water. The BMPs in Section A (General BMPs) and Section C (Petroleum Bulk Station and Terminal BMPs) will apply. Section B does not apply since there is no locomotive activity at the facility.

Paragraph C.1.c requires a normally closed shut-off valve. The facility installed an automatic shut-off valve in the eastern area that is normally open but closes when a leak is automatically detected, the emergency shutoff button is pressed, or a power failure or signal loss. In addition to the automatic shut-off valve is a normally closed manual valve. The automatic valve is an additional precaution in the event the manual valve is accidentally left open. The western diked tank containment has a manual valve only.

Paragraph C.4.b will not be included since effluent limitations for the hydrostatic test water discharge is established for IMP 201 and 102 in Part A.

The PAG-10 General Permit for Hydrostatic Testing of Tanks and Pipelines has slightly different effluent limitations and reporting and requires measurement frequencies outside of just 1/discharge. Table 6 the PAG-10 effluent limitations.

Table 6. PAG-10 – Hydrostatic Test Water Discharge Concentrations

Discharge Parameter	Units	Minimum	Average Monthly	Instant. Maximum	Minimum Measurement Frequency
Flow	gpm	XXX	Report	XXX	1/discharge
Duration of Discharge	hours	XXX	Report	XXX	1/discharge
Total Volume Discharged	gallons	XXX	Report Total Monthly	XXX	1/month
Dissolved Oxygen (DO)	mg/L	5.0	XXX	XXX	2/discharge
pH	S.U.	6.0	XXX	9.0	2/discharge
Total Residual Chlorine (TRC)	mg/L	XXX	Report	0.05	2/discharge
Total Suspended Solids (TSS)	mg/L	XXX	30	60	1/discharge
Oil and Grease	mg/L	XXX	15	30	1/discharge
Dissolved Iron	mg/L	XXX	XXX	7.0	1/discharge

The PAG-10 permit recommended limits are similar to the current permit limits and PAG-03 permit limits except for the following:

- Total volume discharge reporting will be added to the renewed permit. It is not expected that more than one hydrostatic test will occur in the same month, and so the measurement frequency will be set to 1/discharge rather than 1/month for consistency with the other pollutants.
- The measurement frequency is 2/discharge for DO, pH and TRC. Since discharge is rare and occurred just once during the current permit cycle. The duration is not expected to last more than one day, and so 1/discharge will continue to apply, particularly since the discharge can be held in the tank until compliance is achieved.
- TSS is currently limited to 60.0 mg/L as a daily maximum. The PAG-10 limits TSS to 30 mg/L as a monthly average and 60 mg/L as a daily maximum. Sampling frequency is 1/discharge. The PAG-10 permit accounts for multiple discharges per month and although a daily value of 60 mg/L may be protective of the stream for a short period of time, 30 mg/L is not only more appropriate for an average value of multiple discharge events, but can be achieved during any one event. See the BPJ section below for limit development.
- Oil and grease is currently limited to 30.0 mg/L as a daily maximum. The PAG-10 limits oil and grease to 15 mg/L as a monthly average and 30 mg/L as a daily maximum. Sampling frequency is 1/discharge. Like TSS, a 15 mg/L discharge concentration is achievable during any one discharge event. See the BPJ section below for limit development.
- The PAG-10 TRC IMAX is 0.05 mg/L like the PAG-03. Per anti-backsliding, the 0.02 mg/L limit for TRC will continue to be imposed.

Total Residual Chlorine

The hydrostatic test water discharge in 2017 from IMP 201 had a TRC concentration of 0.10 mg/L which was above the 0.02 mg/L effluent limit. Per sector-specific BMP V.C.4.c states “If the test water contains TRC above the discharge concentration requirement, the water may be drained to and held in a diked area until the TRC level meets the above standard, after which it may be released from the dike.” The permittee can meet the TRC limit with prolonged holding of the discharge water without treatment.

§92a.48 states: (a) Industrial waste regulated by this chapter must meet the following requirements: (2) For facilities where the EPA has not promulgated a National ELG setting forth limits for TRC or free available chlorine for an industry or activity, and the Department has not developed a facility-specific BAT effluent limitation for TRC under the factors in paragraph (1), an effluent limitation for TRC of 0.5 milligrams per liter (30-day average) constitutes BAT. The current TRC TBEL limit is 0.02 mg/L. In accordance with anti-backsliding, the limit will remain at 0.02 mg/L.

Best Professional Judgement – TSS and Oil and Grease

As noted above, there is no ELG developed for hydrostatic test water. In the absence of any ELGs, technology-based effluent limitations are developed based on Best Professional Judgement. Development of BPJ limits are authorized under sections 304(b)(2)(B) and 402(1)(1) of the Clean Water Act. The PAG-10 General Permit effluent limits described above are more stringent than the existing effluent limitations. It would be appropriate to impose effluent limits that would apply in the event the permittee qualified for the General Permit. The General Permit effluent limits have been developed for state-wide application and are consistent for the entire industry. Technology capability and financial implications were accounted for in the General Permit development.

1. A discharge concentration of 15 mg/L oil and grease would result in a visible oil sheen and conflict with narrative standards that prohibit such a sheen on waters of the Commonwealth. The tanks will be cleaned prior to testing, and cleaning water is disposed offsite and not directly to the stream. The source of hydrostatic test water is well water that should be void of oil and grease. Oil and grease should not be detected in the hydrostatic test water if the cleaning process and disposal is performed properly. It is proposed that the oil and grease limit be reduced to the PAG-10 General Permit’s 15 mg/L monthly average. The TSS in March 2017 from IMP 201 was <4.0 mg/L, and so compliance is expected immediately upon becoming effective.

2. The current TSS limit of 60 mg/L will allow for a significant amount of suspended solids in the discharge. The well water should have a low concentration of TSS, and so any measurable TSS in the discharge would be due to poor cleaning of the tanks prior to testing. The PAG-10 General Permit’s 30 mg/L monthly average is proposed for the effluent limit. The oil and grease in March 2017 from IMP 201 was 1.2 mg/L J (<4.8 mg/L reporting limit), and so compliance is expected immediately upon becoming effective.

In establishing effluent limitations on a case-by-case basis, the appropriate technology for the applicant is considered. When evaluating appropriate BPJ limits for a permittee, the Department considers six factors as required by 40 CFR § 125.3. The six factors are: (1) the age of the equipment and facility, (2) the process employed, (3) the engineering aspects of the application of various types of control technique, (4) process changes, (5) the cost of achieving such effluent reduction and, (6) non-water quality environmental impact (including energy requirements). Factors specific to each level of control technology include costs, pollutant reduction benefits and economic achievability. Each of these factors are discussed below as they relate to the Coraopolis/Pittsburgh Terminal.

1. Equipment and Facility Age – Hydrostatic test water pollutants are controlled through the implementation of Best Management Practices (BMPs). As such, equipment age is not an applicable consideration when evaluating costs associated with meeting proposed effluent limitations. Based on the DMR data available for the most recent hydrostatic test, the Department anticipates compliance with the NPDES permit through the continued implementation of BMPs and housekeeping procedures.

2. The Process Employed – As mentioned in the previous paragraph, the Department anticipates compliance with the proposed effluent limitations based on the most current sample results and through continued implementation of BMPs. The process to achieve these limits is proper tank cleaning which is currently utilized to meet the current effluent limitations.

3. Engineering Aspects of Control Techniques – Pollutants are currently controlled through BMPs and additional engineering solutions are not expected as the facility currently meets the proposed effluent limitations.

4. Process Changes – Operations at the site are not proposed to change. The facility is currently meeting the effluent limitations with the tank cleaning BMPs that are already in place.

5. Cost of Achieving - No additional expenses for increased or modified BMP implementation are expected.

6. Non-Water Quality Environmental Impacts (Including Energy Requirements) – There are no known non-water quality environmental impacts or energy requirements associated with the lower effluent limitations since no changes to the current process or BMPs is expected.

25 Pa Code Chapter 95

§95.2 requires industrial wastes have a pH not less than 6 and not greater than 9. Additionally, oil-bearing wastewaters at no time may contain more than 15 mg/L of oil as a daily average or 30 mg/L at any time.

The requirements also state that Petroleum marketing terminals must:

(i) Be provided with facilities to remove oil from waters, including stormwater runoff, before discharge into waters of this Commonwealth. Compliance with this paragraph constitutes compliance with paragraph (2)(i) except to the extent that the State Act or Federal Act or regulations promulgated thereunder impose a more stringent requirement.
(ii) Develop, implement and keep up to date pollution incident prevention plans as described in § 91.34 (relating to activities utilizing pollutants).
(iii) Design, maintain and utilize oil removal facilities that consist of an American Petroleum Institute (A.P.I.) listed oil separator, unless the person operating the facility can demonstrate to the Department that an alternate design is equivalent or better in removing oil from water to maintain and protect the waters of this Commonwealth, including all existing and designated uses established under Chapter 93 (relating to water quality standards).

The oil water separators at the facility meet A.P.I. standards. The facility has a PPC Plan as well as an SPCC plan.

There is no expansion or new mass loading of total dissolved solids (TDS) at the facility and so §95.10 will not apply.

Water Quality-Based Effluent Limitations (WQBELs)

Water Quality Analysis

Hydrostatic test water discharges occur infrequently, and limited data is available for sampling. A Part C condition prohibits the discharge to occur at critical stream conditions including low flow. The available dilution ratio is extremely high, even if Q_{7-10} conditions are considered for both IMP 102 and 201. It is reasonable to infer neither a violation of human health nor aquatic life would occur. Additionally, there is no expectation of toxic elevated pollutant concentrations in hydrostatic test water provided the tanks are properly cleaned prior to testing. Therefore, no water quality based effluent limitations or monitoring will be imposed in the permit for IMP 102 or 201 based on a potential to exceed water quality standards in the receiving stream.

The discharge flow rate in March 2017 was 80 gpm over a duration of 12 hours. The Q7-10 low flow of the Ohio River is controlled to 4730 cfs.

4730 cfs x 448.8 gpm/cfs = 2122824 gpm Ohio River

2122824 gpm Ohio River / 80 gpm discharge = 26535 : 1

At a ratio of >26535 : 1 during conditions outside of low flow, the hydrostatic test water will have a negligible impact on the Ohio River during discharge.

Total Maximum Daily Load (TMDL)

See the description in Outfall 001, 002 and IMP 101 above. PCBs and chlordane are not expected to be present in hydrostatic test water. Monitoring will not be imposed.

Sampling Frequency and Types

The sampling frequency will continue to be imposed as 1/discharge and submitted monthly. Flow and total volume will be calculated, duration will be recorded, and all other sampling will be a grab type.

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

Outfall 001, 002 and IMP 101 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	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/6 months	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	2/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	Report	XXX	2/6 months	Grab
Oil and Grease	XXX	XXX	XXX	15.0	XXX	30.0	2/6 months	Grab
Iron, Dissolved	XXX	XXX	XXX	Report	XXX	7.0	2/6 months	Grab
BTEX, Total	XXX	XXX	XXX	Report	Report	XXX	2/6 months	Grab
Benzene	XXX	XXX	XXX	Report	Report	XXX	2/6 months	Grab
Toluene	XXX	XXX	XXX	Report	Report	XXX	2/6 months	Grab
Ethylbenzene	XXX	XXX	XXX	Report	Report	XXX	2/6 months	Grab
Xylenes, Total	XXX	XXX	XXX	Report	Report	XXX	2/6 months	Grab

Outfall 001 and 002 Compliance Sampling Location: end of pipe

IMP 101 Compliance Sampling Location: discharge of loading rack oil/water separator

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

IMP 102 and 201, 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
	Daily Maximum	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (GPM)	Report	XXX	XXX	XXX	XXX	XXX	1/discharge	Calculation
Duration of Discharge (hours)	Report	XXX	XXX	XXX	XXX	XXX	1/discharge	Recorded
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/discharge	Grab
Dissolved Oxygen	XXX	XXX	5.0	XXX	XXX	XXX	1/discharge	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	XXX	0.02	XXX	1/discharge	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	60.0	XXX	1/discharge	Grab
Oil and Grease	XXX	XXX	XXX	XXX	30.0	XXX	1/discharge	Grab
Iron, Dissolved	XXX	XXX	XXX	XXX	7.0	XXX	1/discharge	Grab
Benzene	XXX	XXX	XXX	XXX	0.0025	XXX	1/discharge	Grab
BTEX, Total	XXX	XXX	XXX	XXX	0.25	XXX	1/discharge	Grab

Compliance Sampling Location: Diked containment area

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☐	Toxics Management Spreadsheet (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☒	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
☐	Pennsylvania CSO Policy, 385-2000-011, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
☐	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 391-2000-019, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 391-2000-022, 3/1999.
☐	Design Stream Flows, 391-2000-023, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 391-2000-024, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☒	SOP: Establishing Effluent Limitations for Individual Industrial Permits, BCW-PMT-032, 10/1/19.
☐	Other:

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
3—Streets Run	Basin	Allegheny	WWF: *Delete* PWS	None

Authority

The provisions of this § 93.9v amended under sections 5(b)(1) and 402 of The Clean Streams Law (35 P. S. §§ 691.5(b)(1) and 691.402); and section 1920-A of The Administrative Code of 1929 (71 P. S. § 510-20).

Source

The provisions of this § 93.9v adopted March 6, 1992, effective March 7, 1992, 22 Pa.B. 1037; amended May 14, 1993, effective May 15, 1993, 23 Pa.B. 2325; amended November 19, 1993, effective November 20, 1993, 23 Pa.B. 5529; amended November 17, 2000, effective November 18, 2000, 30 Pa.B. 6059; amended September 27, 2002, effective September 28, 2002, 32 Pa.B. 4695; corrected December 27, 2002, effective December 7, 2002, 32 Pa.B. 6381; amended November 12, 2004, effective November 13, 2004, 34 Pa.B. 6133; amended January 5, 2007, effective January 6, 2007, 37 Pa.B. 11; amended May 15, 2009, effective May 16, 2009, 39 Pa.B. 2523. Immediately preceding text appears at serial pages (272199) to (272206) and (324923) to (324926).

Cross References

This section cited in 25 Pa. Code § 16.51 (relating to table); 25 Pa. Code § 93.1 (relating to definitions); 25 Pa. Code § 93.4 (relating to Statewide water uses); and 25 Pa. Code § 93.7 (relating to specific water quality criteria).

§ 93.9w. Drainage List W.

Ohio River Basin in Pennsylvania
Ohio River

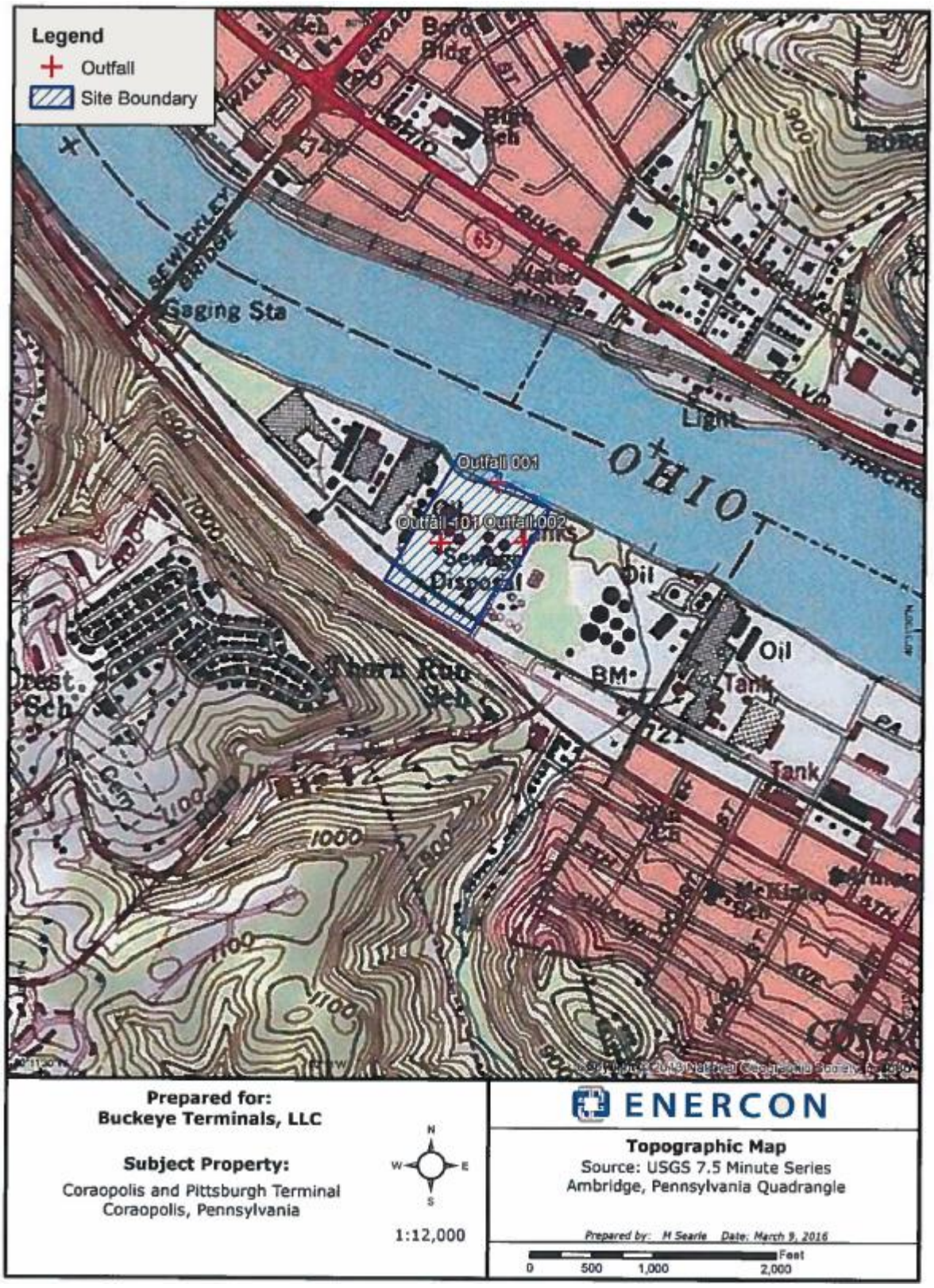
Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
1—Ohio River	Main Stem, Confluence of Allegheny and Monongahela Rivers to PA-OH State Border	Beaver	WWF; *Add* N	See Orsanco Pollution Control Standards
2—Unnamed Tributaries to Ohio River	Basins, Confluence of Allegheny and Monongahela Rivers to PA-OH State Border	Allegheny-Beaver	WWF	None
2—Sawmill Run	Basin	Allegheny	WWF	None
2—Chartiers Creek	Main Stem	Allegheny	WWF	None

$Q_{7\text{-}10}$ Flows of Major Rivers

Nicolas Lazzaro, P.E.
U.S. Army Corp of Engineers
Pittsburgh District Water Management
December 1, 2017

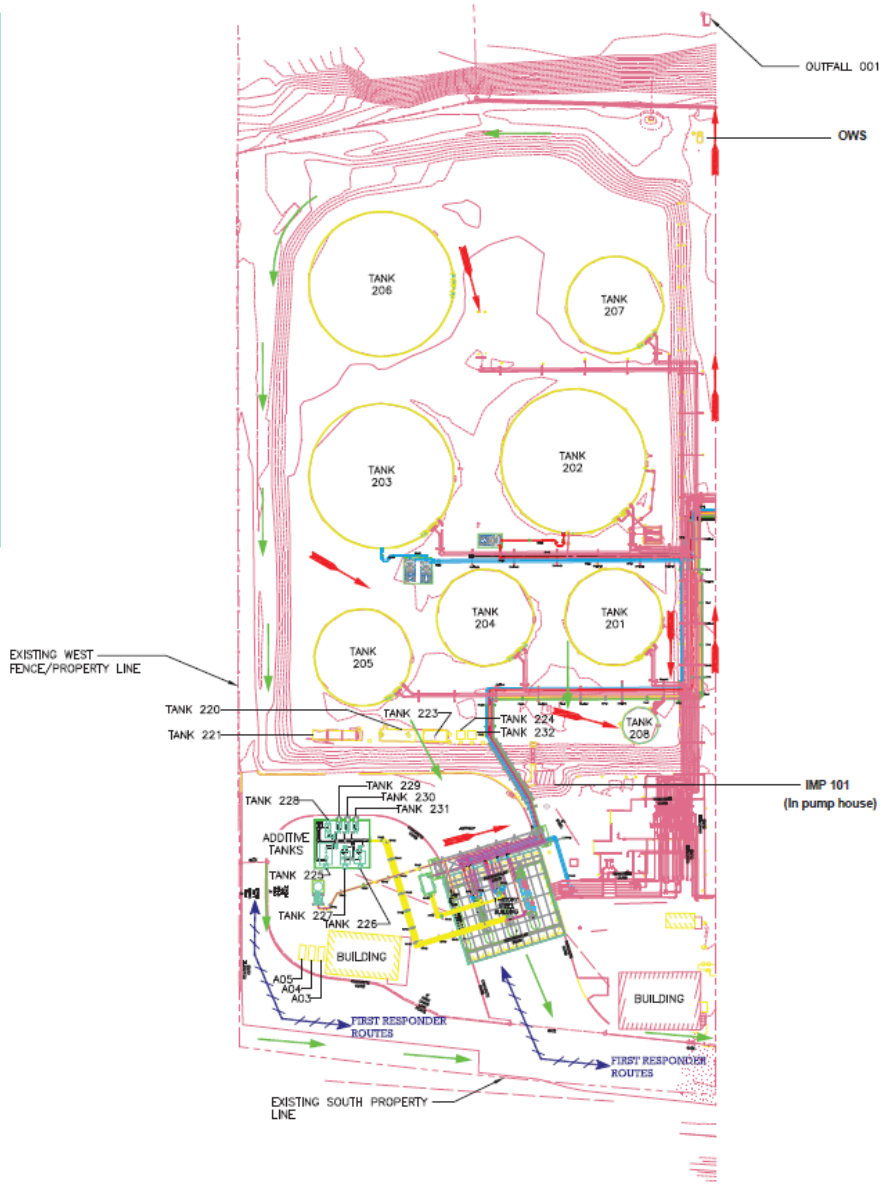
UPPER OHIO BASIN LOW FLOWS		
Location		Q7, 10 Flow (cfs)
Allegheny River		
Franklin downstream of French Creek (RMI 123.96)		1,450
L&D 9 at Templeton (RMI 62.2; Upper Pool El. 822.2)		2,070
L&D 8 at Templeton (RMI 52.6; Upper Pool El. 800.2)		2,070
L&D 7 at Kittanning (RMI 45.7; Upper Pool El. 782.4)	Crooked Creek enters at RMI 40.11	2,070
L&D 6 at Freeport (RMI 36.3; Upper Pool El. 769.4)		2,070
L&D 5 at Freeport (RMI 30.4; Upper Pool El. 757.0)	Kiskiminetas R. enters at RMI 30.2	2,070
L&D 4 at Natrona (RMI 24.2; Upper Pool El. 745.4)		2,390
C.W. Bill Young L&D at New Kensington (RMI 14.5; Upper Pool El. 734.5)		2,390
L&D 2 at Pittsburgh (RMI 6.7, Pool El. 721.0)		2,390
Monongahela River		
Point Marion L&D (RMI 90.8; Upper Pool El. 797.0)	Cheat River enters at RMI 89.68 Dunkard Creek enters at RMI 87.18	420
Grays Landing L&D (RMI 82.0; Upper Pool El. 778.0)	Tenmile Creek enters at RMI 65.62	530
Maxwell L&D (RMI 61.2; Upper Pool El. 763.0)	Redstone Creek enters at RMI 54.90	530
L&D 4 at Charleroi (RMI 41.5; Upper Pool El. 743.5)		550
L&D 3 at Elizabeth (RMI 23.8; Upper Pool El. 726.9)		550
McKeesport downstream of the Youghiogheny River (RMI 15.53)		1,060
Braddock L&D (RMI 11.2; Upper Pool El. 718.7)		1,230
Youghiogheny River		
Youghiogheny Dam at Confluence (RMI 74.8)		390
Dam at Connellsville (RMI 46.27)		460
Sutersville downstream of Sewickley Creek (~RMI 15.0)		510
Beaver River		
Beaver Falls		640
Ohio River		
Emsworth L&D (RMI 974.8; Pool El. 710.0)	Q7,10 is halved for each side of Neville Island	4,730
Dashields L&D (RMI 967.7; Upper Pool El. 692.0)		4,730
Montgomery L&D (RMI 949.3; Upper Pool El. 682.0)		5,880
New Cumberland L&D (RMI 926.7; Upper Pool El. 664.5)		5,880
Pike Island L&D (RMI 896.8; Upper Pool El. 664.0)		5,880
Hannibal L&D (RMI 854.6; Upper Pool El. 623.0)		5,880

Permittee Maps from Application Submittal



TANK STORAGE LEGEND

TANK NO.	PRODUCT	CAPACITY IN GALLONS
A03	PROPANE	
A04	PROPANE	
A05	PROPANE	
201	JET	
202	GASOLINE	4,620,000
203	ULSD	4,620,000
204	GASOLINE	2,100,000
205	TRANSMIX	2,100,000
206	ULSD	4,620,000
207	ULSD	2,100,000
208	JET	105,000
220	O.O.S. (EMPTY)	7,980
221	FS II ADDITIVE	9,996
223	O.O.S. (EMPTY)	7,980
224	O.O.S. (EMPTY)	1,974
225	EXXON ADDITIVE	9,996
226	BP ADDITIVE	3,990
227	GENERIC ADDITIVE	3,990
228	LUBRICITY ADDITIVE	2,100
229	RED DYE	1,974
230	JET ADDITIVE (STADIS)	1,974
231	JET ADDITIVE CI	1,974
232	DIESEL ADDITIVE	9,996



LEGEND:
DRAINAGE
EVACUATION ROUTE
FIRST RESPONDERS INGRESS/EGRESS AND EQUIPMENT TRANSPORTATION ROUTES

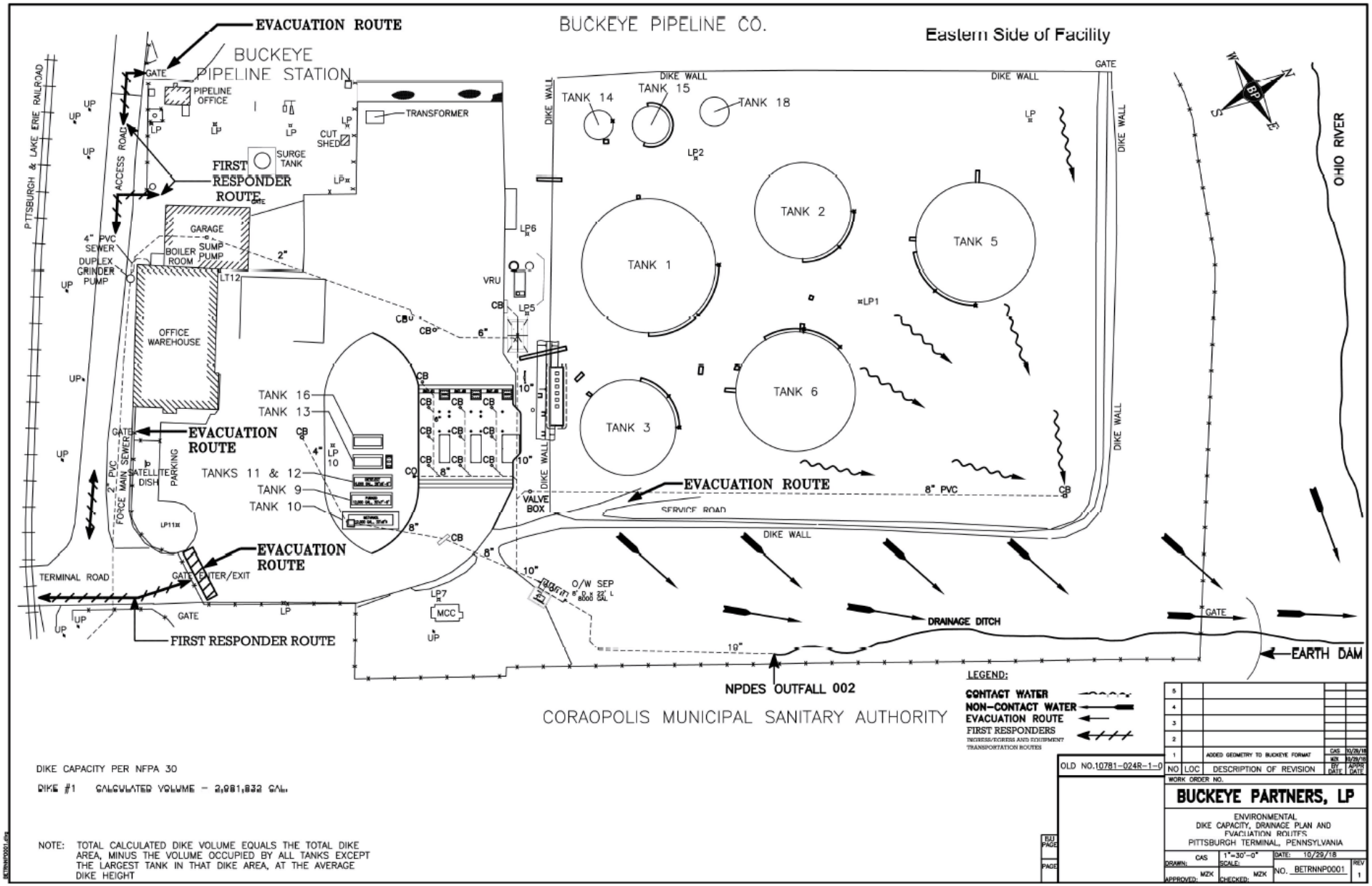
NO	LOC	DESCRIPTION OF REVISION	BY DATE	APPR DATE
1		ADDED DRAINAGE AND EVACUATION PLANS	CAS 10/30/18	MZK 10/30/18

WORK ORDER NO.

BUCKEYE PARTNERS, LP

ENVIRONMENTAL
DIKE CAPACITY, DRAINAGE PALAN AND EVACUATION TOUTES
CORAOPOLIS TERMINAL, PENNSYLVANIA

DRAWN: CAS | 1"=600' | DATE: 10/30/18
APPROVED: MZK | CHECKED: MZK | NO. BITCPNP0001 | REV 1


BUCKEYE PIPELINE CO.
Eastern Side of Facility
EVACUATION ROUTE
BUCKEYE PIPELINE STATION
PIPELINE OFFICE
TRANSFORMER
CUT SHED
SURGE TANK
FIRST RESPONDER ROUTE
GARAGE
SUMP PUMP
BOILER ROOM
4" PVC SEWER
DUPLEX GRINDER PUMP
OFFICE WAREHOUSE
TANK 16
TANK 13
TANKS 11 & 12
TANK 9
TANK 10
SATELLITE DISH
PARKING
2" PVC FORCE MAIN SEWER
TERMINAL ROAD
ENTER/EXIT
ACCESS ROAD
PITTSBURGH & LAKE ERIE RAILROAD
TANK 14
TANK 15
TANK 18
TANK 1
TANK 2
TANK 5
TANK 6
TANK 3
DIKE WALL
VRU
VALVE BOX
SERVICE ROAD
8" PVC
O/W SEP
MCC
DRAINAGE DITCH
EARTH DAM
OHIO RIVER
NPDES OUTFALL 002
CORAOPOLIS MUNICIPAL SANITARY AUTHORITY
LEGEND:
CONTACT WATER
NON-CONTACT WATER
EVACUATION ROUTE
FIRST RESPONDERS
INGRESS/EGRESS AND EQUIPMENT TRANSPORTATION ROUTES
DIKE CAPACITY PER NFPA 30
DIKE #1 CALCULATED VOLUME = 2,981,832 GAL.
NOTE: TOTAL CALCULATED DIKE VOLUME EQUALS THE TOTAL DIKE AREA, MINUS THE VOLUME OCCUPIED BY ALL TANKS EXCEPT THE LARGEST TANK IN THAT DIKE AREA, AT THE AVERAGE DIKE HEIGHT
OLD NO. 10781-024R-1-0
ADDED GEOMETRY TO BUCKEYE FORMAT
DESCRIPTION OF REVISION
BUCKEYE PARTNERS, LP
ENVIRONMENTAL
DIKE CAPACITY, DRAINAGE PLAN AND EVACUATION ROUTES
PITTSBURGH TERMINAL, PENNSYLVANIA
DRAWN: CAS
SCALE: 1"=30'-0"
DATE: 10/29/18
APPROVED: MZK
CHECKED: MZK
NO. BETRNNP0001
REV 1