pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0284785**
Facility Type	**Storm Water**	APS ID	**1056132**
Major / Minor	**Minor**	Authorization ID	**1384051**

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

Applicant and Facility Information

Applicant Name	**Amazon.com Services LLC**	Facility Name	**Amazon.com Services LLC - DAE7**
Applicant Address	PO Box 80842	Facility Address	833 E Pittsburgh McKeesport Road
	Seattle, WA 98108-0842		North Versailles, PA 15137-1703
Applicant Contact	Paul Wilson	Facility Contact	Bill Holm
Applicant Phone	(951) 445-7785	Facility Phone	(646) 535-5148
Client ID	367608	Site ID	855000
SIC Code	4225	Municipality	North Versailles Township
SIC Description	Trans. & Utilities - General Warehousing And Storage	County	Allegheny
Date Application Received	February 5, 2022	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: New NPDES Permit for the discharge of Stormwater associated with industrial activity from general warehousing, storage, and distribution facility.

Summary of Review

The Department received a new NPDES permit application from Amazon.com Services LLC on February 5, 2022 for coverage of its warehouse, storage, and distribution facility in North Versailles Township in Allegheny County.

The Amazon.com Services LLC - DAE7 Facility is a general warehousing Facility engaged in the handling, storage, and transportation of merchandise. The Facility has an SIC Code of 4225 and North American Industry Classification System Code of 493110.

Industrial activities that occur on-Site include general warehousing and storage, a shipping dock area for loading and unloading of merchandise. Additional industrial activities that may occur on-Site include vehicle and equipment fueling, storage, maintenance, and cleaning. Waste streams include cardboard for recycling and general commercial trash. Interior floor drains throughout the Facility discharge to the North Versailles Sanitary Authority; there are no illicit connections from inside the Facility to the storm sewer system.

The Site consists of approximately 48 percent impervious cover (i.e., concrete paved areas, building, etc.), and the topography around the Site is sloped steeply around impervious areas, with the highest elevations along the northern and eastern borders, and the lowest elevations at the outfalls on the southwestern portion of the Site. Based on topography, it appears that stormwater falling on the impervious surfaces of the Site would be captured in the storm drainage conveyance system, which is comprised of a series of stormwater drains and piping that direct stormwater within one of two drainage areas.

Approve	Deny	Signatures	Date
X		Angela Rohrer / Environmental Engineering Specialist	November 18, 2022
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	December 1, 2022

Summary of Review

Potential Pollutant Sources

Vehicle and Equipment Cleaning. The Facility may clean vehicles and/or trailers on-Site on an impervious surface; the washing activity is conducted a minimum of 20 feet from the nearest storm drain. Vehicle and/or trailer washing, when it occurs on-Site, is conducted by a contractor. Amazon Fueling, Washing, and Maintenance SOPs for allowing this operation includes steps to be taken to allow for complete capture and removal of wash water for off-Site treatment and disposal by the washing vendor. Vehicle washing is conducted on an as-needed basis and generally not during peak operations at the Facility; the volume of wash water is dependent upon the number of vehicles to be washed as well as the size of the tanker truck. During washing operations, a Transportation Operations Management (TOM) Team Representative will observe and inspect the washing operation setup.

Vehicle and Equipment Storage Areas. Vehicles and/or trailers may be stored outside of the Facility. Vehicles that may be stored on-Site are maintained in good condition and inspected regularly for leaks. Absorbents contained in spill kits located throughout the shipping dock area are used as needed to control leaks waiting for maintenance.

Vehicle and Equipment Fueling Areas. On-Site fueling operations may be conducted on an impervious; the fueling activity is conducted a minimum of 20 feet from the nearest storm drain. A third-party contractor performs the operation when the operation does occur on-Site.

Vehicle and Equipment Maintenance. Maintenance activities may be conducted on an impervious surface; the maintenance activity is conducted a minimum of 20 feet from the nearest storm drain. Specifically, vehicles and/or trailers may have fluids changed, parts lubricated, hydraulic lines replaced, and tires and hoses changed. Should vehicle maintenance occur on-Site, absorbents will be located in spill kits throughout the maintenance area to control leaks.

Commercial solid waste and recycling are collected in covered waste storage containers. The waste and recycling are collected regularly by a solid waste management contractor for off-Site disposal. Wooden pallets are uncontaminated and stored inside the Facility or are placed in a covered waste storage container for removal. Metal scrap from indoor operations or from c trailers are placed in a covered waste storage container. Waste containers are routinely inspected. Ground surfaces around waste storage areas are kept clean using brooms and shovels.

Management of Run-off. The Facility stormwater collection and conveyance system is comprised of catch basins and roof drains that collect most of the Facility stormwater run-off. These drains are located around the building and capture run-off from parking areas, the roof, and paved areas along the side of the building subject to potential stormwater pollutants. The site storm drains are maintained by landlord of the Site.

Amazon.com Services has not been inspected. The client has no open violations.

Draft permit issuance is recommended.

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
Latitude	40º 22' 36.33"	Longitude	-79º 50' 01.87"
Quad Name	1507	Quad Code	Braddock
Wastewater Description:	Stormwater		
Receiving Waters	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99408094	RMI	12.89
Drainage Area	7180 mi^2	Yield (cfs/mi^2)	0.14
Q_{7-10} Flow (cfs)	1060	Q_{7-10} Basis	U.S. Army Corp of Engineers
Elevation (ft)	1097	Slope (ft/ft)	0.001
Watershed No.	19-A	Chapter 93 Class.	WWF
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	Monongahela River TMDL
Nearest Downstream Public Water Supply Intake	PA American Water Company – Pittsburgh (Intake Flow 69 MGD)		
PWS Waters	Monongahela River	Flow at Intake (cfs)	1230
PWS RMI	4.6	Distance from Outfall (mi)	8.27

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0
Latitude	40º 22' 33.79"	Longitude	-79º 49' 56.97"
Quad Name	1507	Quad Code	Braddock
Wastewater Description:	Stormwater		
Receiving Waters	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99408094	RMI	12.92
Drainage Area	7180 mi^2	Yield (cfs/mi^2)	0.14
Q_{7-10} Flow (cfs)	1060	Q_{7-10} Basis	U.S. Army Corp of Engineers
Elevation (ft)	1083	Slope (ft/ft)	0.001
Watershed No.	19-A	Chapter 93 Class.	WWF
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	Monongahela River TMDL
Nearest Downstream Public Water Supply Intake	PA American Water Company – Pittsburgh (Intake Flow 69MGD)		
PWS Waters	Monongahela River	Flow at Intake (cfs)	1230
PWS RMI	4.6	Distance from Outfall (mi)	8.27

Development of Effluent Limitations

Outfall No.	001	**Design Flow (MGD)**	0
Latitude	40º 22' 36.33"	**Longitude**	-79º 50' 01.87"
Outfall No.	002	**Design Flow (MGD)**	0
Latitude	40º 22' 33.79"	**Longitude**	-79º 49' 56.97"

Wastewater Description: Stormwater

Stormwater Drainage Overview

- Drainage Area 1 includes the western portion of the Site, and areas north, west, and south of the Facility. This area discharges via Outfall 001 to the wooded area west of the Site. This drainage area receives discharge from off-Site from north and west of the Site where stormwater drains through underground piping to the stormwater collection system on-Site.

- Drainage Area 2 includes the eastern portions of the Site and the area east of the Facility. This area discharges via Outfall 002 to the wooded area west of the Site. This drainage area receives discharge from off-Site from north of the Site where stormwater drains through underground piping to the stormwater collection system on-Site and south of the Site where stormwater flows on the surface from a neighboring residential area. There is also a catch basin on the eastern border of the Site along E. Pittsburgh McKeesport Boulevard that is connected to the Municipal Stormwater Sewer System (MS4). However, this catch basin is blocked from collecting stormwater from off-Site at the time of development of this Plan, and there is not currently a plan to allow drainage from off-Site through this catch basin.

Technology-Based Limitations

Stormwater Technology Limits

Outfalls 001and 002 will be subject to PAG-03 General Stormwater Permit conditions as a minimum requirement because the outfall receives stormwater. The SIC code for the site is 4225 (General Warehousing) and the corresponding appendix of the PAG-03 that would apply to the facility is Appendix J (Additional Facilities). The reporting requirements applicable to stormwater discharges are shown in Table 1 below. Along with the monitoring requirements, sector specific BMPs included in Appendix J of the PAG-03 will also be included in Part C of the Draft Permit.

Table 1. PAG-03 Appendix J Monitoring Requirements

Parameter	Maximum Daily Concentration
Total Suspended Solids (TSS) (mg/L)	Monitor and Report
Oil and Grease (mg/L)	Monitor and Report

Water Quality-Based Limitations

Stormwater WQBELs

Water quality analyses are typically performed under low-flow (Q7-10) conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharge from Outfalls 001and 002 is composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations based on water quality analyses are not proposed.

Total Maximum Daily Load (TMDL)

Stormwater discharges from Amazon.com Services LLC - DAE7 are located within the Monongahela River Watershed, for which the Department has developed a TMDL. The Monongahela River Watershed TMDL was finalized on March 1, 1999 to address impairments resulting from PCBs and Chlordane. Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency's ("EPA's") Water Quality Planning and Management Regulations (codified at Title 40 of the Code of Federal Regulations Part 130) require states to develop a TMDL for impaired water bodies. A TMDL establishes the amount of a pollutant that a water body can assimilate without exceeding its water quality standard for that pollutant. TMDLs provide the scientific basis for a state to establish water quality-based controls to reduce pollution from both point and non-point sources to restore and maintain the quality of the state's water resources (USEPA 1991). The Monongahela River Watershed TMDL does not include a waste load allocation for Amazon.com Services and the facility does not discharge PCBs or Chlordane. Water quality criteria for the TMDL watershed does not apply to the stormwater discharges from Amazon.com Services.

Anti-Backsliding

Amazon.com Services LLC - DAE7 was not previously covered under an NPDES permit. EPA's anti-backsliding regulation, 40 CFR 122.44(l) is not applicable to the Amazon.com Services facility.

Proposed Effluent Limitations and Monitoring Requirements

Outfalls 001 and 002 will be subject to the semi-annual monitoring requirements in Appendix J of the PAG-03 General Permit. The proposed effluent monitoring requirements for Outfalls 001 and 002 are displayed in Table 2 below. A Part C condition is included in the Draft Permit requiring development and submission of a Corrective Action Plan whenever there are two or more consecutive exceedances of the benchmark values, which are also included in the Part C condition. The benchmark values are also displayed below in Table 2. These values are not effluent limitations, an exceedance of the benchmark value is not a violation. As described above, if there are two consecutive exceedances of the benchmark value, a Corrective Action Plan must be conducted to evaluate site stormwater controls and BMPs. Benchmark monitoring is a feedback tool, along with routine inspections and visual assessments, for assessing the effectiveness of stormwater controls and BMPs. An exceedance of the benchmark provides permittees with an indication that the facility's controls may not be sufficiently controlling pollutants in stormwater.

Table 2: Proposed Effluent Limitation at Outfall 001 and 002

Parameters	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements	
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Total Suspended Solids	XXX	XXX	XXX	Report	100	XXX	1/6 Months	Grab
Oil and Grease	XXX	XXX	XXX	15.0	30.0	XXX	1/6 Months	Grab

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:
☐	Other:

ATTACHMENT A

StreamStats Report for Amazon.com Services LLC - DAE7

PA0284785 - Amazon.com Services LLC - DAE7 - StreamStats Report

Region ID: PA
Workspace ID: PA20221130180527810000
Clicked Point (Latitude, Longitude): 40.37449, -79.83850
Time: 2022-11-30 13:05:55 -0500

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	7180	square miles
ELEV	Mean Basin Elevation	1857	feet
FOREST	Percentage of area covered by forest	73.4973	percent
PRECIP	Mean Annual Precipitation	46	inches
URBAN	Percentage of basin with urban development	3.5153	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [99.9 Percent (7180 square miles) Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	7180	square miles	2.26	1400
ELEV	Mean Basin Elevation	1857	feet	1050	2580

Low-Flow Statistics Disclaimers [99.9 Percent (7180 square miles) Low Flow Region 4]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [99.9 Percent (7180 square miles) Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	999	ft^3/s
30 Day 2 Year Low Flow	1310	ft^3/s
7 Day 10 Year Low Flow	599	ft^3/s
30 Day 10 Year Low Flow	684	ft^3/s
90 Day 10 Year Low Flow	1000	ft^3/s

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

ATTACHMENT B
Site Plan

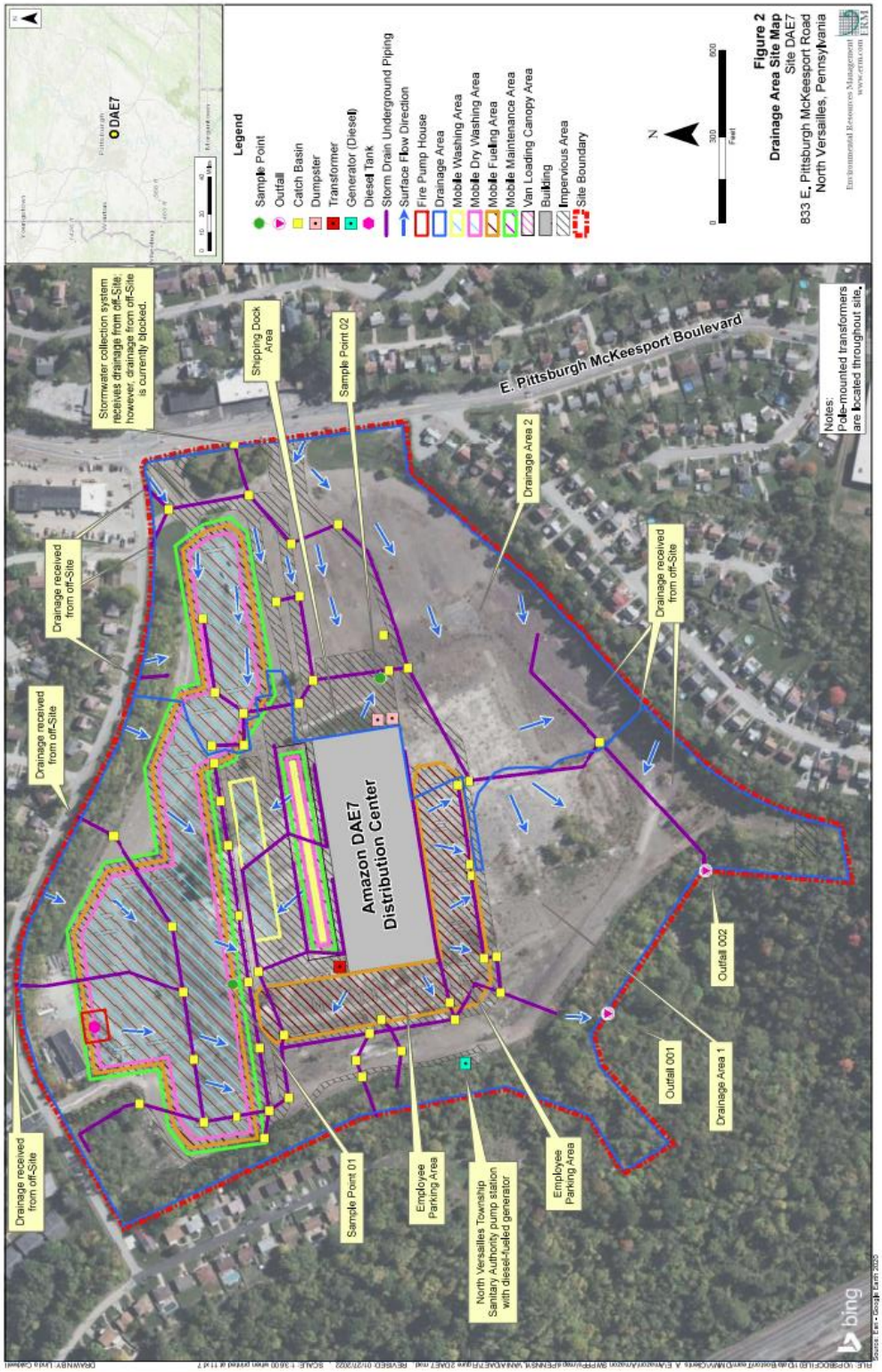
Figure 2
Drainage Area Site Map
Site DAE7
833 E. Pittsburgh McKeesport Road
North Versailles, Pennsylvania
Legend
Sample Point
Outfall
Catch Basin
Dumpster
Transformer
Generator (Diesel)
Diesel Tank
Storm Drain Underground Piping
Surface Flow Direction
Fire Pump House
Drainage Area
Mobile Washing Area
Mobile Dry Washing Area
Mobile Fueling Area
Mobile Maintenance Area
Van Loading Canopy Area
Building
Impervious Area
Site Boundary
N
Feet
Notes:
Pole-mounted transformers are located throughout site.
E. Pittsburgh McKeesport Boulevard
Amazon DAE7 Distribution Center
Stormwater collection system receives drainage from off-Site; however, drainage from off-Site is currently blocked.
Shipping Dock Area
Sample Point 02
Drainage Area 2
Drainage received from off-Site
Drainage received from off-Site
Drainage received from off-Site
Drainage received from off-Site
Outfall 002
Outfall 001
Drainage Area 1
Employee Parking Area
Employee Parking Area
North Versailles Township Sanitary Authority pump station with diesel-fueled generator
Sample Point 01
bing