

Southwest Regional Office CLEAN WATER PROGRAM

Application Type Renewal Facility Type Industrial Major / Minor Minor

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

Application No.PA0204897APS ID1066887Authorization ID1402160

## **Applicant and Facility Information**

Applicant Name	Port Authority of Allegheny County Heinz 57 Center, 3rd Floor	Facility Name	Collier Garage
Applicant Address	345 Sixth Avenue	Facility Address	541 Mayer St.
	Pittsburgh, PA 15222-2527		Bridgeville, PA 15017-2716
Applicant Contact	Eric Bilsky	Facility Contact	Dean Pregel
Applicant Phone	(412) 566-5167	Facility Phone	(412) 566-5170
Client ID	69898	Site ID	250832
SIC Code	4111	Municipality	Collier Township
SIC Description	Trans. & Utilities - Local And Suburban Transit	County	Allegheny
Date Application Receiv	vedJuly 1, 2022	EPA Waived?	No
Date Application Accep	ted July 8, 2022	If No, Reason	DEP Discretion
Purpose of Application	Renewal NPDES permit coverage		

## Summary of Review

The Collier maintenance garage facility is a large, one-story building which contains bus staging areas, repair and maintenance areas, body and paint shop, bus wash bays, parts and tool storage areas and office areas. Adjacent to and abutting the western end of the maintenance garage facility is a one-story administration building containing administrative offices and worker common areas including lockers restrooms.

Drainage for the active yard areas of the garage primarily flows east, south and west into a trench system and catch basins connected to the storm drainage system discharging through Outfall 001, which is located on the south side of the facility in the lower (southern) end of the entrance roadway to the facility. Outfall 001 ultimately discharges into Chartiers Creek.

Outfall 002 discharges uncontaminated stormwater runoff from the roof of the maintenance garage. The outfall was created at the Department's request to reduce the volume of water routed through the oil/water separator. All discharges from this outfall consist of uncontaminated stormwater runoff. No monitoring is required; however, the outfall will still be subject to requirements in the Part C of the permit.

The facility also discharges stormwater runoff through Outfall 001 from non-industrial (non-impacted) areas which include the employee parking lots A, B and CD, a contiguous vegetated slope abutting the paved areas northwest and northeast of the Garage, limited portions of the entrance road, minor portions of the maintenance roof area and the administrative building rooftop.

Approve	Deny	Signatures	Date
х		Angela Rohrer / Environmental Engineering Specialist	August 17, 2022
х		Miden F. Fifel Michael E. Fifth, P.E. / Environmental Engineer Manager	September 29, 2022

#### **Summary of Review**

Stormwater collected from these areas is conveyed to a common point in the lower end of the entrance roadway (off Mayer Street) where they enter an underground 11,000 gallon solids separator and then an underground 20,000 gallon oil/water separator.

The site was last inspected by Cameron Quinten on May 2, 2016. The permittee 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)	N/A - Stormwater			
Latitude 40° 21' 49.2	1"	Longitude	-80º 06' 29.77"			
Quad Name Bridgeville	e, PA	Quad Code	1605			
Wastewater Description:	Bus storage and maintena	nce yard stormwater runoff.				
Receiving Waters Char	tiers Creek (Flood spillway)	Stream Code	36777			
NHD Com ID 9968	9314	RMI	13.8			
Drainage Area 0.068	38	Yield (cfs/mi <sup>2</sup> )	0.0036			
Q <sub>7-10</sub> Flow (cfs) 0.000	)248	Q <sub>7-10</sub> Basis	USGS Streamstats			
Elevation (ft) 800		Slope (ft/ft)	0.0001			
Watershed No. 20-F		Chapter 93 Class.	WWF			
Existing Use WWF	-	Existing Use Qualifier	-			
Exceptions to Use None		Exceptions to Criteria	None			
Assessment Status	Impaired					
Cause(s) of Impairment	Chlordane, PCB, Siltation,	Turbidity				
Source(s) of Impairment	Habitat Modification, Habit	at Modification, Source Unknov	vn			
TMDL Status	Final – PCB, Chlordane	Name Chartiers Cre	ek - 4/9/2001			
	Final – metals, pH, TSS	Chartiers Cre	ek Watershed – 4/9/2003			
Nearest Downstream Pub	lic Water Supply Intake	West View Municipal Authority	1			
PWS Waters Ohio Ri	ver	Flow at Intake (cfs)	4,730			
PWS RMI (mi) 975.1		Distance from Outfall (mi)	16.85			

## **Changes Since Last Permit Issuance:**

The previous permit was issued having Painters Run and McLaughlin Run as receiving water from Outfall 001. However, during the review and using Google Maps and eMaPA, it was determined that the discharge flows into Chartiers Creek.

#### Development of Effluent Limitations

Outfall No.	001		Design Flow (MGD)	0
Latitude	40º 21' 49.21	"	Longitude	-80° 06' 29.77"
Wastewater D	escription:	IW Process Effluent without ELG		

#### **Technology-Based Limitations**

#### Stormwater Technology Limits

Outfall 001 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 4111 (Transportation & Utilities – Local and Suburban Transit) and the corresponding appendix of the PAG-03 that would apply to the facility is Appendix L (Land Transportation and Petroleum Stations and Terminals). The reporting requirements applicable to stormwater discharges are shown in Table 1 below. Along with the monitoring requirements, sector specific BMPs included in Appendix L of the PAG-03 will also be included in Part C of the Draft Permit.

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

#### Table 1: PAG-03 Appendix (L) Monitoring Requirements

#### 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 Outfall 001 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)

Wastewater discharges from Collier Garage are located within the Chartiers Creek Watershed for which the Department has developed two TMDLs. The watershed is impacted by metals pollution (aluminum, iron & manganese) from abandoned mine drainage, sedimentation, low pH, PCBs and chlordane.

Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency's Water Quality Planning and Management Regulations (codified at Title 40 of the Code of Federal Regulations Part 130) requires 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 the water quality criteria 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 in order to restore and maintain the quality of the state's water resources (USEPA 1991). Stream reaches within the Chartiers Creek watershed are included in the state's 2008 Section 303(d) list because of various impairments, including PCBs, chlordane, metals and pH. The TMDLs include consideration for each tributary within their target watersheds and relevant impairment sources. Stream data is then used to calculate minimum pollutant reductions that are necessary to attain water quality criteria levels. Target concentrations published in the TMDLs are based on established water quality criteria of 0.750 mg/L total recoverable aluminum, 1.5 mg/L total recoverable iron based on a 30-day average and 1.0 mg/L total recoverable manganese. The reduction needed to meet the minimum water quality standards is then divided between each known point and non-point pollutant source in the form of a watershed allocation. TMDLs prescribe allocations that minimally achieve water quality criteria (i.e., 100 percent use of a stream's assimilative capacity).

The Chartiers Creek TMDL was finalized on April 9, 2001 and regulates the discharge of PCBs and Chlordane to Chartiers Creek. Neither of these pollutants are handled, stored, or generated at Collier Garage; nor are they present in PAT's discharges. Accordingly, PCB and Chlordane effluent limits are not applicable to this facility.

The Chartiers Creek Watershed TMDL was finalized on April 9, 2003 and regulates the discharge of aluminum, iron, and manganese primarily from abandoned mine discharges within the Chartiers Creek Watershed. The TMDL does not include a specific wasteload allocation for Port Authority's Collier Facility. Allocations were provided only for abandoned mine discharges, active mining operations, and one industrial wastewater generator (Allegheny Ludlum Houston Plant). It is apparent from the TMDL report that stormwater discharges associated with industrial activity were considered to be negligible sources of metals pollution and omitted from inclusion to the TMDL. Collier Garage's aluminum (0.23 mg/L), iron (0.49 mg/L), and manganese (0.065 mg/L) discharges are well below the water quality criteria values and allocated discharge concentrations defined in the TMDL.

## Anti-Backsliding

The limitations in the site's current permit can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(I) and are displayed in Table 2 below. The Total Suspended Solids limitations were previously imposed as Best Professional Judgment Limitations derived using EPA's multisector general permit benchmark values and the site treatment achievability. The Total Iron, Total Aluminum and Total Manganese monitoring were previously imposed due to the discharging to a stream with Total Maximum Daily Loads (TMDL). Monitoring for COD and BOD5 were previously imposed because the parameters were pollutants of concern. The Oil and Grease limits that were imposed are effluent standards for oil and grease from 25 Pa. Code § 95.2(2).

#### Table 2: Current Effluent Limitation at Outfall 001

Parameters	Mass (Ib/day)		Concentration (mg/L)				Monitoring Requirements	
Faiameters	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/Month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/Month	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	100	XXX	2/Month	Grab
Oil and Grease	XXX	XXX	XXX	15.0	30.0	XXX	2/Month	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	xxx	Report	XXX	1/Quarter	Grab
Chemical Oxygen Demand	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab
Total Manganese	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab

## Proposed Effluent Limitations and Monitoring Requirements

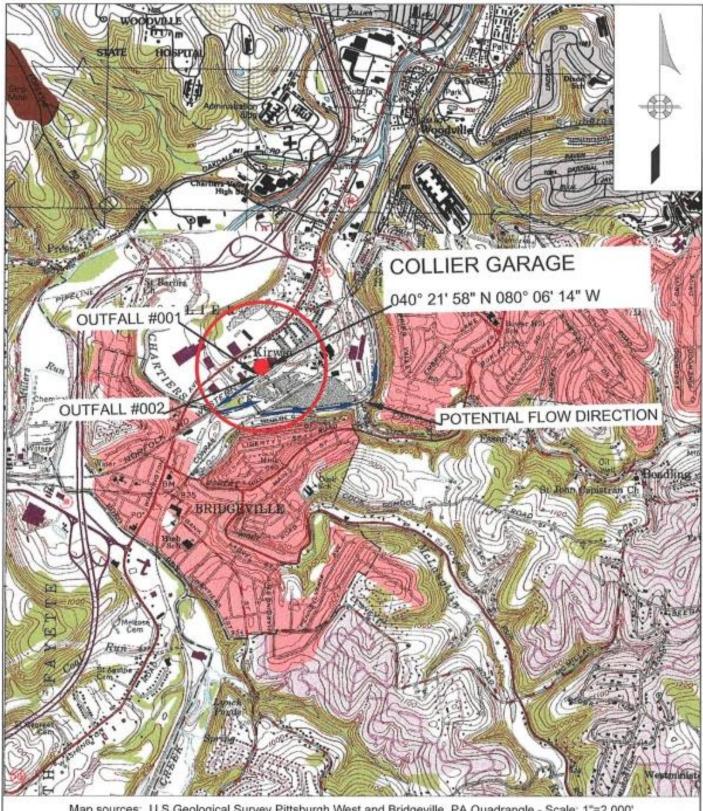
The proposed effluent monitoring requirements for Outfall 001 are displayed in Table 3 below. The daily maximum reporting requirement for pH has been replaced with an instantaneous maximum reporting requirement to be consistent with current permitting practices.

#### Table 3: Proposed Effluent Limitation at Outfall 001

Deremetere	Mass (Ib/day)		Concentration (mg/L)				Monitoring Requirements	
Parameters	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/Month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	2/Month	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	100	XXX	2/Month	Grab
Oil and Grease	XXX	XXX	XXX	15.0	30.0	XXX	2/Month	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	xxx	Report	XXX	1/Quarter	Grab
Chemical Oxygen Demand	XXX	XXX	XXX	xxx	Report	XXX	1/Quarter	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab
Total Manganese	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	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.
$\overline{\Box}$	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
	<ul> <li>and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.</li> <li>Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.</li> </ul>
	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.
<u> </u>	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:

## **TOPOGRAPHIC MAP**



Map sources: U.S Geological Survey Pittsburgh West and Bridgeville, PA Quadrangle - Scale: 1"=2,000"



Collective Efforts, LLC Civil and Environmental Engineers

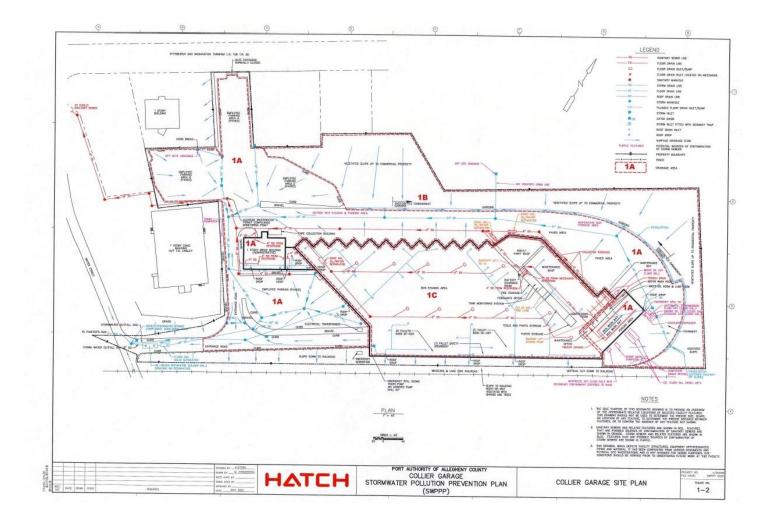
Drawn By: Chkd By: MWH AHS

Date: December 2020 Project No. H/362698

COLLIER GARAGE SITE LOCATION MAP

Figure 1-1

SITE PLAN



# PA0204897 - Collier Garage - StreamStats Report



Collapse All

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	0.0688	square miles
ELEV	Mean Basin Elevation	840	feet
FOREST	Percentage of area covered by forest	2.0191	percent
PRECIP	Mean Annual Precipitation	37	inches

Parameter Code	Parameter Description	Value	Unit
STORAGE	Percentage of area of storage (lakes ponds reservoirs wetlands)	0	percent
URBAN	Percentage of basin with urban development	97.9809	percent

## Annual Flow Statistics

Annual Flow Statistics Parameters [Statewide Mean and Base Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0688	square miles	2.26	1720
ELEV	Mean Basin Elevation	840	feet	130	2700
PRECIP	Mean Annual Precipitation	37	inches	33.1	50.4
FOREST	Percent Forest	2.0191	percent	5.1	100
URBAN	Percent Urban	97.9809	percent	0	89

Annual Flow Statistics Disclaimers [Statewide Mean and Base Flow]

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

Annual Flow Statistics Flow Report [Statewide Mean and Base Flow]

Statistic	Value	Unit
Mean Annual Flow	0.0808	ft^3/s

Annual 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/)

Low-Flow Statis	tics Parameters [Low	Flow Re	gion 4]		
Parameter Code	Parameter Name	Value	Units	Min Limit	Max Lim
DRNAREA	Drainage Area	0.0688	square miles	2.26	1400
ELEV	Mean Basin Elevation	840	feet	1050	2580
unknown errors.	e parameters is outside the tics Flow Report [Low			s were extrapo	olated with
unknown errors.					olated with
unknown errors. Low-Flow Statis	tics Flow Report [Low		gion 4]	U	
unknown errors. Low-Flow Statis Statistic	tics Flow Report [Low		gion 4] Value	U	nit
unknown errors. Low-Flow Statis Statistic 7 Day 2 Year Low	tics Flow Report [Low Flow		gion 4] Value 0.000988	U ft ft	nit *3/s
unknown errors. Low-Flow Statis Statistic 7 Day 2 Year Low 30 Day 2 Year Lo	tics Flow Report [Low Flow w Flow w Flow		gion 4] Value 0.000988 0.00211	U ft ft	nit *3/s *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/)

## General Flow Statistics

General Flow Statistics Parameters [Statewide Mean and Base Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0688	square miles	2.26	1720