pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0204889**
Facility Type	**Industrial**	APS ID	**595773**
Major / Minor	**Minor**	Authorization ID	**1283035**

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

Applicant and Facility Information

Applicant Name	**Allegheny County Port Authority**	Facility Name	**Harmar Garage**
Applicant Address	345 Sixth Avenue, Floor 3	Facility Address	2851 Freeport Road
	Pittsburgh, PA 15222-2527		Pittsburgh, PA 15238-1415
Applicant Contact	Keith Wargo	Facility Contact	Dean Pregel
Applicant Phone	(412) 566-5106	Facility Phone	412-566-5170
Client ID	69898	Site ID	244593
SIC Code	4111	Municipality	Harmar Township
SIC Description	Trans. & Utilities - Local And Suburban Transit	County	Allegheny
Date Application Received	August 2, 2019	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: Renewal of NPDES Industrial Waste Permit without an ELG.

Summary of Review

On August 2, 2019, Port Authority of Allegheny County (PAAC) submitted an NPDES permit renewal application to discharge storm water runoff from its Harmar Garage via Outfalls 001 & 002 into an UNT to Deer Creek (WWF). The facility operates under SIC Code 4111 – Transportation & Public Utilities. Each outfall is equipped with oil/water separation and solids separation treatment units. Currently, there are no operations conducted onsite. No bus maintenance activities have been performed at the facility since April 2011. The permit will be reissued at the request of PAAC however to allow the site to reopen at will.

The facility consists of a one-story garage building with parking lots on the north, west and east side of the building. Alpha Drive bounds the facility on the north and east along with commercial properties to the south and west.

PAAC Harmar Garage is a bus parking and maintenance facility. Historically the facility primarily engaged in the repair, cleaning, and staging of PAAC buses. The garage has a maintenance shop with eight (8) service bays, an indoor bus staging area, one indoor wash bay, an engine/chassis wash bay, two (2) diesel fuel dispensers, and several isolated storage rooms. In addition, the garage has administrative offices, a lunchroom, and driver waiting rooms. None of these areas are being used currently for their former purpose. The only current activities at the facility are storage of decommissioned buses and conducting site inspections. Historic activities undertaken at this facility have been service oriented and conducted under roof. Under normal condition, storm water should not come into contact with pollutants that may exist within the maintenance building. Frequent traffic flow however results in pollution discharges from the facility.

Exterior portions of the facility are maintained and kept clear of debris and used only for the storage of decommissioned buses. No routine PAAC activities are undertaken, performed or otherwise done at this facility other than site inspections. All necessary environmental controls and appurtenances (i.e. oil/water separators and solids separators) are in-service, functioning and being maintained. The entire Harmar Garage property is fenced, and all gates are locked.

Approve	Deny	Signatures	Date
✓		Curtis Holes, P.E. / Environmental Engineering Specialist	9/10/19
✓		Michael E. Fifth, P.E. / Environmental Engineer Manager	9/10/19

Summary of Review

The facility's Water Quality Management Permit # 0290207, issued on September 14, 1995, authorizes the use of a 3,000-gallon OWS for treatment of interior floor drains. Subsequently on December 8, 2015, the Water Quality Management Permit was amended authorizing the installation of two (2) grit removal systems, a 15,000-gallon OWS and 25,000-gallon OWS.

Outfall 001 is equipped with a 25,000-gallon oil/water separator (OWS) and solids separator. In the drainage area of Outfall 001, current activities are storage of decommissioned buses awaiting disposition. The location of Outfall 001 is 42° 32' 26", -79° 49' 54" and has a drainage area of 123,830 sf that is 95% impervious.

Outfall 002 is equipped with a 15,000-gallon OWS and solids separator. In the drainage area of Outfall 002, current activities are storage of decommissioned buses awaiting disposition. The location of Outfall 002 is 42° 32' 25", -79° 50' 01" and has a drainage area of 72,549 sf that is 95% impervious.

Wastewater originating within the maintenance building is pretreated by a separate 2,000-gallon OWS and discharged to the Allegheny Valley Joint Sanitary Authority.

Residual waste disposal must meet solid waste regulations.

Part C language in the draft permit provides controls on stormwater outfalls and best management practices.

The Harmar Garage Facility has no open violations.

It is recommended that a draft permit be published for public comment in response to this application.

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)	0.0 (Stormwater)
Latitude	40° 32’ 26”	Longitude	-79° 49’ 54”
Quad Name	New Kensington West	Quad Code	1407

Wastewater Description: Stormwater runoff from a bus maintenance and storage area. Pollutants of concern include oil and grease, BOD, COD, TSS and iron.

Treatment System : Oil / Water Separator and Grit Removal Chamber.

Outfall No.	002	Design Flow (MGD)	0.0 (Stormwater)
Latitude	40° 32’ 25”	Longitude	-79° 50’ 01”
Quad Name	New Kensington West	Quad Code	1407

Wastewater Description: Stormwater runoff from a bus maintenance and storage area. Pollutants of concern include oil and grease, BOD, COD and iron.

Treatment System: Oil / Water Separator and Grit Removal Chamber.

Receiving Waters	UNT to Deer Creek	Stream Code	42285
NHD Com ID	123972835	RMI	0.61
Drainage Area	0.5	Yield (cfs/mi^2)	0
$Q_{7\text{-}10}$ Flow (cfs)	2,070	$Q_{7\text{-}10}$ Basis	US Army Corp.
Elevation (ft)	710	Slope (ft/ft)	0.001
Watershed No.	18-A	Chapter 93 Class.	WWF
Assessment Status	Impaired		
Cause(s) of Impairment	Flow Alterations, TDS, Turbidity, Nutrients, Metals, Siltation		
Source(s) of Impairment	Construction, Subsurface Mining, Source Unknown, Abandoned Mine Drainage		
TMDL Status	None	Name	None

Nearest Downstream Public Water Supply Intake	Fox Chapel Water Authority		
PWS Waters	Allegheny River	Flow at Intake (cfs)	-
PWS RMI	10.8	Distance from Outfall (mi)	2.2

Compliance History

DMR Data for Outfall 001 (from August 1, 2018 to July 31, 2019)

Parameter	Limit	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18	SEP-18	AUG-18
Flow (MGD) Average Monthly	Report	0.0097	0.0085	0.0117	4.014	0.0573	0.1224	0.0573	0.0345	0.0344	0.0426	0.0551	0.0636
Flow (MGD) Daily Maximum	Report	0.0108	0.0085	0.0124	8.025	0.0720	0.1224	0.0720	0.0423	0.0550	0.0508	0.0678	0.0678
pH (S.U.) Minimum	Report	7.35	7.33	7.65	7.73	7.76	7.89	7.83	7.81	7.61	7.71	6.53	6.56
pH (S.U.) Maximum	Report	7.82	7.39	7.71	8.59	8.81	7.89	8.02	7.91	8.66	8.76	6.71	7.18
BOD5 (mg/L) Average Monthly	Report	10.3	< 4.7	4.4	21.8	< 4.1	< 3.6	< 3.4	< 3.5	< 3.5	< 3.35	< 3.6	< 3.2
BOD5 (mg/L) Daily Maximum	Report	16.6	5.8	5.0	38.4	4.4	< 3.6	3.6	< 3.5	< 3.6	< 3.5	< 3.8	< 3.4
COD (mg/L) Average Monthly	Report	< 37.6	< 32.1	< 26.6	< 57.5	30.6	< 25	< 34.2	< 32	< 25	< 25	< 25	< 27.2
COD (mg/L) Daily Maximum	Report	50.2	39.2	28.1	90.0	34.8	< 25	43.3	39	< 25	< 25	< 25	29.4
TSS (mg/L) Average Monthly	30.0	< 4.0	< 8.0	< 5.5	20.0	9.5	< 4	< 9	9	13.5	7.5	< 3	< 4.5
TSS (mg/L) Daily Maximum	60.0	4.0	12.0	7.0	34.0	15.0	< 4	14	14	19.0	11.0	4	5.0
Oil and Grease (mg/L) Average Monthly	15.0	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 5.2	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8
Oil and Grease (mg/L) Daily Maximum	30.0	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	5.6	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8
Dissolved Iron (mg/L) Average Monthly	3.5	< 0.075	< 0.07	< 0.07	< 0.07	< 0.07	0.074	< 0.07	< 0.07	< 0.07	< 0.073	< 0.07	< 0.07
Dissolved Iron (mg/L) Daily Maximum	7.0	0.08	< 0.07	< 0.07	< 0.07	< 0.07	0.074	< 0.07	< 0.07	< 0.07	0.076	< 0.07	< 0.07

Compliance History Cont.

DMR Data for Outfall 002 (from August 1, 2018 to July 31, 2019)

Parameter	Limit	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18	SEP-18	AUG-18
Flow (MGD) Average Monthly	Report	0.0168	0.0101	0.0134	4.560	0.2885	0.0115	0.0026	0.0052	0.0026	0.0175	0.2965	0.0956
Flow (MGD) Daily Maximum	Report	0.0217	0.0101	0.0160	9.117	0.5154	0.0115	0.0026	0.0077	0.0026	0.0323	4.0143	0.1070
pH (S.U.) Minimum	Report	7.47	7.45	7.58	7.17	7.19	7.69	7.75	6.60	6.12	8.02	6.31	6.65
pH (S.U.) Maximum	Report	7.48	7.61	7.66	8.90	8.73	7.69	8.11	7.21	7.25	8.60	7.19	6.89
BOD5 (mg/L) Average Monthly	Report	< 3.6	< 3.5	4.2	< 7.7	< 3.7	< 3.6	5.2	< 3.5	< 3.5	< 5.85	< 3.5	< 3.2
BOD5 (mg/L) Daily Maximum	Report	3.8	< 3.5	4.6	11.9	< 3.7	< 3.6	6.6	< 3.5	< 3.6	< 8.4	< 3.8	< 3.4
COD (mg/L) Average Monthly	Report	32.1	< 25	< 27.7	< 41.6	< 25	< 25	< 42.6	< 25	< 25	< 25	< 25	< 25
COD (mg/L) Daily Maximum	Report	39.2	< 25	30.3	58.1	< 25	< 25	60.2	< 25	< 25	< 25	< 25	< 25
TSS (mg/L) Average Monthly	30.0	< 5.0	< 5.0	7.0	12.5	< 4.0	11.0	< 5.5	< 4.0	< 4	7.5	< 12.5	7.0
TSS (mg/L) Daily Maximum	60.0	6.0	6.0	8.0	16.0	< 4.0	11.0	7.0	4.0	< 4	9.0	21	9.0
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	< 4.8	< 4.8	< 4.8
Oil and Grease (mg/L) Daily Maximum	30.0	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8
Dissolved Iron (mg/L) Average Monthly	3.5	< 0.07	< 0.07	< 0.07	< 0.07	0.091	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07
Dissolved Iron (mg/L) Daily Maximum	7.0	< 0.07	< 0.07	< 0.07	< 0.07	0.091	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07

Compliance History	
Summary of DMRs:	No exceedances with permit effluent limits.
Summary of Inspections:	The last inspection conducted by the Department was on October 10, 2016 by Stuart Demanski and one violation was noted for violation of effluent limits in Part A of the NPDES Permit.

Other Comments: None

Development of Effluent Limitations

Outfall No.	001	**Design Flow (MGD)**	0.0 (Stormwater)
Latitude	42º 32' 26"	**Longitude**	-79º 49' 54"

Wastewater Description: Stormwater runoff associated with areas of bus maintenance and storage.

Technology-Based Limitations

Outfall 001 discharges stormwater runoff from the decommissioned bus storage and maintenance building. Discharges from Outfall 001 are treated by a Vortechs solids separator and 25,000-gallon, American Petroleum Institute certified, OWS prior to being discharged to UNT to Deer Creek. Sample analysis results that were submitted with the NPDES permit application contained concentrations of oil and grease (<4.8 $^{mg}/_{L}$), biological oxygen demand (<3.4 $^{mg}/_{L}$), chemical oxygen demand (<25.0 $^{mg}/_{L}$), total suspended solids (<4.0 $^{mg}/_{L}$), total nitrogen (<1.0 $^{mg}/_{L}$), total phosphorus (0.064 $^{mg}/_{L}$), pH (7.3 S.U.), and dissolved iron (<70 ug/L).

Effluent Limitation Rationale

There are no Federal Effluent Limitation Guidelines ("ELG's") for facilities with SIC code 4111. However, parking and maintenance facilities may generate and discharge runoff containing significant amounts of oil and grease, TSS and heavy metals. Oil & grease, TSS and heavy metal concentrations are known to have an adverse impact on receiving waters. The existing NPDES permit contains effluent limitations for TSS, iron, and oil & grease.

The effluent limits for TSS are based on data for oil/water separation and sedimentation technologies. The TSS limits of 30 mg/L Average Monthly and 60 mg/L Daily Maximum are readily achievable through the application of technology designed to remove solids from the wastewater.

The effluent limits for oil and grease are imposed in accordance with PA Code § 95.2. (15 $^{mg}/_{L}$ average, 30 $^{mg}/_{L}$ maximum for oil-bearing wastewaters)

The effluent limitations for dissolved iron have been re-imposed in accordance with PA Code § 95.2(4).

In accordance with Chapter 6 of the Department's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits*, pH effluent limitations should not be imposed for discharges of stormwater runoff. The guidance recommends the use of "monitor only" and no numerical limits since it has been documented across the state that rainfall pH is below 6 standard units.

Effluent limitations from the previous permit are proposed for TSS, oil and grease, dissolved iron. The Department is imposing previously permitted monitoring requirements for BOD_5, COD and pH. The proposed technology based effluent limitations and monitoring requirements for Outfall 001 are shown in Table 1.

Water Quality-Based Effluent Limitations – Outfall 001

Outfalls 001 discharge storm water runoff from the Harmar Facility following treatment by an OWS and grit chamber. The treated wastewater discharges into an UNT to Deer Creek. Water quality analyses are typically performed under low-flow (Q_{7-10}) conditions. Since the discharges from this site consist entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Water quality based effluent limitations are not imposed.

Development of Effluent Limitations

Outfall No.	002	**Design Flow (MGD)**	0.0 (Stormwater)
Latitude	42º 32' 25"	**Longitude**	-79º 50' 01"

Wastewater Description: Stormwater runoff associated with areas of bus maintenance and storage.

Technology-Based Limitations

Outfall 001 discharges stormwater runoff from the decommissioned bus storage and maintenance building. Discharges from Outfall 001 are treated by a Vortechs solids separator and 15,000-gallon, American Petroleum Institute certified, OWS prior to being discharged to UNT to Deer Creek. Sample analysis results that were submitted with the NPDES permit application contained concentrations of oil and grease (<4.8 $^{mg}/_{L}$), biological oxygen demand (<3.4 $^{mg}/_{L}$), chemical oxygen demand (<25.0 $^{mg}/_{L}$), total suspended solids (6.0 $^{mg}/_{L}$), total nitrogen (<1.0 $^{mg}/_{L}$), total phosphorus (0.088 $^{mg}/_{L}$), pH (6.9 S.U.), and dissolved iron (148 ug/L).

Effluent Limitation Rationale

There are no Federal Effluent Limitation Guidelines ("ELG's") for facilities with SIC code 4111. However, parking and maintenance facilities may generate and discharge runoff containing significant amounts of oil and grease, TSS and heavy metals. Oil & grease, TSS and heavy metal concentrations are known to have an adverse impact on receiving waters. The existing NPDES permit contains effluent limitations for TSS, iron, and oil & grease.

The effluent limits for TSS are based on data for oil/water separation and sedimentation technologies. The TSS limits of 30 mg/L Average Monthly and 60 mg/L Daily Maximum are readily achievable through the application of technology designed to remove solids from the wastewater.

The effluent limits for oil and grease are imposed in accordance with PA Code § 95.2. (15 $^{mg}/_{L}$ average, 30 $^{mg}/_{L}$ maximum for oil-bearing wastewaters)

The effluent limitations for dissolved iron have been re-imposed in accordance with PA Code § 95.2(4).

In accordance with Chapter 6 of the Department's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits*, pH effluent limitations should not be imposed for discharges of stormwater runoff. The guidance recommends the use of "monitor only" and no numerical limits since it has been documented across the state that rainfall pH is below 6 standard units.

Effluent limitations from the previous permit are proposed for TSS, oil and grease, dissolved iron. The Department is imposing previously permitted monitoring requirements for BOD_5, COD and pH. The proposed technology based effluent limitations and monitoring requirements for Outfall 001 are shown in Table 2.

Water Quality-Based Effluent Limitations – Outfall 002

Outfalls 002 discharge storm water runoff from the Harmar Facility following treatment by an OWS and grit chamber. The treated wastewater discharges into an UNT to Deer Creek. Water quality analyses are typically performed under low-flow (Q_{7-10}) conditions. Since the discharges from this site consist entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Water quality based effluent limitations are not imposed.

Discharges of Stormwater Associated with Industrial Activity

The following BMPs may be helpful for reducing the discharge of pollutants into Waters of the Commonwealth. In light of the high effluent concentrations for a range of pollutants at this site, these BMPs have been included in Part C of the NPDES permit.

1. Enclose, cover or contain washing areas; use pressure washing without detergents or additives; perform washing in designated areas where wash water can be separately collected and treated, as appropriate.

2. Provide secondary containment for cracked batteries; store intact batteries on impervious surfaces.

3. Practice good housekeeping, periodically inspecting for leaks and spills; promptly clean up any leak/spill residue.

4. Store all hazardous and petroleum liquids in secure areas away from storm drains; minimize use of hazardous products.

5. Use oil-water separators to treat storm water drainage prior to discharge.

6. Do not conduct surface preparation and painting in windy conditions; use measures to collect any residue or spills.

7. Perform engine maintenance in areas where drainage can be contained and collected; minimize use of solvents and other hazardous materials.

8. Perform all vehicle and parts maintenance activities, wherever feasible, in enclosed areas.

9. Ensure adequate secondary containment and leak detection for fuel and other hazardous liquid storage areas.

10. For salt storage piles, follow the applicable recommendations and BMPs from the “Salt Storage Handbook” published by the Salt Institute.

Table 1 – Outfall 001 Effluent Limitations and Monitoring Requirements

Parameter	Mass ($^{lb}/_{day}$)		Concentration ($^{mg}/_{L}$)			Units
	Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	
Flow	Monitor & Report		---	---	---	MGD
Total Suspended Solids	---	---	---	30.0	60.0	$^{mg}/_{L}$
Oil and Grease	---	---	---	15.0	30.0	$^{mg}/_{L}$
BOD_5	---	---	---	Report	Report	$^{mg}/_{L}$
COD	---	---	---	Report	Report	$^{mg}/_{L}$
Iron, dissolved	---	---	---	3.5	7.0	$^{mg}/_{L}$
pH	---	---	Report	---	Report (IMAX)	S.U.

Table 2 – Outfall 002 Monitoring Requirements

Parameter	Mass (lb/day)		Concentration (mg/L)			Units
	Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	
Flow	Monitor & Report		---	---	---	MGD
Total Suspended Solids	---	---	---	30.0	60.0	$^{mg}/_{L}$
Oil and Grease	---	---	---	15.0	30.0	$^{mg}/_{L}$
BOD5	---	---	---	Report	Report	$^{mg}/_{L}$
COD	---	---	---	Report	Report	$^{mg}/_{L}$
Iron, dissolved	---	---	---	3.5	7.0	$^{mg}/_{L}$
pH	---	---	Report	---	Report (IMAX)	S.U.

1. Guidelines: PA Bulletin 6 & 12; EPA Multi-Sector General Permit; EPA Permit Writers' Manual;

2. Regulations: Chapters 92, 93, 95, Code of Federal Regulations and the Clean Water Act

Stick Diagram

Port Authority of Allegheny County
Harmar Garage
Harmar Township
Allegheny County
PA0204889