pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0255114**
Facility Type	**Storm Water**	APS ID	**1066495**
Major / Minor	**Minor**	Authorization ID	**1401449**

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

Applicant and Facility Information

Applicant Name	**Greenstar Pittsburgh, LLC**	Facility Name	**Greenstar Pittsburgh, LLC**
Applicant Address	4100 Grand Avenue	Facility Address	4100 Grand Avenue
	Pittsburgh, PA 15225-1516		Pittsburgh, PA 15225-1516
Applicant Contact	Paul Frank	Facility Contact	Paul Frank
Applicant Phone	(724) 413-2691	Facility Phone	(724) 413-2691
Client ID	267598	Site ID	447556
SIC Code	5093	Municipality	Neville Township
SIC Description	Wholesale Trade - Scrap And Waste Materials	County	Allegheny
Date Application Received	June 30, 2022	EPA Waived?	Yes
Date Application Accepted	June 30, 2022	If No, Reason	
Purpose of Application	Renewal of NPDES permit for the discharge of Stormwater Associated with Industrial Activity from the municipal recycling facility.		

Summary of Review

Background

Greenstar Pittsburgh, LLC (Greenstar) submitted an application on June 30, 2022 to renew NPDES permit coverage of their municipal recycling facility in Neville Township of Allegheny County. The recycling facility operates under the SIC Code 5093 (Scrap and Waste Materials). The current NPDES permit was issued as a new permit on December 29, 2017 and expired on December 31, 2022. The site was previously covered under PAG-03 General Permit PAR206125 from 1999-2015. General Permit coverage was denied on December 9, 2015 in response to the facility's pollutant discharge concentrations repeatedly exceeding the EPA's federal benchmark values for stormwater.

Property and Operations

Greenstar's municipal recycling facility operations include recycling of glass, metal, cardboard, paper, and plastic containers. The 17.75-acre recycling facility consists of vehicle storage and parking areas, equipment storage areas, a maintenance garage, processing offices, loading docks, baling operation and recycle storage building, glass processing building, fueling area, trailer storage area, overflow outdoor tipping area, and finished bale storage area.

Tipping operations of recycled materials are performed in the baling operation and recycling storage building during normal operation. Overflow tipping operations, during times of high recyclable collection, may be performed on the concrete pad outside the operational buildings. Sorting processes are currently all performed under roof in the baling operation and recycle

Approve	Deny	Signatures	Date
X		Lauren Nolfi / Environmental Engineering Specialist	June 27, 2024
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	July 10, 2024

Summary of Review

storage buildings and in the glass processing building. The facility disposes of an average of 8% of materials as residual waste. Bales of sorted recycled materials are stored inside the baling operation and recycling storage building and on a concrete pad on the east side of the building. Bales of material are picked up daily via railcar or tractor trailer. Greenstar's double-walled, 1000-gallon diesel fuel tank is stored without cover on the east side of the baling operation and in the recycle storage building. A contactor's fuel tank is stored without containment awaiting pickup in the vehicle storage and parking area. A Google Earth image of the Greenstar facility is included below in Figure 1.

Greenstar did not include a PPC Plan with their permit application, but reportedly has a PPC Plan onsite. The facility's BMPs include routine monthly and quarterly inspections, spill kits throughout the facility, socks, inserts, and metal screens in most catch basins, most tipping operations and all sorting processes performed under roof, double-walled fueling tank, paving the front parking area, installing new catch basins, regular cleaning of roof areas, gutters, downspouts, and conveyance lines, rerouting of gutters and downspouts to prevent the discharge of stormwater to grade, rerouting and replacement of below-grade stormwater piping and infrastructure, and regular maintenance of catch basin inserts and compost filter socks.

During a recent inspection of Greenstar by DEP on June 5, 2024, DEP's compliance specialist noted that the catch basins at the head of the dock tipping area were backed up, had a buildup of mud, no inserts, covers, or booms. DEP recommends that Greenstar improve BMPs at their loading dock and tipping area catch basins and ensure all catch basins have inserts, socks, and are routinely inspected.

Greenstar completed a large renovation project from September 2023 – April 2024 that moves most of its operations under roof. Greenstar's operations were shut down during this renovation period. Outdoor glass sorting and processing between the operational buildings was previously believed to be a source of the facility's high discharge concentrations of biological oxygen demand (BOD_5), chemical oxygen demand (COD), and total suspended solids (TSS). Glass processing was moved into a new glass processing building during the renovation. The area between the operational building has greatly improved as a result of moving the glass processing under cover. Greenstar also reported that the facility currently receives less glass since glass recycling has become restricted in several municipalities.

Figure 1: Greenstar Pittsburgh Google Earth image

Summary of Review

Outfalls

The facility has one outfall, Outfall 001, which discharges to the Ohio River, designated in 25 PA Code Chapter 93 as a Warm Water Fishery (WWF). A drainage map of the facility is included in Attachment A. Outfall 001 receives stormwater from catch basins throughout the entire 17.75-acre area of the facility, consisting of the vehicle storage and parking areas, equipment storage areas, a maintenance garage, processing offices, loading docks, baling operating and recycle storage building, glass processing building, fueling area, trailer storage area, overflow outdoor tipping area, and finished bale storage area.

During the previous permit cycle, the facility eliminated its previously named Outfall 001 by rerouting it to Outfall 002. The previously named Outfall 002 was renamed Outfall 001 and remains Greenstar's only discharge point.

Liquids draining from tipping operations have the potential to discharge to Outfall 001 via the three loading dock catch basins or the two catch basins near the head of the dock. This permit does not authorize any liquids from tipping operations to discharge to Outfall 001.

Public Participation

Greenstar provided evidence of Act 14 municipal and county notifications to Neville Township and Allegheny County on June 9, 2022.

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

Draft permit issuance is recommended.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0
Latitude	40º 30' 41"	Longitude	-80º 6' 59"
Quad Name	Emsworth	Quad Code	1405
Wastewater Description:	Stormwater		
Receiving Waters	Ohio River (WWF)	Stream Code	32317
NHD Com ID	99684046	RMI	32.74
Drainage Area	19,400 mi^2	Yield (cfs/mi^2)	0.12
Q_{7-10} Flow (cfs)	2365	Q_{7-10} Basis	U.S. Army Corp of Engineers Emsworth L&D
Elevation (ft)	694	Slope (ft/ft)	0.0005
Watershed No.	20-G	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Dioxins, Pathogens, Polychlorinated Biphenyls (PCBS)		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final	Name	Ohio River
Nearest Downstream Public Water Supply Intake	Moon Township Municipal Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	8.05
PWS RMI	28.72	Distance from Outfall (mi)	4.02

Changes Since Last Permit Issuance:

No changes have been made to Outfall 001 since last permit issuance.

Other Comments:

The USGS Stream Stats Data for the drainage area is displayed in Attachment B.

Compliance History

DMR Data for Outfall 001 (from May 1, 2023 to April 30, 2024)

Parameter	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23
Flow (MGD) Daily Maximum	14	11	39	50	12	6.7	119	4	13	14	49	60
BOD5 (mg/L) Daily Maximum	< 1.5	< 1.5	5.0	< 3.0	< 6.0	4.0	< 1.7	6.0	3.0	3.0	9.0	21.0
COD (mg/L) Daily Maximum	< 10.0	14.0	21.0	< 10.0	< 10.0	17.0	< 10.0	74.0	20.0	11.0	65.0	23.0
TSS (mg/L) Daily Maximum	< 2.0	< 2.0	26.0	< 2.0	19.0	26.0	12.0	11.0	4.0	4.0	19.0	6.0
Oil and Grease (mg/L) Daily Maximum	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Copper (mg/L) Daily Maximum	0.028	0.014	0.015	0.023	0.034	0.026	0.018	0.053	< 0.010	0.012	0.040	0.014
Total Iron (mg/L) Daily Maximum	0.12	0.06	1.21	0.17	0.46	0.97	0.86	0.49	0.16	0.53	0.60	0.15
Total Lead (mg/L) Daily Maximum	< 0.02	< 0.02	0.04	< 0.02	< 0.02	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.02	< 0.02

Compliance History

Summary of Inspections:

The most recent inspections conducted by the Department were on May 3, 2021 as an administrative/ file review and on April 22, 2021 and June 5, 2024 by Shawn Bell as compliance evaluations. The April 22, 2021 inspection was completed in response to four effluent violations. No violations were noted during each of these inspections.

The following recommendations were made during the June 5, 2024 inspection:

(1) Ensure tipping area catch basins have inserts, socks, and are routinely inspected. Remove mud from catch basins.

(2) Evaluate options to provide overhead cover of tipping area to avoid potential stormwater pollution.

(3) Consider additional overhead cover of facility's fuel tank.

(4) Have contractor remove temporary fuel tank as soon as possible.

Other Comments:

A review of Greenstar's DMRs from the past five years revealed 12 effluent violations for BOD_5, COD, and TSS between April 2019 and September 2022. The effluent violations are listed below in Table 2 in the Development of Effluent Limitations section.

The client has no open violations.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0
Latitude 40º 30' 41" **Longitude** -80º 6' 59"
Wastewater Description: Stormwater

Stormwater Drainage Overview

Outfall 001 receives stormwater from the entire 17.75-acre area of the facility, consisting of the vehicle storage and parking areas, equipment storage areas, a maintenance garage, processing offices, loading docks, baling operating and recycle storage building, glass processing building, fueling area, trailer storage area, overflow outdoor tipping area, and finished bale storage area.

Technology-Based Limitations

Stormwater Technology Limits

Outfall 001 will be subject to PAG-03 General Stormwater Permit conditions as a minimum requirement because the outfalls discharge stormwater. The SIC codes for the site are 5093 (Plastics Products, Not Elsewhere Classified) and the corresponding appendix of the PAG-03 that would apply to the facility is Appendix P. The reporting requirements applicable to stormwater discharges are shown in Table 1. Along with the monitoring requirements, sector specific BMPs included in Appendix P (Scrap and Waste Recycling Facilities) of the PAG-03 will also be included in Part C of the Draft Permit.

Table 1: PAG-03 Appendix P Monitoring Requirements

Parameters	Average Monthly (mg/L)	Daily Maximum (mg/L)	Benchmark Values (mg/L)	Monitoring Requirements	
				Monitoring Frequency	Sample Type
Nitrogen, total	-	Monitor & Report	-	1/6 Months	Calculation[1]
Phosphorus, total	-	Monitor & Report	-	1/6 Months	Grab
Total Suspended Solids	-	Monitor & Report	100	1/6 Months	Grab
Oil and Grease	-	Monitor & Report	30	1/6 Months	Grab
Chemical Oxygen Demand	-	Monitor & Report	120	1/6 Months	Grab
Aluminum, total	-	Monitor & Report	-	1/6 Months	Grab
Copper, total	-	Monitor & Report	-	1/6 Months	Grab
Lead, total	-	Monitor & Report	-	1/6 Months	Grab
Zinc, total	-	Monitor & Report	-	1/6 Months	Grab

1. Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO2+NO3-N), where TKN and NO2+NO3-N are measured in the same sample.

BPJ Analysis for Stormwater Discharges

Best Professional Judgement (BPJ) limits are derived when EPA has not promulgated technology based effluent limitations. The previous permit imposed BPJ limits in response to Greenstar's repeated high pollutant discharge concentrations. Over the previous five years, since the effluent limitations were imposed by the previous permit's compliance schedule, Greenstar has received 12 effluent limitation violations for BOD_5, COD, and TSS, between April 2019 and September 2022. The effluent limitation exceedances are shown below in Table 2.

Table 2: Effluent Limitation Exceedances ($^{mg}/_{L}$)			
Date	**BOD_5**	**COD**	**TSS**
4/ 2019	**37.0**	39.0	32.0
4/ 2020	**91.0**	**130.0**	38.0
3/ 2021	**34.0**	89.0	98.0
11/ 2021	9.0	59.0	**151.0**
2/ 2022	**67.0**	**234.0**	17.0
6/ 2022	**50.0**	**162.0**	**170.0**
9/ 2022	**42.0**	**160.0**	54.0
Effluent Limit ($^{mg}/_{L}$)	**30.0**	**120.0**	**100.0**

In reaction to the effluent violations, Greenstar has implemented additional Best Management Practices (BMPs) in the past few years, including the following:

- Paving the front parking area and installing new catch basins;
- Replacing catch basins along the western portion of the property with new units;
- Moving tipping operations under roof in routine conditions;
- Regular cleaning of roof areas, gutters, downspouts, and conveyance lines;
- Rerouting of gutters and downspouts to prevent the discharge of stormwater to grade;
- Rerouting and replacement of below grade stormwater piping and infrastructure;
- Blockage of catch basins in select areas to prevent the introduction of pollutants;
- Regular maintenance of catch basin inserts and compost filter socks.

In addition, Greenstar completed a large renovation project from September 2023 – April 2024 that moves most of its operations under roof. Overflow tipping operations, during times of high recyclable collection, may still be performed outside the operational buildings. Greenstar has not received any effluent limitation violations since 2022. Reported analytical results submitted with the NPDES permit application did not show elevated concentrations of any parameters.

Benchmark Monitoring

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 BMPs may not be sufficiently controlling pollutants in stormwater. The previous permit imposed monitoring only for the parameters lead, copper, and iron, since the high discharge concentrations were believed to be linked to the levels of solids and oxygen demand in the effluent.

Average and maximum discharge concentrations of lead, copper, and iron, from the past five years, were compared with the EPA's stormwater benchmark goals, based on EPA's Multisector General Permit (MSGP) document. Greenstar's average and maximum discharge concentrations of lead, copper, and iron, along with EPA's stormwater benchmark values from both the 2015 and 2021 MSGPs are shown below in Table 3. The benchmark for iron was removed by the 2021 MSGP and the benchmark for lead was unchanged. EPA's benchmark for copper was reduced by the 2021 MSGP, based on updated EPA national recommended aquatic life water quality criteria.

Table 3: MSGP Benchmark Exceedances ($^{mg}/_{L}$)			
	Lead	**Copper**	**Iron**
Average Concentration 1/1/19 – 4/30/24	0.0298	0.0216	0.936
Maximum Concentration 1/1/19 – 4/30/24	0.15	0.07	7.58
MSGP Benchmarks ($^{mg}/_{L}$) 2015 - 2021	**0.082**	**0.014**	**1.0**
MSGP Benchmarks ($^{mg}/_{L}$) 2021 – present	**0.082**	**0.00519**	**-**

Greenstar's reported discharge concentrations of iron will not be compared with the benchmark, since it was removed by the 2021 MSGP. The facility reported a maximum iron concentration of 7.58 mg/L in 2021. Greenstar's reported discharge concentrations of lead exceeded the benchmark value three times on nonconsecutive months, with a maximum

concentration of 0.15 mg/L in 2021. Greenstar's reported discharge concentrations of copper exceeded the benchmark values 34 times, with a maximum concentration of 0.07 mg/L in 2021.

While Greenstar repeatedly exceeds EPA's MSGP benchmark value for copper, the discharge concentration is not high enough to be considered treatable. The Best Available Technology (BAT) limit for copper, achievable using a treatment technology of chemical precipitation, is 0.4 mg/L. Since this limit is nearly six times the maximum reported discharge concentration of copper, treatment technologies would not reduce Greenstar's copper concentrations.

The Department continues to believe that high discharge concentrations of lead, copper, and iron are linked to the levels of solids and oxygen demand in the effluent. Greenstar's reported discharge concentrations of lead, copper, and iron have all decreased as Greenstar has implemented additional BMPs and maintained compliance with their BOD_5, COD, and TSS effluent limitations. Continued monitoring only of these parameters is proposed.

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 discharges from Outfalls 001 are 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.

Anti-Backsliding

Previous limits can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l). Previous Limits imposed at Outfall 001 are displayed below in Table 4. DMRs from the past five years were reviewed and it was determined, based on the concentrations reported in the DMRs, that BOD_5, COD, TSS, copper, iron, and lead are still pollutants of concern. No parameters, with the exception of flow, have been removed from the effluent limits and monitoring requirements for Outfall 001. Since the discharges from Outfall 001 are composed entirely of stormwater, flow monitoring is not applicable to this outfall and will be removed from the permit.

Table 4: Current Permit Effluent Limitations – Outfall 001

Parameters	Average Monthly	Maximum Daily	Units	Monitoring Requirements	
				Monitoring Frequency	Sample Type
Flow	-	Monitor & Report	mg/L	1/month	Estimate
Biological Oxygen Demand (BOD_5)	-	30.0	mg/L	1/month	Grab
Chemical Oxygen Demand (COD)	-	120.0	mg/L	1/month	Grab
Oil and Grease	-	15.0	mg/L	1/month	Grab
Total Suspended Solids (TSS)	-	100.0	mg/L	1/month	Grab
Copper, total	-	Monitor & Report	mg/L	1/month	Grab
Iron, total	-	Monitor & Report	mg/L	1/month	Grab
Lead, total	-	Monitor & Report	mg/L	1/month	Grab

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent monitoring requirements for Outfall 001, displayed in Table 5 below, are the most stringent values from the above effluent limitation development. The monitoring frequency is reduced to once per quarter, since the discharges from Outfalls 001 are composed entirely of stormwater and the facility has maintained compliance with effluent limitations since 2022.

Table 5: Proposed Effluent Monitoring Requirements – Outfall 001					
Parameters	**Maximum Daily**	**Benchmark Values**	**Units**	**Monitoring Requirements**	
				Monitoring Frequency	**Sample Type**
Biological Oxygen Demand (BOD_5)	30.0	-	mg/L	1/ quarter	Grab
Chemical Oxygen Demand (COD)	120.0	-	mg/L	1/ quarter	Grab
Oil and Grease	15.0	-	mg/L	1/ quarter	Grab
Total Suspended Solids (TSS)	100.0	-	mg/L	1/ quarter	Grab
Aluminum, total	Monitor & Report	-	mg/L	1/ quarter	Grab
Copper, total	Monitor & Report	-	mg/L	1/ quarter	Grab
Iron, total	Monitor & Report	-	mg/L	1/ quarter	Grab
Lead, total	Monitor & Report	-	mg/L	1/ quarter	Grab
Nitrogen, total	Monitor & Report	-	mg/L	1/ quarter	Calculation [1]
Phosphorus, total	Monitor & Report	-	mg/L	1/ quarter	Grab
Zinc, total	Monitor & Report	-	mg/L	1/ quarter	Grab

1. Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO2+NO3-N), where TKN and NO2+NO3-N are measured in the same sample.

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, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☐	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 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, 386-2000-020, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 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, 386-2000-010, 3/1999.
☐	Design Stream Flows, 386-2000-003, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☐	Other:

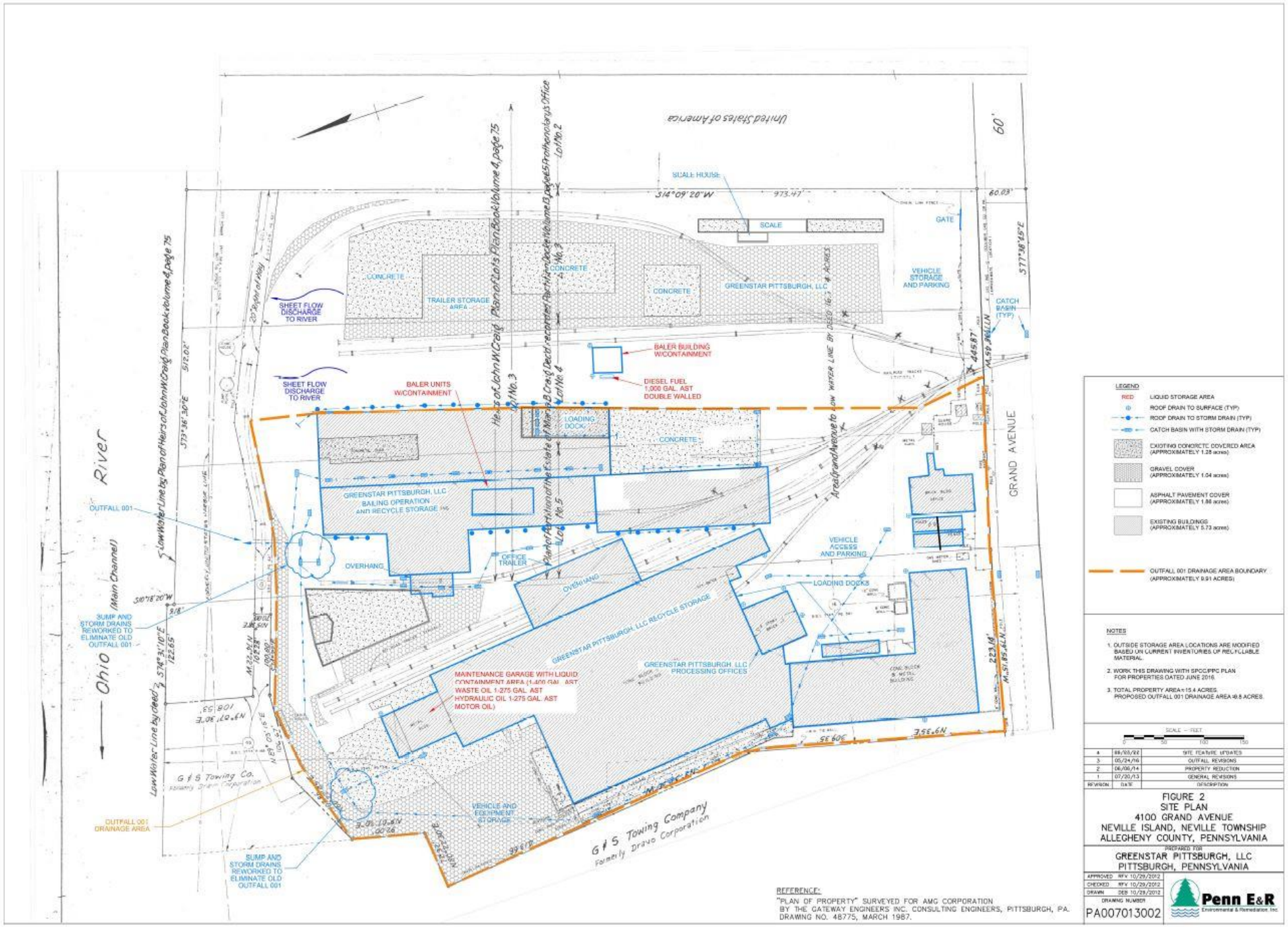
Attachments

Attachment A: Drainage Area Map

Attachment B: StreamStats Report

ATTACHMENT A:

Drainage Area Map


Ohio (Main Channel) River
GRAND AVENUE
United States of America
SCALE HOUSE
SCALE
GATE
CONCRETE
TRAILER STORAGE AREA
GREENSTAR PITTSBURGH, LLC
VEHICLE STORAGE AND PARKING
CATCH BASIN (TYP)
SHEET FLOW DISCHARGE TO RIVER
BALER BUILDING W/CONTAINMENT
DIESEL FUEL 1,000 GAL. AST DOUBLE WALLED
BALER UNITS W/CONTAINMENT
LOADING DOCK
GREENSTAR PITTSBURGH, LLC BALING OPERATION AND RECYCLE STORAGE
OUTFALL 001
OVERHANG
OFFICE TRAILER
VEHICLE ACCESS AND PARKING
LOADING DOCKS
GREENSTAR PITTSBURGH, LLC RECYCLE STORAGE
GREENSTAR PITTSBURGH, LLC PROCESSING OFFICES
MAINTENANCE GARAGE WITH LIQUID CONTAINMENT AREA (1,400 GAL. AST
WASTE OIL 1-275 GAL. AST
HYDRAULIC OIL 1-275 GAL. AST
MOTOR OIL)
SUMP AND STORM DRAINS REWORKED TO ELIMINATE OLD OUTFALL 001
G & S Towing Co.
G & S Towing Company
Formerly Dravo Corporation
VEHICLE AND EQUIPMENT STORAGE
OUTFALL 001 DRAINAGE AREA
LEGEND
LIQUID STORAGE AREA
ROOF DRAIN TO SURFACE (TYP)
ROOF DRAIN TO STORM DRAIN (TYP)
CATCH BASIN WITH STORM DRAIN (TYP)
EXISTING CONCRETE COVERED AREA (APPROXIMATELY 1.28 acres)
GRAVEL COVER (APPROXIMATELY 1.04 acres)
ASPHALT PAVEMENT COVER (APPROXIMATELY 1.86 acres)
EXISTING BUILDINGS (APPROXIMATELY 5.73 acres)
OUTFALL 001 DRAINAGE AREA BOUNDARY (APPROXIMATELY 9.91 ACRES)
NOTES
1. OUTSIDE STORAGE AREA LOCATIONS ARE MODIFIED BASED ON CURRENT INVENTORIES OF RECYCLABLE MATERIAL.
2. WORK THIS DRAWING WITH EPCC/PPC PLAN FOR PROPERTIES DATED JUNE 2016
3. TOTAL PROPERTY AREA = 15.4 ACRES. PROPOSED OUTFALL 001 DRAINAGE AREA 49.8 ACRES.
SCALE — FEET
4 09/03/22 SITE FEATURE UPDATES
3 05/24/16 OUTFALL REVISIONS
2 06/06/14 PROPERTY REDUCTION
1 07/20/13 GENERAL REVISIONS
REVISION DATE DESCRIPTION
FIGURE 2
SITE PLAN
4100 GRAND AVENUE
NEVILLE ISLAND, NEVILLE TOWNSHIP
ALLEGHENY COUNTY, PENNSYLVANIA
PREPARED FOR
GREENSTAR PITTSBURGH, LLC
PITTSBURGH, PENNSYLVANIA
APPROVED RFV 10/29/2012
CHECKED RFV 10/29/2012
DRAWN DEB 10/29/2012
DRAWING NUMBER
PA007013002
Penn E&R
Environmental & Remediation, Inc.
REFERENCE:
"PLAN OF PROPERTY" SURVEYED FOR AMG CORPORATION BY THE GATEWAY ENGINEERS INC. CONSULTING ENGINEERS, PITTSBURGH, PA. DRAWING NO. 48775, MARCH 1987.

ATTACHMENT B:

StreamStats Report

StreamStats Report

Region ID: PA
Workspace ID: PA20240522180603058000
Clicked Point (Latitude, Longitude): 40.51272, -80.11617
Time: 2024-05-22 14:06:39 -0400

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	19400	square miles
ELEV	Mean Basin Elevation	1675	feet
PRECIP	Mean Annual Precipitation	45	inches

Low-Flow Statistics

Low-Flow Statistics Parameters [58.0 Percent (11200 square miles) Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	19400	square miles	2.33	1720

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
ELEV	Mean Basin Elevation	1675	feet	898	2700
PRECIP	Mean Annual Precipitation	45	inches	38.7	47.9

Low-Flow Statistics Parameters [42.0 Percent (8200 square miles) Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	19400	square miles	2.26	1400
ELEV	Mean Basin Elevation	1675	feet	1050	2580

Low-Flow Statistics Disclaimers [58.0 Percent (11200 square miles) Low Flow Region 3]

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

Low-Flow Statistics Flow Report [58.0 Percent (11200 square miles) Low Flow Region 3]

Statistic	Value	Unit
7 Day 2 Year Low Flow	2810	ft^3/s
30 Day 2 Year Low Flow	3530	ft^3/s
7 Day 10 Year Low Flow	1990	ft^3/s
30 Day 10 Year Low Flow	2310	ft^3/s
90 Day 10 Year Low Flow	3080	ft^3/s

Low-Flow Statistics Disclaimers [42.0 Percent (8200 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 [42.0 Percent (8200 square miles) Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	2850	ft^3/s
30 Day 2 Year Low Flow	3530	ft^3/s
7 Day 10 Year Low Flow	1920	ft^3/s
30 Day 10 Year Low Flow	2020	ft^3/s
90 Day 10 Year Low Flow	2760	ft^3/s

Low-Flow Statistics Flow Report [Area-Averaged]

Statistic	Value	Unit
7 Day 2 Year Low Flow	2830	ft^3/s

Statistic	Value	Unit
30 Day 2 Year Low Flow	3530	ft^3/s
7 Day 10 Year Low Flow	1960	ft^3/s
30 Day 10 Year Low Flow	2190	ft^3/s
90 Day 10 Year Low Flow	2950	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/)

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