pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0003085**
Facility Type	**Industrial**	APS ID	**956461**
Major / Minor	**Minor**	Authorization ID	**1208942**

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

Applicant and Facility Information

Applicant Name	**GrafTech USA LLC**	Facility Name	**Graftech USA**
Applicant Address	800 Theresia Street	Facility Address	800 Theresia Street
	St Marys, PA 15857-1831		St Marys, PA 15857
Applicant Contact	Lee Cunningham, HSEP Manager	Facility Contact	
Applicant Phone	(814) 834-2479	Facility Phone	(814) 781-2479
Client ID	71578	Site ID	237623
SIC Code	3624	Municipality	Saint Marys City
SIC Description	Manufacturing - Carbon And Graphite Products	County	Elk
Date Application Received	November 30, 2017	EPA Waived?	No
Date Application Accepted	December 7, 2017	If No, Reason	Discharge to a TMDL Stream

Purpose of Application: Renewal of an NPDES Permit for an existing discharge of treated groundwater and stormwater

Summary of Review

This facility produces graphite electrodes for the Electric Arc Furnace (EAF) steel industry.

There are no discharges of process wastewater or cooling water associated with this facility.

There are currently no open violations listed in EFACTS for this permittee (6/26/2019).

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.

Approve	Deny	Signatures	Date
X		Adam J. Pesek, E.I.T. / Environmental Engineering Specialist	
X		Justin C. Dickey, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	010	Design Flow (MGD)	0.043
Latitude	41º 25' 49"	Longitude	78º 32' 17"
Quad Name	Saint Marys	Quad Code	03091
Wastewater Description:	Groundwater / Stormwater associated with industrial activity		

Receiving Waters	Unnamed Tributary to Elk Creek (CWF)	Stream Code	50518
NHD Com ID	102665157	RMI	1.0
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	17-A	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	CAUSE UNKNOWN, Metals		
Source(s) of Impairment	ACID MINE DRAINAGE, SOURCE UNKNOWN		
TMDL Status	Final	Name	Elk Creek TMDL (Elk County) 50459

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake	PA American Water Company - Clarion		
PWS Waters	Clarion River	Flow at Intake (cfs)	195.14
PWS RMI	33.6	Distance from Outfall (mi)	Approx. 73 mi

Comments: This is also the representative stormwater sampling location for Outfalls 023 & 036.
The application indicates this is a continuous discharge.

0.043 MGD is the permitted design flow based on the design of the constructed wetland.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	007	Design Flow (MGD)	N/A
Latitude	41º 25' 51"	Longitude	-78º 32' 28"
Quad Name	Saint Marys	Quad Code	03091
Wastewater Description:	Groundwater / Spring Discharge, Stormwater		

Comments: This is also the representative stormwater sampling location for Outfall 034.
There is a suspected AMD seepage contribution at 007 which is an intermittent flow.

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	201	Design Flow (MGD)	N/A
Latitude	41º 25' 49"	Longitude	-78º 32' 17"
Quad Name	Saint Marys	Quad Code	03091
Wastewater Description:	Groundwater / Spring Discharge, Stormwater		

Comments: This is also the representative stormwater sampling location for Outfall 002.
There is a suspected AMD seepage contribution at 201 which is an intermittent flow.

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	006	Design Flow (MGD)	N/A
Latitude	41º 25' 47"	Longitude	-78º 32' 38"
Quad Name	Saint Marys	Quad Code	03091
Wastewater Description:	Stormwater		

Comments: This is also the representative stormwater sampling location for Outfalls 003 & 032.

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	008	Design Flow (MGD)	N/A
Latitude	41º 25' 51"	Longitude	-78º 32' 22"
Quad Name	Saint Marys	Quad Code	03091
Wastewater Description:	Stormwater		

Comments: This is also the representative stormwater sampling location for Outfalls 020 & 046

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	040	Design Flow (MGD)	N/A
Latitude	41º 25' 46"	Longitude	-78º 32' 09"
Quad Name	Saint Marys	Quad Code	03091
Wastewater Description:	Stormwater		

Comments: This is also the representative stormwater sampling location for Outfalls 011, 026, 042, 043 & 046.

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	041	Design Flow (MGD)	N/A
Latitude	41º 25' 47"	Longitude	-78º 32' 12"
Quad Name	Saint Marys	Quad Code	03091
Wastewater Description:	Stormwater		

Comments: This is also the representative stormwater sampling location for Outfall 039.

Other Stormwater Outfalls

Outfall No.	Latitude	Longitude
002	41º 25' 49"	78º 32' 44"
003	41º 25' 49"	78º 32' 44"
011	41º 25' 47"	78º 32' 13"
020	41º 25' 51"	78º 32' 24"
023	41º 25' 49"	78º 32' 18"
026	41º 25' 48"	78º 32' 12"
032	41º 25' 52"	78º 32' 30"
033	41º 25' 52"	78º 32' 30"
034	41º 25' 49"	78º 32' 22"
036	41º 25' 49"	78º 32' 20"
039	41º 25' 48"	78º 32' 17"
042	41º 25' 46"	78º 32' 06"
043	41º 25' 46"	78º 32' 01"
045	41º 25' 46"	78º 32' 01"
046	41º 25' 49"	78º 32' 17"

These outfalls discharge to an UNT to Elk Creek.

Treatment Facility Summary				
Treatment Facility Name: Graftech USA				
WQM Permit No.	**Issuance Date**			
2498201-T2	5/9/13			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Daily Flow (MGD)**
Industrial	Iron removal	Constructed Wetland	N/A	0.043

Changes since the last permit issuance: None

Groundwater collection sump, dosing tank and a constructed wetland (0.5 acres) – [originally permitted on 8/13/98]

Previous permittees: Carbide Graphite Group & CG Electrodes Acquisition LLC

Compliance History	
Summary of DMRs:	See Fact Sheet Attachment A. No violations indicated at Outfall 010. DMR monitoring data indicate a potential for contribution to the stream impairment at Outfalls 007.
Summary of Inspections:	Compliance Inspection last conducted September 8, 2016. Report indicated production activities had been greatly reduced, with only machining of shipped-in parts done onsite. Also followed up on a report of an oil sheen in the stream that was reported from Outfall 003. Source of oil not located, booms in place to catch the contaminants.

Other Comments: **PPC Plan was last revised in December 2015.**

Development of Effluent Limitations

Outfall No. 010 **Design Flow (MGD)** 0.043
Latitude 41º 25' 49" **Longitude** 78º 32' 17"
Wastewater Description: Groundwater / Spring Discharge, Stormwater associated with industrial activity

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)

Comments:

Water Quality-Based Limitations

Comments: No PENTOXSD modeling was conducted due to limits for AMD metals already being set at the most stringent instream criteria.

Best Professional Judgment (BPJ) Limitations

Comments: An AMD TMDL was finalized for the Elk Creek Watershed on March 28, 2005. This TMDL did not consider any point source discharges, and therefore no Waste Load Allocations (WLAs) were assigned to this facility. In accordance with the Department's SOP entitled "Establishing Effluent Limitations for Individual Industrial Permits," average monthly/quarterly limits for total aluminum, total iron, and total manganese that are set at the most stringent Chapter 93 criteria. It is assumed by DMR data, that these new limits can be met consistently, with exception of total iron discharge data that indicates the new limit would be exceeded periodically. This permitting strategy was also suggested by EPA Region III during the last permit renewal process, but the Department did not implement that permitting strategy at that time.

The total iron daily maximum limit was a WQBEL in the current permit and is being retained as part of this permit renewal.

Anti-Backsliding

N/A

Development of Effluent Limitations

Outfall No. 003, 006, 008, 011, 020, 026, 032, 033, 039, 040, 041, 042, 043, 045, and 046 **Design Flow (MGD)** 0

Wastewater Description: Stormwater associated with industrial activities

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)

Comments: The pH minimum limit will be applied as a benchmark value in Part C.II. of the permit. The pH maximum limit is not being applied as a benchmark value due to the receiving stream being impaired due to acid mine drainage, therefore higher alkaline flows are desired.

Water Quality-Based Limitations

Comments: No WQ-based modeling was done as the discharge consists of stormwater only.

Best Professional Judgment (BPJ) Limitations

Comments: Monitoring requirements for TSS and oil and grease, along with benchmark values found in Part C.II. of the permit, were included in accordance with the Department's SOP entitled "Establishing Effluent Limitations for Individual Industrial Permits."

Monitoring for total aluminum, total iron, and total manganese was placed in the permit due to these parameters being identified as pollutants causing the stream impairment in the Elk Creek Watershed TMDL that was finalized on March 28, 2005. The most stringent Chapter 93 instream water-quality criteria were set as benchmarks in Part C.II. as a means to address the stream impairment since these existing point source discharges are not addressed in the TMDL.

Anti-Backsliding

N/A

Development of Effluent Limitations

Outfall No. 002, 007, 034, and 201 **Design Flow (MGD)** 0
Wastewater Description: Groundwater/Spring Discharge, Stormwater Associated with Industrial Activities

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)

Comments: The pH minimum limit will be applied as a benchmark value in Part C.II. of the permit. The pH maximum limit is not being applied as a benchmark value due to the receiving stream being impaired due to acid mine drainage, therefore higher alkaline flows are desired.

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Comments: No WQ-based modeling was done as the discharge consists of stormwater only.

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Comments: Monitoring requirements for TSS and oil and grease, along with benchmark values found in Part C.II. of the permit, were included in accordance with the Department's SOP entitled "Establishing Effluent Limitations for Individual Industrial Permits."

Monitoring for total aluminum, total iron, and total manganese was placed in the permit due to these parameters being identified as pollutants causing the stream impairment in the Elk Creek Watershed TMDL that was finalized on March 28, 2005. The most stringent Chapter 93 instream water-quality criteria were set as benchmarks in Part C.II. as a means to address the stream impairment since these existing point source discharges are not addressed in the TMDL.

Elevated AMD metal concentrations seen on DMRs for Outfalls 007 and 207 are most likely contributing to the stream impairment and will also most like trigger the need for corrective action plans for most or all of these four outfalls early in the permit cycle.

Anti-Backsliding

N/A

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), SOPs and/or BPJ.

Outfalls 002, 003, 006, 008, 011, 020, 026, 32, 33, 036, 039, 040, 041, 042, 043, 045, and 046, 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	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	XXX	Report Daily Max	XXX	XXX	XXX	XXX	1/6 months	Estimate
pH (S.U.)	XXX	XXX	Report Daily Min	XXX	XXX	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Manganese	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: Outfall 006, 008, 040, and 041 (prior to mixing with any other waters)

Other Comments:

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), SOPs and/or BPJ.

Outfalls 002, 007, 034 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
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	XXX	Report Daily Max	XXX	XXX	XXX	XXX	1/quarter	Estimate
pH (S.U.)	XXX	XXX	Report Daily Min	XXX	XXX	XXX	1/quarter	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Manganese	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Compliance Sampling Location: Outfalls 007 and 201 (prior to mixing with any other waters).

Other Comments: 201 is the compliance monitoring point instead of Outfall 001 due to neighboring industries also contributing to Outfall 001. Outfall 201 only collects stormwater from this permitted facility. These other industries were also give internal monitoring points to evaluate their stormwater contribution.

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), SOPs and/or BPJ.

Outfall 010, 023, and 036, 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	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/month	Grab
Total Aluminum	0.26 Avg Qrtly	XXX	XXX	0.75 Avg Qrtly	XXX	XXX	1/quarter	Grab
Total Iron	0.53	2.5 Daily Max	XXX	1.5	7.0 Daily Max	8.75	1/month	Grab
Total Manganese	0.35 Avg Qrtly	XXX	XXX	1.0 Avg Qrtly	XXX	XXX	1/quarter	Grab

Compliance Sampling Location: Outfall 010 (prior to mixing with any other waters)

Other Comments: