pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal/ Transfer**
Facility Type	**Storm Water**
Major / Minor	**Minor**

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

Application No.	**PA0042102**
APS ID	**1049634**
Authorization ID	**1372784**

Applicant and Facility Information

Applicant Name	**Huntsman Advanced Materials Americas, LLC**	Facility Name	**Huntsman Advanced Materials Americas, LLC**
Applicant Address	10003 Woodloch Forest Drive	Facility Address	408 Manor Harrison City Road
	The Woodlands, TX 77380-1913		Harrison City, PA 15636-1102
Applicant Contact	Darren Barker	Facility Contact	Chad Dolby
Applicant Phone	(281) 536-0753	Facility Phone	724-493-6082
Client ID	366082	Site ID	243748
SIC Code	2851	Municipality	Manor Borough
SIC Description	Manufacturing - Paints And Allied Products	County	Westmoreland
Date Application Received	October 2, 2020	EPA Waived?	Yes
Date Application Accepted	October 19, 2020	If No, Reason	

Purpose of Application: Renewal of NPDES permit for the discharge of stormwater associated with industrial activity.

Summary of Review

Background

Gabriel Performance Products, LLC submitted an NPDES permit application on October 2, 2020 to transfer and renew coverage of discharges from its manufacturing facility located in Manor Borough of Westmoreland County. The facility transferred ownership from Ranbar Electrical Materials, LLC to Gabriel Performance Products, LLC in November of 2018. The Department later received a transfer application on October 4, 2021 to transfer the permit from Gabriel Performance Products, LLC to Huntsman Advanced Materials Americas, LLC. The transfer is the result of a change in ownership on November 1, 2021. Huntsman Advanced Materials Americas, LLC (Huntsman) submitted the eDMR registration and trading partner agreement forms to DEP on September 30, 2021. The Huntsman facility operates as a paint, electrical coating, and varnish manufacturing plant with an SIC Code 2851 (Paints, Varnishes, Lacquers, Enamels, and Allied Products). The previous NPDES permit was issued on March 18, 2016 and expired on March 31, 2021.

Property and Operations

The Huntsman property consists of 72,500 ft^2 of warehouse and manufacturing space and 5,300 ft^2 of office space. The site is located adjacent to Bushy Run, with a bridge over Bushy Run connecting the office building and parking lot to the main manufacturing plant. The facility includes a paint manufacturing area (Paint Plant) and a manufacturing area designated as the Resin Plant (Alkyd), which produces varnishes and related industrial coating materials.

The Paint Plant's manufacturing process involves milling and blending to reduce pigment particle size, incorporate pigments into the liquid base of a coating, and mix the paint or coating materials. The Resin Plant has four chemical reactors, with

Approve	Deny	Signatures	Date
X		Lauren Nolfi, E.I.T. / Environmental Engineering Specialist	November 4, 2021
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	November 10, 2021

Summary of Review

capacities ranging from 500 gallons to 2000 gallons. The reactors are operated at atmospheric pressure or under vacuum. Reactor temperatures can exceed 300°C; heating is supplied by two (and one back-up) gas-fired heat-transfer fluid vaporizers. Vents from the reaction kettles and thinning tanks are manifolded into a common duct. An induction fan serves as the draft on reactors and exhaust vapors into the atmosphere. The facility uses low pressure steam for comfort heating, high-pressure steam for process heating and line tracing, and a gas-fired high-pressure boiler for an on-line backup. Both recycled cooling tower water and once through city water are used for noncontact process cooling. Boiler blowdown waters and non-contact cooling water that is not recycled through either of the facility's two cooling towers are discharged to the city sanitary sewer system.

The Huntsman facility is a large quantity generator of hazardous waste, with Environmental Protection Agency Identification Number PAD005000591. Wastes include off-specification varnishes, cleaning solvents, and gelled varnishes. Waste materials are collected and stored in 55-gallon drums and placed in the diked flammable waste storage area in the back of the Paint Plant building. Waste materials are then shipped to a permitted treatment, storage, and disposal (TSD) facility for disposal. Hazardous waste is stored on-site for fewer than 90 days. Process by-products of reaction are generated only from dehydration reactions, decanted solvents, and fume stack condensates in the Resin Plant. By-products are stored in one 12,000-gallon steel tank outside the Resin Plant building. The tank is allowed to settle; recyclable solvents are removed from the tank for reuse and water is disposed offsite.

Outfalls

Huntsman eliminated all non-contact cooling water and boiler blowdown discharges in 2015. Boiler blowdown waters and non-contact cooling water that is not recycled through either of the facility's two cooling towers are now discharged to the city sanitary sewer system. The facility discharges only stormwater from roofs, walkways, driveways, and parking lots through six outfalls.

Huntsman discharges stormwater through Outfalls 001, 002, 003, 005, 006, and 007. All six outfalls discharge to Bushy Run, designated in 25 PA Code Chapter 93 as a Trout Stocked Fishery in Watershed 19-A. Outfall 001 conveys stormwater from a 24,000 ft^2 drainage area consisting of alkyd, powder and maintenance building roofs; paved walkways and driveways between the lab, paint plant, alkyd plant and powder buildings. Outfall 002 conveys stormwater runoff from a 3,300 ft^2 drainage area consisting of the laboratory building roof. Outfall 003 conveys stormwater from a 24,000 ft^2 drainage area consisting of paved areas above the alkyd and paint plants; roof gutters from the alkyd, paint, and maintenance buildings. Outfall 005 conveys stormwater from a 9,200 ft^2 drainage area consisting of portions of the paint plant roof, paved walkways and driveways. Outfall 006 conveys stormwater from a 17,000 ft^2 drainage area consisting of a portion of the paint plant roof and paved walkways. Outfall 007 conveys stormwater from a 4,100 ft^2 drainage area consisting of the main office building roof and grassy areas.

Public Participation

Huntsman provided evidence of Act 14 municipal and county notifications to Manor Borough and Westmoreland County on September 29, 2020.

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, 002, 003, 005, 006, 007	Design Flow (MGD)	0
Latitude	See Table 1	Longitude	See Table 1
Quad Name	Irwin	Quad Code	1608
Wastewater Description:	Stormwater from building roofs, paved walkways and driveways between buildings, and grassy areas.		
Receiving Waters	Bushy Run (TSF)	Stream Code	37284
NHD Com ID	99407934	RMI	See Table 1
Drainage Area	See Table 1	Yield (cfs/mi^2)	See Table 1
Q_{7-10} Flow (cfs)	See Table 1	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	See Table 1	Slope (ft/ft)	0.0071
Watershed No.	19-A	Chapter 93 Class.	TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Siltation; Metals; pH		
Source(s) of Impairment	Agriculture; Streambank Modifications/ Destabilization; Acid Mine Drainage		
TMDL Status	Final, 6/28/2005 Final, 7/7/2009	Name	Brush Creek (Westmoreland) Turtle Creek Watershed
Nearest Downstream Public Water Supply Intake	PA American Water Company - Pittsburgh		
PWS Waters	Monongahela River	Flow at Intake (cfs)	107
PWS RMI	4.64	Distance from Outfall (mi)	26

Other Comments:

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

Outfall locations for the above-mentioned outfalls are displayed below in Table 1.

Table 1: Stormwater Outfall Locations

Outfall	Latitude	Longitude	RMI	Drainage Area (mi^2)	Q_{7-10} Flow (cfs)	Yield (cfs/mi^2)	Elevation (ft)
001	40º 20' 36.3"	-79º 39' 36.5"	0.8883	12.6	0.181	0.0144	929
002	40º 20' 35.7"	-79º 39' 36.7"	0.8683	12.6	0.181	0.0144	929
003	40º 20' 35.5"	-79º 39' 36.7"	0.8683	12.6	0.181	0.0144	929
005	40º 20' 34.5"	-79º 39' 37.0"	0.8483	12.6	0.181	0.0144	928
006	40º 20' 33.9"	-79º 39' 37.2"	0.8383	12.7	0.183	0.0144	928
007	40º 20' 34.3"	-79º 39' 38.7"	0.8183	12.7	0.183	0.0144	927

Compliance History

DMR Data for Outfall 001 (from September 1, 2020 to August 31, 2021)

Parameter	AUG-21	JUL-21	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20
Flow (MGD) Daily Maximum			E						0.000288			
pH (S.U.) Daily Maximum			E						8.17			
COD (mg/L) Daily Maximum			E						< 25.0			
TSS (mg/L) Daily Maximum			E						< 4.0			
Nitrate-Nitrite (mg/L) Daily Maximum			E						0.52			
Total Phosphorus (mg/L) Daily Maximum			E						< 0.030			
Total Aluminum (mg/L) Daily Maximum			E						0.0634			
Total Iron (mg/L) Daily Maximum			E						0.198			
Total Lead (mg/L) Daily Maximum			E						< 0.005			
Total Manganese (mg/L) Daily Maximum			E						0.058			
Total Zinc (mg/L) Daily Maximum			E						< 0.01			

DMR Data for Outfall 002 (from September 1, 2020 to August 31, 2021)

Parameter	AUG-21	JUL-21	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20
Flow (MGD) Daily Maximum			E						0.000158			
pH (S.U.) Daily Maximum			E						8.22			
COD (mg/L) Daily Maximum			E						< 25.0			

TSS (mg/L) Daily Maximum			E						< 4.0			
Nitrate-Nitrite (mg/L) Daily Maximum			E						0.53			
Total Phosphorus (mg/L) Daily Maximum			E						< 0.030			
Total Aluminum (mg/L) Daily Maximum			E						0.0554			
Total Iron (mg/L) Daily Maximum			E						0.216			
Total Lead (mg/L) Daily Maximum			E						< 0.005			
Total Manganese (mg/L) Daily Maximum			E						0.0539			
Total Zinc (mg/L) Daily Maximum			E						< 0.01			

DMR Data for Outfall 003 (from September 1, 2020 to August 31, 2021)

Parameter	AUG-21	JUL-21	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20
Flow (MGD) Daily Maximum			E						0.000475			
pH (S.U.) Daily Maximum			E						8.35			
COD (mg/L) Daily Maximum			E						< 25.0			
TSS (mg/L) Daily Maximum			E						< 4.0			
Nitrate-Nitrite (mg/L) Daily Maximum			E						0.60			
Total Phosphorus (mg/L) Daily Maximum			E						0.030			
Total Aluminum (mg/L) Daily Maximum			E						0.0588			
Total Iron (mg/L) Daily Maximum			E						0.171			
Total Lead (mg/L) Daily Maximum			E						< 0.005			

Total Manganese (mg/L) Daily Maximum			E						0.0519			
Total Zinc (mg/L) Daily Maximum			E						< 0.01			

DMR Data for Outfall 005 (from September 1, 2020 to August 31, 2021)

Parameter	AUG-21	JUL-21	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20
Flow (MGD) Daily Maximum			E									
pH (S.U.) Daily Maximum			E									
COD (mg/L) Daily Maximum			E									
TSS (mg/L) Daily Maximum			E									
Nitrate-Nitrite (mg/L) Daily Maximum			E									
Total Phosphorus (mg/L) Daily Maximum			E									
Total Aluminum (mg/L) Daily Maximum			E									
Total Iron (mg/L) Daily Maximum			E									
Total Lead (mg/L) Daily Maximum			E									
Total Manganese (mg/L) Daily Maximum			E									
Total Zinc (mg/L) Daily Maximum			E									

DMR Data for Outfall 006 (from September 1, 2020 to August 31, 2021)

Parameter	AUG-21	JUL-21	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20
Flow (MGD) Daily Maximum			E						0.000072			
pH (S.U.) Daily Maximum			E						8.36			

COD (mg/L) Daily Maximum			E						< 25.0			
TSS (mg/L) Daily Maximum			E						< 4.0			
Nitrate-Nitrite (mg/L) Daily Maximum			E						0.46			
Total Phosphorus (mg/L) Daily Maximum			E						< 0.030			
Total Aluminum (mg/L) Daily Maximum			E						0.063			
Total Iron (mg/L) Daily Maximum			E						0.183			
Total Lead (mg/L) Daily Maximum			E						< 0.005			
Total Manganese (mg/L) Daily Maximum			E						0.0517			
Total Zinc (mg/L) Daily Maximum			E						< 0.01			

DMR Data for Outfall 007 (from September 1, 2020 to August 31, 2021)

Parameter	AUG-21	JUL-21	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20
Flow (MGD) Daily Maximum			E						0.0003168			
pH (S.U.) Daily Maximum			E						8.04			
COD (mg/L) Daily Maximum			E						< 25.0			
TSS (mg/L) Daily Maximum			E						37.0			
Nitrate-Nitrite (mg/L) Daily Maximum			E						0.44			
Total Phosphorus (mg/L) Daily Maximum			E						0.074			
Total Aluminum (mg/L) Daily Maximum			E						1.07			
Total Iron (mg/L) Daily Maximum			E						1.890			

Total Lead (mg/L) Daily Maximum			E						< 0.005			
Total Manganese (mg/L) Daily Maximum			E						0.470			
Total Zinc (mg/L) Daily Maximum			E						0.0101			

Other Comments:

A compliance evaluation was completed on October 26, 2021 by John Murphy for the review period 10/2016 – 10/2021 (Attachment B). The facility was most recently inspected on November 15, 2018 as a routine inspection and July 6, 2020 as an administrative/ file review. A violation was noted on July 7, 2020 for failure to pay annual fee; the violation was resolved on August 26, 2020. The previous client and current client have no open violations. No DMR exceedances were noted.

The November 15, 2018 inspection was conducted by the local Water Quality Specialist, Zac Flannigan, and PA Fish & Boat Commission (PAFBC) Waterways Conservation Office (WCO) Daniel Wilson. The inspection was unannounced after receiving a report that chemicals were being pumped into the creek, which flows along the plant, and that leaking tanks within a dike near the creek were leaking resin into the stream. Reportedly, these events took place on or about September 12, 2018 and were reported to the Department mid-November 2018. The facility explained that during September Brush Creek flooded the area due to significant rains from hurricane affect weather. Reportedly, cleanup efforts from flooding took place or about September 12, 2018. No chemicals were pumped or otherwise directed into the stream. During a tour of the facility, no open floor drains were observed. Secondary containment surrounding five tanks near the stream were found with two valved drains. The drains were reportedly never used and a pump is manually installed every time accumulated stormwater within the containment needs to be removed. No evidence of chemicals being pumped to the creek (directly or via floor drain) was found during the inspection. No sheen, foam, scum layer, or chemical discoloration was observed on the stream downstream of the facility or at any point viewed from the facility during the inspection. A light petroleum sheen was observed on the stormwater which ultimately discharges via Outfall 001. The source of the sheen was believed to be from a piece of equipment. Zac recommended that the facility consider sealing or, at a minimum, installing a screw-in plug in the two secondary containment drains along the stream and ensuring that the valves are in the closed position; and inspecting all equipment for signs of leaks and addressing any issues as discovered. Zac requested that if ownership of the facility has changed to transfer the NPDES permit to the current owner.

Development of Effluent Limitations

Outfall No.	001, 002, 003, 005, 006, 007	**Average Flow (MGD)**	0
Latitude	See Table 2	**Longitude**	See Table 2
Wastewater Description:	See Table 2		

Outfalls 001, 002, 003, 005, 006, and 007 discharge stormwater from building roofs, paved walkways and driveways between buildings, and grassy areas at the Huntsman facility. Outfall locations and wastewater descriptions for each outfall are listed below in Table 2.

Table 2: Stormwater Outfall Locations and Description

Outfall	Latitude	Longitude	Wastewater Description
001	40º 20' 36.3"	-79º 39' 36.5"	Stormwater runoff from alkyd, powder and maintenance building roofs; paved walkways and driveways between the lab, paint plant, alkyd plant and powder buildings.
002	40º 20' 35.7"	-79º 39' 36.7"	Stormwater runoff from laboratory building roof.
003	40º 20' 35.5"	-79º 39' 36.7"	Stormwater runoff from paved areas above the alkyd and paint plants; roof gutters from the alkyd, paint, and maintenance buildings.
005	40º 20' 34.5"	-79º 39' 37"	Stormwater runoff from portions of the paint plant roof, paved walkways and driveways.
006	40º 20' 33.9"	-79º 39' 37.2"	Stormwater runoff from portion of the paint plant roof and paved walkways.
007	40º 20' 34.3"	-79º 39' 38.7"	Stormwater runoff from the main office building roof and grassy areas.

Technology-Based Effluent Limitations (TBELs)

Huntsman is not subject to Federal Effluent Limitation Guideline (ELGs) as the SIC code is not listed under 40 CFR parts 405 through 471. Outfalls 001, 002, 003, 005, 006, and 007 are subject to PAG-03 General Stormwater Permit conditions as a minimum requirement because the outfalls discharge stormwater associated with industrial activity. The SIC code for the site is 2581 (Paints, Varnishes, Lacquers, Enamels, and Allied Products) and the corresponding appendix that would apply to the facility is Appendix F of the PAG-03 General Permit. Appendix F reporting requirements are in Table 3 below.

Table 3: PAG-03 Appendix F Monitoring Requirements

Parameters	Average Monthly (mg/L)	Maximum Daily (mg/L)	Benchmark Values (mg/L)	Monitoring Requirements	
				Monitoring Frequency	Sample Type
pH (S.U.)	-	Monitor & Report	-	1/6 Months	Grab
Chemical Oxygen Demand (COD)	-	Monitor & Report	120	1/6 Months	Grab
Total Suspended Solids (TSS)	-	Monitor & Report	100	1/6 Months	Grab
Nitrate + Nitrite-Nitrogen	-	Monitor & Report	-	1/6 Months	Grab
Total Phosphorus	-	Monitor & Report	-	1/6 Months	Grab
Total Lead	-	Monitor & Report	-	1/6 Months	Grab
Total Zinc	-	Monitor & Report	-	1/6 Months	Grab
Total Iron	-	Monitor & Report	-	1/6 Months	Grab
Total Aluminum	-	Monitor & Report	-	1/6 Months	Grab

Water Quality-Based Effluent Limitations (WQBELs)

Water quality analyses are typically performed under low-flow (Q_{7-10}) conditions. Stormwater discharges occur at variable rates and frequencies, but not however during Q_{7-10} conditions. Since the discharges from Huntsman are composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations are not proposed.

Based on guidance in DEP's IW Effluent Limit SOP, effluent limits may be warranted when pollutant concentrations in stormwater are significant, which may be quantified as "100 times the most stringent Chapter 93 criterion" or greater than "100 mg/L." A summary of the reported analytical results for Outfall 001, 002, 003, 005, 006, and 007 are shown below in Table 4.

Table 4 - DMR Discharge Concentrations ($^{mg}/_{L}$)

Parameter	Outfall 1	Outfall 2	Outfall 3	Outfall 5	Outfall 6	Outfall 7
Oil and Grease	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Biological Oxygen Demand (BOD)	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Chemical Oxygen Demand (COD)	< 25.0	< 25.0	< 25.0	< 25.0	< 81.2	< 41.4
Total Suspended Solids (TSS)	11.0	< 4.0	< 4.0	10.0	18.0	< 4.0
Nitrogen, total	1.5	0.57	0.61	0.55	0.25	0.29
Phosphorus, total	< 0.030	< 0.030	< 0.030	< 0.078	< 0.086	0.076
pH (S.U.)	7.88	8.19	8.22	8.27	7.01	5.99

None of the analytical results reported on the application indicate the presence of pollutants in concentrations that would lead to the imposition of numerical effluent limits or additional monitoring requirements. Additional water quality-based requirements are considered due to the applicability of Total Maximum Daily Loads to the receiving water for Huntsman's discharges.

Total Maximum Daily Loads (TMDLs)

Two final TMDLs are applicable to discharges to Bushy Run, Brush Creek Watershed TMDL and Turtle Creek Watershed TMDL. Bushy Run discharges to Brush Creek, which discharges into Turtle Creek. The Brush Creek Watershed TMDL was finalized on June 28, 2005 and The Turtle Creek Watershed TMDL was finalized on July 7, 2009. Both TMDLs address aquatic life impairment caused by acid drainage from abandoned coalmines. The TMDLs address primary metals associated with acid mine drainage, including iron, manganese and aluminum and pH. 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).

No wasteload allocations or load allocations were developed for discharges from the Huntsman facility or for the farthest upstream sampling point for the 2009 Turtle Creek Watershed TMDL. Most of the metals loadings to Brush Creek and Turtle Creek are from large mining sources located downstream of both the Huntsman facility and Bushy Run. Based on discussions with EPA, monitoring for manganese was imposed in the 2016 NPDES permit at all outfalls since there was no site-specific data available for manganese at Huntsman's facility. The monitoring was imposed to gather discharge data for the Brush Creek Watershed TMDL and characterize the discharge and inform any potential future TMDL revisions. Analytical results reported for manganese from 2016-2021 are well below criteria and indicate that manganese is not a pollutant of concern for the Huntsman facility. Therefore, no TMDL limits are imposed and monitoring for manganese is removed from the permit. The Appendix F monitoring requirements for aluminum, iron and pH from the PAG-03 will be used to monitor Huntsman's contribution of metals to the Turtle Creek watershed and Brush Creek watershed.

Anti-Backsliding

The effluent limitations and monitoring requirements in Table 5 below are from the current permit, issued on March 18, 2016. Previous limits can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l).

Table 5: Current Permit Effluent Limitations				
Parameters	**Maximum Daily**	**Units**	**Monitoring Requirements**	
			Monitoring Frequency	**Sample Type**
Flow	Report	MGD	1/6 months	Estimated
pH	Report	S.U.	1/6 months	Grab
Chemical Oxygen Demand (COD)	Report	mg/L	1/6 months	Grab
Total Suspended Solids	Report	mg/L	1/6 months	Grab
Nitrate-Nitrite	Report	mg/L	1/6 months	Grab
Phosphorus, total	Report	mg/L	1/6 months	Grab
Aluminum, total	Report	mg/L	1/6 months	Grab
Iron, total	Report	mg/L	1/6 months	Grab
Lead, total	Report	mg/L	1/6 months	Grab
Manganese, total	Report	mg/L	1/6 months	Grab
Zinc, total	Report	mg/L	1/6 months	Grab

Effluent Limitations and Monitoring Requirements

Effluent limitations applicable at Outfalls 001, 002, 003, 005, 006, and 007 are the most stringent of TBELs, WQBELs, regulatory effluent standards and monitoring requirements, and the current permit's effluent monitoring requirements. The proposed monitoring requirements for Outfalls 001, 002, 003, 005, 006, and 007 are displayed in Table 6 below. Since discharges from Outfalls 001, 002, 003, 005, 006 and 007 are precipitation-induced and non-continuous, grab sampling will be required for all parameters except flow, which should be estimated. The sampling frequency for all parameters will be 1/6 months as established in Appendix F of the PAG-03 General Permit upon which the monitoring requirements are based.

A Part C condition is included in the Draft permit requiring submission of a Corrective Action Plan when there are two consecutive exceedances of the benchmark values. The benchmark values are displayed below in Table 6 and included in the Part C condition. These values are from EPA'S Multisector General Permit document and are not effluent limitations. Exceedance of the benchmark values is not a violation. 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 6: Effluent Limits and Monitoring Requirements for Outfalls 001, 002, 003, 005, 006, 007					
Parameters	**Maximum Daily**	**Units**	**Benchmark Values (mg/L)**	**Monitoring Requirements**	
				Monitoring Frequency	**Sample Type**
Flow	Report	MGD	-	1/6 months	Estimated
pH	Report	S.U.	-	1/6 months	Grab
Chemical Oxygen Demand (COD)	Report	mg/L	120	1/6 months	Grab
Total Suspended Solids	Report	mg/L	100	1/6 months	Grab
Nitrate-Nitrite	Report	mg/L	-	1/6 months	Grab
Phosphorus, total	Report	mg/L	-	1/6 months	Grab
Aluminum, total	Report	mg/L	-	1/6 months	Grab
Iron, total	Report	mg/L	-	1/6 months	Grab
Lead, total	Report	mg/L	-	1/6 months	Grab
Zinc, total	Report	mg/L	-	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: Establishing Effluent Limitations for Individual Industrial Permits
☐	Other:

Attachments

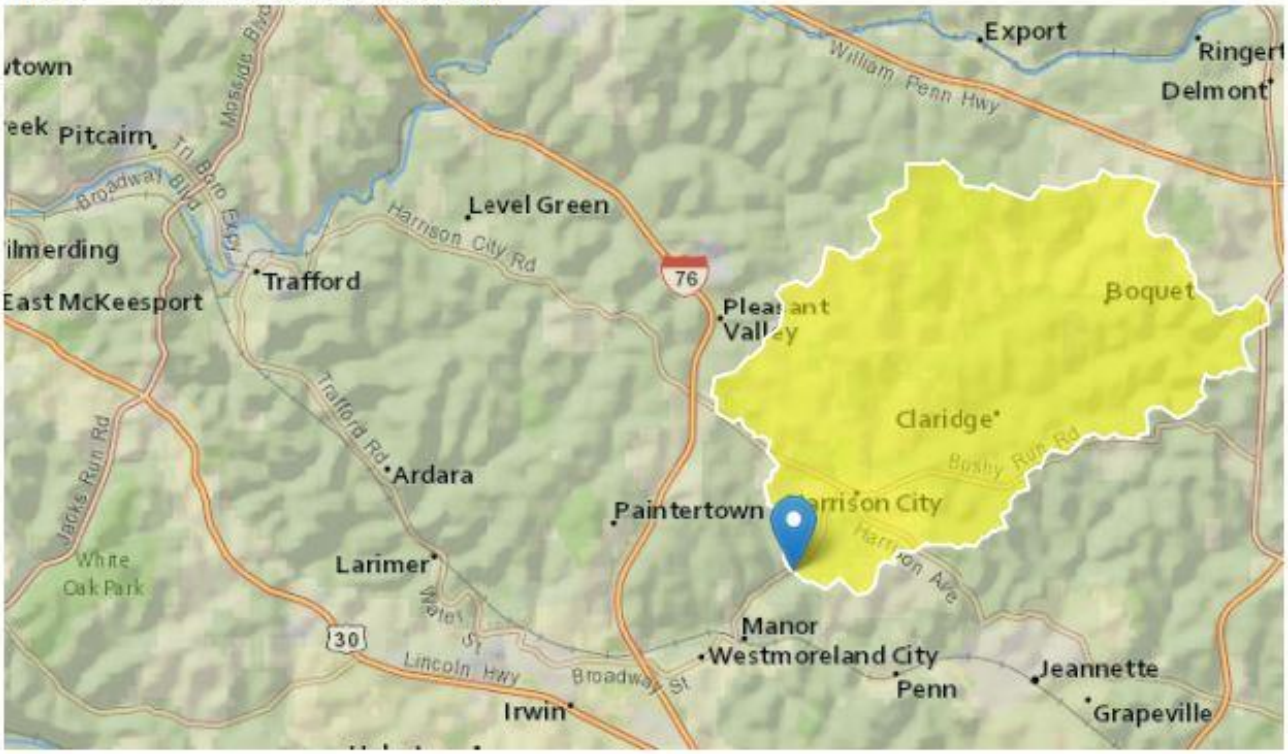
Attachment A: StreamStats Report for Outfall 001

Attachment B: Operations Compliance Report

ATTACHMENT A:
StreamStats Report for Outfall 001

StreamStats Report

Region ID: PA
Workspace ID: PA20211025134529195000
Clicked Point (Latitude, Longitude): 40.34347, -79.66028
Time: 2021-10-25 09:45:49 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	12.6	square miles
ELEV	Mean Basin Elevation	1137	feet

Low-Flow Statistics Parameters [100.0 Percent (12.6 square miles) Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	12.6	square miles	2.26	1400

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
ELEV	Mean Basin Elevation	1137	feet	1050	2580

Low-Flow Statistics Flow Report [100.0 Percent (12.6 square miles) Low Flow Region 4]

PII: Prediction Interval-Lower, PIu: Prediction Interval-Upper, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	0.481	ft^3/s	43	43
30 Day 2 Year Low Flow	0.822	ft^3/s	38	38
7 Day 10 Year Low Flow	0.181	ft^3/s	66	66
30 Day 10 Year Low Flow	0.319	ft^3/s	54	54
90 Day 10 Year Low Flow	0.571	ft^3/s	41	41

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:
Operations Compliance Report

Operations Compliance Check Summary Report

Facility: Gabriel Performance Products/ Huntsman Advanced Materials Americas, LLC

NPDES Permit No.: PA0042102

Compliance Review Period: 10/2016 – 10/2021

Inspection Summary:

INSP ID	INSPECTED DATE	INSP TYPE	AGENCY	INSPECTION RESULT DESC	CREATION DATE
3052272	07/06/2020	Administrative/File Review	PA Dept of Environmental Protection	Violation(s) Noted	07/07/2020
2844260	11/15/2018	Routine/Partial Inspection	PA Dept of Environmental Protection	No Violations Noted	02/25/2019

Violation Summary:

VIOL ID	VIOLATION DATE	VIOLATION TYPE	VIOLATION TYPE DESC	RESOLVED DATE
888136	07/06/2020	92A.62	NPDES - Failure to pay annual fee	08/26/2020

Open Violations by Client ID:

No open violations for Client ID 90274

Enforcement Summary:

No enforcements

DMR Violation Summary:

No DMR exceedances

Compliance Status:

In compliance

Completed by: John Murphy

Completed date: 10/26/2021