

Application Type New  
Facility Type Storm Water  
Major / Minor Minor

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

Application No. PA0203963  
APS ID 1121754  
Authorization ID 1499663

**Applicant and Facility Information**


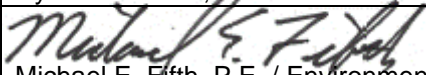
Applicant Name	<u>Washington Penn Plastic Co. Inc.</u>	Facility Name	<u>Washington Penn Plastics Performance Products Division</u>
Applicant Address	<u>480 Johnson Road</u> <u>Washington, PA 15301-8912</u>	Facility Address	<u>136 Mitchell Road</u> <u>Eighty Four, PA 15330</u>
Applicant Contact	<u>Travis Bittner, HSE Manager</u>	Facility Contact	<u>***same as applicant***</u>
Applicant Phone	<u>(724) 206-4450</u>	Facility Phone	<u>***same as applicant***</u>
Applicant Email	<u><a href="mailto:travis.bittner@audia.com">travis.bittner@audia.com</a></u>	Facility Email	<u>***same as applicant***</u>
Client ID	<u>92130</u>	Site ID	<u>460957</u>
SIC Code	<u>3087</u>	Municipality	<u>South Strabane Township</u>
SIC Description	<u>Manufacturing - Custom Compound Purchased Resins</u>	County	<u>Washington</u>
Date Application Received	<u>August 30, 2024</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>September 17, 2024</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of an NPDES permit for discharges from a plastics molding facility.</u>		

**Summary of Review**

Washington Penn Plastic Company, Inc. (WPP) submitted an application dated August 30, 2024, and received by DEP on the same date to renew NPDES Permit PA0203963 for discharges from WPP's Performance Products Division (PPD) in Eighty Four, PA. The current permit was issued on January 27, 2020, with an effective date of March 1, 2020, and an expiration date of February 28, 2025. The renewal application was due 180 days before the expiration date (*i.e.*, by September 1, 2024). WPP's renewal application was timely, so the terms and conditions of the 2020 permit will be administratively extended if the permit is not renewed before the expiration date.

Industrial activities at the PPD facility include the compounding of plastic resins (polypropylene, polyethylene, and thermoplastic elastomer compounds). Discharges formerly consisted of treated sanitary wastewaters, contact cooling water, and storm water. However, WPP reached an agreement with the North Strabane Township Municipal Authority to discharge sanitary wastewater and contact cooling water from the PPD facility to the local sanitary sewer for treatment by the Canonsburg-Houston Joint Sewage Authority, which North Strabane pays to treat its sanitary wastewaters. WPP's connection to the publicly owned treatment works was completed in February 2024, which avoided new permit obligations relating to temperature limits and technology-based limits for contact cooling water.

The current NPDES permit authorizes WPP to discharge treated sanitary wastewaters from Outfall 001, contact cooling water (regulated internally at Internal Monitoring Point 102) and storm water from Outfall 002, and storm water from parking areas and roof drains (not exposed to industrial activities) through Outfall 003. With the elimination of point source discharges of treated sanitary wastewaters and contact cooling water from the facility, WPP only discharges storm water associated with industrial activities. Also, WPP no longer claims Outfall 003 as "no exposure", which is appropriate due to the presence of plastic pellets in the drainage area of that outfall.

Approve	Deny	Signatures	Date
✓		 Ryan C. Decker, P.E. / Environmental Engineer	December 13, 2024
X		 Michael E. Fifth, P.E. / Environmental Engineer Manager	December 16, 2024

### Summary of Review

Outfall 002 discharges storm water to an unnamed tributary of Little Chartiers Creek and Outfall 003 discharges storm water to an unnamed tributary to Little Chartiers Creek. Both receiving streams have a designated aquatic life use for High Quality-Warm Water Fishes (HQ-WWF). Due to the "high quality" designation of the receiving streams, WPP is not eligible for coverage under DEP's "PAG-03 General Permit for Discharges of Stormwater Associated with Industrial Activity" even though there are no longer any discharges of industrial wastewater (see 25 Pa. Code § 92a.54(a)(8)).

#### Pellet Releases

On June 6, 2022, DEP inspected the PPD facility and observed, among other things, the following:

- Waste storage areas were observed with pellets outside of the waste bins and around the gravel lot. There were also pellets observed by the loading docks near the waste storage area.
- The train tracks where the resins and pellets received and shipped from the plant were observed. There were pellets along the train tracks and hillside from this location.
- The resins storage tanks were observed along with the hillside. The hillside had minor erosion and plastic pellets along the banks of the hill. The plastic pellets were observed along this hillside from the tank storage area to the rail car reception area in the back of the plant.

WPP was issued a notice of violation on July 26, 2022 for violations observed during the June 6, 2022 inspection. DEP's inspection report requested, among other things, the following corrective actions:

- Immediately implement additional BMPs to control plastic nurdle release to include the handling, disposal, storage, and general housekeeping.
- Inspect and seal any leaking storage containers within the facility and waste storage areas that could be contributing the plastic nurdle discharges.
- Submit and implement a Corrective Action Plan (CAP within 30 days of reception of the notice of violation (NOV)).
- Create and implement an updated Pollution Prevention Control (PPC) plan within 30 days of reception of the NOV. Include training for staff on proper storage, handling, disposal, and spill response of nurdles. Provide an updated site map to include additional generated waste storage areas.

A follow-up inspection on December 1, 2023 noted the following:

#### **Outfall 001**

- Outfall 001 was viewed with no adverse conditions noted. The catch basins leading to the outfall contain basket screens. These basket screens are checked twice daily by facility staff. Plastic nurdles are found periodically within these catch basins and vacuumed out using a shop vac. Facility staff also use a wire brush to remove mud and built-up solids from the baskets during their checks.

#### **Outfall 003**

- Outfall 003 was viewed. There appeared to be residual silt runoff from the drainage area. Nurdles were seen sporadically along the grassy areas within the outfall drainage area and outside of the track areas. This area was not previously viewed during the last CEI. An accumulation of plastic nurdles was noted on the train tracks outside of the terminal.

#### **Train Tracks and Transfer Terminal**

- The train tracks and off-loading terminal were viewed. A blower system is used to move nurdles from the transfer point to designated silos. The train tracks near the southern end of the property were graded to convey storm water toward the grassy area of the property where a screened catch basin is located. This catch basin discharges to Outfall 003.

### Summary of Review

Along the track there are prepositioned spill kits in place, as well as containers to catch loose product. After unloading, shop vacs and push sweepers can be used to clean up released nurdles.

- There was a silt fence installed along the length of the track to help prevent nurdles from discharging into sheet flow runoff. The silt fence consisted of tarping material, which appeared to lift from the bottom. Due to this containment not being secure, nurdles were observed on the other side of the silt fence.
- Gravel surfacing was in use from this area to the loading docks, which is located near the municipal waste storage area.

### Municipal Waste Storage Area

- The municipal waste area was observed. There appeared to be some leaching occurring from the dumpster, which contained dusts produced from the facility. Filtration socks had been placed on the drainage pipes that were extending from the dock. The filtration socks are changed once every three months. The dumpsters were lined during the time of the inspection. Plastic nurdles were sporadically imbedded within the gravel lot surface. The permittee plans to apply concrete surfacing in this area, to facilitate collection of released nurdles. Berms were present in the loading dock area to help prevent nurdle release from the off-loading areas. Drainage from this area discharges to Outfall 003.

### Silo Farm

- The silo farm was viewed. Erosion control along the hill side was completed in December 2022. The soil and vegetation along the hillside were removed with only shale rock remaining. When the excavation was completed, a French drain system was uncovered by the permittee. The catch basins along this system did not have screens or coverings. Residual plastic nurdles were observed on the ground in this area.

Based on the December 1, 2023 follow-up inspection, DEP requested, among other things, the following:

- Continue to explore and implement additional BMPs to contain the release of plastic nurdles.
- Implement additional inspection of the railcars after loading and off-loading operations to prevent nurdles from escaping outside of the terminal areas.
- Secure silt fences or utilize additional curbing to prevent plastic nurdles from bypassing the silt filtration fence system. Periodically check the system to ensure a proper seal so as to limit the release of nurdles from underneath the fence.
- Please ensure all catch basins have a filtration or silt capture system to prevent discharges of nurdles, and sediment from stormwater outfalls. A buildup of sediment within the storm system can potentially cause effluent exceedances.
- Evaluate and implement additional BMPs, to prevent the leaching of dusts from the waste storage bins during rain events, such as covering the municipal waste storage areas.

The permit will include additional BMPs to facilitate improved control of fugitive plastic pellets.

### 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.	<u>002</u>	Design Flow (MGD)	<u>Variable</u>
Latitude	<u>40° 10' 59.6"</u>	Longitude	<u>-80° 08' 45.5"</u>
Quad Name	<u>Washington East</u>	Quad Code	<u>1704</u>
Wastewater Description: <u>Storm water</u>			
Receiving Waters	<u>Unnamed Tributary of Chartiers Creek (HQ-WWF)</u>	Stream Code	<u>N/A</u>
NHD Com ID	<u>99694438</u>	RMI	<u>0.04</u>
Drainage Area	<u>0.15</u>	Yield (cfs/mi <sup>2</sup> )	<u></u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.000752</u>	Q <sub>7-10</sub> Basis	<u>USGS StreamStats</u>
Elevation (ft)	<u></u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>20-F</u>	Chapter 93 Class.	<u>HQ-WWF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u></u>		
Source(s) of Impairment	<u></u>		
TMDL Status	<u>Final, Final, Final</u>	Name	<u>Chartiers Creek, Chartiers Creek Watershed; Canonsburg Lake TMDL</u>
Background/Ambient Data	Data Source		
pH (SU)	<u></u>	<u></u>	
Temperature (°F)	<u></u>	<u></u>	
Hardness (mg/L)	<u></u>	<u></u>	
Other:	<u></u>	<u></u>	
Nearest Downstream Public Water Supply Intake	<u>West View Water Authority – Neville Island</u>		
PWS ID	<u>5020043</u>	PWS Withdrawal (MGD)	<u>40.0</u>
PWS Waters	<u>Ohio River</u>	Flow at Intake (cfs)	<u>4,730</u>
PWS RMI	<u>976.1</u>	Distance from Outfall (mi)	<u>41.24</u>

Changes Since Last Permit Issuance: Elimination of contact cooling water

Other Comments:

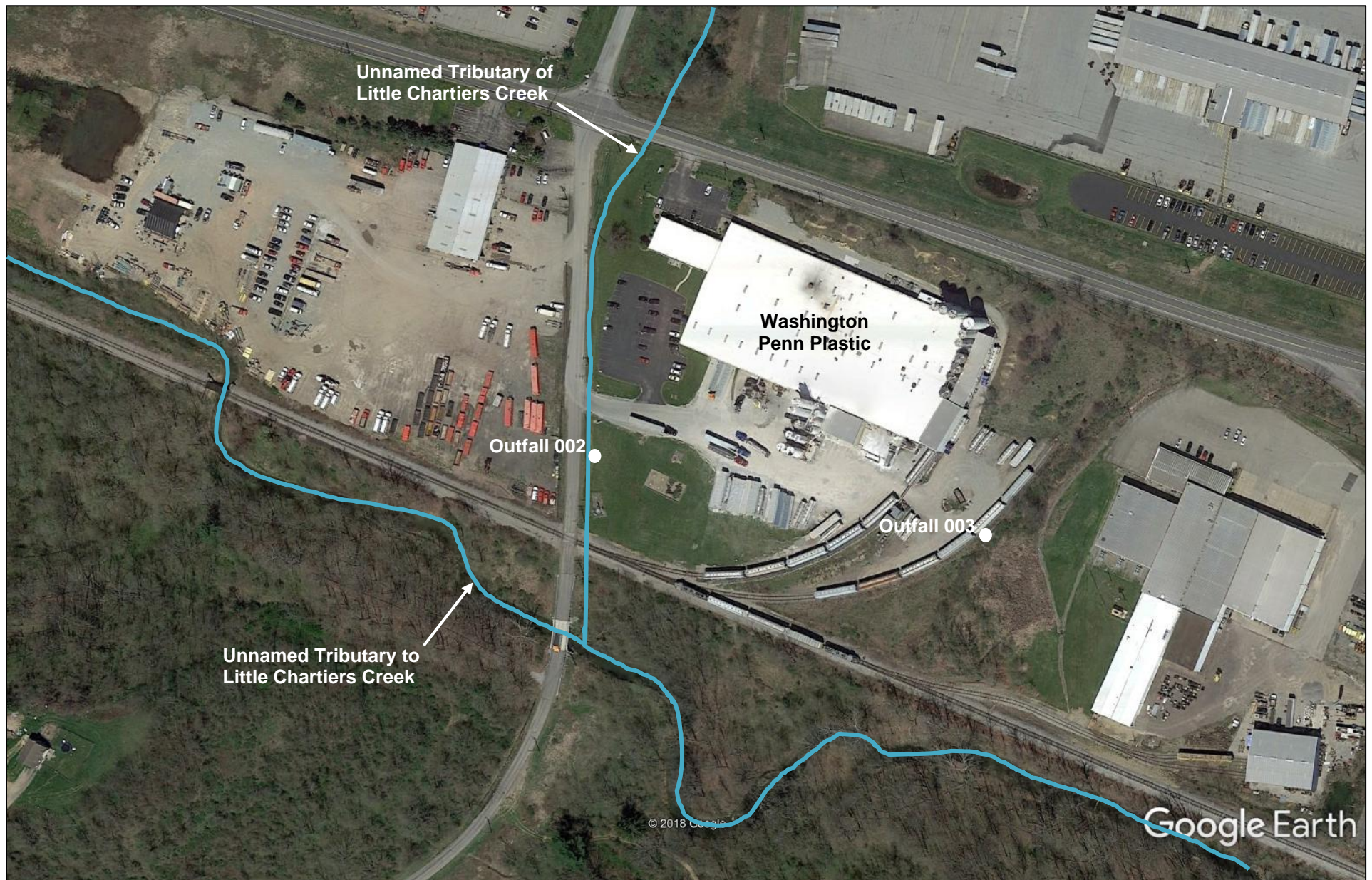
Outfall No.	003	Design Flow (MGD)	Variable
Latitude	40° 10' 58.4"	Longitude	-80° 8' 37.7"
Quad Name	Washington East	Quad Code	1704
Wastewater Description: Storm water			

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

5







Compliance History

DMR Data for Outfall 001 (from August 1, 2023 to July 31, 2024)

Parameter	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23
Flow (MGD) Average Monthly					0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Flow (MGD) Daily Maximum					0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
pH (S.U.) Instantaneous Minimum					7.5	7.3	7.3	7.4	7.4	7.4	7.4	7.4
pH (S.U.) Instantaneous Maximum					7.5	7.4	7.4	7.6	7.5	7.5	7.4	7.5
DO (mg/L) Instantaneous Minimum					6.8	5.4	5.6	5.4	6.2	6.9	7.3	7.1
DO (mg/L) Instantaneous Maximum					7.3	5.9	5.9	6.3	6.4	7.2	7.7	7.4
TRC (mg/L) Average Monthly					< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TRC (mg/L) Instantaneous Maximum					< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.010	< 0.010	< 0.010
CBOD5 (mg/L) Average Monthly					< 2.0	< 2.0	9.15	< 2.0	< 2.0	< 2.0	< 2.0	2.05
CBOD5 (mg/L) Instantaneous Maximum					< 2.0	< 2.0	12.5	< 2.0	< 2.0	< 2.0	< 2.0	2.1
TSS (mg/L) Average Monthly					< 5.0	< 5.0	11.5	< 5.0	< 5.0	< 5.0	7.5	< 5.0
TSS (mg/L) Instantaneous Maximum					< 5.0	< 5.0	16.0	< 5.0	< 5.0	< 5.0	10.0	< 5.0
Fecal Coliform (No./100 ml) Geometric Mean					2	2	631	2	4	2	5	2
Fecal Coliform (No./100 ml) Instantaneous Maximum					2	2	1260	5	16	2	27	2
Total Nitrogen (mg/L) Average Monthly					56.847	65.9	44.13	77.3	189	205	284.9	119.72



Parameter	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23
Total Nitrogen (mg/L) Instantaneous Maximum					56.847	74.4	57.9	86.9	218.4	214.8	303	153.05
Ammonia (mg/L) Average Monthly					0.1	0.3	4.3	0.1	2.25	0.3	0.85	0.45
Ammonia (mg/L) Instantaneous Maximum					0.1	0.4	5.4	0.1	2.8	0.5	1.1	0.6
Total Phosphorus (mg/L) Average Monthly					3.4	3.5	3.85	2.45	3.35	3.1	3.3	2.45
Total Phosphorus (mg/L) Instantaneous Maximum					3.4	4.0	4.7	2.5	3.7	3.2	3.3	2.5

**DMR Data for Outfall 002 (from August 1, 2023 to July 31, 2024)**

Parameter	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23
Flow (MGD) Average Monthly	0.00534	0.00567	0.0009	0.0151	0.116	0.0018	0.0012	0.0008	0.0012	0.00325	0.0061	0.015
Flow (MGD) Daily Maximum	0.02171	0.02171	0.002	0.070	0.46	0.0037	0.0024	0.0024	0.0024	0.0075	0.0061	0.029
pH (S.U.) Daily Maximum		7.97						8.07				
Temperature (°F) (Day 1 thru 15) Downstream Monitoring Average Monthly		72.3	63.6	56.9					44.1	62	65.2	74.7
Temperature (°F) (Day 1 thru 15) Upstream Monitoring Average Monthly		72.1	63.6	56.9					48.7	57.6	64.2	70.1
Temperature (°F) (Day 16 thru End of Month) Downstream Monitoring Average Monthly		68.5	58.7	53.0					47.5	60.1	67.8	71.2
Temperature (°F) (Day 16 thru End of Month) Upstream Monitoring Average Monthly		68.5	58.7	52.3					52.3	59.7	66	70.6

Parameter	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23
Temperature (°F) Downstream Monitoring Average Monthly	71.27 6				48.2	43.6	39.9	40.7				
Temperature (°F) Upstream Monitoring Average Monthly	72.14				48.2	43.4	38.9	41.2				
Temperature (Day 1 thru 15) (°F) Downstream Monitoring Daily Maximum		76.5	65.1	61.2					47.3	67.5	67.3	77.4
Temperature (Day 1 thru 15) (°F) Upstream Monitoring Daily Maximum		76.1	65.1	61.2					54.7	58.6	65.8	71.1
Temperature (Day 16 thru End of Month) (°F) Downstream Monitoring Daily Maximum		70.7	60.6	56.1					47.7	63.5	69.9	74.8
Temperature (Day 16 thru End of Month) (°F) Upstream Monitoring Daily Maximum		70.7	60.6	56.1					54.7	63.5	69.6	73.9
Temperature (°F) Downstream Monitoring Daily Maximum	76.28				51.3	46.6	47.3	48.6				
Temperature (°F) Instantaneous Maximum	76.46	74.7	65.5	63.1	52.0	48.4	46	49.6	64.8	76.8	76.5	87.9
Temperature (°F) Upstream Monitoring Daily Maximum	76.1				51.3	46.6	47.5	48.6				
Temperature Increase (°F) Instream Monitoring Instantaneous Maximum	0.864	0.4	0.00	2.1	0.0	0.9	3.7	0.3	4.1	8.9	2.5	8.3
TSS (mg/L) Daily Maximum		< 5						20				

**DMR Data for Outfall 102 (from August 1, 2023 to July 31, 2024)**

Parameter	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23
-----------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

**NPDES Permit Fact Sheet**  
**Washington Penn Plastic Performance Products Division**

**NPDES Permit No. PA0203963**

Parameter	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23
Flow (GPM) Internal Monitoring Point Average Monthly	0.64	0.22	1.127	0.112	0.173	0.029	0.21	0.45	0.55	1.30	3.52	3.66
Flow (GPM) Internal Monitoring Point Daily Maximum	0.22	0.49	2.49	0.288	0.274	0.485	0.34	0.50	0.96	2.77	6.11	4.71
Duration of Discharge (minutes) Internal Monitoring Point Instantaneous Maximum	10	5.0	10	10	10	10	10	10	10	10	10	10
pH (S.U.) Internal Monitoring Point Instantaneous Minimum	8.03	7.86	7.89	7.49	7.3	7.7	8.32	7.88	7.87	8.04	7.7	7.75
pH (S.U.) Internal Monitoring Point Instantaneous Maximum	8.93	8.52	8.39	7.94	8.3	8.3	8.7	8.29	8.27	9.16	8.38	8.22
Temperature (°F) Internal Monitoring Point Instantaneous Maximum	82.76	78.3	80.2	84	65.3	65.5	61.7	66.2	71.2	83.1	80.8	92.5
BOD5 (lbs/day) Internal Monitoring Point Daily Maximum	0.06	0.01	0.24	0.02	0.03	0.04	0.09	0.07	0.09	0.17	0.53	0.22
BOD5 (mg/L) Internal Monitoring Point Average Monthly	< 3.4	< 3.8	8.6	8.6	< 4.8	18.7	18.3	7.1	14.1	6.8	3.9	< 4.6
BOD5 (mg/L) Internal Monitoring Point Daily Maximum	5.35	5.94	11.9	19.20	8.93	61.2	43.70	13.3	27.50	12.9	8.66	< 10.3
TSS (lbs/day) Internal Monitoring Point Daily Maximum	0.27	0.04	1.86	0.30	0.09	0.30	0.29	0.54	1.59	1.81	2.13	2.99

**NPDES Permit Fact Sheet**  
**Washington Penn Plastic Performance Products Division**

**NPDES Permit No. PA0203963**

Parameter	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23
TSS (mg/L) Internal Monitoring Point Average Monthly	45.20	13.5	88.75	94	19.50	67.2	50.25	70.4	82.75	64.4	33.40	43.0
TSS (mg/L) Internal Monitoring Point Daily Maximum	133	25	136	159	26.0	153	88	155	210	129	50	59.0
Oil and Grease (lbs/day) Internal Monitoring Point Daily Maximum	0.07	< 0.03	0.15	0.02	0.01	0.03	0.02	< 0.03	0.06	0.17	0.43	0.28
Oil and Grease (mg/L) Internal Monitoring Point Average Monthly	< 5.24	< 5.08	< 6.75	7.92	< 5.15	< 16.48	< 5.78	< 5.0	22.97	< 5.0	< 5.24	< 5.0
Oil and Grease (mg/L) Internal Monitoring Point Daily Maximum	6.2	< 5.3	10.2	12.9	5.6	44.6	8.1	< 5.0	58.9	< 5.0	5.8	< 5.0
Total Cadmium (mg/L) Internal Monitoring Point Average Monthly	< 0.0050	< 0.005	< 0.005	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0050	< 0.005	< 0.005
Total Cadmium (mg/L) Internal Monitoring Point Daily Maximum	< 0.0050	< 0.005	< 0.005	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0050	< 0.005	< 0.005
Hexavalent Chromium (mg/L) Internal Monitoring Point Average Monthly	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Hexavalent Chromium (mg/L) Internal Monitoring Point Daily Maximum	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Total Cobalt (mg/L) Internal Monitoring Point Average Monthly	0.0100	0.0095	0.0168	0.016	< 0.0138	0.0152	0.020	0.0162	< 0.011	< 0.0074	0.0086	0.0093

Parameter	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23
Total Cobalt (mg/L) Internal Monitoring Point Daily Maximum	0.0140	0.012	0.0220	0.026	0.0240	0.020	0.0240	0.0240	0.016	0.0090	0.013	0.0110
Total Copper (mg/L) Internal Monitoring Point Average Monthly	0.0306	0.0238	0.0535	0.0334	< 0.0210	0.0438	0.0328	0.0188	0.0360	0.0174	0.0220	0.0240
Total Copper (mg/L) Internal Monitoring Point Daily Maximum	0.0740	0.0330	0.0860	0.0600	0.0410	0.1200	0.0510	0.0270	0.0690	0.0270	0.0460	0.0360
Dissolved Iron (mg/L) Internal Monitoring Point Average Monthly	0.0476	< 0.020	< 0.020	< 0.01782	< 0.0318	< 0.0406	0.0762	0.148	< 0.020	< 0.0212	< 0.0266	< 0.0588
Dissolved Iron (mg/L) Internal Monitoring Point Daily Maximum	0.1220	< 0.020	< 0.020	0.760	0.052	0.112	0.223	0.327	< 0.020	0.0260	0.046	0.1750
Total Zinc (mg/L) Internal Monitoring Point Average Monthly	0.1092	0.0688	0.2725	0.2696	0.1183	0.190	0.1908	0.1922	0.193	0.1086	0.1254	0.1103
Total Zinc (mg/L) Internal Monitoring Point Daily Maximum	0.1700	0.1040	0.3550	0.416	0.2110	0.352	0.283	0.2450	0.292	0.143	0.2160	0.165



Compliance History

Effluent Violations for Outfall 002, from: September 1, 2023 To: July 31, 2024

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Temperature Increase	09/30/23	IMAX	2.5	°F	2.0	°F
Temperature Increase	10/31/23	IMAX	8.9	°F	2.0	°F
Temperature Increase	11/30/23	IMAX	4.1	°F	2.0	°F
Temperature Increase	01/31/24	IMAX	3.7	°F	2.0	°F
Temperature Increase	04/30/24	IMAX	2.1	°F	2.0	°F

Summary of Inspections:

Other Comments:

Effluent Violations for Outfall 102, from: September 1, 2023 To: July 31, 2024

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	10/31/23	IMAX	9.16	S.U.	9.0	S.U.
TSS	09/30/23	Daily Max	2.13	lbs/day	2.06	lbs/day
Total Copper	06/30/24	Avg Mo	0.0238	mg/L	0.0216	mg/L
Total Copper	11/30/23	Avg Mo	0.0360	mg/L	0.0216	mg/L
Total Copper	05/31/24	Avg Mo	0.0535	mg/L	0.0216	mg/L
Total Copper	02/29/24	Avg Mo	0.0438	mg/L	0.0216	mg/L
Total Copper	07/31/24	Avg Mo	0.0306	mg/L	0.0216	mg/L
Total Copper	01/31/24	Avg Mo	0.0328	mg/L	0.0216	mg/L
Total Copper	04/30/24	Avg Mo	0.0334	mg/L	0.0216	mg/L
Total Copper	09/30/23	Avg Mo	0.0220	mg/L	0.0216	mg/L
Total Copper	04/30/24	Daily Max	0.0600	mg/L	0.0337	mg/L

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Total Copper	02/29/24	Daily Max	0.1200	mg/L	0.0337	mg/L
Total Copper	09/30/23	Daily Max	0.0460	mg/L	0.0337	mg/L
Total Copper	11/30/23	Daily Max	0.0690	mg/L	0.0337	mg/L
Total Copper	05/31/24	Daily Max	0.0860	mg/L	0.0337	mg/L
Total Copper	07/31/24	Daily Max	0.0740	mg/L	0.0337	mg/L
Total Copper	01/31/24	Daily Max	0.0510	mg/L	0.0337	mg/L
Total Copper	03/31/24	Daily Max	0.0410	mg/L	0.0337	mg/L
Dissolved Iron	04/30/24	Daily Max	0.760	mg/L	0.631	mg/L
Total Zinc	05/31/24	Avg Mo	0.2725	mg/L	0.174	mg/L
Total Zinc	12/31/23	Avg Mo	0.1922	mg/L	0.174	mg/L
Total Zinc	11/30/23	Avg Mo	0.193	mg/L	0.174	mg/L
Total Zinc	02/29/24	Avg Mo	0.190	mg/L	0.174	mg/L
Total Zinc	04/30/24	Avg Mo	0.2696	mg/L	0.174	mg/L
Total Zinc	01/31/24	Avg Mo	0.1908	mg/L	0.174	mg/L
Total Zinc	02/29/24	Daily Max	0.352	mg/L	0.272	mg/L
Total Zinc	04/30/24	Daily Max	0.416	mg/L	0.272	mg/L
Total Zinc	01/31/24	Daily Max	0.283	mg/L	0.272	mg/L
Total Zinc	11/30/23	Daily Max	0.292	mg/L	0.272	mg/L
Total Zinc	05/31/24	Daily Max	0.3550	mg/L	0.272	mg/L

Summary of Inspections:

Other Comments:

Development of Effluent Limitations

Outfall No.	002	Design Flow (MGD)	Variable
Latitude	40° 10' 59.6"	Longitude	-80° 08' 45.5"
Wastewater Description:	Storm water		

Outfall 002 discharges storm water runoff from a 120,00 sq. ft. area that encompasses silo storage areas and the loading dock. Discharges from Outfall 002 are currently subject to the following monitoring requirements.

**Table 1. Outfall 002 – Current Effluent Limits and Monitoring Requirements**

Parameter	Average Monthly	Maximum Daily	IMAX	Units	Measurement Frequency	Sample Type	Limit Basis
Flow	Report	Report	—	MGD	1/week	Estimate	25 Pa. Code § 92a.61(h)
pH	—	Report	—	S.U.	1/6 months	Grab	25 Pa. Code § 92a.61(h)
Temperature	—	—	110	°F	1/week	I-S	25 Pa. Code § 92a.61(h)
Total Suspended Solids	—	Report	—	mg/L	1/6 months	Grab	25 Pa. Code § 92a.61(h)
Temperature Increase	—	—	2.0	°F	1/week	Calculation	25 Pa. Code § 92a.61(h)

The monitoring requirements in **Table 1** will remain in effect in the renewed permit pursuant to anti-backsliding requirements under Section 402(o) of the Clean Water Act (33 U.S.C. §1342(o)) and/or 40 CFR § 122.44(l) (incorporated by reference at 25 Pa. Code § 92a.44) unless the limits are superseded by more stringent limits developed for this renewal or are relaxed pursuant to the anti-backsliding exceptions listed in 33 U.S.C. §1342(o) or 40 CFR § 122.44(l).

**002.A. Technology-Based Effluent Limitations (TBELs)**

40 CFR § 122.44(a)(1) (incorporated by reference at 25 Pa. Code § 92a.44) requires NPDES permits to include conditions meeting technology-based effluent limitations and standards. WPP's storm water discharges are not subject to any Federal Effluent Limitations Guidelines. Therefore, case-by-case TBELs, if warranted, are developed based on DEP's Best Professional Judgment (BPJ).

Consistent with 25 Pa. Code § 92a.61(h) and DEP's policy for permitting storm water discharges associated with industrial activities, minimum standards described in DEP's PAG-03 NPDES General Permit for Discharges of Stormwater Associated with Industrial Activity are applied to WPP's storm water discharges.<sup>1</sup> Based on the PPD facility's SIC Code of 3087, the facility would be classified under "Appendix S – Rubber, Miscellaneous Plastic Products and Miscellaneous Manufacturing Industries" of the PAG-03 General Permit.<sup>2</sup> Therefore, the monitoring requirements and sector-specific Best Management Practices (BMPs) of Appendix S of the PAG-03 are imposed as baseline requirements. The monitoring requirements of Appendix S in the current revision of the PAG-03 General Permit are shown in **Table 2**. Monitoring for additional pollutants is considered to the extent the baseline monitoring requirements from Appendix S do not capture the range of analytes present in Outfall 002's discharges.

**Table 2. PAG-03 Appendix S – Minimum Monitoring Requirements**

Discharge Parameter	Units	Minimum Measurement Frequency	Sample Type	Benchmark Values
Total Nitrogen †	mg/L	1/6 months	1 Grab	XXX
Total Phosphorus	mg/L	1/6 months	1 Grab	XXX
pH	S.U.	1/6 months	1 Grab	9.0
Total Suspended Solids	mg/L	1/6 months	1 Grab	100
Total Zinc	mg/L	1/6 months	1 Grab	XXX

† Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO<sub>2</sub>+NO<sub>3</sub>-N), where TKN and NO<sub>2</sub>+NO<sub>3</sub>-N are measured in the same sample.

When the PAG-03 General Permit was renewed in 2023, Appendix S was updated to include Total Nitrogen and Total Phosphorus. Those parameters will be added to Outfall 002's semi-annual monitoring requirements.

<sup>1</sup> Standard Operating Procedure (SOP) for Clean Water Program, Establishing Effluent Limitations for Individual Industrial Permits, Section III.C. (SOP No. BCW-PMT-032, February 5, 2024, Version 1.7): "The applicable appendix of the PAG-03 General Permit should be considered the minimum standards for limits, benchmarks and monitoring requirements for individual industrial stormwater permits. The application manager may include other limits, benchmarks and monitoring requirements as justified in the fact sheet."

<sup>2</sup> The determination of which of the PAG-03 General Permit's appendices applies to a facility is based on a facility's SIC Code. The requirements in Appendix J apply to storm water discharges associated with industrial activity from facilities whose industrial activity is not described by any other appendix of the PAG-03.

Sector-specific BMPs for Plastic Products Manufacturers under Appendix S of the PAG-03 are limited to the following, which are the same as those listed in Section 8.Y.2.2 of EPA's Multi-Sector General Permit (the federal equivalent of DEP's PAG-03 General Permit):

Minimize the discharge of plastic resin pellets in your stormwater discharges through implementation of control measures including but not limited to the following: minimize spills; clean up spills promptly and thoroughly; sweep thoroughly; pellet capturing; employee education; and disposal precautions.

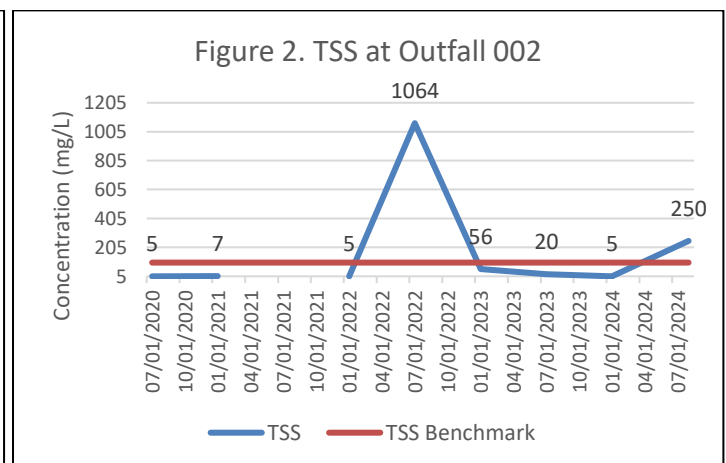
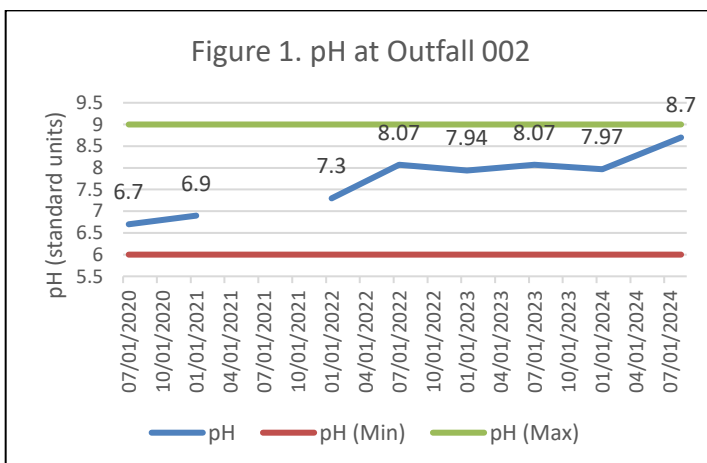
Given the prevalence of fugitive pellets and plastic residues at the PPD facility, DEP referred to EPA's "Industrial Stormwater Fact Sheet Series - Sector Y: Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries" [Doc. No. EPA-833-F-06-040] (see Attachment A) for a more comprehensive listing of BMPs for the industry. Additional BMPs from EPA's Fact Sheet will be included in WPP's permit as sector- and site-specific BMPs and should be implemented to the extent practicable.

As stated previously, in the absence of ELGs, case-by-case TBELs are developed based on BPJ. The development of case-by-case TBELs using BPJ typically involves the evaluation of end-of-pipe wastewater treatment technologies. However, consistent with 40 CFR § 122.44(k)(2), DEP considers the use of BMPs to be BAT for storm water discharges associated with industrial activities unless effluent concentrations indicate that BMPs provide inadequate pollution control.

Analytical data reported on the NPDES permit renewal application are summarized in Table 3 and semi-annual monitoring data reported on DMRs from the second half of 2020 through the first half of 2024 are shown in Figures 1 and 2, below.

**Table 3. Storm Water Analytical Results for Outfall 002**

Parameter	Units	002 Effluent Conc.	No Exposure Thresholds	PAG-03 Benchmarks
Oil and Grease	mg/L	4.2	≤ 5.0	N/A
BOD <sub>5</sub>	mg/L	6.9	≤ 10.0	30
COD	mg/L	<9.1	≤ 30.0	120
TSS	mg/L	250	≤ 30.0	100
Total Nitrogen	mg/L	1.7	≤ 2.0	N/A
Total Phosphorus	mg/L	0.16	≤ 1.0	N/A
pH	s.u.	8.7	6.0 – 9.0	9.0
Zinc, Total	mg/L	0.075	0.112	N/A



No results were reported for the second half of 2021.

Based on the results in Table 3 and Figures 1 and 2, no TBELs are imposed at Outfall 002. WPP reported high concentrations of TSS at Outfall 002, but not consecutively such that the permit's Corrective Action Plan requirement was triggered. Benchmark values will continue to apply consistent with the benchmark monitoring requirements imposed from Appendix S of the PAG-03. Also, consistent with the updated requirements of the 2023 PAG-03 General Permit upon which Outfall 002's requirements are based, four or more consecutive exceedances of the benchmark values will require a graduated response.

Antidegradation Best Available Combination of Technologies (ABACT)

WPP was founded in 1959 and was permitted to discharge treated sewage by Water Quality Management Permit 6375405 issued on June 30, 1975. The Little Chartiers Creek basin from its source to the Alcoa Dam (including receiving waters for WPP's effluent) was designated for HQ-WWF effective October 8, 1979 (9 Pa.B. 3051, September 8, 1979) to "protect the emergency intake water supply" of Canonsburg Lake. While discharges of storm water runoff from the PPD facility were not explicitly permitted in 1975, the discharges would have existed at the time—whether as point sources or non-point sources. Discharges that existed prior to the date a stream was designated as high quality are implicitly incorporated into that designation. This is explained on pp. 46-47 of the DEP's "Water Quality Antidegradation Implementation Guidance" [Doc. No. 391-0300-002] as follows:

Discharges in existence prior to the HQ or EV designation are "grandfathered" and considered to be part of the existing quality of the waterbody. "Grandfathered" flows are not subject to "the non-discharge alternatives/use of best technologies analysis" or SEJ (for HQ waters) in acknowledgment of the resources invested by municipal officials in planning for community sewage needs and corporate officials in equivalent planning to tailor treatment facilities to the wastewater volume and characteristics created by production/manufacturing processes.

Based on the preceding, requirements for a non-discharge alternatives analysis, social-economic justification, non-degrading effluent limits, and TBELs based on ABACT do not apply at Outfall 002. Even though those requirements do not apply and consequently have no effect on the renewed permit, DEP is documenting that conclusion for the permit record. Pursuant to 25 Pa. Code § 93.4c(b), the antidegradation requirements would be considered only if WPP proposes new, additional, or increased discharges.

**002.B. Water Quality-Based Effluent Limitations (WQBELs)**

Generally, DEP does not develop numerical WQBELs for storm water discharges. Pursuant to 25 Pa. Code § 96.4(g), mathematical modeling used to develop WQBELs must be performed at  $Q_{7-10}$  low-flow conditions. Precipitation-induced discharges generally do not occur at  $Q_{7-10}$  conditions because the precipitation that causes a storm water discharge also will increase the receiving stream's flow and that increased stream flow will provide additional assimilative capacity during a storm event. That does not preclude the potential for adverse effects to aquatic life caused by acute exposure during a storm event and intermittent chronic exposures (particularly for bio-accumulative pollutants) from multiple storm events as they naturally recur. Mathematically modeling such effects for wet weather conditions is not procedurally defined, which is why 40 CFR § 122.44(k)(2) and 25 Pa. Code § 92a.46 provide for BMPs to control or abate the discharge of pollutants in lieu of numeric limits. Pursuant to those regulations, conditions in Part C of the permit will ensure compliance with water quality standards through the combination of benchmark monitoring and BMPs including pollution prevention and exposure minimization, good housekeeping, erosion and sediment control, and spill prevention and response.<sup>3</sup>

Total Maximum Daily Loads

There are three TMDLs related to discharges in the Chartiers Creek watershed including 1) the Chartiers Creek/Little Chartiers Creek TMDL for PCBs and chlordane; 2) the Chartiers Creek Watershed TMDL for aluminum, iron, manganese, TSS, and pH; and 3) the Canonsburg Lake TMDL for nutrients.

Chartiers Creek/Little Chartiers Creek TMDL

WPP's process wastewaters historically did not contain PCBs or chlordane. By extension, WPP's storm water is not expected to contain PCBs or chlordane, which are not pollutants of concern for the industrial activities performed at the PPD facility. Therefore, the facility is unaffected by the Chartiers Creek/Little Chartiers Creek TMDL.

Chartiers Creek Watershed TMDL

TSS and pH are regulated and will continue to be regulated by benchmark monitoring at Outfall 002. There are no discharge monitoring report or application data available for aluminum, iron, and manganese. Therefore, semi-annual monitoring for those parameters will be added to Outfall 002 to determine WPP's contribution of metals to the watershed.

Canonsburg Lake TMDL

---

<sup>3</sup> Benchmark values are generally based on water quality criteria (mostly acute aquatic life criteria, but also chronic criteria for bioaccumulative pollutants), so the permit's iterative requirements for responding to consecutive benchmark value exceedances will minimize the potential for water quality concerns.



The Canonsburg Lake TMDL was developed in 2004 to address the aquatic life impairment of Canonsburg Lake, a recreational lake located about nine miles downstream of WPP on Little Chartiers Creek. Canonsburg Lake was created when the Alcoa Dam was constructed in 1943. The lake was used by the Alcoa Company as a manufacturing water supply. In 1958, Alcoa donated the lake and surrounding property to the Pennsylvania Fish Commission, which managed it as a recreational trout-stocked lake. The Alcoa Dam, which is approximately 525 feet long and 45 feet high, impounds water from the 46 mi<sup>2</sup> Little Chartiers Creek Basin (State Water Plan 20-F, Stream Code 36943). Historical documents state that the resulting lake has a surface area of about 76 acres, a volume of 700 acre/feet, a mean depth of 2.8 meters, and a maximum depth of 13 meters. However, an internal study conducted in 1987 by DEP revealed that the maximum and average depths as well as the total volume have decreased considerably due to siltation, predominantly stemming from non-point sources such as agriculture. The study also determined that Canonsburg Lake was further degraded by the effects of excessive algal growth arising from excess levels of nutrients. Canonsburg Lake was subsequently listed on Pennsylvania's 1996 Section 303(d) List of impaired waters and remained on all subsequent lists for impairments caused by nutrients primarily from agricultural sources.

A Lake Phosphorus Study conducted by DEP in 1987 formed the basis for Canonsburg Lake appearing on Pennsylvania's 1996 303(d) list. The study was done to assess the potential effects of imposing Total Phosphorus effluent limits on phosphorus dischargers in the watershed (phosphorus was identified as the limiting nutrient for the lake). The study determined that Canonsburg Lake, although highly eutrophic, would realize only modest improvements in water quality from effluent limits on dischargers because the overwhelming majority of the phosphorus load to the lake was delivered from nonpoint sources. Therefore, wasteload allocations for point source dischargers were specified with no reductions while nonpoint sources required a 57% reduction in Total Phosphorus. The TMDL report recommends that the required reductions of Total Phosphorus from nonpoint sources be achieved by implementing BMPs. The report also notes that most phosphorus is sediment-bound, so controlling sediment is expected to help control phosphorus.

WPP's sewage treatment plant (former Outfall 001) was assigned a wasteload allocation of 13 kg/year (28.66 pounds/year) for Total Phosphorus based on a design flow of 0.0012 MGD and an assumed effluent concentration of 6 mg/L. Outfall 001 no longer exists, but the remaining storm water discharges are point source discharges that will contribute to phosphorus loading in the Little Chartiers Creek basin. Since WPP's storm water discharges were not assigned wasteload allocations and already exhibit low concentrations of Total Phosphorus, no effluent limits are imposed. BMPs will control Total Phosphorus in WPP's storm water discharges. As discussed in Section 002.A of this Fact Sheet, Total Phosphorus and Total Nitrogen will require semi-annual reporting pursuant to Appendix S of the PAG-03. A benchmark value of 6.0 mg/L will be specified for Total Phosphorus in WPP's storm water based on the allocated concentration for point source discharges in the TMDL (although primarily targeted to sewage discharges). Benchmark monitoring for TSS also may help control Total Phosphorus if it is sediment-bound. DEP considers this implementation methodology to be consistent with the assumptions and requirements of the Canonsburg Lake TMDL, as required by 40 CFR § 122.44(d)(1)(vii)(B).<sup>4</sup>

#### Temperature Limits

In WPP's 2020 NPDES permit, Outfall 002 was subject to an instantaneous maximum temperature limit of 110°F and an in-stream temperature limit increase of 2.0°F. With the re-routing of contact cooling water discharges to the sanitary sewer, the limits are no longer necessary and will be removed pursuant to the exception to anti-backsliding given by 33 U.S.C. 1342(o)(2)(B)(i) regarding new information that justifies the application of less stringent effluent limitations.

#### **002.C. Effluent Limitations and Monitoring Requirements for Outfall 002**

In accordance with 25 Pa. Code §§ 92a.12 and 92a.61 and anti-backsliding requirements under Section 402(o) of the Clean Water Act (33 U.S.C. 1342(o)) and 40 CFR § 122.44(l) (incorporated in Pennsylvania's regulations at 25 Pa. Code § 92a.44), effluent limits are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements developed for this permit renewal; and effluent limits and monitoring requirements from the previous permit, subject to any exceptions to anti-backsliding discussed previously in this Fact Sheet. No TBELs are imposed at Outfall 002 (other than BMPs) and no WQBELs apply at this time, so monitoring and reporting requirements are the most stringent requirements.

---

<sup>4</sup> (vii) When developing water quality-based effluent limits under this paragraph the permitting authority shall ensure that:

- (A) The level of water quality to be achieved by limits on point sources established under this paragraph is derived from, and complies with all applicable water quality standards; and
- (B) Effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to [40 CFR 130.7](#).

**Table 4. Effluent Limits and Monitoring Requirements for Outfall 002**

Parameter	Mass (pounds)		Concentration (mg/L)			Basis
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant Maximum	
Flow (MGD)	—	Report	—	—	—	25 Pa. Code § 92a.61(h)
pH (S.U.)	—	—	—	Report	—	25 Pa. Code § 92a.61(h); PAG-03, Appendix S
Total Suspended Solids	—	—	—	Report	—	
Zinc, Total	—	—	—	Report	—	
Nitrogen, Total	—	—	—	Report	—	
Phosphorus, Total	—	—	—	Report	—	
Aluminum, Total	—	—	—	Report	—	25 Pa. Code § 92a.61(h) (TMDL-based reporting)
Iron, Total	—	—	—	Report	—	
Manganese, Total	—	—	—	Report	—	

The monitoring frequencies and sample types for all parameters will be grab sampling 1/6 months. The frequency of flow monitoring from the previous permit is changed from 1/week to 1/6 months and should be estimated at the time of sampling.

**Development of Effluent Limitations**

<b>Outfall No.</b>	003	<b>Design Flow (MGD)</b>	Variable
<b>Latitude</b>	40° 10' 58.4"	<b>Longitude</b>	-80° 08' 37.7"
<b>Wastewater Description:</b>	Storm water		

Outfall 003 discharges storm water runoff from a 100,000 sq. ft. area that encompasses the railcar loading/unloading area, dumpster loading area, and silo storage areas. Discharges from Outfall 003 currently are not subject to any monitoring requirements based on a previous no exposure certification.

**003.A. Technology-Based Effluent Limitations (TBELs)**

On the NPDES permit renewal application, WPP did not indicate its intent to renew its No Exposure Certification for Outfall 003. Based on DEP's inspections of the facility, Outfall 003 does not qualify for such certification due to the presence of plastic pellets in the drainage area. Therefore, consistent with the rationale in Section 002.A of this Fact Sheet, storm water discharges from Outfall 003 will be subject to the monitoring requirements of Appendix S of DEP's PAG-03 General Permit and sector- and site-specific BMPs based on EPA's "Industrial Stormwater Fact Sheet Series - Sector Y: Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries".

**003.B. Water Quality-Based Effluent Limitations (WQBELs)**

Generally, DEP does not develop numerical WQBELs for storm water discharges. Pursuant to 25 Pa. Code § 96.4(g), mathematical modeling used to develop WQBELs must be performed at Q<sub>7-10</sub> low flow conditions. Precipitation-induced discharges generally do not occur at Q<sub>7-10</sub> conditions because the precipitation that causes a storm water discharge also will increase the receiving stream's flow and that increased stream flow will provide additional assimilative capacity during a storm event. That does not preclude the potential for adverse effects to aquatic life caused by acute exposure during a storm event and intermittent chronic exposures (particularly for bio-accumulative pollutants) from multiple storm events as they naturally recur. Mathematically modeling such effects for wet weather conditions is not procedurally defined, which is why 40 CFR § 122.44(k)(2) and 25 Pa. Code § 92a.46 provide for BMPs to control or abate the discharge of pollutants in lieu of numeric limits. Pursuant to those regulations, conditions in Part C of the permit will ensure compliance with water quality standards through the combination of benchmark monitoring and BMPs including pollution prevention and exposure minimization, good housekeeping, erosion and sediment control, and spill prevention and response.

TMDL requirements are the same as those for Outfall 002 including additional monitoring requirements for Total Aluminum, Total Iron, and Total Manganese, and a benchmark value for Total Phosphorus of 6.0 mg/L.

**003.C. Effluent Limitations and Monitoring Requirements for Outfall 003**

In accordance with 25 Pa. Code §§ 92a.12 and 92a.61 and anti-backsliding requirements under Section 402(o) of the Clean Water Act (33 U.S.C. 1342(o)) and 40 CFR § 122.44(l) (incorporated in Pennsylvania's regulations at 25 Pa. Code § 92a.44), effluent limits are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements developed for this permit renewal; and effluent limits and monitoring requirements from the previous permit, subject to any exceptions to anti-backsliding discussed previously in this Fact Sheet. No TBELs are imposed at Outfall 003 (other than BMPs) and no WQBELs apply at this time, so monitoring and reporting requirements are the most stringent requirements.

**Table 5. Effluent Limits and Monitoring Requirements for Outfall 003**

Parameter	Mass (pounds)		Concentration (mg/L)			Basis
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant Maximum	
Flow (MGD)	—	Report	—	—	—	25 Pa. Code § 92a.61(h)
pH (S.U.)	—	—	—	Report	—	25 Pa. Code § 92a.61(h); PAG-03, Appendix S
Total Suspended Solids	—	—	—	Report	—	
Zinc, Total	—	—	—	Report	—	
Nitrogen, Total	—	—	—	Report	—	
Phosphorus, Total	—	—	—	Report	—	
Aluminum, Total	—	—	—	Report	—	25 Pa. Code § 92a.61(h) (TMDL-based reporting)
Iron, Total	—	—	—	Report	—	
Manganese, Total	—	—	—	Report	—	

The monitoring frequencies and sample types for all parameters will be grab sampling 1/6 months. The frequency of flow monitoring from the previous permit is changed from 1/week to 1/6 months and should be estimated at the time of sampling.

Tools and References Used to Develop Permit	
<input type="checkbox"/>	WQM for Windows Model (see Attachment )
<input type="checkbox"/>	Toxics Management Spreadsheet (see Attachment )
<input type="checkbox"/>	TRC Model Spreadsheet (see Attachment )
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment )
<input type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input checked="" type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
<input type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 386-2000-002, 9/08.
<input checked="" type="checkbox"/>	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
<input type="checkbox"/>	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
<input type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
<input type="checkbox"/>	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
<input type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
<input type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Design Stream Flows, 386-2000-003, 9/98.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
<input type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input checked="" type="checkbox"/>	SOP: Standard Operating Procedure (SOP) for Clean Water Program, Establishing Effluent Limitations for Individual Industrial Permits, Section III.C. (SOP No. BCW-PMT-032, February 5, 2024, Version 1.7)
<input type="checkbox"/>	Other:



## ATTACHMENT A

U.S. Environmental Protection Agency  
Industrial Stormwater Fact Sheet Series –  
Sector Y: Rubber, Miscellaneous Plastic  
Products, and Miscellaneous Manufacturing  
Industries

# INDUSTRIAL STORMWATER

## FACT SHEET SERIES



U.S. EPA Office of Water  
EPA-833-F-06-040  
February 2021

**Sector Y: Rubber, Miscellaneous  
Plastic Products, and Miscellaneous  
Manufacturing Industries**

### ***What is the NPDES stormwater permitting program for industrial activity?***

Activities, such as material handling and storage, equipment maintenance and cleaning, industrial processing or other operations that occur at industrial facilities are often exposed to stormwater. The runoff from these areas may discharge pollutants directly into nearby waterbodies or indirectly via storm sewer systems, thereby degrading water quality.

In 1990, the U.S. Environmental Protection Agency (EPA) developed permitting regulations under the National Pollutant Discharge Elimination System (NPDES) to control stormwater discharges associated with eleven categories of industrial activity. As a result, NPDES permitting authorities, which may be either EPA or a state environmental agency, issue stormwater permits to control runoff from these industrial facilities.

### ***What types of industrial facilities are required to obtain permit coverage?***

This fact sheet specifically discusses stormwater discharges from rubber, miscellaneous plastic products, and manufacturing facilities as described by Standard Industrial Classification (SIC) Major Group 30. Facilities and products in this group fall under the following categories, all of which require coverage under an industrial stormwater permit:

- ◆ Tires and inner tubes (SIC 3011)
- ◆ Rubber and plastic footwear (SIC 3021)
- ◆ Rubber and plastic hose and belting (SIC 3052)
- ◆ Gaskets, packaging, and sealing devices (SIC 3053)
- ◆ Fabricated rubber products, not elsewhere classified (SIC 3061 and 3069)
- ◆ Miscellaneous plastic products (SIC 3081 and 3089)
- ◆ Miscellaneous manufacturing industries (SIC 3991-3999)

Also discussed are stormwater discharges from miscellaneous manufacturing industries (except jewelry, silverware, and plateware) commonly identified by SIC Major Group 39 (except for 391). Miscellaneous manufacturing industries specifically include manufacturers of:

- ◆ Musical instruments (SIC 3931)
- ◆ Games, toys, and athletic goods (SIC 3942-3949)
- ◆ Pens, pencils, and artists' supplies (SIC 3951-3955, except 3952)
- ◆ Buttons, pins, and needles (SIC 3961 and 3965)

## INDUSTRIAL STORMWATER FACT SHEET SERIES

### *Sector Y: Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries*

#### ***What does an industrial stormwater permit require?***

Common requirements for coverage under an industrial stormwater permit include development of a written stormwater pollution prevention plan (SWPPP), implementation of control measures, and submittal of a request for permit coverage, usually referred to as the Notice of Intent or NOI. The SWPPP is a written assessment of potential sources of pollutants in stormwater runoff and control measures that will be implemented at your facility to minimize the discharge of these pollutants in runoff from the site. These control measures include site-specific best management practices (BMPs), maintenance plans, inspections, employee training, and reporting. The procedures detailed in the SWPPP must be implemented by the facility and updated as necessary, with a copy of the SWPPP kept on-site. The industrial stormwater permit also requires collection of visual, analytical, and/or compliance monitoring data to determine the effectiveness of implemented BMPs. For more information on EPA's industrial stormwater permit and links to State stormwater permits, go to [www.epa.gov/npdes/stormwater](http://www.epa.gov/npdes/stormwater) and click on "Industrial Activity."

#### ***What pollutants are associated with activities at my facility?***

Pollutants conveyed in stormwater discharges from facilities involved with the manufacturing of rubber, miscellaneous plastic, and other products will vary. There are a number of factors that influence to what extent industrial activities and significant materials can affect water quality.

- ◆ Geographic location
- ◆ Topography
- ◆ Hydrogeology
- ◆ Extent of impervious surfaces (e.g., concrete or asphalt)
- ◆ Type of ground cover (e.g., vegetation, crushed stone, or dirt)
- ◆ Outdoor activities (e.g., material storage, loading/unloading, vehicle maintenance)
- ◆ Size of the operation
- ◆ Type, duration, and intensity of precipitation events

Most of the actual manufacturing and processing activities associated with this industry normally occur indoors. However, there is a wide variety of materials used at these facilities which may include:

- ◆ Solvents
- ◆ Acids and caustic
- ◆ Carbon black
- ◆ Plasticizers
- ◆ Paint
- ◆ Processing oils
- ◆ Resins
- ◆ Rubber compounds and solutions
- ◆ Scrap plastic and rubber
- ◆ Fuels such as diesel or gasoline
- ◆ Adhesives
- ◆ Zinc
- ◆ Miscellaneous chemicals

Tanks, drums, or bags of these materials (including raw materials, by-products, final products, or waste products) may be exposed to stormwater during loading/unloading operations or through outdoor storage or handling at some facilities. Other items which may be exposed to stormwater include surplus processing machinery, scrap metal, PVC pipe, and rags.

The activities, pollutant sources, and pollutants detailed in Table 1 are commonly found at Rubber, miscellaneous plastic product, and miscellaneous manufacturing facilities.

## INDUSTRIAL STORMWATER FACT SHEET SERIES

### Sector Y: Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries

**Table 1. Common Activities, Pollutant Sources, and Associated Pollutants at Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Facilities**

Activity	Pollutant Source	Pollutant
Outdoor material loading/unloading	Wooden pallets, spills/leaks from material handling equipment, solvents, resins	Total suspended solids (TSS), oil and grease, organics
Outdoor material and equipment storage	Solvents, acids and caustic, plasticizers, paint, lubricating oils, processing oils, resins, rubber compounds, mineral spirits, zinc, scrap metal, scrap plastic and rubber, plastic pellets, PVC pipe, and rags	Organics, zinc, hydrocarbons, oil and grease, acids, alkalinity

Note: Activities may have additional pollutant sources that contain PFAS and can come into contact with stormwater discharges. Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that include PFOA, PFOS, GenX, and many other chemicals.

### **What BMPs can be used to minimize contact between stormwater and potential pollutants at my facility?**

A variety of BMP options may be applicable to eliminate or minimize the presence of pollutants in stormwater discharges from rubber, miscellaneous plastic products, and miscellaneous manufacturing facilities. You will likely need to implement a combination or suite of BMPs to address stormwater runoff at your facility. Your first consideration should be for pollution prevention BMPs, which are designed to prevent or minimize pollutants from entering stormwater runoff and/or reduce the volume of stormwater requiring management. Prevention BMPs can include regular cleanup, collection and containment of debris in storage areas, and other housekeeping practices, spill control, and employee training. It may also be necessary to implement treatment BMPs, which are engineered structures intended to treat stormwater runoff and/or mitigate the effects of increased stormwater runoff peak rate, volume, and velocity. Treatment BMPs are generally more expensive to install and maintain and include oil-water separators, wet ponds, and proprietary filter devices.

BMPs must be selected and implemented to address the following:

#### **Good Housekeeping Practices**

Good housekeeping is a practical, cost-effective way to maintain a clean and orderly facility to prevent potential pollution sources from coming into contact with stormwater. It includes establishing protocols to reduce the possibility of mishandling materials or equipment and training employees in good housekeeping techniques. Common areas where good housekeeping practices should be followed include trash containers and adjacent areas, material storage areas, vehicle and equipment maintenance areas, and loading docks. Good housekeeping practices must include a schedule for regular pickup and disposal of garbage and waste materials and routine inspections of drums, tanks, and containers for leaks and structural conditions. Practices also include containing and covering garbage, waste materials, and debris. Involving employees in routine monitoring of housekeeping practices has proven to be an effective means of ensuring the continued implementation of these measures. Industrial facilities can conduct activities that use, store, manufacture, transfer, and/or dispose of PFAS containing materials. Successful good housekeeping practices to minimize PFAS exposure to stormwater could include inventorying the location, quantity, and method of storage; using properly designed storage and transfer techniques; providing secondary containment around chemical storage areas; and using proper techniques for cleaning or replacement of production systems or equipment.

#### **Minimizing Exposure**

Where feasible, minimizing exposure of potential pollutant sources to precipitation is an important control option. Minimizing exposure prevents pollutants, including debris, from coming into contact with precipitation and can reduce the need for BMPs to treat contaminated stormwater runoff. It can also prevent debris from being picked up by stormwater and carried into drains and surface waters.



## INDUSTRIAL STORMWATER FACT SHEET SERIES

### *Sector Y: Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries*

Examples of BMPs for exposure minimization include covering materials or activities with temporary structures (e.g., tarps) when wet weather is expected or moving materials or activities to existing or new permanent structures (e.g., buildings, silos, sheds). Even the simple practice of keeping a dumpster lid closed can be a very effective pollution prevention measure. Another example could include locating PFAS-containing materials and residues away from drainage pathways and surface waters.

### **Erosion and Sediment Control**

BMPs must be selected and implemented to limit erosion on areas of your site that, due to topography, activities, soils, cover, materials, or other factors are likely to experience erosion. Erosion control BMPs such as seeding, mulching, and sodding prevent soil from becoming dislodged and should be considered first. Sediment control BMPs such as silt fences, sediment ponds, and stabilized entrances trap sediment after it has eroded. Sediment control BMPs should be used to back-up erosion control BMPs.

### **Management of Runoff**

Your SWPPP must contain a narrative evaluation of the appropriateness of stormwater management practices that divert, infiltrate, reuse, or otherwise manage stormwater runoff so as to reduce the discharge of pollutants. Appropriate measures are highly site-specific, but may include, among others, vegetative swales, collection and reuse of stormwater, inlet controls, snow management, infiltration devices, and wet retention measures. Incorporating treatment like granular activated carbon may be helpful to remove certain pollutants like PFAS.

Additionally, identifying weaknesses in current facility practices will aid the permittee in determining appropriate BMPs that will achieve a reduction in pollutant loadings.

A combination of preventive and treatment BMPs will yield the most effective stormwater management for minimizing the offsite discharge of pollutants via stormwater runoff. Though not specifically outlined in this fact sheet, BMPs must also address preventive maintenance records or logbooks, regular facility inspections, spill prevention and response, and employee training.

All BMPs require regular maintenance to function as intended. Some management measures have simple maintenance requirements, others are quite involved. You must regularly inspect all BMPs to ensure they are operating properly, including during runoff events. As soon as a problem is found, action to resolve it should be initiated immediately.

Implement BMPs, such as those listed below in Table 2 for the control of pollutants at rubber, miscellaneous plastic products and miscellaneous manufacturing facilities, to minimize and prevent the discharge of pollutants in stormwater. Identifying weaknesses in current facility practices will aid the permittee in determining appropriate BMPs that will achieve a reduction in pollutant loadings. BMPs listed in Table 2 are broadly applicable to rubber, miscellaneous plastic products and miscellaneous manufacturing facilities; however, this is not a complete list and you are recommended to consult with regulatory agencies or a stormwater engineer/consultant to identify appropriate BMPs for your facility.

## INDUSTRIAL STORMWATER FACT SHEET SERIES

### Sector Y: Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries

**Table 2. BMPs for Potential Pollutant Sources at Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Facilities**

Pollutant Sources	BMPs
Outdoor material unloading/loading	<ul style="list-style-type: none"> <li><input type="checkbox"/> Confine loading/unloading activities to designated areas outside drainage pathways and away from surface waters.</li> <li><input type="checkbox"/> Close storm drains during loading/unloading activities in surrounding areas.</li> <li><input type="checkbox"/> Use a dead-end sump where materials could be directed.</li> <li><input type="checkbox"/> Inspect containers for leaks or damage prior to loading/unloading.</li> <li><input type="checkbox"/> Avoid loading/unloading materials in the rain or provide cover or other protection for loading docks.</li> <li><input type="checkbox"/> Provide diversion berms, dikes or grassed swales around the perimeter of the area to limit run-on.</li> <li><input type="checkbox"/> Cover loading and unloading areas and perform these activities on an impervious pad to enable easy collection of spilled materials.</li> <li><input type="checkbox"/> Slope the impervious concrete floor or pad to collect spills and leaks and convey them to proper containment and treatment.</li> <li><input type="checkbox"/> Provide overhangs or door skirts to enclose trailer ends at truck loading/unloading docks.</li> <li><input type="checkbox"/> For rail transfer, a drip pan shall be installed within the rails to collect spillage from the tank.</li> <li><input type="checkbox"/> Where liquid or powdered materials are transferred in bulk to/from truck or rail cars, ensure hose connection points at storage containers are inside containment areas, or drip pans are used in areas where spillage may occur which are not in a containment area.</li> <li><input type="checkbox"/> Place catch trays between the dock and trailer at shipping and receiving bays to capture solids.</li> <li><input type="checkbox"/> Enclose material handling systems.</li> <li><input type="checkbox"/> Cover materials entering and leaving areas.</li> <li><input type="checkbox"/> Use dry cleanup methods instead of washing the areas down.</li> <li><input type="checkbox"/> Regularly sweep area to minimize debris on the ground and dispose of materials properly.</li> <li><input type="checkbox"/> Provide dust control if necessary. When controlling dust, sweep and/or apply water or materials that will not impact surface or ground water.</li> <li><input type="checkbox"/> Develop and implement spill prevention, containment, and countermeasure (SPCC) plans.</li> <li><input type="checkbox"/> Train employees in spill prevention, control, cleanup, and proper materials management techniques.</li> <li><input type="checkbox"/> Inspect pallets for protruding nails or broken boards.</li> </ul>
Outdoor material storage	<ul style="list-style-type: none"> <li><input type="checkbox"/> Cover storage areas with roofs or tarps.</li> <li><input type="checkbox"/> Confine storage of raw materials, parts, and equipment to designated areas away from high traffic, outside drainage pathways and away from surface waters.</li> <li><input type="checkbox"/> Provide secondary containment around chemical storage areas.</li> <li><input type="checkbox"/> If containment structures have drains, ensure that the drains have valves, and that valves are maintained in the closed position. Institute protocols for checking/testing stormwater in containment areas prior to discharge.</li> <li><input type="checkbox"/> Provide diversion berms, dikes or grassed swales around the perimeter of the area to limit run-on.</li> <li><input type="checkbox"/> Direct stormwater runoff to an on-site retention pond.</li> <li><input type="checkbox"/> Ensure that all containers are properly sealed and valves closed.</li> <li><input type="checkbox"/> Conduct container integrity testing and provide leak detection.</li> </ul>

## INDUSTRIAL STORMWATER FACT SHEET SERIES

### Sector Y: Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries

**Table 2. BMPs for Potential Pollutant Sources at Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Facilities (continued)**

Pollutant Sources	BMPs
Outdoor material storage (continued)	<ul style="list-style-type: none"> <li><input type="checkbox"/> Inspect storage tanks and piping systems (pipes, pumps, flanges, couplings, hoses, and valves) for failures or leaks and perform preventive maintenance.</li> <li><input type="checkbox"/> Plainly label all containers.</li> <li><input type="checkbox"/> Maintain an inventory of fluids to identify leakage.</li> <li><input type="checkbox"/> Wash and rinse containers indoors before storing them outdoors.</li> <li><input type="checkbox"/> Provide transfer of PFAS containing materials and their proper collection and disposal methods in the event of a release from their container.</li> <li><input type="checkbox"/> Train employees on proper spill prevention and response techniques.</li> <li><input type="checkbox"/> Train employees on proper waste control and disposal.</li> </ul>
Waste management	<ul style="list-style-type: none"> <li><input type="checkbox"/> Store waste in enclosed and/or covered areas.</li> <li><input type="checkbox"/> Store wastes in covered, leak proof containers (e.g., dumpsters, drums).</li> <li><input type="checkbox"/> Cover the dumpsters or move them indoors.</li> <li><input type="checkbox"/> Use linked dumpsters that do not leak.</li> <li><input type="checkbox"/> Provide a lining for the dumpsters.</li> <li><input type="checkbox"/> Dispose or recycle packaging properly.</li> <li><input type="checkbox"/> Ensure hazardous and solid waste disposal practices are performed in accordance with applicable federal, state, and local requirements.</li> <li><input type="checkbox"/> Ship all wastes to offsite licensed landfills or treatment facilities.</li> </ul>
Particulate emission management	<ul style="list-style-type: none"> <li><input type="checkbox"/> Clean around vents and stacks.</li> <li><input type="checkbox"/> Place tubs around vents and stacks to collect particulates.</li> <li><input type="checkbox"/> Inspect air emission control systems regularly and repair or replace when necessary.</li> </ul>
<b>Rubber Manufacturers - Zinc material management</b>	
Material storage	<ul style="list-style-type: none"> <li><input type="checkbox"/> Store zinc bags indoors.</li> <li><input type="checkbox"/> Use of special large volume sacks (2,500 pound sacks rather than 50- to 100-pound sacks) with less potential for releases of zinc.</li> <li><input type="checkbox"/> Store materials in use in sealable container.</li> <li><input type="checkbox"/> Provide an airspace between the container and the cover to minimize "puffing" losses when the container is opened.</li> <li><input type="checkbox"/> Use automatic dispensing and weighing equipment.</li> <li><input type="checkbox"/> Use pre-weighed bags that can be thrown directly into the mixer to reduce spillage.</li> <li><input type="checkbox"/> Clean up spills without washing zinc into storm drains.</li> <li><input type="checkbox"/> Train employees on proper handling and emptying of zinc bags.</li> </ul>
Dumpsters	<ul style="list-style-type: none"> <li><input type="checkbox"/> Cover the dumpsters or move them indoors.</li> <li><input type="checkbox"/> Use linked dumpsters that do not leak.</li> <li><input type="checkbox"/> Provide a lining for the dumpsters.</li> </ul>
Dust collectors or baghouses	<ul style="list-style-type: none"> <li><input type="checkbox"/> Repair or replace improperly operating baghouses.</li> <li><input type="checkbox"/> Provide regular maintenance.</li> </ul>



INDUSTRIAL STORMWATER FACT SHEET SERIES

*Sector Y: Rubber, Miscellaneous Plastic Products,  
and Miscellaneous Manufacturing Industries*

**Table 2. BMPs for Potential Pollutant Sources at Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Facilities (continued)**

Pollutant Sources	BMPs
Grinding operations from which zinc dust may be released	<input type="checkbox"/> Use dust collection system or reduce the amount of dust generated.
Zinc stearate coating operations	<input type="checkbox"/> Develop a spill prevention/response plan. <input type="checkbox"/> Use dry cleanup methods for spills. <input type="checkbox"/> Use alternate compounds to zinc stearate.
<i>Plastics Manufacturers - Plastic Pellet Management</i>	
Management	<input type="checkbox"/> Conduct regularly scheduled self evaluations to identify problem areas. <input type="checkbox"/> Encourage information sharing between companies. <input type="checkbox"/> Develop educational materials for employees, including those involved in transporting pellets.
Education and training	<input type="checkbox"/> Educate key officials and company managers regarding the fate and effects and the economic disadvantages of pellet loss. <input type="checkbox"/> Educate company employees regarding environmental hazards of pellet loss and employee responsibility for corrective actions. <input type="checkbox"/> Train pellet handlers to operate equipment, particularly fork lifts, in a manner that minimizes the potential for pellet loss.
Equipment and facilities	<input type="checkbox"/> Install a containment system to capture stormwater runoff. <input type="checkbox"/> Implement dry cleanup procedures. <input type="checkbox"/> Install connecting hoses equipped with valves that will close automatically when the connection is broken. <input type="checkbox"/> Direct the water flow from rail hopper cars and bulk trucks through a screen to capture the pellets rather than spilling them onto the ground. <input type="checkbox"/> Seal expansion joints in concrete floors with a flexible material to facilitate cleanup. <input type="checkbox"/> Install alarms in the pellet conveying system. <input type="checkbox"/> Pave all pellet handling areas, including loading docks and rail sidings. <input type="checkbox"/> Place screening in storm drains. <input type="checkbox"/> Place control devices where they can be serviced without losing pellets. <input type="checkbox"/> Equip bag-handling stations with vacuum hoses to facilitate spill cleanup. <input type="checkbox"/> Use tarps or containment devices to collect pellets as they are spilled. <input type="checkbox"/> Install grating at doorways for wiping feet. <input type="checkbox"/> Modify loading systems so that transfer lines can be completely emptied, with any residual resin being contained when loading ceases. <input type="checkbox"/> Ensure equipment is secured and stored properly.



## INDUSTRIAL STORMWATER FACT SHEET SERIES

### Sector Y: Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries

**Table 2. BMPs for Potential Pollutant Sources at Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Facilities (continued)**

Pollutant Sources	BMPs
Operations	<ul style="list-style-type: none"> <li><input type="checkbox"/> Place portable screens underneath connection points when making and breaking all connections.</li> <li><input type="checkbox"/> Secure outlet caps and seals before moving full or empty rail hopper cars and trucks.</li> <li><input type="checkbox"/> Implement handling procedures that minimize punctures and pellet spillage.</li> <li><input type="checkbox"/> Inspect pellet packaging before offloading.</li> <li><input type="checkbox"/> Repair punctured bags immediately.</li> </ul>
Good housekeeping	<ul style="list-style-type: none"> <li><input type="checkbox"/> Implement daily and routine housekeeping and spill response procedures.</li> <li><input type="checkbox"/> Develop standard operating procedures for containing and cleaning up spills.</li> <li><input type="checkbox"/> Conduct routine inspections for the presence of loose pellets on the facility grounds, including parking lots, drainage areas, driveways, etc.</li> </ul>
Packaging	<ul style="list-style-type: none"> <li><input type="checkbox"/> Use reinforced bags and containers lined with puncture-resistant material.</li> <li><input type="checkbox"/> Minimize the use of valved bags or seal valved bags immediately after filling.</li> <li><input type="checkbox"/> Use sealed containers instead of break bulk packaging.</li> </ul>
Shipping	<ul style="list-style-type: none"> <li><input type="checkbox"/> Use containers for cargo shipping rather than individual pallets.</li> <li><input type="checkbox"/> Identify the person responsible for sealing the ports on rail hopper cars and bulk trucks, and document sealing.</li> <li><input type="checkbox"/> Close and secure the rail hopper car valve with strong wire or aircraft cable in addition to the normal sealing mechanism.</li> <li><input type="checkbox"/> Visually confirm that each compartment and tube of shipping vehicles is empty.</li> <li><input type="checkbox"/> Inspect interiors of trailers and sea containers for defects that may puncture pellet packaging. Consider vandalism exposure when selecting leased track sites.</li> <li><input type="checkbox"/> Avoid on-deck pellet storage.</li> <li><input type="checkbox"/> Seal empty rail hopper cars and bulk trucks before returning them to shipper.</li> </ul>
Recycling and waste disposal	<ul style="list-style-type: none"> <li><input type="checkbox"/> Store waste pellets in properly labeled containers.</li> <li><input type="checkbox"/> Recycle or resell waste pellets.</li> <li><input type="checkbox"/> Check broken and discarded packaging for residual pellets.</li> <li><input type="checkbox"/> Inspect handling and storage procedures.</li> <li><input type="checkbox"/> If an outside vendor is used for waste removal, train in material handling, spill prevention and control.</li> </ul>

### ***What if activities and materials at my facility are not exposed to precipitation?***

The Industrial stormwater program requires permit coverage for a number of specified types of industrial activities. However, when a facility is able to prevent the exposure of ALL relevant activities and materials to precipitation, it may be eligible to claim no exposure and qualify for a waiver from permit coverage.

If you are regulated under the Industrial permitting program, you must either obtain permit coverage or submit a no exposure certification form, if available. Check with your permitting authority for additional information as not every permitting authority program provides no exposure exemptions.

## INDUSTRIAL STORMWATER FACT SHEET SERIES

*Sector Y: Rubber, Miscellaneous Plastic Products,  
and Miscellaneous Manufacturing Industries*

### ***Where do I get more information?***

For additional information on the Industrial stormwater program see  
[www.epa.gov/npdes/stormwater/msgp](http://www.epa.gov/npdes/stormwater/msgp).

A list of names and telephone numbers for each EPA Region or state NPDES permitting authority can be found at [www.epa.gov/npdes/stormwatercontacts](http://www.epa.gov/npdes/stormwatercontacts).

### ***References***

Information contained in this Fact Sheet was compiled from EPA's past and current Multi-Sector General Permits and from the following sources:

- ◆ City of Phoenix, Arizona, Street Transportation Department, Stormwater Management Section. 2004. Prevent Storm Water Contamination Best Management Practices for Section Y - Rubber, Plastic Products & Miscellaneous Manufacturing. Major Groups 30 and 39 (Except 3910-19).  
<http://phoenix.gov/STREETS/rubplas.pdf>
- ◆ U.S. EPA, Office of Air and Water Programs - Effluent Guidelines Division. 1974. Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Tire and Synthetic Segment of the Rubber Processing Point Source Category. EPA-820-B-80-100.
- ◆ U.S. EPA, Office of Science and Technology. 1999. Preliminary Data Summary of Urban Stormwater Best Management Practices. EPA-821-R-99-012  
[www.epa.gov/OST/stormwater/](http://www.epa.gov/OST/stormwater/)
- ◆ U.S. EPA, Office of Water. 1992. Plastic Pellets in the Aquatic Environment: Sources and Recommendations. EPA 842/B-92/010.
- ◆ U.S. EPA, Office of Wastewater Management. *NPDES Stormwater Multi-Sector General Permit for Industrial Activities (MSGP)*.  
[www.epa.gov/npdes/stormwater/msgp](http://www.epa.gov/npdes/stormwater/msgp)