pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0222763**
Facility Type	**Industrial**	APS ID	**983761**
Major / Minor	**Minor**	Authorization ID	**1256882**

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

Applicant and Facility Information

Applicant Name	**Charter Plastics, Inc.**	Facility Name	**Charter Plastics**
Applicant Address	P.O. Box 770, 221 South Perry Street	Facility Address	221 Souh Perry Street
	Titusville, PA 16354-0770		Titusville, PA 16354-1662
Applicant Contact	Andy Loker	Facility Contact	
Applicant Phone	(814) 827-9665	Facility Phone	
Client ID	91163	Site ID	264147
SIC Code	3084	Municipality	Titusville City
SIC Description	Manufacturing - Plastics, Pipe	County	Crawford
Date Application Received	December 31, 2018	EPA Waived?	Yes
Date Application Accepted	January 8, 2019	If No, Reason	

Purpose of Application: Renewal of a NPDES Permit for an existing discharge of industrial waste and stormwater.

Summary of Review

This facility is engaged in the manufacture of NSF-approved polyethylene pipe via extrusion molding. Contact Cooling water from this process is subject to federal ELGs at 40 CFR 463 Subpart A.

There are no perceived impacts to any threatened or endangered mussel species as a result of discharges from this facility.

There are currently no open violations listed in EFACTS for this permittee (10/10/2019).

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

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

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.144
Latitude	41º 37' 28.2"	Longitude	-79º 40' 33.2"
Quad Name	Titusville South	Quad Code	0608
Wastewater Description:	Contact Cooling Water (CCW), Stormwater associated with industrial activity		

Receiving Waters	Oil Creek (via Municipal Storm Sewer)	Stream Code	54128
NHD Com ID	100473083	RMI	18.90
Drainage Area	167	Yield (cfs/mi^2)	0.102
Q_{7-10} Flow (cfs)	17.034	Q_{7-10} Basis	USGS #03020500
Elevation (ft)	1205	Slope (ft/ft)	
Watershed No.	16-E	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)	7.0	Default
Temperature (°C)	20	Default (CWF)
Hardness (mg/L)	182	WQN 866 @ Rouseville (regression analysis)
Other:		

Nearest Downstream Public Water Supply Intake		Aqua Pennsylvania, Inc. – Emlenton	
PWS Waters	Allegheny River	Flow at Intake (cfs)	
PWS RMI	90.0	Distance from Outfall (mi)	60

Changes Since Last Permit Issuance:

Other Comments: Design flow is based on maximum flow reported on the application. This is the flow most representative of actual conditions when full production is occurring.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0
Latitude	41º 37' 30.3"	Longitude	-79º 40' 35.6"
Quad Name	Titusville South	Quad Code	0608
Wastewater Description:	Stormwater associated with industrial activity		

Outfall No.	004	Design Flow (MGD)	0
Latitude	41º 37' 30.9"	Longitude	-79º 40' 40.5"
Quad Name	Titusville South	Quad Code	0608
Wastewater Description:	Stormwater associated with industrial activity		

Receiving Waters	Oil Creek (via Municipal Storm Sewer)	Stream Code	54128
NHD Com ID	100473083	RMI	19.15

Changes Since Last Permit Issuance:

Other Comments: These outfalls were indicated to meet a condition of “No Exposure” on the renewal application. A review of aerial imagery appears to support this.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	003	Design Flow (MGD)	0.216
Latitude	41Âº 37' 29.3"	Longitude	-79º 40' 43.5"
Quad Name	Titusville South	Quad Code	0608
Wastewater Description:	Contact Cooling Water (CCW), Stormwater associated with industrial activity		
Receiving Waters	Oil Creek (via Municipal Storm Sewer)	Stream Code	54128
NHD Com ID	100473083	RMI	19.35
Drainage Area	167	Yield (cfs/mi^2)	0.102
Q_{7-10} Flow (cfs)	17.034	Q_{7-10} Basis	USGS #03020500
Elevation (ft)	1205	Slope (ft/ft)	
Watershed No.	16-E	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)	7.0	Default
Temperature (°C)	20	Default (CWF)
Hardness (mg/L)	182	WQN 866 @ Rouseville (regression analysis)
Other:		

Nearest Downstream Public Water Supply Intake		Aqua Pennsylvania, Inc.	
PWS Waters	Allegheny River	Flow at Intake (cfs)	
PWS RMI	90.0	Distance from Outfall (mi)	60

Changes Since Last Permit Issuance: Design flow used has increased due to increased production in this part of the plant.

Other Comments: Design flow is based on maximum flow reported on the application. This is the flow most representative of actual conditions when full production is occurring.

Changes Since Last Permit Issuance: The design flow used increased from 0.144 MGD to 0.216 MGD.

Other Comments:

Compliance History

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

Parameter	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18	SEP-18
Flow (MGD) Average Monthly	0.108	0.130	0.108	0.108	0.108	0.108	0.1025	0.097	0.108	0.0864	0.115	0.108
Flow (MGD) Daily Maximum	0.108	0.130	0.108	0.108	0.108	0.108	0.108	0.108	0.108	0.108	0.144	0.108
pH (S.U.) Minimum			7.2			7.1			7.2			7.2
pH (S.U.) Instantaneous Maximum			7.3			7.3			7.4			7.3
BOD5 (lbs/day) Daily Maximum			2.7			< 2.7			2.8			2.7
BOD5 (mg/L) Daily Maximum			< 3.0			< 3.0			< 3			< 3
TSS (lbs/day) Daily Maximum			4.5			3.6			3.7			3.6
TSS (mg/L) Daily Maximum			< 4.5			4.0			< 4.0			< 4.0
Oil and Grease (lbs/day) Average Quarterly			4.5			< 5.0			< 4.8			< 4.8
Oil and Grease (lbs/day) Daily Maximum			4.5			< 5.0			< 4.8			< 4.8
Oil and Grease (mg/L) Average Quarterly			< 5.0			< 5.0			< 4.8			< 4.8
Oil and Grease (mg/L) Daily Maximum			< 5.0			< 5.0			< 4.8			< 4.8

DMR Data for Outfall 003 (from September 1, 2018 to August 31, 2019)

Parameter	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18	SEP-18
Flow (MGD) Average Monthly	0.137	0.108	0.126	0.144	0.158	0.144	0.126	0.135	0.144	0.144	0.144	0.144
Flow (MGD) Daily Maximum	0.144	0.108	0.144	0.144	0.216	0.144	0.144	0.144	0.144	0.144	0.144	0.144
pH (S.U.) Minimum			7.2			7.1			7.3			7.2
pH (S.U.) Instantaneous Maximum			7.3			7.4			7.3			7.3
BOD5 (lbs/day) Daily Maximum			3.2			< 3.6			3.6			3.6
BOD5 (mg/L) Daily Maximum			< 3.0			< 3.0			< 3.0			< 3.0
TSS (lbs/day) Daily Maximum			5.2			4.8			4.7			4.8
TSS (mg/L) Daily Maximum			< 5			4.0			< 4.0			< 4.0
Oil and Grease (lbs/day) Average Quarterly			5.2			< 5.0			< 4.8			< 4.8
Oil and Grease (lbs/day) Daily Maximum			5.2			< 5.0			< 4.8			< 4.8
Oil and Grease (mg/L) Average Quarterly			< 5.2			< 5.0			< 4.8			< 4.8
Oil and Grease (mg/L) Daily Maximum			< 5.2			< 5.0			< 4.8			< 4.8

Compliance History	
Summary of DMRs:	No effluent violations in last 5 years
Summary of Inspections:	Facility was last inspected on March 16, 2017. The inspection report did not mention any violations. It was noted that the permittee was taking 24-hour composite samples for BOD5 and TSS, although they are only required to take an 8-hour composite sample for those parameters.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.144
Latitude 41º 37' 28.20" **Longitude** -79º 40' 33.2"
Wastewater Description: Contact Cooling Water (CCW), Stormwater associated with industrial activity

Technology-Based Limitations

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

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
BOD_5	26	Daily Max	40 CFR 463.12(a)	
TSS	19	Daily Max	40 CFR 463.12(a)	
Oil & Grease	29	Daily Max	40 CFR 463.12(a)	
pH	6.0 – 9.0 (S.U.)	Min – Max	40 CFR 463.12(a)	25 Ch.95.2(1)
Oil & Grease	15	Monthly Average		25 Ch. 95.2(2)(ii)
Oil & Grease	30	IMAX		25 Ch. 95.2(2)(ii)

Comments:

Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment A) determined the following parameters were candidates for limitations: 1,1, 2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,2-Dichloroethane, 1,3-Dichloropropylene, Carbon tetrachloride, Chlorodibromomethane, Dichlorobromomethane, Tetrachloroethylene, and Vinyl chloride.

The following limitations were determined through water quality modeling (output files attached):

Parameter	Limit (mg/l)	SBC	Model
None			

Comments: Outfall 001 and 003 were combined for PENTOXSD Modeling and the Thermal Analysis Spreadsheet due to the close proximity of the discharges in Oil Creek.

The Thermal Analysis Spreadsheet calculated lower limits from June through September. A review of thermal data from the last three permit applications show that discharge temperatures remain in a consistently close range with a maximum reported temperature of 56 °F at both outfalls which is less than the most string WQBEL calculated (64°F during Nov. 1-15). Therefore, temperature limits or monitoring is not being recommended in the renewed permit.

Best Professional Judgment (BPJ) Limitations

Comments: None

Anti-Backsliding

N/A

Development of Effluent Limitations

Outfall No. 003 **Design Flow (MGD)** 0.216
Latitude 41º 37' 29.30" **Longitude** -79º 40' 43.5"
Wastewater Description: Other Miscellaneous Discharges, Stormwater associated with industrial activity

Technology-Based Limitations

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

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
BOD_5	26	Daily Max	40 CFR 463.12(a)	
TSS	19	Daily Max	40 CFR 463.12(a)	
Oil & Grease	29	Daily Max	40 CFR 463.12(a)	
pH	6.0 – 9.0 (S.U.)	Min – Max	40 CFR 463.12(a)	25 Ch.95.2(1)
Oil & Grease	15	Monthly Average		25 Ch. 95.2(2)(ii)
Oil & Grease	30	IMAX		25 Ch. 95.2(2)(ii)

Comments:

Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment A) determined the following parameters were candidates for limitations: 1,1, 2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,2-Dichloroethane, 1,3-Dichloropropylene, Carbon tetrachloride, Chlorodibromomethane, Dichlorobromomethane, Tetrachloroethylene, and Vinyl chloride.

The following limitations were determined through water quality modeling (output files attached):

Parameter	Limit (mg/l)	SBC	Model
None			

Comments: Outfall 001 and 003 were combined for PENTOXSD Modeling and the Thermal Analysis Spreadsheet due to the close proximity of the discharges in Oil Creek.

The Thermal Analysis Spreadsheet calculated lower limits from June through September. A review of thermal data from the last three permit applications show that discharge temperatures remain in a consistently close range with a maximum reported temperature of 56 °F at both outfalls which is less than the most string WQBEL calculated (64°F during Nov. 1-15). Therefore, temperature limits or monitoring is not being recommended in the renewed permit.

Best Professional Judgment (BPJ) Limitations

Comments: None

Anti-Backsliding

Mass limits were made less stringent due to a change in the design flow at the outfall. Backsliding is allowed due to "material and substantial alternations or additions to the permitted facility."

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/quarter	Grab
BOD5	XXX	31	XXX	XXX	26	XXX	1/quarter	8-Hr Composite
TSS	XXX	22	XXX	XXX	19	XXX	1/quarter	8-Hr Composite
Oil and Grease	18 Avg Qrtly	34	XXX	15 Avg Qrtly	29	30	1/quarter	Grab

Compliance Sampling Location: Outfall 001 (after disinfection)

Other Comments: Sampling frequencies retained from the previous permit.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 003, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/quarter	Grab
BOD5	XXX	46	XXX	XXX	26	XXX	1/quarter	8-Hr Composite
TSS	XXX	34	XXX	XXX	19	XXX	1/quarter	8-Hr Composite
Oil and Grease	27 Avg Qrtly	52	XXX	15 Avg Qrtly	29	30	1/quarter	Grab

Compliance Sampling Location: Outfall 003 (after disinfection)

Other Comments: Sampling frequencies retained from the previous permit. Mass limits were adjusted due to change in the design flow.

ATTACHMENT A

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Figure 1 - Toxic Screening Analysis

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Figure 2 - PENTOXSD Modeling

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Figure 3 - Thermal Analysis Spreadsheet