Pennsylvania Department of Environmental Protection

Southeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0245267**
Facility Type	**Storm Water**	APS ID	**1155481**
Major / Minor	**Minor**	Authorization ID	**1557618**

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

Applicant and Facility Information

Applicant Name	**Arkema Inc.**	Facility Name	**Arkema Inc. West Chester Plant**
Applicant Address	155 King of Prussia Rd	Facility Address	610 S Bolmar Street
	Radnor, PA 19087		West Chester, PA 19382-3797
Applicant Contact	Mike Macheski	Facility Contact	Mike Macheski
Applicant Phone	(610) 344-2820	Facility Phone	(610) 344-2820
Client ID	36685	Site ID	454704
SIC Code	2821	Municipality	West Chester Borough
SIC Description	Manufacturing - Plastics Materials and Resins	County	Chester
Date Application Received	January 29, 2026	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: Permit Renewal

Summary of Review

Applicant requests renewal of an individual NPDES permit to discharge stormwater associated with industrial activities for their facility located at 610 S. Bolmar Street, West Chester, PA.

The facility manufactures multifunctional acrylate and methacrylate monomers for varied industrial uses. The manufacturing process consists of reacting to acrylic acid or methacrylic acid with alcohol or glycol to yield an ester (acrylates or methacrylates). The facility includes production and warehouse buildings, tank farms, and satellite buildings for maintenance and process control.

Drainage of stormwater associated with industrial activity from the site is conveyed by storm drains, ditches, and swales to stormwater Outfalls 001 (along S. Bolmar St.), 002 (south of the plant) and 003 (southwest of the plant). All three outfalls at the site are discharging to an UNT to Chester Creek (also known as Goose Creek).

Outfalls 001 and 002 are discharging stormwater from roof drainage from manufacturing, laboratory, truck loading and paved vehicle parking areas.

Outfall 003 is discharging stormwater from roof drainage from manufacturing, truck loading, and paved vehicle parking areas as well as from non-production grassy and wooded areas.

BMPs include daily observation of the outfalls and of the areas that feed to the outfalls. Any spills are cleaned up immediately. Catch basin valves are kept in the closed position until the accumulated stormwater is evaluated and given the okay to release.

Approve	Deny	Signatures	Date
X		*Sara Abraham* Sara Reji Abraham, E.I.T. / Project Manager	April 14, 2026
X		*Pravin Patel* Pravin C. Patel, P.E. / Environmental Engineer Manager	04/14/2026

Summary of Review

Facility's light wastewater pretreatment system is contained within a concrete containment dike, and any and all floor washes, rainfall, and potential spills are collected in the floor sump and automatically pumped back into the in-feed tank, T-403.

Under normal conditions, the facility's stormwater from within diked containment areas, as well as first flush (first 30 minutes) of stormwater from around process areas in drainage area 3, receives pH neutralization and organics stripping prior to discharge to the Borough of West Chester's Goose Creek Wastewater Treatment Plant. After major storm events, rainwater may be discharged directly to surface water using a "dike draining permit" process, which includes documenting pH checks, looking for sheens, monitoring for odors etc. Pretreatment of certain process wastewater occurs on-site; disposal activities for significant materials do not.

Sanitary sewage, pretreated (neutralized and steam stripped) process wastewater, cooling tower blowdown, water softener backwash, boiler blowdown, and dike drainage water (except in unusually large storm events) are sent to the Borough of Weste Chester's Goose Creek Wastewater Treatment Plant.

Site inspection was conducted by DEP on January 12, 2026. No violations were noted in the inspection report. No comments received from OP section.

Based on the available SIC codes, PAG03 appendix F (Chemical and Allied Products) is applicable to this discharge. Accordingly, the following effluent requirements are recommended for the draft permit:

Parameters	Limit/Monitoring	Benchmark Values (mg/l)
pH (S.U.)	Report	9.0
COD	Report	120
TSS	Report	100
Nitrate+Nitrite- Nitrogen	Report	3.0
Total Phosphorus	Report	
Total Lead	Report	
Total Zinc	Report	
Total Iron	Report	
Total Aluminum	Report	
Total Nitrogen*	Report	

*This is a new parameter included in the draft permit according to the PAG03 appendix F. All other parameters are carried over from the existing permit.

PFAS:

At the last permit renewal PADEP established an effluent limitation in the permit for Total PFOA and PFOS based on a translation of the general water quality criterion at 25 Pa. Code § 93.6(a). 25 Pa. Code § 93.6(a) is an element of Pennsylvania's EPA-approved water quality standards program. The determination was appropriate at that time based on the available information and guidance at the time.

According to the current NPDES permit requirement, the facility has been submitting progress reports to comply with the final effluent limitations for Total PFOA and PFOS in the current permit. Review of the progress reports shows the following: preliminary source identification did not identify any raw materials or finished products containing PFOA and/or PFOS that could possibly lead to detection in stormwater samples at the outfalls. However, historical use of fluorinated firefighting foam (aqueous film-forming foam or AFFF) was identified as a possible source of PFOA and PFOS detections in stormwater outfall samples.

Potential source reduction activities have been ongoing since 2022. The facility has replaced all of the existing fluorinated firefighting foam with a fluorine-free foam alternative that provides appropriate fire protection capability. There is no longer any fluorinated fire-fighting foam concentrate at the site.

Summary of Review

The discharge concentrations reported in the application for PFOA are 1.4 ng/l (001), 1.3 ng/l (002) and 2.6 ng/l (003) and for PFOS are 3.4 ng/l (001), 6.2 (002) and 122 ng/l (003). Review shows that the discharge concentrations of these parameters are generally decreasing over time.

Based on the past sampling results and the current DEP procedure, quarterly monitoring for the PFAS parameters PFOA, PFOS, HFPO-DA and PFBS is included in the draft permit for Outfalls 001 and 002. This is appropriate since Outfalls 001 and 002 show significantly low PFOA and PFOS discharge concentrations.

The following footnote is also included in Part A of the permit for Outfalls 001 and 002 according to DEP's Standard Operating Procedure for Clean Water Program, Establishing Effluent Limitations for Individual Industrial Permits, SOP No. BCW-PMT-032: The permittee may discontinue monitoring for PFOA, PFOS, HFPO-DA, and PFBS if the results in 4 consecutive monitoring periods indicate non-detect results for all of these parameters at or below Quantitation Limits of 4.0 ng/L for PFOA, 3.7 ng/L for PFOS, 3.5 ng/L for PFBS and 6.4 ng/L for HFPO-DA. When monitoring is discontinued, permittees should enter a No Discharge Indicator (NODI) Code of "GG" on DMRs. This requirement is consistent with the requirements of other similar dischargers in the area. With this change, the current limit for PFOA+PFOS is eliminated from the permit for Outfall 001 and 002.

Based on the significantly elevated sampling results (PFOA+PFOS) for Outfall 003, the existing permit limit (PFOA+PFOS = 70 ng/l) is carried over to the draft permit. A PFAS reduction plan is also included in Part C of the permit for Outfall 003.

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.

Act 14 Notifications:

West Chester Borough - December 2, 2025
Chester County - December 2, 2025

Permit conditions:

A. Stormwater Outfalls
B. Best Management Practices
C. Stormwater Monitoring
D. Routine Inspections
E. PPC Plan
F. Acquire Necessary Property Rights
G. Proper Sludge Disposal
H. PFAS Reduction Plan For Outfall 003

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0
Latitude	39º 57' 19.47"	Longitude	-75º 35' 18.55"
Quad Name	West Chester	Quad Code	1941
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary of Chester Creek (Goose Creek) (TSF, MF)	Stream Code	00619
NHD Com ID	25621262	RMI	0.11
Watershed No.	3-G	Chapter 93 Class.	TSF, MF
Assessment Status	Impaired		
Cause(s) of Impairment	cause unknown, dewatering, flow regime modification, pathogens,		
Source(s) of Impairment	impacts from hydrostructure flow regulation/modification, municipal point source discharges, source unknown, urban runoff/storm sewers		
TMDL Status	Final	Name	Goose Creek

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0
Latitude	39º 57' 17.85"	Longitude	-75º 35' 24.25"
Quad Name	West Chester	Quad Code	1941
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Chester Creek (Goose Creek) (TSF, MF)	Stream Code	00619
NHD Com ID	25621264	RMI	0.07
Watershed No.	3-G	Chapter 93 Class.	TSF, MF
Assessment Status	Impaired		
Cause(s) of Impairment	cause unknown, dewatering, flow regime modification, pathogens		
Source(s) of Impairment	impacts from hydrostructure flow regulation/modification, municipal point source discharges, source unknown, urban runoff/storm sewers		
TMDL Status	Final	Name	Goose Creek

Discharge, Receiving Waters and Water Supply Information

Outfall No.	003	Design Flow (MGD)	0
Latitude	39º 57' 18.13"	Longitude	-75º 35' 24.89"
Quad Name	West Chester	Quad Code	1941
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Chester Creek (Goose Creek) (TSF, MF)	Stream Code	00619
NHD Com ID	25621264	RMI	0.04
Watershed No.	3-G	Chapter 93 Class.	TSF, MF
Assessment Status	Impaired		
Cause(s) of Impairment	cause unknown, dewatering, flow regime modification, pathogens		
Source(s) of Impairment	impacts from hydrostructure flow regulation/modification, municipal point source discharges, source unknown, urban runoff/storm sewers		
TMDL Status	Final	Name	Goose Creek

Compliance History

DMR Data for Outfall 001 (from February 1, 2025 to January 31, 2026)

Parameter	JAN-26	DEC-25	NOV-25	OCT-25	SEP-25	AUG-25	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25
pH (S.U.) Daily Maximum		6.71						6.7				
COD (mg/L) Daily Maximum		< 25						40				
TSS (mg/L) Daily Maximum		5						18				
Nitrate-Nitrite (mg/L) Daily Maximum		< 1.10						< 1.10				
Total Phosphorus (mg/L) Daily Maximum		0.02						0.07				
Total Aluminum (mg/L) Daily Maximum		< 0.10						0.35				
Total Iron (mg/L) Daily Maximum		0.05						0.82				
Total Lead (mg/L) Daily Maximum		< 0.005						0.002				
Total Zinc (mg/L) Daily Maximum		0.077						0.241				
PFOA (ug/L) Daily Maximum		0.00046						0.0014				
PFOS (ug/L) Daily Maximum		0.0032						0.0024				
Total PFOA and PFOS (ug/L) Daily Maximum		0.00366						0.0038				

DMR Data for Outfall 002 (from February 1, 2025 to January 31, 2026)

Parameter	JAN-26	DEC-25	NOV-25	OCT-25	SEP-25	AUG-25	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25
pH (S.U.) Daily Maximum		7.24						7.5				
COD (mg/L) Daily Maximum		< 25						91				

TSS (mg/L) Daily Maximum		22						17				
Nitrate-Nitrite (mg/L) Daily Maximum		< 1.10						< 1.10				
Total Phosphorus (mg/L) Daily Maximum		0.01						0.09				
Total Aluminum (mg/L) Daily Maximum		0.12						0.56				
Total Iron (mg/L) Daily Maximum		0.18						0.75				
Total Lead (mg/L) Daily Maximum		< 0.005						0.003				
Total Zinc (mg/L) Daily Maximum		0.076						0.224				
PFOA (ug/L) Daily Maximum		0.00076						0.0017				
PFOS (ug/L) Daily Maximum		0.002						0.0046				
Total PFOA and PFOS (ug/L) Daily Maximum		0.00276						0.0063				

DMR Data for Outfall 003 (from February 1, 2025 to January 31, 2026)

Parameter	JAN-26	DEC-25	NOV-25	OCT-25	SEP-25	AUG-25	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25
pH (S.U.) Daily Maximum		6.84						6.8				
COD (mg/L) Daily Maximum		< 25						104				
TSS (mg/L) Daily Maximum		7						50				
Nitrate-Nitrite (mg/L) Daily Maximum		< 1.10						< 1.16				
Total Phosphorus (mg/L) Daily Maximum		0.07						0.12				
Total Aluminum (mg/L) Daily Maximum		0.12						0.83				
Total Iron (mg/L) Daily Maximum		0.22						1.12				

Total Lead (mg/L) Daily Maximum		< 0.005						0.005				
Total Zinc (mg/L) Daily Maximum		0.944						0.319				
PFOA (ug/L) Daily Maximum		0.0012						0.0039				
PFOS (ug/L) Daily Maximum		0.035						0.32				
Total PFOA and PFOS (ug/L) Daily Maximum		0.0362						0.3239				

Compliance History

None

Proposed Effluent Limitations and Monitoring Requirements

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	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Calculation
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
PFOA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFOS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFBS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
HFPO-DA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Proposed Effluent Limitations and Monitoring Requirements

Outfall 002, **Effective Period:** **Permit Effective Date** **through** **Permit Expiration Date**.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Calculation
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
PFOA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFOS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFBS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
HFPO-DA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Proposed Effluent Limitations and Monitoring Requirements

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	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Calculation
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
PFOA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFOS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFBS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
HFPO-DA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total PFOA and PFOS (ng/L)	XXX	XXX	XXX	XXX	70	XXX	1/quarter	Calculation