Pennsylvania Department of Environmental Protection

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0231860**
Facility Type	**Storm Water**	APS ID	**1134944**
Major / Minor	**Minor**	Authorization ID	**1522846**

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

Applicant and Facility Information

Applicant Name	**The Pennsylvania State University**	Facility Name	**Water Reclamation Facility**
Applicant Address	336 Steam Drive Steam Services Bldg, Suite 301 University Park, PA 16802-4523	Facility Address	143 Water Reclamation Drive University Park, PA 16802
Applicant Contact	James Crandall	Facility Contact	Garry Beck
Applicant Phone	(814) 865-6391	Facility Phone	(814) 506-5008
Client ID	81628	Site ID	545486
SIC Code	4952	Municipality	College Township
SIC Description	Trans. & Utilities - Sewerage Systems	County	Centre
Date Application Received	April 7, 2025	EPA Waived?	Yes
Date Application Accepted	April 14, 2025	If No, Reason	

Purpose of Application: New permit for existing stormwater discharges at the PSU Water Reclamation Facility.

Summary of Review

The Pennsylvania State University ("PSU") has applied coverage under an NPDES permit for the industrial stormwater outfalls associated with the existing Water Reclamation Facility ("WRF").

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		Derek S. Garner / Project Manager	July 17, 2025
X		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	July 17, 2025

Facility Summary

The Penn State Water Reclamation Facility ("WRF") is an existing facility that has gone through several expansions and upgrades since its original construction in 1913. Most recently, the WRF was approved for major upgrades under WQM Permit No. 1407408, Amendment No. 2, issued August 2019. Treated effluent is land applied via spray irrigation to a vegetated area known as the "Living Filter." Since the effluent is land applied, there is no existing NPDES permit for a surface water discharge. Consequently, the existing discharges at the WRF must be covered under an individual industrial stormwater NPDES permit.

There are three stormwater outfalls (001, 002, and 003) and one catch basin used as an internal monitoring point (102) for representative sampling of Outfall 002.

Outfall 001's drainage area is 6.96 acres and is primarily comprised of driveway, parking, buildings, and the emergency generator. The drainage area is 19% impervious and does not have any materials or industrial activities exposed to precipitation.

Outfall 002's drainage area is 14.12 acres and is primarily comprised of the wastewater treatment units and one covered municipal dumpster. The drainage area is 14% impervious. Materials and industrial activities exposed to precipitation include those associated with the wastewater treatment units.

Outfall 003's drainage area is 0.92 acres and is primarily comprised of treatment buildings, garages, and sheds. The drainage area is 50% impervious and includes activities associated with loading/unloading.

IMP 102's drainage area is included in Outfall 002's above description.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	**001**	Design Flow (MGD)	n/a
Latitude	40º 48' 6.00"	Longitude	-77º 50' 52"
Quad Name	State College	Quad Code	40077
Wastewater Description:	Stormwater		

Receiving Waters	UNT of Slab Cabin Run [1]	Stream Code	23037
NHD Com ID	67180134	RMI	n/a
Drainage Area	n/a	Yield (cfs/mi^2)	n/a
Q_{7-10} Flow (cfs)	n/a	Q_{7-10} Basis	n/a
Elevation (ft)	1,009	Slope (ft/ft)	n/a
Watershed No.	9-C	Chapter 93 Class.	HQ-CWF, MF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Impaired		
Cause(s) of Impairment	Habitat alterations, eutrophication, siltation		
Source(s) of Impairment	Urban runoff/storm sewers, impervious surface/parking lot runoff		
TMDL Status	n/a	Name	n/a

[1] Locally known as Thompson Run.

Outfall No.	**002** [1]	Design Flow (MGD)	n/a
Latitude	40º 48' 6.00"	Longitude	-77º 50' 52"
Quad Name	State College	Quad Code	40077
Wastewater Description:	Stormwater		

Receiving Waters	UNT of Slab Cabin Run [2]	Stream Code	23037
NHD Com ID	67180134	RMI	n/a
Drainage Area	n/a	Yield (cfs/mi^2)	n/a
Q_{7-10} Flow (cfs)	n/a	Q_{7-10} Basis	n/a
Elevation (ft)	1,009	Slope (ft/ft)	n/a
Watershed No.	9-C	Chapter 93 Class.	HQ-CWF, MF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Impaired		
Cause(s) of Impairment	Habitat alterations, eutrophication, siltation		
Source(s) of Impairment	Urban runoff/storm sewers, impervious surface/parking lot runoff		
TMDL Status	n/a	Name	n/a

(1) Monitoring for stormwater discharged via Outfall 002 will occur at an upstream internal monitoring point (IMP No. 102).
(2) Locally known as Thompson Run.

Outfall No.	**003**	Design Flow (MGD)	n/a
Latitude	40º 48' 6.00"	Longitude	-77º 50' 52"
Quad Name	State College	Quad Code	40077
Wastewater Description:	Stormwater		

Receiving Waters	UNT of Slab Cabin Run (1)	Stream Code	23037
NHD Com ID	67180134	RMI	n/a
Drainage Area	n/a	Yield (cfs/mi^2)	n/a
Q_{7-10} Flow (cfs)	n/a	Q_{7-10} Basis	n/a
Elevation (ft)	1,009	Slope (ft/ft)	n/a
Watershed No.	9-C	Chapter 93 Class.	HQ-CWF, MF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Impaired		
Cause(s) of Impairment	Habitat alterations, eutrophication, siltation		
Source(s) of Impairment	Urban runoff/storm sewers, impervious surface/parking lot runoff		
TMDL Status	n/a	Name	n/a

(1) Locally known as Thompson Run.

IMP No.	**102**	Design Flow (MGD)	n/a
Latitude	40º 48' 5.00"	Longitude	-77º 50' 55"
Quad Name	State College	Quad Code	40077
Wastewater Description:	Stormwater		

Receiving Waters	UNT of Slab Cabin Run (1)	Stream Code	23037
NHD Com ID	67180134	RMI	n/a
Drainage Area	n/a	Yield (cfs/mi^2)	n/a
Q_{7-10} Flow (cfs)	n/a	Q_{7-10} Basis	n/a
Elevation (ft)	1,015	Slope (ft/ft)	n/a
Watershed No.	9-C	Chapter 93 Class.	HQ-CWF, MF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Impaired		
Cause(s) of Impairment	Habitat alterations, eutrophication, siltation		
Source(s) of Impairment	Urban runoff/storm sewers, impervious surface/parking lot runoff		
TMDL Status	n/a	Name	n/a

(1) Locally known as Thompson Run.

Compliance History

An extensive 14-page permittee compliance history report that includes the most recent 15 years was included with the application. There doesn't appear to be any chronic violations that should prohibit moving forward with drafting the permit.

There is one open violation associated with the permittee:

PF ID	Facility	Program	Program Specific ID	Inspection ID	Violation ID	Violation Date	Violation Code	Violation
589811	PA State Univ Milton S Hershey Med Ctr	Storage Tanks	22-11734	3991922	8236508	4/23/2025	245.533	Failure to meet aboveground storage tank system exterior coating requirements

This is a new permit. Accordingly, there is no compliance history specifically associated with the permit number.

Development of Effluent Limitations

Outfall/IMP Nos. 001, 102, 003 **Design Flow (MGD)** n/a
Wastewater Description: Stormwater

Technology-Based Limitations

There are no technology-based limitations applicable to stormwater associated with wastewater treatment plants.

Water Quality-Based Limitations

DEP does not have an established procedure for modeling stormwater discharges. Accordingly, no water quality-based limitations are proposed.

Best Professional Judgment (BPJ) Limitations

Since there are no applicable technology- or water quality-based effluent limitations, DEP has chosen to use BPJ in establishing effluent limits and monitoring requirements for the PSU WRF. When applying BPJ to individual stormwater permits DEP generally relies on the PAG-03 General Permit for Discharged of Stormwater Associated with Industrial Activity and the appendix(ces) that would most likely have been assigned had the facility been eligible for coverage under the general permit.

Specifically, Appendix J serves as a "catch-all" for industries that are not explicitly called out in other appendices (e.g., landfills, air transportation facilities, steam electric generating facilities, etc.). Since wastewater treatment plants do not fit neatly into any of the sector-specific PAG-03 appendices, DEP believes Appendix J is the best fit to demonstrate the discharged stormwater is not negatively impacting the receiving surface waters. Appendix J's monitoring requirements are as follows:

Pollutant	Monitoring Requirements		Benchmark Values
	Minimum Measurement Frequency	Sample Type	
Total Nitrogen (mg/l)	1 / 6 months	Calculation	XXX
Total Phosphorus (mg/l)	1 / 6 months	Grab	XXX
Total Suspended Solids (TSS) (mg/l)	1 / 6 months	Grab	100
Oil and Grease (mg/l)	1 / 6 months	Grab	30
pH (S.U.)	1 / 6 months	Grab	9.0
Chemical Oxygen Demand (COD) (mg/l)	1 / 6 months	Grab	120

The above benchmark values are not effluent limitations. Benchmark values serve as a trigger so that, if exceeded, the permittee must act. Actions may include corrective action plans or implementing additional best management practices.

Antidegradation Considerations

The PSU WRF was originally constructed 1913. The original construction date predates Thompson Run's high-quality designation in 2002. Since these stormwater discharges predate the high-quality designation, they can essentially be treated as part of the background quality. Accordingly, antidegradation considerations should not impact the issuance of this permit.

Anti-Backsliding

This is a new permit. Anti-backsliding regulations are not applicable.

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" (386-0400-001), SOPs and/or BPJ.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum 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
Oil and Grease	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

Compliance Sampling Location: Outfall 001

IMP 102, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum 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
Oil and Grease	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

Compliance Sampling Location: IMP 102

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum 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
Oil and Grease	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

Compliance Sampling Location: Outfall 003