pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0053899**
Facility Type	**Industrial**	APS ID	**1094740**
Major / Minor	**Minor**	Authorization ID	**1450704**

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

Applicant and Facility Information

Applicant Name	**Wheelabrator Falls Inc.**	Facility Name	**Wheelabrator Falls Recycling and Energy Recovery Facility**
Applicant Address	1201 New Ford Mill Road	Facility Address	1201 New Ford Mill Road
	Morrisville, PA 19067		Morrisville, PA 19067
Applicant Contact	Perry Alburg	Facility Contact	Perry Alburg
Applicant Phone	(215) 428-7912	Facility Phone	(215) 428-7912
Client ID	76188	Site ID	452533
SIC Code	4953	Municipality	Falls Township
SIC Description	Trans. & Utilities - Refuse Systems	County	Bucks
Date Application Received	July 19, 2023	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: Permit Renewal.

Summary of Review

The applicant requests renewal of an NPDES Permit to discharge Stormwater associated with industrial activities from facility into unnamed tributary to Delaware River through Outfalls 001 and 002. The discharge of stormwater from Outfalls 001 and 002 is being discharged to wetland to the Delaware River Estuary Zone 2 via stormwater retention ponds. This permit renewal includes proposed Outfall 004 that would discharge stormwater runoff from the areas surrounding MRF, specifically truck maintenance activities and chemical/oil storage areas.

The Wheelabrator Falls facility is a municipal and solid waste incinerator, which generates steam and electricity in three mass-burn boilers. The facility is designed as a “zero discharge” facility and maintains the NPDES permit for emergency use only. No discharge has occurred since the permit issuance in 1992. Previous permit contained Outfall 003 for discharge of 37,000 GPD of cooling tower blowdown. Outfall 003 was cancelled during last permit renewal.

Outfall 001 receives stormwater from chemical storage area, road sweeping, detention basins, grass surfaces, and gravel drainage swales. Outfall 002 receives stormwater from road sweeping, grass surfaces and detention pond. Due to industrial activities in the drainage areas of outfall 002, the Department requires monitoring of stormwater at outfall 002 to ensure the effectiveness of applied Best Management Practices (BMPs) in that drainage areas. It is Department’s determination that the effectiveness of BMPs and stormwater sampling requirements can be met with monitoring of stormwater entering into basin #1. Since basin #1 contains water most of the time, basin is considered water of Commonwealth and water entering into basin #1 is considered discharge point. We have clarified outfall 002 location (monitoring point) in the permit.
Stormwater sampling requirements are included in the permit from Appendix A (Hazardous Waste Treatment, Storage or Disposal Facilities) and Appendix H (Steam Electric Generating Facilities) which are similar to the previous PAG-3, Monitoring Requirements for all Land Disposal Units, Incinerators, and BIFs (Appendix C). Sector-specific BMPs for Steam Electric Generating Facilities from Appendix H of General Permit PAG-03 will remain in permit renewal. We have added stormwater sampling & monitoring requirement and Sector-specific BMPs from Appendix L (Land Transportation, Vehicle

Approve	Deny	Signatures	Date
X		Ketan Thaker Ketan Thaker / Project Manager	4/15/2024
X		Pravin Patel Pravin C. Patel, P.E. / Environmental Engineer Manager	04/15/2024

Summary of Review

Maintenance) at proposed Outfall 004 for this permit renewal. We have added effluent limits for pH (6.0 – 9.0 SU), Total Suspended Solids (100 mg/l), COD (120 mg/l), and Oil & Grease (30 mg/l) for Outfall 001 and Outfall 002 in place of monitor/report. Monitoring frequency is revised to 1/6 months at Outfall 002 in place of 1/year. These effluent limits replace the Bench-Mark Values in the last NPDES permit. We have included effluent limits for TSS, and Oil & Grease for Outfall proposed Outfall 004. The activities in the drainage area include light truck maintenance performed inside tent style structure on the east side of MRF building. Also, this area includes properly maintained trucks parked overnight. The stormwater discharge from outfall 004 will pass through retention basin decreasing flow velocity and allowing the particulates to drop out before discharge.

The permittee has identified a method to conserve city water use from the public water system. During scheduled and unscheduled boiler outage, the de-ionized water from the boiler can be routed to the cooling tower and used as a make-up water thus reducing city water use and eliminating the extra boiler water to maintain a zero-discharge condition. The boiler chemicals would not be added to the cooling tower but have already been added and maintained in the boiler water system. As a clarification, the boiler water system and non-contact cooling water (cooling tower) systems are separate. Boiler water containing chemical additives may be used as cooling tower make up water. Boiler additives will not be fed directly into the cooling tower. Permittee had requested to recognize in the permit for the ability to use boiler water as cooling water make up when the boiler must be drained. A special condition was added in the last permit renewal allowing the facility to use boiler water for cooling tower make up water only during non-discharge conditions.

Other requirement was added in the last permit which acknowledges that the facility uses cooling water for fire protection system.

Act -14 Notices to Falls Township and Bucks County Commissioners on May 19, 2023.

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.	002	Design Flow (MGD)	0
Latitude	40Âº 10' 29.34"	Longitude	-74Âº 45' 29.71"
Quad Name		Quad Code	
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Biles Creek (WWF, MF)	Stream Code	
NHD Com ID	25486676	RMI	
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	2-E	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Not Assessed		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

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

Nearest Downstream Public Water Supply Intake			
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0
Latitude	40Âº 10' 29.34"	Longitude	-74Âº 45' 29.71"
Quad Name		Quad Code	
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Biles Creek (WWF, MF)	Stream Code	
NHD Com ID	25486676	RMI	
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	2-E	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Not Assessed		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

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

Nearest Downstream Public Water Supply Intake			
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	004	Design Flow (MGD)	0
Latitude	40Âº 9' 55.83"	Longitude	-74Âº 46' 19.52"
Quad Name		Quad Code	
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Delaware River (WWF, MF)	Stream Code	
NHD Com ID	134238019	RMI	0.0100
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	2-E	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Not Assessed		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

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

Nearest Downstream Public Water Supply Intake			
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Compliance History

DMR Data for Outfall 001 (from February 1, 2023 to January 31, 2024)

Parameter	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23
pH (S.U.) Daily Maximum		8.08						7.0				
COD (mg/L) Daily Maximum		120						63				
Total Dissolved Solids (mg/L) Daily Maximum		546						289				
Oil and Grease (mg/L) Daily Maximum		< 5						< 0.5				
Nitrate-Nitrite (mg/L) Daily Maximum		2.87						2.2				
Ammonia (mg/L) Daily Maximum		0.31						0.27				
Total Arsenic (mg/L) Daily Maximum		0.007						0.004				
Total Barium (mg/L) Daily Maximum		0.084						0.043				
Total Cadmium (mg/L) Daily Maximum		0.0079						0.0029				
Total Chromium (mg/L) Daily Maximum		0.0077						0.0029				
Total Cyanide (mg/L) Daily Maximum		< 0.01						< 0.01				
Dissolved Iron (mg/L) Daily Maximum		0.03						0.02				
Total Lead (mg/L) Daily Maximum		0.070						0.048				
Dissolved Magnesium (mg/L) Daily Maximum		8.5						3.5				
Total Magnesium (mg/L) Daily Maximum		10.5						4.4				
Total Mercury (mg/L) Daily Maximum		< 0.0002						< 0.0002				
Total Selenium (mg/L) Daily Maximum		0.003						< 0.001				

Total Silver (mg/L) Daily Maximum		< 0.0010						< 0.001				
TOC (mg/L) Daily Maximum		22.6						30.0				

DMR Data for Outfall 002 (from February 1, 2023 to January 31, 2024)

Parameter	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23
pH (S.U.) Daily Maximum		7.6										
COD (mg/L) Daily Maximum		< 25										
Total Dissolved Solids (mg/L) Daily Maximum		63										
Oil and Grease (mg/L) Daily Maximum		< 5										
Nitrate-Nitrite (mg/L) Daily Maximum		0.11										
Ammonia (mg/L) Daily Maximum		0.68										
Total Arsenic (mg/L) Daily Maximum		0.002										
Total Barium (mg/L) Daily Maximum		0.017										
Total Cadmium (mg/L) Daily Maximum		0.0011										
Total Chromium (mg/L) Daily Maximum		0.0021										
Total Cyanide (mg/L) Daily Maximum		< 0.01										
Dissolved Iron (mg/L) Daily Maximum		0.09										
Total Lead (mg/L) Daily Maximum		0.018										
Dissolved Magnesium (mg/L) Daily Maximum		< 0.5										
Total Magnesium (mg/L) Daily Maximum		0.8										
Total Mercury (mg/L) Daily Maximum		< 0.0002										

Total Selenium (mg/L) Daily Maximum		0.001										
Total Silver (mg/L) Daily Maximum		< 0.001										
TOC (mg/L) Daily Maximum		5.4										

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) (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	6.0 Inst Min	XXX	XXX	9.0	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	120.0	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	100.0	XXX	1/6 months	Grab
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	30.0	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	Grab
Ammonia	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Arsenic	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Barium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Cadmium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Chromium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Cyanide	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Outfall 001, Continued (from 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		
Dissolved Iron	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
Dissolved Magnesium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Magnesium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Mercury	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Selenium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Silver	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TOC	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

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 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	6.0 Inst Min	XXX	XXX	9.0	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	120.0	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	100.0	XXX	1/6 months	Grab
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	30.0	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	Grab
Ammonia	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Arsenic	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Barium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Cadmium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Chromium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Cyanide	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Outfall 002, Continued (from 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		
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Dissolved Magnesium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Magnesium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Mercury	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Selenium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Silver	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TOC	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: at Outfall 002 (at pipe entering basin no.1)

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 004, 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		
TSS	XXX	XXX	XXX	XXX	100.0	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	30.0	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