pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0245038**
Facility Type	**Storm Water**	APS ID	**1092309**
Major / Minor	**Minor**	Authorization ID	**1446335**

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

Applicant and Facility Information

Applicant Name	**GMA Garnet (Usa) Corp**	Facility Name	**GMA Garnet Corporation - Fairless Hills Recycling Facility**
Applicant Address	1780 Hughes Landing Suite 725	Facility Address	25 Middle Road
	The Woodlands, TX 77380-1684		Fairless Hills, PA 19030-5017
Applicant Contact	Greg Hildebrand	Facility Contact	Ryan Moses
Applicant Phone	(208) 761-5121	Facility Phone	(215) 736-1868
Client ID	310682	Site ID	781766
SIC Code	1499	Municipality	Falls Township
SIC Description	Mining - Miscellaneous Nonmetallic Minerals, Nec	County	Bucks
Date Application Received	May 25, 2023	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: Renewal.

Summary of Review

The permittee has submitted a renewal application for discharge of stormwater associated with industrial activities to Delaware River (WWF, MF) for their facility located at in Falls Township, thru their Outfall 001 (not monitored due to it being discharged and monitored at US Steel Corp. PA0013463 - Outfall 002). To Delaware River Estuary Zone 3

The facility is involved in storing and washing unprocessed (virgin) and used garnet sand. The washing of virgin and used garnet sand is a separate process and completed inside GMAs building, this material is not mixed or washed together. Once washed, both virgin and washed used garnet sand is separately stored outside on an existing concrete pad. Virgin and washed used garnet sand are separated by concrete T-Walls and Jersey Barriers. Virgin and washed used garnet sand will have separate sampling locations at Monitoring Point (MP) 101 and MP 102. Mineral by-products of washing and drying of the virgin garnet sand will be stored outside on the existing concrete pad. Stormwater from mineral by-products are part of Outfall 001 (MP 101). Additionally, GMA utilizes the existing spur adjacent to the main-front parking lot. Utilizing a portable conveyor, bulk garnet sand will be unloaded from rail cars into a dump or pneumatic truck or equivalent. Each rail car holds 90 metric tons. Once loaded, the truck is driven inside the main building where the garnet sand it is stockpiled awaiting packaging. Proper BMP's will be installed on the stormwater drains that are within proximity to the rail unloading. The loading and unloading of rail cars are covered by MP 103 and MP 104.

DEP has conducted a site visit on 12/21/2022.

Based on the inspection following comments are noted in the inspection report:
No operational violations were observed during the onsite inspection. All best management practices (BMP) were observed to be implemented. Following onsite observations, an administrative review of the facility was conducted. The Preparedness, Prevention, and Contingency (PPC) plan was reviewed. The plan was most recently updated 10 January 2023.

Approve	Deny	Signatures	Date
X		Begay Omuralieva Begay Omuralieva / Environmental Engineering Specialist	March 29, 2024
X		Pravin Patel Pravin C. Patel, P.E. / Environmental Engineer Manager	04/05/2024

Summary of Review

No changes in quality and quantity of the stormwater runoffs, therefore all established effluent limits and monitoring requirements will be applicable for the Monitoring Points 101, 102, 103 and 104. Additionally, site specific BMPs are added to Part C of the draft permit in Stormwater Requirements as it was updated based on the March 2023's new PAG03 requirements for stormwater discharges associated with industrial activities.

Act 14 Notifications:
Falls Township– 5/19/2023
Bucks County – 5/19/2023

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.	001		
Latitude	40Âº 8' 27.01"	Longitude	-74Âº 43' 56.85"
Quad Name		Quad Code	
Wastewater Description:	Stormwater		
Receiving Waters	Delaware River (WWF, MF)	Stream Code	
NHD Com ID	25486170	RMI	0.3300
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	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final	Name	Delaware River Estuary PCB TMDLs

Changes Since Last Permit Issuance: none

Discharge, Receiving Waters and Water Supply Information

IMP	101		
Latitude	40Âº 8' 27.01"	Longitude	-74Âº 43' 56.85"
Quad Name		Quad Code	
Wastewater Description:	Stormwater runoffs from washed used garnet sand storage area		
Receiving Waters	Delaware River (WWF, MF)	Stream Code	
NHD Com ID	25486170	RMI	0.3300
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	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final	Name	Delaware River Estuary PCB TMDLs

Changes Since Last Permit Issuance: IMP 101

Discharge, Receiving Waters and Water Supply Information

IMP No.	102		
Latitude	40Âº 8' 27.01"	Longitude	-74Âº 43' 56.85"
Quad Name		Quad Code	
Wastewater Description:	Stormwater runoffs from washed used garnet sand storage area		
Receiving Waters	Delaware River (WWF, MF)	Stream Code	
NHD Com ID	25486170	RMI	0.3300
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	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final	Name	Delaware River Estuary PCB TMDLs

Changes Since Last Permit Issuance: IMP 102**Discharge, Receiving Waters and Water Supply Information**

Outfall No.	103		
Latitude	40Âº 8' 16.23"	Longitude	-74Âº 44' 14.15"
Quad Name		Quad Code	
Wastewater Description:	Stormwater runoffs from rail car loading activities southern area		
Receiving Waters	Delaware River (WWF, MF)	Stream Code	
NHD Com ID	25486170	RMI	0.0000
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	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final	Name	Delaware River Estuary PCB TMDLs

Changes Since Last Permit Issuance: IMP 103

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	104		
Latitude	40º 8' 16.23"	Longitude	-74º 44' 14.15"
Quad Name		Quad Code	
Wastewater Description:	Stormwater runoffs from rail car loading activities northern area		
Receiving Waters	Delaware River (WWF, MF)	Stream Code	
NHD Com ID	25486170	RMI	0.0000
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	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final	Name	Delaware River Estuary PCB TMDLs

Changes Since Last Permit Issuance: IMP 104

Compliance History

DMR Data for IMP 101 (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		6.8			6.9			7.3			8.2	
TSS (mg/L) Daily Maximum		1.1			5.5			100			6.1	
Total Aluminum (mg/L) Daily Maximum		< 0.3			< 0.3			2.8			3.9	
Total Barium (mg/L) Daily Maximum		0.013			0.0050			0.057			0.030	
Dissolved Iron (mg/L) Daily Maximum		< 0.21			< 0.21			< 0.21			< 0.21	
Total Lead (mg/L) Daily Maximum		< 0.015			< 0.015			0.045			0.015	
Total Zinc (mg/L) Daily Maximum		0.028			0.059			0.27			0.013	

DMR Data for IMP 102 (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		7.1			6.8			6.8			8.2	
TSS (mg/L) Daily Maximum		2.1			5.4			5.8			4.2	
Total Aluminum (mg/L) Daily Maximum		0.34			< 0.3			0.35			0.69	
Total Barium (mg/L) Daily Maximum		0.018			0.053			0.0082			0.010	
Dissolved Iron (mg/L) Daily Maximum		< 0.21			< 0.21			< 0.21			< 0.21	
Total Lead (mg/L) Daily Maximum		< 0.015			< 0.015			< 0.015			< 0.015	
Total Zinc (mg/L) Daily Maximum		0.049			0.051			0.037			0.028	

DMR Data for IMP 103 (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		7.7			7.6			7.6			7.8	
TSS (mg/L) Daily Maximum		17			6.2			23			10	
Total Aluminum (mg/L) Daily Maximum		0.74			0.22			1.3			1.9	
Total Barium (mg/L) Daily Maximum		0.017			0.030			0.013			0.034	
Dissolved Iron (mg/L) Daily Maximum		< 0.21			< 0.21			< 0.21			< 0.21	
Total Lead (mg/L) Daily Maximum		< 0.015			< 0.015			< 0.015			0.015	
Total Zinc (mg/L) Daily Maximum		0.030			0.025			0.034			0.17	

DMR Data for IMP 104 (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		7.8			7.9			7.6			7.6	
TSS (mg/L) Daily Maximum		3.3			1.9			5.2			3.6	
Total Aluminum (mg/L) Daily Maximum		7.1			0.37			0.29			1.6	
Total Barium (mg/L) Daily Maximum		0.043			0.023			0.014			0.031	
Dissolved Iron (mg/L) Daily Maximum		< 0.21			< 0.21			< 0.21			< 0.21	
Total Lead (mg/L) Daily Maximum		0.025			< 0.015			< 0.015			0.016	
Total Zinc (mg/L) Daily Maximum		0.37			0.023			0.016			0.14	

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.

MP 101, 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/quarter	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Barium	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Compliance Sampling Location: **MP 101**

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.

MP 102, 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/quarter	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Barium	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Compliance Sampling Location: **MP 102**

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.

MP 103, 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/quarter	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Barium	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Compliance Sampling Location: **MP 103**

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.

MP 104, 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/quarter	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Barium	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Compliance Sampling Location: **MP 104**