

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

Application Type Amendment,
Major
Facility Type Storm Water
Major / Minor Minor

Application No. PA0245038
APS ID 994188
Authorization ID 1274890

Applicant and Facility Information

Applicant Name	<u>GMA Garnet (USA) Corp</u>	Facility Name	<u>GMA Garnet Corporation - Fairless Hills Recycling Facility</u>
Applicant Address	<u>1780 Hughes Landing Suite 725 The Woodlands, TX 77380-1684</u>	Facility Address	<u>25 Middle Road Fairless Hills, PA 19030-5017</u>
Applicant Contact	<u>Mathew Cain</u>	Facility Contact	<u>Ryan Moses</u>
Applicant Phone	<u>(832) 243-9300</u>	Facility Phone	<u>(215) 736-1868</u>
Client ID	<u>310682</u>	Site ID	<u>781766</u>
SIC Code	<u>1499</u>	Municipality	<u>Falls Township</u>
SIC Description	<u>Mining - Miscellaneous Nonmetallic Minerals, Nec</u>	County	<u>Bucks</u>
Date Application Received	<u>May 1, 2019</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u></u>	If No, Reason	<u></u>
Purpose of Application	<u>Amendment of the New storage of used unwashed garnet sand</u>		

Summary of Review

The permittee has submitted NPDES permit amendment to include new storage of used unwashed sand products. Total of 14,000 tons used garnet is anticipated to be stored on new concrete pad.

Application indicated that a new monitoring point MP 105 for sampling of the stormwater runoff will be installed. However, based on multiple conversation with permittee, such MP is not necessary, since the stormwater runoff should be directed to the wastewater treatment system on-site. The wastewater is being treated during main processing of the garnet sand product within the main building.

Based on the submittal, DEP has developed a special requirement and proposing in Part C of the permit:

C. The permittee is allowed to store unwashed garnet sand on a newly constructed pad following the installation of permanent structural BMP's preventing run-on of stormwater, migration of sand from the storage pad, and preventing or minimizing contact with stormwater as approved by DEP's Southeast Office Clean Water Program Operations Section. Stormwater runoff that may be generated from the unwashed used garnet sand storage pad shall be directed to the on-site wastewater treatment system within the main processing building that treats/processes the unwashed used garnet sand.

Act 14 Notification:

Falls Township was notified on 4/26/2019
Bucks County was notified on 4/26/2019

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES

Approve	Deny	Signatures	Date
X		Begay Omuralieva / Environmental Engineering Specialist /s/	February 13, 2020
X		Pravin C. Patel, P.E. / Environmental Engineer Manager /s/	February 13, 2020

Summary of Review

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.

Compliance History

DMR Data for Outfall 101 (from January 1, 2019 to December 31, 2019)

Parameter	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19
pH (S.U.) Daily Maximum	8.3			8.6			7.8			8.1		
TSS (mg/L) Daily Maximum	9.55			10.3			2.84			191		
Total Aluminum (mg/L) Daily Maximum	0.720			0.548			0.284			2.01		
Total Barium (mg/L) Daily Maximum	0.0038			0.0041			0.0040			0.0082		
Dissolved Iron (mg/L) Daily Maximum	< 0.0412			< 0.0400			< 0.0400			< 0.0400		
Total Lead (mg/L) Daily Maximum	< 0.0071			< 0.0071			< 0.0071			< 0.0071		
Total Zinc (mg/L) Daily Maximum	0.0177			0.0263			0.0185			0.0950		

DMR Data for Outfall 102 (from January 1, 2019 to December 31, 2019)

Parameter	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19
pH (S.U.) Daily Maximum	8.3			8.1			7.7			8.5		
TSS (mg/L) Daily Maximum	27.5			8.96			4.03			12.5		
Total Aluminum (mg/L) Daily Maximum	0.798			0.807			< 0.153			0.246		
Total Barium (mg/L) Daily Maximum	0.0040			0.0051			0.0022			0.0029		
Dissolved Iron (mg/L) Daily Maximum	< 0.0412			< 0.0400			< 0.0400			< 0.0400		
Total Lead (mg/L) Daily Maximum	< 0.0071			< 0.0071			< 0.0071			< 0.0071		
Total Zinc (mg/L) Daily Maximum	0.0199			0.0348			0.0169			0.0188		

DMR Data for Outfall 103 (from January 1, 2019 to December 31, 2019)

Parameter	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19
pH (S.U.) Daily Maximum	8.3			7.2			9					
TSS (mg/L) Daily Maximum	27.5			1.79			6.27					
Total Aluminum (mg/L) Daily Maximum	0.0797			< 0.153			0.255					
Total Barium (mg/L) Daily Maximum	0.0035			0.0023			0.0051					
Dissolved Iron (mg/L) Daily Maximum	< 0.0412			< 0.0400			< 0.0400					
Total Lead (mg/L) Daily Maximum	< 0.0071			< 0.0071			< 0.0071					
Total Zinc (mg/L) Daily Maximum	0.0171			0.0124			0.0160					

DMR Data for Outfall 104 (from January 1, 2019 to December 31, 2019)

Parameter	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19
pH (S.U.) Daily Maximum	8.2			7.5			9.1					
TSS (mg/L) Daily Maximum	15.1			2.39			5.97					
Total Aluminum (mg/L) Daily Maximum	0.793			< 0.153			< 0.153					
Total Barium (mg/L) Daily Maximum	0.0037			0.0034			0.0051					
Dissolved Iron (mg/L) Daily Maximum	< 0.0412			< 0.0400			< 0.0400					
Total Lead (mg/L) Daily Maximum	< 0.0071			< 0.0071			< 0.0071					
Total Zinc (mg/L) Daily Maximum	0.0183			0.0135			0.0164					

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.

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" (362-0400-001), 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" (362-0400-001), 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" (362-0400-001), 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 103