



Application Type Renewal
Wastewater Type Sewage
Facility Type SFTF

**NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP**

Application No. PA0084328
APS ID 277985
Authorization ID 1512667

Applicant, Facility and Project Information

Applicant Name	<u>Magnesita Refractories Co.</u>	Facility Name	<u>Magnesita Refractories York Quarry</u>
Applicant Address	<u>425 S Salem Church Road</u>	Facility Address	<u>320 N Baker Road</u>
	<u>York, PA 17408-5955</u>		<u>York, PA 17408-5802</u>
Applicant Contact	<u>Rory Nesmith</u>	Facility Contact	<u>Rory Nesmith</u>
Applicant Phone	<u>(717) 793-5436</u>	Facility Phone	<u>(717) 793-5436</u>
Client ID	<u>51763</u>	Site ID	<u>236507</u>
SIC Code	<u>3297</u>	Municipality	<u>West Manchester Township</u>
SIC Description	<u>Manufacturing - Nonclay Refractories</u>	County	<u>York</u>
Date Application Received	<u>January 16, 2025</u>	WQM Required	<u>Issued</u>
Date Application Accepted	<u>January 6, 2026</u>	WQM App. No.	<u>0193405</u>
Project Description	<u>NPDES Renewal application for an existing SFTF with addition of IW Stormwater permit conditions incorporated in.</u>		

Summary of Review

Magnesita Refractories is an existing quarry located in York County. The company manufactures refractory materials. Refractories can be produced in molded bricks of various shapes, bulk refractories, plastic mixtures, consisting of moistened aggregates. The site is a mining facility which consists of numbers of manufacturing plants, raw material storage areas, large sedimentation ponds, a limestone quarry, and the sewage treatment plant (STP). The STP, according to the application, treats sanitary wastewater only from Brick Plant, Engineered Ceramics and Specialties Plant which is utilized by 180 people over a 24-hour, 3 shifts per day, period. Based on the site visit, the treatment process is as follows:

A lift station → comminutor → a 6,000-gallon flow equalization tank → a 2,000-gallon aeration tank → clarifier → chlorine contact tank with tablets → post aeration tank → Outfall 001

The site also has two (2) septic tanks with sand mounds for additional sanitary wastewater from other buildings. According to the site representative, sludge from the STP and these tanks will be disposed periodically (6 to 8 weeks) by a licensed hauler for land applications.

OTHER WASTEWATER / PERMITS

The site currently discharges a large amount of quarry water on a daily basis (approximately 250,000 gallons). This quarry water co-mingled with stormwater is currently covered under an NPDES Large Surface Mining Permit (4873SM1) issued by DEP Mining Program. All storage tanks are also covered under DEP Cleanup Program (No. 67-20835). A landfill is permitted by DEP Waste Management Program (Permit No. 300659)

Along with this NPDES renewal for their SFTF, the facility, with approval from DEP, has proposed to incorporate IW Stormwater permit regulations and conditions into their SFTF permit to allow for consolidation amongst permits.

Approve	Deny	Signatures	Date
X		Jared Lescavage Jared Lescavage / Project Manager	January 6, 2026
x		Scott M Arwood Scott M. Arwood, P.E. / Environmental Engineer Manager	01/08/2026

Summary of Review

The facility currently has three (3) outfalls that discharge stormwater (002, 003, and 004). Outfall 003 is representative of Outfall 004. The table below describes the activities that occur in the drainage area that are exposed to precipitation for each outfall:

Outfall No.	Area Drained (ft ²)	Latitude	Longitude	Description
002	57600	39° 56' 8.5"	-76° 49' 8.9"	Parking lot, loading area, building roof.
003	127300	39° 56' 8.4"	-76° 49' 8.12"	Building roof, compactor, aboveground propane tank, ad pressing area exposure.

Since the facility is classified as a Refractories Manufacturing facility, Appendix N benchmarks from the PAG-03 Stormwater Permit would be appropriate to assign to the permit.

SFTF LIMITS:

DEVELOPMENT OF EFFLUENT LIMITATIONS

a. pH / Dissolved Oxygen

Existing pH and Dissolved Oxygen (D.O.) limits will remain in the permit. pH limits (above 6.0 and below 9.0 standard units) are required by 40 CFR § 133.102(c), federal regulation for secondary treatment requirements. A D.O. limit (minimum of 5.0 mg/L) are also required by 25 Pa.Code § 93.7.

b. Total Residual Chlorine (TRC)

The current permit contains an average monthly limit (AML) of 1.5 mg/L and an instantaneous maximum limit (IMAX) of 2.5 mg/L for TRC.

This STP was built in 1970's and there is no change in watershed since the last permit review. The discharge is to a stormwater ditch which flows into two (2) large sedimentation ponds. Sedimentation ponds receive about 90% of flows from the quarry with the remaining from stormwater and sewage (i.e., high degree of dilution). Also, the facility uses an erosion chlorinator (tablets) and therefore does not have flow proportional control of chlorine feed. As per the previous renewal, the default Best Available Technology Economically Achievable (BAT) limit of 0.5 mg/L is not appropriate and the site-specific BAT limit is necessary. Since the permittee has the ability to control the level of chlorine during the disinfection process by inserting different chlorine tablets as needed, a TRC limit of 1.0 mg/L should be appropriate and is consistent with limits for other treatment plants with similar technology. Based on the sample results reported on the Discharge Monitoring Reports (DMRs), the facility is capable of meeting this requirement. Accordingly, a BAT AML of 1.0 mg/L, based on case-by-case basis (BPJ), is recommended as per 25 Pa.Code § 92a.48(b)(1) and 40 CFR § 125.3(d)(3). For IMAX, the writer utilizes the Department's TRC_CALC spreadsheet to calculate an IMAX limit based on new conditions which is determined to be 2.6 mg/L. Since this is less stringent than the existing limit, the existing IMAX limit of 2.5 mg/L is adequate to protect water quality standards in the receiving stream.

c. CBOD5 / Total Suspended Solids (TSS)

The Department's Standard Operating Procedure (SOP) for *new and reissuance small flow treatment facility individual NPDES permit application* (SOP no. BPNPSM-PMT-003) recommends 10 mg/L of AML and 20 mg/L of IMAX for both COBD5 and TSS. Since the facility has been consistently meeting existing requirements and does not discharge directly to surface waters (i.e., supporting aquatic life), existing CBOD5 limits (AML of 25 mg/L and IMAX of 50 mg/L) and TSS limits (AML of 30 mg/L and IMAX of 60 mg/L) will still remain in the permit. These limits are also consistent with 25 Pa.Code §92a.47(a)(1) and (2) and 40 CFR § 133.102(a) and (b).

d. Fecal Coliform

Summary of Review

In accordance with 25 Pa.Code § 92a.47(a) and (b), existing fecal coliform AMLs (200/100 mL for summer and 2,000/100 mL for winter) will remain in the permit. IMAX limits will be included in the permit as per 25 Pa.Code § 92a.47(a) and (b).

DEVELOPMENT OF EFFLUENT MONITORING

a. Flow

Flow monitoring will remain in the permit. This requirement is in accordance with 40 CFR § 122.44(i)(1)(ii).

b. Chesapeake Bay Monitoring Requirements

Small flow treatment facilities are generally exempt from the Bay requirements.

MONITORING AND REPORTING REQUIREMENTS

Based on current conditions of the facility, existing monitoring and reporting requirements for CBOD5, TSS, and Fecal Coliform (i.e., 2/month grab sampling) and pH, D.O., and TRC (i.e., 1/day grab sampling) will remain in the permit. These requirements are recommended by Table 6-3 of the Department's permit guidance, *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits (362-0400-001)*.

The previous permit renewal from 2020 allowed the permittee to estimate the volume of effluent on a daily basis. As noted in the facility's January 16, 2014 inspection report, the permittee was put on notice that during this renewal that their flow monitoring requirements would be updated during the next renewal. Per Table 6-3 of the Department's permit guidance, *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits (362-0400-001)*, a facility rated for 2,000 gpd should measure flow at least weekly. Weekly flow monitoring was implemented in the previous permit renewal and will be kept as a condition in the current permit moving forward.

ANTI-DEGRADATION REQUIREMENTS

All proposed effluent limits and monitoring requirements have been developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. No High-Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

CLASS A WILD TROUT STREAMS

No Class A Wild Trout Fishery is impacted by this discharge.

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.

Commented [AS1]: You think this language was applicable to the previous 2000 renewal only? Maybe it should be changed to say that this was done in 2000 and will be continued?

Commented [JL2R1]: Yea I can change that.

Commented [JL3R1]: Do you think I should keep this paragraph and add a note that this was a previous requirement that will be kept the same, or should I change the paragraph entirely?

Commented [4R1]: I'd keep it but make it past tense, saying it was changed in 2020 and it will stay that way

NPDES Permit Fact Sheet
Magnesita Refractories York Quarry

NPDES Permit No. PA0084328

Nearest Downstream Public Water Supply Intake	Wrightsville Water Supply Company
PWS Waters	Flow at Intake (cfs)
PWS RMI	Distance from Outfall (mi) 52.51

Changes Since Last Permit Issuance: Addition of Stormwater Benchmarks and conditions into the SRSTP permit.

Other Comments: None

Compliance History	
Summary of DMRs:	See next page
Summary of Inspections:	N/A

Other Comments: **None**

NPDES Permit Fact Sheet
Magnesita Refractories York Quarry

NPDES Permit No. PA0084328

NAME: MAGNESITA REFRACTORIES CO
ADDRESS: 425 S SALEM CHURCH RD, YORK PA, 17408-5955
FACILITY: MAGNESITA REFRACTORIES
LOCATION: 320 N BAKER RD, YORK PA, 17408-5802
STAGE: Final Effluent

PA0084328		001					
PERMIT NUMBER		OUTFALL NUMBER					
MONITORING PERIOD							
YEAR	MO	DAY		YEAR	MO	DAY	
FROM	2025	11	01	TO	2025	11	30

Reporting Frequency: Monthly
DMR Effective From: 11/01/2025
DMR Effective To: 11/30/2025
Permit Expires: 07/31/2025
Permit Application Due: 02/01/2025
No Discharge: ☐

PARAMETERS REPORTED VALUES

PARAMETER		QUANTITY OR LOADING			QUANTITY OR CONCENTRATION				SAMPLING FREQUENCY	SAMPLING TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS		
Dissolved Oxygen (00300)	Sample Measurement	***	***	***	10.1	***	***	mg/L	1/day	Grab
	Permit Requirement	***	***		5.0 Min	***	***		1/day	Grab
pH (00400)	Sample Measurement	***	***	***	7.5	***	8.1	S.U.	1/day	Grab
	Permit Requirement	***	***		6.0 Min	***	9.0 Max		1/day	Grab
Total Suspended Solids (00530)	Sample Measurement	***	***	***	***	16	16.0	mg/L	2/month	Grab
	Permit Requirement	***	***		***	30 Avg Mo	60 IMAX		2/month	Grab
Flow (50050)	Sample Measurement	.0015	***	MGD	***	***	***	***	1/week	Measured
	Permit Requirement	Monitor & Report Avg Mo	***		***	***	***		1/week	Measured
Total Residual Chlorine (TRC) (50060)	Sample Measurement	***	***	***	***	.7	1.2	mg/L	1/day	Grab
	Permit Requirement	***	***		***	1.0 Avg Mo	2.5 IMAX		1/day	Grab
Fecal Coliform (74055) (Oct-Apr)	Sample Measurement	***	***	***	***	5	12	CFU/100 ml	2/month	Grab
	Permit Requirement	***	***		***	2000 Geo Mean	10000 IMAX		2/month	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082)	Sample Measurement	***	***	***	***	7	6.9	mg/L	2/month	Grab
	Permit Requirement	***	***		***	25 Avg Mo	50 IMAX		2/month	Grab
Facility Sampling Point Comments										

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.

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	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	1/day	Grab
DO	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	1.0	XXX	2.5	1/day	Grab
CBOD5	XXX	XXX	XXX	25	XXX	50	2/month	Grab
TSS	XXX	XXX	XXX	30	XXX	60	2/month	Grab
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab

Compliance Sampling Location: Outfall 001

Other Comments: None

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.

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
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
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Commented [A55]: I think these should remain XXX and note somewhere that benchmarks are included for pH and TSS

Compliance Sampling Location: Outfall 002

Other Comments: Appendix N benchmarks are included in this permit for pH and TSS.

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.

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
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
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: Outfall 003

Other Comments: Appendix N benchmarks are included in this permit for pH and TSS.

Commented [A56]: same comment as above