State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**3241**	NAICS Code:	**327310**	SPDES Number:	**NY0005037**
Discharge Class (CL):	**03**			DEC Number:	**4-0124-00001 /00057**
Toxic Class (TX):	**T**			Effective Date (EDP):	**EDP**
Major-Sub Drainage Basin:	**13 - 01**			Expiration Date (ExDP):	**ExDP**
Water Index Number:	**H 214-1**	Item No.:	**863 - 544**	Modification Dates (EDPM):	
Compact Area:					

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended (33 U.S.C. '1251 et.seq.)

PERMITTEE NAME AND ADDRESS					
Name:	**Amrize Cement Inc**	Attention:	**David Romero, Plant Manager**		
Street:	**8700 W Bryn Mawr Ave, Ste 300**				
City:	**Chicago**	State:	**IL**	Zip Code:	**12143**
Email:	**david.romero@amrize.com**	Phone:	**(518) 545 - 7556**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL																	
Name:	**Amrize Ravena Facility**																
Address / Location:	**1916 US Route 9W**											County:	**Albany**				
City:	**Ravena**							State:	**NY**			Zip Code:	**12143**				
Facility Location:		Latitude:	**42**	°	**29**	’	**7.0**	” N	& Longitude:	**73**	°	**48**	’	**3.0**	” W		
Primary Outfall No.:	**023**	Latitude:	**42**	°	**29**	’	**28**	” N	& Longitude:	**73**	°	**47**	’	**11**	” W		
Wastewater Description:	**Treated Sanitary and landfill leachate**	Receiving Water:	**Hudson River**					NAICS:	**327310**	Class:	**C**		Standard:	**C**			

and the additional outfalls listed in this permit, in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1 and 750-2.

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:
CO BWP - Permit Coordinator
BWP – Permit Writer
CO BWC - SCIS
RWE
RPA
EPA Region II
CO DFW

Permit Administrator:			
Address:	1130 N Westcott Rd, Schenectady NY 12306		
Signature:		Date:	/ /

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SUMMARY OF ADDITIONAL OUTFALLS

Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
003	**Quarry pump out water, storm water**	**327310**	**42** ° **29** ‘ **7.00** ” N	**73** ° **48** ’ **3.00** ” W
Receiving Water:	**Coeymans Creek**			Class: **C(TS)**
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
006	**Stormwater – Aggregate areas**	**327310**	**42** ° **29** ’ **7.00** ” N	**73** ° **48** ’ **9.64** ” W
Receiving Water:	**Unnamed tributary 1 to Coeymans Creek**			Class: **C**
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
007	**Stormwater, former clay mining area, CKD landfill**	**327310**	**42** ° **30** ’ **7.00** ” N	**73** ° **48** ’ **2.00** ” W
Receiving Water:	**Coeymans Creek,**			Class: **C(TS)**
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
010	**Quarry pump out water, storm water**	**327310**	**42** ° **29** ’ **28** ” N	**73** ° **49** ’ **26** ” W
Receiving Water:	**Tributary 1 to Coeymans Creek**			Class: **C**
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
012	**Stormwater**	**327310**	**42** ° **29** ’ **24** ” N	**73** ° **47** ’ **14** ” W
Receiving Water:	**Hudson River**			Class: **C**
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
013	**Stormwater**	**327310**	**42** ° **29** ’ **24** ” N	**73** ° **47** ’ **18** ” W
Receiving Water:	**Hudson River**			Class: **C**
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
014	**Stormwater**	**327310**	**42** ° **29** ’ **32** ” N	**73** ° **48** ’ **05** ” W
Receiving Water	**Coeymans Creek**			Class: **C(TS)**
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
015	**Stormwater**	**327310**	**42** ° **29** ’ **38** ” N	**73** ° **48** ’ **10** ” W
Receiving Water	**Coeymans Creek**			Class: **C(TS)**
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
016	**Stormwater**	**327310**	**42** ° **29** ’ **32** ” N	**73** ° **48** ’ **05** ” W
Receiving Water	**Coeymans Creek**			Class: **C(TS)**
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
020	**Stormwater**	**327310**	**42** ° **29** ’ **31** ” N	**73** ° **48** ’ **03** ” W
Receiving Water	**Unnamed Tributary 1 to Coeymans Creek**			Class: **C**
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
021	**Stormwater**	**327310**	**42** ° **29** ’ **33** ” N	**73** ° **48** ’ **53** ” W
Receiving Water	**Unnamed Tributary 1 to Coeymans Creek**			Class: **C**
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
023A	**Sanitary Wastewater Treatment Effluent**	**327310**	**42** ° **29** ’ **46** ” N	**73** ° **48** ’ **30** ” W

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Receiving Water	**Hudson River via outfall 023**								Class:	**C**		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude						Outfall Longitude			
023B	**CKD landfill leachate treatment Effluent**	**327310**	**42**	°	**29**	’	**44**	” N	**73**	°	**48**	’	**26**	” W
Receiving Water	**Hudson River via outfall 023**								Class:	**C**		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude						Outfall Longitude			
024	**Stormwater**	**327310**	**42**	°	**29**	’	**35**	” N	**73**	°	**48**	’	**47**	” W
Receiving Water	**Unnamed Tributary 1 to Coeymans Creek**								Class:	**C**		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude						Outfall Longitude			
027	**Stormwater**	**327310**	**42**	°	**28**	’	**45**	” N	**73**	°	**49**	’	**43**	” W
Receiving Water:	**Unnamed Tributary 2 to Hannacroix Creek**								Class:	**C**		

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DEFINITIONS

TERM	DEFINITION
7-Day Geo Mean	The highest allowable geometric mean of daily discharges over a calendar week.
7-Day Average	The average of all daily discharges for each 7-days in the monitoring period. The sample measurement is the highest of the 7-day averages calculated for the monitoring period.
12-Month Rolling Average (12 MRA)	The current monthly value of a parameter, plus the sum of the monthly values over the previous 11 months for that parameter, divided by the number of months for which samples were collected in the 12-month period.
30-Day Geometric Mean	The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Action Level	Action level means a monitoring requirement characterized by a numerical value that, when exceeded, triggers additional permittee actions and department review to determine if numerical effluent limitations should be imposed.
Compliance Level / Minimum Level	A compliance level is an effluent limitation. A compliance level is given when the water quality evaluation specifies a Water Quality Based Effluent Limit (WQBEL) below the Minimum Level. The compliance level shall be set at the Minimum Level (ML) for the most sensitive analytical method as given in 40 CFR Part 136 or otherwise accepted by the Department.
Daily Discharge	The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
Daily Maximum	The highest allowable Daily Discharge.
Daily Minimum	The lowest allowable Daily Discharge.
Effective Date of Permit (EDP or EDPM)	The date this permit is in effect.
Effluent Limitations	Effluent limitation means any restriction on quantities, quality, rates and concentrations of chemical, physical, biological, and other constituents of effluents that are discharged into waters of the state.
Expiration Date of Permit (ExDP)	The date this permit is no longer in effect.
Instantaneous Maximum	The maximum level that may not be exceeded at any instant in time.
Instantaneous Minimum	The minimum level that must be maintained at all instants in time.
Monthly Average	The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Outfall	The terminus of a sewer system, or the point of emergence of any waterborne sewage, industrial waste or other wastes or the effluent therefrom, into the waters of the State.
Range	The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.
Receiving Water	The classified waters of the state to which the listed outfall discharges.
Sample Frequency / Sample Type / Units	See NYSDEC's "DMR Manual for Completing the Discharge Monitoring Report for the SPDES" for information on sample frequency, type and units.

PERMIT LIMITS, LEVELS AND MONITORING

Outfalls 003 & 007

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
003 & 007	003: Stormwater 007: Stormwater from CKD landfill	Coeymans Creek	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type[1]	Location Inf.	Location Eff.	
Flow	Monthly Average	Monitor	GPD			1/Month	Instantaneous		X	
	Daily Maximum	Monitor	GPD			1/Month	Instantaneous		X	
pH	Daily Minimum	6.0	SU			1/Month	Grab		X	
	Daily Maximum	9.0	SU							
Total Suspended Solids (TSS)	Monthly Average	20	mg/L			1/Month	Grab		X	
	Daily Maximum	40	mg/L			1/Month	Grab		X	
Settleable Solids	Daily Maximum	0.1	mL/L			1/Month	Grab		X	
Total Dissolved Solids	Daily Maximum	Monitor	mg/L			1/Month	Grab		X	
Oil and Grease	Daily Maximum	15	mg/L			1/Month	Grab		X	

Outfalls 006, 021 & 024

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
006, 021, & 024	006: Stormwater 021 & 024: Stormwater from cement manufacturing area	Unnamed Tributary 1 to Coeymans Creek	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type[1]	Location Inf.	Location Eff.	
Flow	Monthly Average	Monitor	GPD			1/Quarter	Instantaneous		X	2
	Daily Maximum	Monitor	GPD			1/Quarter	Instantaneous		X	2
pH	Daily Minimum	6.5	SU			1/Quarter	Grab		X	2
	Daily Maximum	8.5	SU							
Total Suspended Solids (TSS)	Monthly Average	25	mg/L			1/Quarter	Grab		X	2
	Daily Maximum	45	mg/L			1/Quarter	Grab		X	2
Settleable Solids	Daily Maximum	0.1	mL/L			1/Quarter	Grab		X	2
Total Dissolved Solids	Daily Maximum	500	mg/L			1/Quarter	Grab		X	2,3
Oil and Grease	Daily Maximum	15	mg/L			1/Quarter	Grab		X	2

See Footnotes for all Outfalls

Outfall 010

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
010	Quarry pump-out water, stormwater	Unnamed Tributary 1 to Coeymans Creek	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type[1]	Location Inf.	Location Eff.	
Flow	Monthly Average	Monitor	GPD			1/Month	Instantaneous		X	
	Daily Maximum	Monitor	GPD			1/Month	Instantaneous		X	
pH	Daily Minimum	6.5	SU			1/Month	Grab		X	
	Daily Maximum	8.5	SU							
Total Suspended Solids (TSS)	Monthly Average	25	mg/L			1/Month	Grab		X	
	Daily Maximum	45	mg/L			1/Month	Grab		X	
Settleable Solids	Daily Maximum	0.1	mL/L			1/Month	Grab		X	
Oil and Grease	Daily Maximum	15	mg/L			1/Month	Grab		X	
Total Dissolved Solids	Daily Maximum	Monitor	mg/L			1/Month	Grab		X	

Outfall 012

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
012	Stormwater – Near Gypsum Pile	Hudson River	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type[1]	Location Inf.	Location Eff.	
Flow	Monthly Average	Monitor	GPD			1/Quarter	Instantaneous		X	2
	Daily Maximum	Monitor	GPD			1/Quarter	Instantaneous		X	2
pH	Daily Minimum	6.0	SU			1/Quarter	Grab		X	2
	Daily Maximum	9.0	SU							
Total Suspended Solids (TSS)	Monthly Average	20	mg/L			1/Quarter	Grab		X	2
	Daily Maximum	40	mg/L			1/Quarter	Grab		X	2
Settleable Solids	Daily Maximum	0.1	mL/L			1/Quarter	Grab		X	2
Oil and Grease	Daily Maximum	15	mg/L			1/Quarter	Grab		X	2
Sulfate, (SO_4)	Daily Maximum	Monitor	mg/L			1/Quarter	Grab		X	2
Sulfite, (SO_3)	Daily Maximum	Monitor	ug/L			1/Quarter	Grab		X	2

See Footnotes for all Outfalls

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Outfall 013

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
013	Stormwater – Near Gypsum Pile	Hudson River	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type[1]	Location Inf.	Location Eff.	
Flow	Monthly Average	Monitor	GPD			1/Quarter	Instantaneous		X	2
	Daily Maximum	Monitor	GPD			1/Quarter	Instantaneous		X	2
pH	Daily Minimum	6.0	SU			1/Quarter	Grab		X	2
	Daily Maximum	9.0	SU							
Total Suspended Solids (TSS)	Daily Maximum	50	mg/L			1/Quarter	Grab		X	2
Settleable Solids	Daily Maximum	0.1	mL/L			1/Quarter	Grab		X	2
Oil and Grease	Daily Maximum	15	mg/L			1/Quarter	Grab		X	2
Sulfate, (SO_4)	Daily Maximum	Monitor	mg/L			1/Quarter	Grab		X	2
Sulfite, (SO_3)	Daily Maximum	Monitor	ug/L			1/Quarter	Grab		X	2

See Footnotes for all Outfalls

Outfalls 014, 015, & 016

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
014, 015 & 016	Stormwater, Roadside Drainages Near and Under Conveyor Belt	Coeymans Creek	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type[1]	Location Inf.	Location Eff.	
pH	Daily Minimum	6.0	SU			1/Quarter	Grab		X	2
	Daily Maximum	9.0	SU							
Total Suspended Solids (TSS)	Monthly Average	20	mg/L			1/Quarter	Grab		X	2
	Daily Maximum	40	mg/L			1/Quarter	Grab		X	2
Settleable Solids	Daily Maximum	0.1	mL/L			1/Quarter	Grab		X	2
Oil and Grease	Daily Maximum	15	mg/L			1/Quarter	Grab		X	2
Total Dissolved Solids	Daily Maximum	Monitor	mg/L			1/Quarter	Grab		X	2

See Footnotes for all Outfalls

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Outfall 020

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
020	Quarry pump-out water, stormwater	Unnamed Tributary 1 to Coeymans Creek	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type[1]	Location		
								Inf.	Eff.	
Flow	Monthly Average	Monitor	GPD			1/Month	Instantaneous		X	
	Daily Maximum	Monitor	GPD			1/Month	Instantaneous		X	
pH	Daily Minimum	6.5	SU			1/Month	Grab		X	
	Daily Maximum	8.5	SU							
Total Suspended Solids (TSS)	Monthly Average	Monitor	mg/L			1/Month	Grab		X	
	Daily Maximum	50	mg/L			1/Month	Grab		X	
Settleable Solids	Daily Maximum	0.1	mL/L			1/Month	Grab		X	
Oil and Grease	Daily Maximum	15	mg/L			1/Month	Grab		X	
Total Dissolved Solids	Daily Maximum	Monitor	mg/L			1/Month	Grab		X	

See Footnotes for all Outfalls

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Outfall 023

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
023	Cement Kiln Dust (CKD) Landfill Leachate Effluent and Sanitary Effluent	Hudson River	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	Monitor	GPD			Continuous	Recorder		X	
	Daily Maximum	Monitor	GPD			Continuous	Recorder		X	
pH	Daily Minimum	6.0	SU			1/Month	Grab		X	
	Daily Maximum	9.0	SU							
Dissolved Oxygen	Daily Minimum	2.0	mg/L			1/Week	Grab		X	
	Daily Maximum	Monitor	mg/L			1/Week	Grab		X	
Total Dissolved Solids	Monthly Average	Monitor	mg/L			1/Month	Grab		X	
	Daily Maximum	32,000	mg/L			1/Month	Grab		X	
Total Suspended Solids (TSS)	Monthly Average	Monitor	mg/L			1/Month	Grab		X	
	Daily Maximum	20	mg/L			1/Month	Grab		X	
Total Residual Chlorine	Monthly Average	Monitor	ug/L			1/Week	Grab		X	
	Daily Maximum	450	ug/L			1/Week	Grab		X	

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote	15	TUa				See footnote		X	4
WET - Acute Vertebrate	See footnote	15	TUa				See footnote		X	4
WET - Chronic Invertebrate	See footnote	100	TUc				See footnote		X	4
WET - Chronic Vertebrate	See footnote	100	TUc				See footnote		X	4

See Footnotes for all Outfalls

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Outfall 023A

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
023A	Sanitary Effluent	Internal to Outfall 023 (Hudson River)	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	Monitor	GPD			Continuous	Recorder		X	
	Daily Maximum	Monitor	GPD			Continuous	Recorder		X	
BOD_5	Monthly Average	30	mg/L			1/Week	Grab		X	
	Daily Maximum	45	mg/L			1/Week	Grab		X	
pH	Daily Minimum	6.0	SU			1/Month	Grab		X	
	Daily Maximum	9.0	SU							
Coliform, Fecal	30-Day Geometric Mean	200	No./ 100 mL			1/Week	Grab		X	
	7-Day Geometric Mean	400	No./ 100 mL			1/Week	Grab		X	
Chlorine, Total Residual	Daily Maximum	2.0	mg/L			1/Day	Grab		X	
Nitrogen, Ammonia (as N)	Daily Maximum	20	mg/L			1/Week	Grab		X	
Total Suspended Solids (TSS)	Monthly Average	30	mg/L			1/Month	Grab		X	
	Daily Maximum	45	mg/L			1/Month	Grab		X	
Settleable Solids	Daily Maximum	0.1	mL/L			1/Week	Grab		X	

See Footnotes for all Outfalls

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Outfall 023B

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
023B	Cement Kiln Dust (CKD) Landfill Leachate Effluent	Internal to Outfall 023 (Hudson River)	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average	Monitor	GPD			Continuous	Recorder		X	
	Daily Maximum	Monitor	GPD			Continuous	Recorder		X	
pH	Daily Minimum	6.0	SU			1/Week	Grab		X	
	Daily Maximum	9.0	SU							
Total Dissolved Solids (TDS)	Daily Maximum	Monitor	mg/L			1/Month	Grab		X	
Total Suspended Solids (TSS)	Daily Maximum	20	mg/L			1/Month	Grab		X	
Settleable Solids	Daily Maximum	0.1	mL/L			1/Week	Grab		X	
Total Aluminum	Monthly Average	2.0	mg/L			1/Month	Grab		X	
	Daily Maximum	4.0	mg/L			1/Month	Grab		X	
Total Mercury	Daily Maximum	35	ng/L			1/Month	Grab		X	3,5

See Footnotes for all Outfalls

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Outfall 027

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
027	Stormwater from truck unloading pad	Unnamed Tributary 2 to Hannacroix Creek	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type[1]	Location Inf.	Location Eff.	
Flow	Monthly Average	Monitor	GPD			1/Month	Instantaneous		X	
	Daily Maximum	Monitor	GPD			1/Month	Instantaneous		X	
pH	Daily Minimum	6.5	SU			1/Month	Grab		X	
	Daily Maximum	8.5	SU							
Total Suspended Solids (TSS)	Monthly Average	20	mg/L			1/Month	Grab		X	
	Daily Maximum	40	mg/L			1/Month	Grab		X	
Settleable Solids	Daily Maximum	0.1	mL/L			1/Month	Grab		X	
Oil and Grease	Daily Maximum	15	mg/L			1/Month	Grab		X	
Total Dissolved Solids	Daily Maximum	Monitor	mg/L			1/Month	Grab		X	

See Footnotes for all Outfalls

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Footnotes for all Outfalls

1. Stormwater Sampling
   All stormwater sampling shall be in accordance with the New York State Department of Environmental Conservation SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity Permit Number GP-0-23-001, which states:

   A minimum of one grab sample must be taken from the stormwater discharge associated with industrial activity resulting from a storm event with at least 0.1 inch of precipitation (defined as a "measurable" event), providing the interval from the preceding measurable storm is at least 72 hours. The 72-hour storm interval is waived if the preceding measurable storm did not result in a stormwater discharge (e.g., a storm event in excess of 0.1 inches may not result in a stormwater discharge at some facilities), or if the owner or operator is able to document that less than a 72-hour interval is representative for local storm events during the sampling period.

   The grab sample must be taken during the first 30 minutes (or as soon thereafter as practical, but not to exceed one [1] hour) of the discharge. If the sampled discharge commingles with non-stormwater water, the owner or operator must attempt to sample the stormwater discharge before it mixes.

2. Quarterly samples shall be collected in calendar quarters (Q1 – January 1st to March 31st; Q2 – April 1st to June 30th; Q3 – July 1st to September 30th; Q4 – October 1st to December 31st).

3. This is a final effluent limitation for Total Dissolved Solids (TDS) at Outfalls 006, 021, and 024, and mercury at Outfall 023B. See Schedule of Compliance for interim requirements.

4. **Whole Effluent Toxicity (WET) Testing at Outfall 023B:**
   Testing Requirements – Chronic WET testing is required, but report both the acute and chronic results. Testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the Department. The test species shall be Ceriodaphnia dubia (water flea - invertebrate) and Pimephales promelas (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 50:1 for acute, and 100:1 for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

   Monitoring Period - WET testing shall be performed quarterly (calendar quarters) for the duration of the permit.

   Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: TUa = (100)/(48-hr LC50) [note that Acute data is generated by both Acute and Chronic testing] and TUc = (100)/(7-day NOEC) or (100)/(7-day IC25) when Chronic testing has been performed or TUc = (TUa) x (10) when only Acute testing has been performed and is used to predict Chronic test results, where the 48-hr LC50, 7-day NOEC and/or IC25 are all expressed in % effluent. This must be done, including the Chronic prediction from the Acute data, for both species unless otherwise directed. For Chronic results, report the most sensitive endpoint (i.e. survival, growth and/or reproduction) corresponding to the lowest 7-day NOEC or IC25 and resulting highest TUc. For Acute results, report a TUa of 0.3 if there is no statistically significant mortality in 100% effluent as compared to the control. Report a TUa of 1.0 if there is statistically significant mortality in 100% effluent as compared to the control, but insufficient mortality to generate a 48-hr LC50. Also, in the absence of a 48-hr LC50, use 1.0 TUa for the Chronic prediction from the Acute data, and report a TUc of 10.0.

   The complete test report including all bench sheets, statistical analyses, reference toxicity data, daily average flow at the time of sampling and other appropriate supporting documentation, shall be submitted within 60 days following the end of each test period with your WET DMR and to WET@dec.ny.gov. A summary page of the test results for the invertebrate and vertebrate species indicating TUa, 48-hr LC50 for Acute tests and/or TUc, NOEC, IC25, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

   WET Testing Action Level or Limit Exceedances - If an action level or limit is exceeded then the DEC may require the permittee to conduct additional WET testing including Acute and/or Chronic tests. Additionally, the permittee may be required to perform a Toxicity Identification/Reduction Evaluation (TI/RE) in accordance with DEC guidance. The permittee shall be notified in writing by their Regional DEC office of testing or a TI/RE and the reason(s) why such are required.

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5. This is a compliance level. The calculated WQBEL for mercury is 0.7 ng/L.

BIOLOGICAL MONITORING REQUIREMENTS

All submissions under this section should provide, unless otherwise noted:

One (1) electronic copy to the Energy Unit Leader[1];
One (1) copy of the cover letter to the Division of Water, SPDES Compliance Information Section; and
One (1) copy of the cover letter to the Regional Water Engineer

Continued Operation of the Best Technology Available

1. By EDP the permittee must continue to operate and maintain:
   a) A closed-cycle glycol cooling system for cement manufacturing facility;
   b) A closed-cycle cooling system for the co-generation facility;
   c) Operation and maintenance of 0.5 mm cylindrical wedge wire screens with a maximum through slot velocity of 0.5 fps at the current cooling water intake structure;
   d) Use alternative primary sources of water (quarry water, storm water and well water) to meet cooling needs of the facility; and
   e) Limit the use of Hudson River water for cooling and process purposes to 2 MGD, and only when the primary sources are inadequate to meet the cooling and process needs of the facility.

Reporting Requirements

2. By February 1, and every year thereafter, the permittee must submit an *Annual River Water Use Summary* report to the Energy Unit Leader. This report shall contain the daily maximum flow for each month, and monthly summaries of flows of Hudson River water used for the previous year. Daily total intake flow shall be calculated on the basis of circulating water pump operation hourly averages.

3. The permittee must maintain records of all data, reports and analysis pertaining to compliance with 6NYCRR Part 704 and Section 316(b) CWA for a period no less than 10 years from EDP.

General Requirements

4. Nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act or Environmental Conservation Law section 11-0535 and its implementing regulations at 6 NYCRR Part 182.

5. Modification of the facility cooling water intake must not occur without prior Department approval. The permittee must submit written notification, including detailed descriptions and plans, to the NYS DEC Energy Unit leader; the Director of the Bureau of Water Compliance Program; and both the Regional Permit Administrator and the Regional Water Engineer, Region 4, at least 60 days prior to any proposed change which would result in the alteration of the permitted operation, location, design, construction or capacity of the cooling water intake structure. The permittee must submit with the written notification a demonstration that the change reflects the best technology available for minimizing adverse environmental impacts pursuant to 6 NYCRR §704.5 and Section 316(b) of the Clean Water Act. As determined by NYS DEC, a permit modification application in accordance with 6 NYCRR Part 621 may be required.

SCHEDULE OF COMPLIANCE - BIOLOGICAL MONITORING REQUIREMENTS

The permittee shall comply with the following schedule:

Outfall Number(s)	Compliance Action	Due Date
-	BMR 1. Permittee shall implement technologies and operational measures to meet requirements of 6 NYCRR Parts 704.1 and 704.5	EDP
-	BMR 2. Submit annual Water Use Summary Report	February 1, and every year thereafter

[1] Energy Unit Leader- Colleen Kimble Energy Unit Leader

BEST MANAGEMENT PRACTICES (BMPs) FOR INDUSTRIAL FACILITIES

Note that for some facilities, especially those with few employees or limited industrial activities, some of the below BMPs may not be applicable. It is acceptable in these cases to indicate "Not Applicable" for the portion(s) of the BMP Plan that do not apply to your facility, along with an explanation.

1. **General** - The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage. The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the Department as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized Department representatives upon request.

2. **Compliance Deadlines** – The initial BMP plan was received by the Department in February 2024. The BMP plan **shall be reviewed annually** and shall be modified whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.

3. **Facility Review** - The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases. The review shall address all substances present at the facility that are identified in the SPDES application Form NY-2C (available at https://www.dec.ny.gov/docs/permits_ej_operations_pdf/form2c.pdf) or that are required to be monitored for by the SPDES permit.

4. **13 Minimum BMPs:** Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of stormwater elements of the BMP is available in *Developing Your Stormwater Pollution Prevention Plan A Guide for Industrial Operators*, February 2009, EPA 833-B-09-002. As a minimum, the plan shall include the following BMPs:

1. BMP Pollution Prevention Team
2. Reporting of BMP Incidents
3. Risk Identification & Assessment
4. Employee Training
5. Inspections and Records
6. Security
7. Preventive Maintenance
8. Good Housekeeping
9. Materials/Waste Handling, Storage, & Compatibility
10. Spill Prevention & Response
11. Erosion & Sediment Control
12. Management of Runoff
13. Street Sweeping

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BMPs FOR INDUSTRIAL FACILITIES (continued)

5. **Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater from Construction Activity to Surface Waters -** A SWPPP shall be developed prior to commencing any construction activity that will result in soil disturbance of one or more acres of uncontaminated area[2]. (Note: the disturbance threshold is 5000 SF in the New York City East of Hudson Watershed). The SWPPP shall conform to the current version of the SPDES General Permit for Stormwater Discharges from Construction Activity (CGP), including the *New York Standards and Specifications for Erosion and Sediment Control* and *New York State Stormwater Management Design Manual.* The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity **at least 30 days prior to soil disturbance**. The SWPPP shall be maintained on-site and submitted to the Department only upon request. When a SWPPP is required, a properly completed *Notice of Intent* (NOI) form shall be submitted (available at www.dec.ny.gov/chemical/43133.html) prior to soil disturbance. Note that submission of the NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges. SWPPPs must be developed for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP are properly. implemented.

6. **Required Sampling For "Hot Spot" Identification** - Development of the BMP plan shall include sampling of waste stream segments for the purpose of pollutant "hot spot" identification. The economic achievability of effluent limits will not be considered until plant site "hot spot" sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology. For the purposes of this permit condition a "hot spot" is a segment of an industrial facility (including but not limited to soil, equipment, material storage areas, sewer lines etc.) which contributes elevated levels of problem pollutants to the wastewater and/or stormwater collection system of that facility. For the purposes of this definition, problem pollutants are substances for which treatment to meet a water quality or technology requirement may, considering the results of waste stream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is sufficiently higher than the concentration of that same pollutant at the compliance monitoring location so as to allow for an economically justifiable removal and/or isolation of the segment and/or B.A.T. treatment of wastewaters emanating from the segment.

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[2] Uncontaminated area means soils which are free of contamination by any toxic or non-conventional pollutants identified in the tables of SPDES Application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting discharge of contaminated stormwater is not authorized by this permit unless the discharge is under State or Federal oversight as part of a remedial program or after review by the Regional Water Engineer; nor is such discharge authorized by any SPDES general permit for stormwater discharges.

MERCURY MINIMIZATION PROGRAM (MMP) - Type III

1. General – To reduce mercury effluent levels with the goal of achieving the water quality standard of 0.7 ng/L, the permittee must develop, implement, and maintain a written MMP plan, which includes the elements set forth below.
2. Relevant Documents – incorporate by reference documents already prepared, if any, for the wastewater treatment facility.
3. Drawings or Maps – for the facility and collection system identifying key locations and other areas identified in the MMP Plan.
4. Monitoring Plan – All mercury outfall monitoring must be conducted using the methods specified in Table 8 of DOW 1.3.10. Monitoring at influent and other locations tributary to compliance points may be performed using either USEPA Method 1631 or another sufficiently sensitive method, as approved under 40 CFR Part 136. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-stormwater substances may be performed using other methods as appropriate. Monitoring must be coordinated so that the results can be effectively compared between locations and conducted with the following frequencies:
    a. Influent/Effluent – sampled in accordance with the SPDES permit limitations table for Outfall 023B; and,
    b. Key Locations – sampled annually, chosen to identify potential mercury sources.
5. Control Strategy –
    a. Inventory – develop and maintain an inventory of known and potential mercury sources.
    b. Equipment and Materials – evaluate equipment and materials (e.g., thermometers, thermostats) used by the permittee for potential mercury contribution to the discharge. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.
    c. Bulk Chemical Evaluation – for chemicals used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain:
        i. A manufacturer's certificate of analysis;
        ii. A chemical analysis performed by a certified laboratory; OR,
        iii. A notarized affidavit that describes the substance's mercury concentration and the detection limit achieved.

        Where practicable, the permittee must only use bulk chemicals in the wastewater treatment process which contain <10 parts per billion (ppb) of mercury.
    d. Inspections – once every five years, conduct and document with the MMP Plan an inspection at each identified location with potential mercury source(s).
    e. Treatment Considerations – document considerations for installation of treatment technology to reduce mercury contributions in the discharge.
6. Status Report – The permittee must develop a **semi-annual** report, in accordance with the Schedule of Additional Submittals, summarizing:
    a. All MMP monitoring results for Outfall(s) 023B since the previous report;
    b. A list of known mercury sources and potential mercury sources;
    c. All actions undertaken by the permittee, pursuant to the control strategy, since the previous report;
    d. Actions planned by the permittee, pursuant to the control strategy, for the upcoming reporting period; and,
    e. Progress toward achieving a dissolved mercury concentration of 0.7 ng/L in the effluent (e.g., summarizing reductions in effluent concentrations as a result of the control strategy implementation or installation/modification of a treatment system).

    The first status report is due in accordance with the Schedule of Additional Submittals. The permittee must maintain a file on-site with all MMP documentation.

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MERCURY MINIMIZATION PROGRAM (MMP) – Type III (Continued)

7. MMP Modification – The permittee must submit a permittee-initiated modification request to DEC whenever:
    a. The permittee meets the criteria for another MMP type;
    b. Changes at the facility, or within the collection system, increase the potential for mercury discharges; OR,
    c. Effluent discharges exceed the current permit limitation(s).

    The permittee may use information in the status reports, as applicable in accordance with item 6, as a basis for the permittee-initiated modification.

DEFINITIONS:

Key location – a location within the collection/wastewater system (e.g., including but not limited to a specific manhole/access point, tributary sewer/wastewater connection, or user discharge point) identified by the permittee as a potential mercury source. The permittee may adjust key locations based upon sampling and/or best professional judgment.

Potential mercury source – a source identified by the permittee that may reasonably be expected to have total mercury contained in the discharge. Some potential mercury sources include switches, fluorescent lightbulbs, cleaners, degreasers, thermometers, batteries, hauled wastes, universities, hospitals, laboratories, landfills, Brownfield sites, or raw material storage.

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SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance parameter	Compliance Action	Due Date
006, 021, 024, 023B	Total Dissolved Solids (TDS) & Mercury	INTERIM PROGRESS REPORT[3] The permittee shall provide a status update on the Engineering Report/Study detailed below.	EDP + 6 Months EDP + 12 Months
006, 021 & 024	TDS	TDS ENGINEERING REPORT/STUDY The permittee shall submit an approvable[4] Engineering Report. The report shall include the following at a minimum: • A detailed description of the drainage areas, collection system, and treatment for each outfall; • A tabulation of all available TDS data for the facility; • Background concentrations of TDS and hardness upstream of the discharge point; • A summary of the identified potential sources and entry-points to each outfall; • A characterization of the individual components of TDS (e.g. sodium, chloride, potassium, etc.); • Actions that can be taken in the short-term to reduce effluent TDS; • A study and evaluation of treatment alternatives, if needed, that may be used to meet the final effluent limitations for TDS; The selected alternative and proposed timeline, including any major milestones such as submittal of any needed design documents, construction start and end, and commence operation.	EDP + 18 Months
023B	Mercury	MERCURY ENGINEERING REPORT/STUDY The permittee shall submit an approvable[5] Engineering Report. The report shall include the following at a minimum: • A detailed description of the leachate collection system and current treatment; • A tabulation of all available mercury data for the facility; • A summary of the identified potential sources and options available to reduce those sources; • A study and evaluation of treatment alternatives that may be used to meet the final effluent limitations for mercury; The selected alternative and proposed timeline, including any major milestones such as submittal of any needed design documents, construction start and end, and commence operation.	EDP + 18 Months
006, 021, 024, 023B	TDS & Mercury	FINAL COMPLIANCE WITH TDS AND MERCURY The permittee shall comply with the final effluent limitation(s) described in this permit for mercury and TDS. Interim limits expire.	EDP + 5 years

[3] 6 NYCRR 750-1.14 (b)
[4] 6 NYCRR 750 1.2 (a)(8)
[5] 6 NYCRR 750 1.2 (a)(8)

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Outfall(s)	Compliance parameter	Compliance Action	Due Date
Unless noted otherwise, the above actions are one-time requirements.			

OUTFALL	PARAMETER	INTERIM EFFLUENT LIMIT					MONITORING REQUIREMENTS				Notes
									Location		
		Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
006	Total Dissolved Solids (TDS)	Daily Maximum	1650	mg/L			1/Month	Grab		X	1
021			1700	mg/L			1/Month	Grab		X	
024			1620	mg/L			1/Month	Grab		X	
023B	Mercury	Daily Max	98	ng/L			1/Week	Grab		X	2
							1/Month	Grab		X	1, 2
Notes:	1. Interim limits for mercury and TDS expire at EDP + 5 years. 2. Frequency of sampling for mercury will be 1/week for the first 6 months (EDP + 6 months) and then continue at 1/month for the remaining time.										

b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
3. Any details which tend to explain or mitigate an instance of non-compliance; and
4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

c) The permittee shall submit copies of any document required by the above schedule of compliance to the NYSDEC Regional Water Engineer and to the Bureau of Water Permits.

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DISCHARGE NOTIFICATION REQUIREMENTS

(a) The permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit, unless the Permittee has obtained a waiver in accordance with the Discharge Notification Act (DNA). Such signs shall be installed before initiation of any new discharge location.

(b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.

(c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.

(d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimensions of eighteen inches by twenty-four inches (18" x 24") and shall have white letters on a green background and contain the following information:

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

Permittee Phone: ( ) - ### - ####

OR:

NYSDEC Division of Water Regional Office Address:

NYSDEC Division of Water Regional Phone: ( ) - ### -####

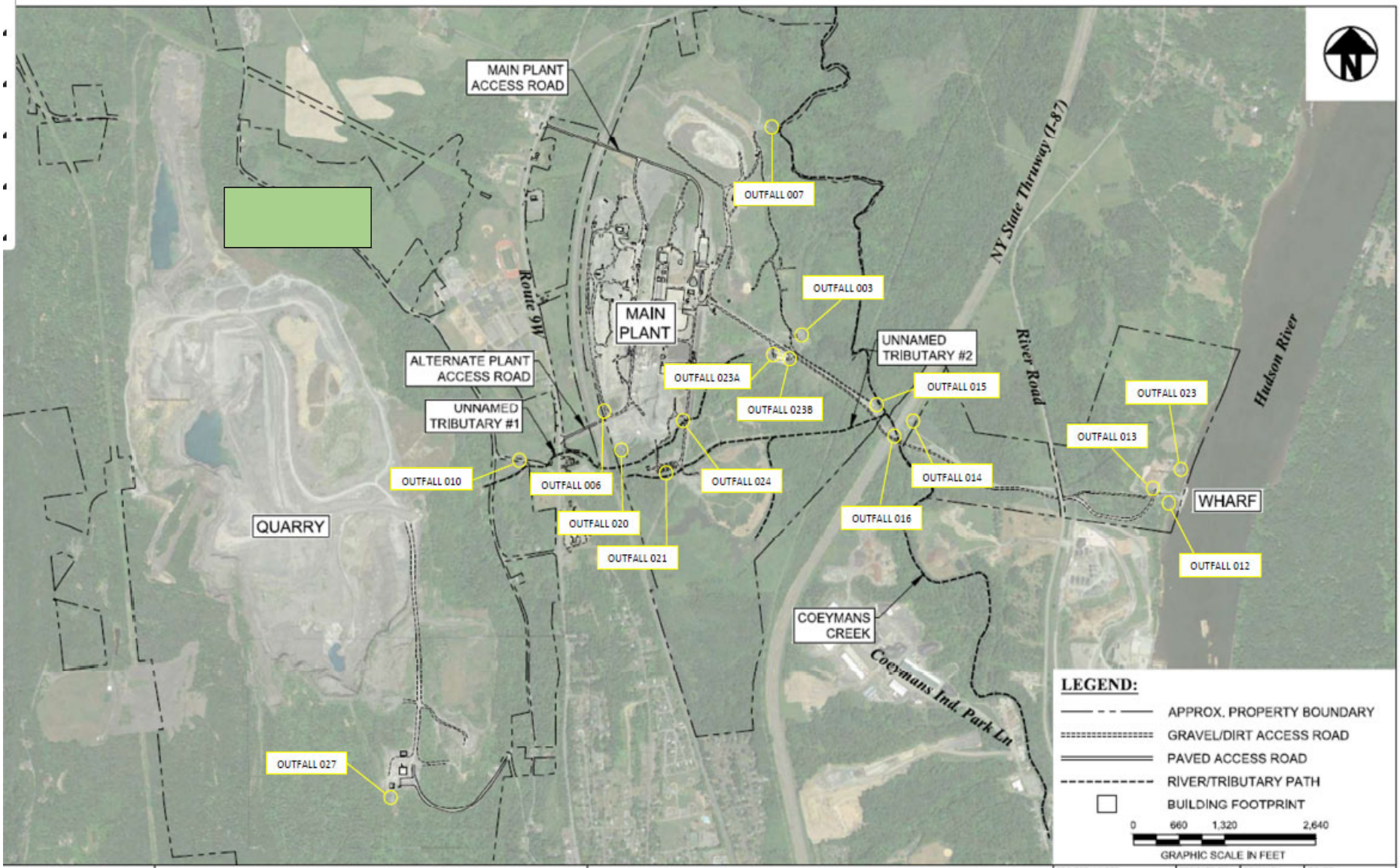
(e) Upon request, the permittee shall make available electronic or hard copies of the sampling data to the public. In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained (either electronically or as a hard copy) on record for a period of five years.

(f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the locations(s) specified below:

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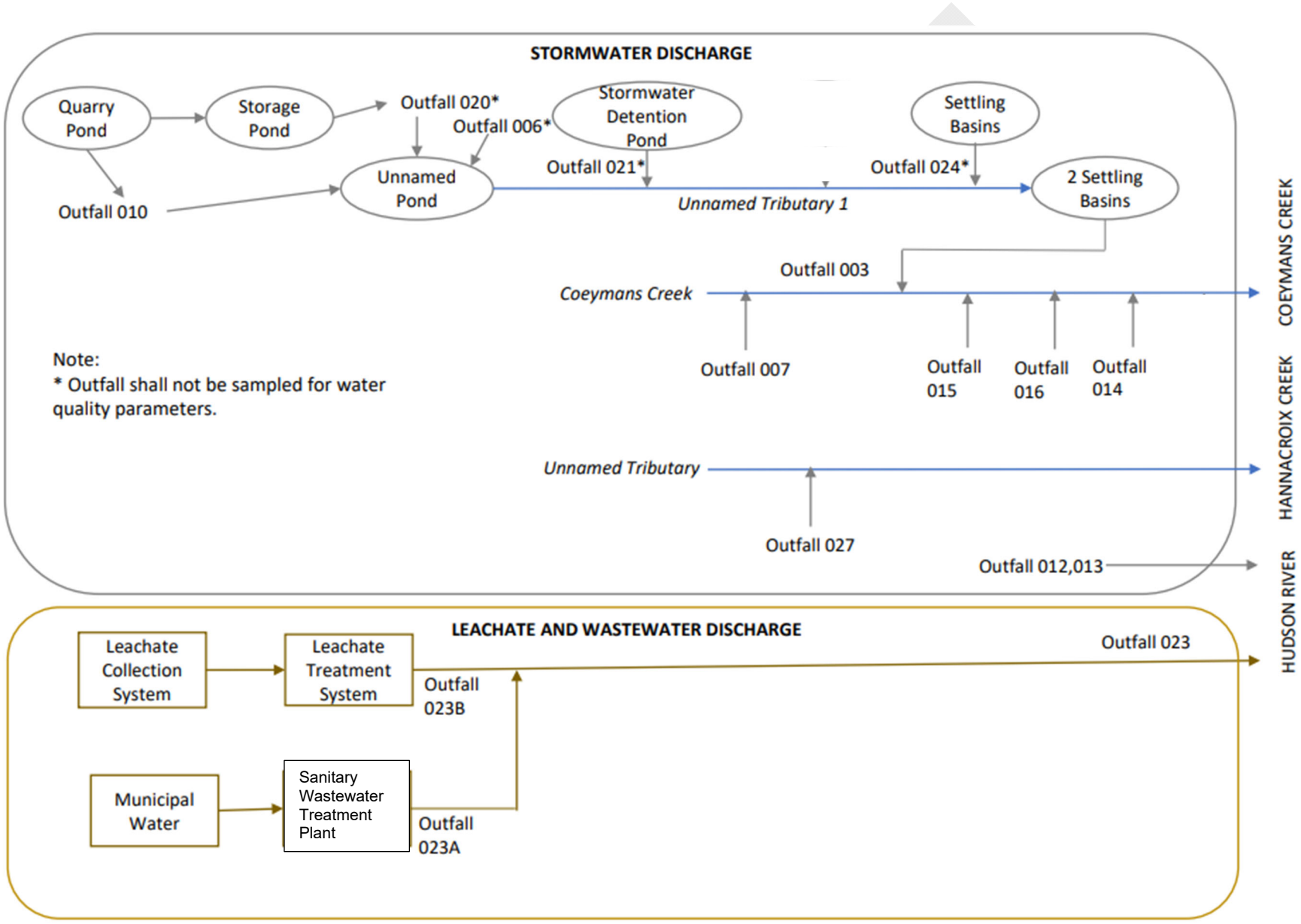
AMRIZE

AMRIZE RAVENA CEMENT PLANT

RAVENA, NEW YORK

OUTFALL LOCATIONS

PROJECT NUMBER:	DESIGNED BY:	DRAWN BY:	FIGURE:
	---		1
DATE:	CHECKED BY:	PROJECT MGR.	SHEET NUMBER:
NOVEMBER 2025	KJG	SMP	1 OF 1


STORMWATER DISCHARGE
Quarry Pond
Storage Pond
Outfall 020*
Outfall 006*
Stormwater Detention Pond
Settling Basins
Outfall 021*
Outfall 024*
Unnamed Pond
2 Settling Basins
Outfall 010
Unnamed Tributary 1
Outfall 003
Coeymans Creek
Outfall 007
Outfall 015
Outfall 016
Outfall 014
Note:
* Outfall shall not be sampled for water quality parameters.
Unnamed Tributary
Outfall 027
Outfall 012,013
COEYMANS CREEK
HANNACROIX CREEK
HUDSON RIVER
LEACHATE AND WASTEWATER DISCHARGE
Leachate Collection System
Leachate Treatment System
Outfall 023B
Outfall 023
Municipal Water
Sanitary Wastewater Treatment Plant
Outfall 023A

GENERAL REQUIREMENTS

A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through H as follows:

B. General Conditions

1.	Duty to comply	6 NYCRR 750-2.1(e) & 2.4
2.	Duty to reapply	6 NYCRR 750-1.16(a)
3.	Need to halt or reduce activity not a defense	6 NYCRR 750-2.1(g)
4.	Duty to mitigate	6 NYCRR 750-2.7(f)
5.	Permit actions	6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h)
6.	Property rights	6 NYCRR 750-2.2(b)
7.	Duty to provide information	6 NYCRR 750-2.1(i)
8.	Inspection and entry	6 NYCRR 750-2.1(a) & 2.3

C. Operation and Maintenance

1.	Proper Operation & Maintenance	6 NYCRR 750-2.8
2.	Bypass	6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7
3.	Upset	6 NYCRR 750-1.2(a)(94) & 2.8(c)

D. Monitoring and Records

1.	Monitoring and records	6 NYCRR 750-2.5(a)(2), 2.5(a)(6), 2.5(c)(1), 2.5(c)(2), & 2.5(d)
2.	Signatory requirements	6 NYCRR 750-1.8 & 2.5(b)

E. Reporting Requirements

1.	Reporting requirements for non-POTWs	6 NYCRR 750-2.5, 2.6, 2.7, &1.17
2.	Anticipated noncompliance	6 NYCRR 750-2.7(a)
3.	Transfers	6 NYCRR 750-1.17
4.	Monitoring reports	6 NYCRR 750-2.5(e)
5.	Compliance schedules	6 NYCRR 750-1.14(d)
6.	24-hour reporting	6 NYCRR 750-2.7(c) & (d)
7.	Other noncompliance	6 NYCRR 750-2.7(e)
8.	Other information	6 NYCRR 750-2.1(f)

F. Sludge Management

The permittee shall comply with all applicable requirements of 6 NYCRR Part 360.

G. SPDES Permit Program Fee

The permittee shall pay to the Department an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the Department, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.

H. Water Treatment Chemicals (WTCs)

New or increased use and discharge of a WTC requires prior Department review and authorization. At a minimum, the permittee must notify the Department in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The Department will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the Department. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.

1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized by the Department.
2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure excessive levels of WTCs are not used.
3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be submitted in electronic format and attached to either the December DMR or the annual monitoring report required below. The *WTC Notification Form and WTC Annual Report Form* are available from the Department's website at: http://www.dec.ny.gov/permits/93245.html

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RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

A. The monitoring information required by this permit shall be retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent.

B. Discharge Monitoring Reports (DMRs): Completed DMR forms shall be submitted for each 1 month reporting period in accordance with the DMR Manual available on Department's website.

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by NYSDEC. Instructions on the use of NetDMR can be found at https://www.dec.ny.gov/chemical/103774.html. **Hardcopy paper DMRs will only be received at the address listed below, directed to the Bureau of Water Compliance, if a waiver from the electronic submittal requirements has been granted by DEC to the facility.**

The first monitoring period begins on the effective date of this permit, and, unless otherwise required, the reports are due no later than the 28th day of the month following the end of each monitoring period.

C. Additional information required to be submitted by this permit shall be summarized and reported to the RWE and Bureau of Water Permits at the following addresses:

Department of Environmental Conservation
Division of Water, Bureau of Water Permits
625 Broadway, Albany, New York 12233-3505 Phone: (518) 402-8111

Department of Environmental Conservation
Regional Water Engineer, Region 04
1130 North Westcott Road, Schenectady, New York, 12306-2014 Phone: (518) 357-2045

D. Schedule of Additional Submittals:

The permittee shall submit the following information to the Regional Water Engineer and to the Bureau of Water Permits, unless otherwise instructed:

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
All Outfalls	BMP PLAN The permittee shall submit and annually review, or annually review] the completed BMP plan, submitted to this Department in February 2024, on an annual basis. The BMP plan shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants, (b) actual releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions must be submitted to the Regional Water Engineer within 30 days.	EDP + 6 Months, Annually thereafter on January 28th
006, 010, 012, 013, 015, 020, 021, 024, and 027	SHORT-TERM MERCURY MONITORING The permittee shall conduct and submit results for a single mercury sample collected at the representative outfalls.	EDP + 3 Months or at next discharge event if a discharge event does not occur within 3 months

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Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
All Outfalls	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	
023	WHOLE EFFLUENT TOXICITY (WET) TESTING WET testing shall be performed as required in the footnote of the permit limits table. The toxicity test report including all information requested of this permit shall be attached to your WET DMRs and sent to the WET@dec.ny.gov email address.	Within 60 days following the end of each monitoring period
023B	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite a semiannual mercury minimization status report in accordance with the requirements of this permit.	By January 31st and by June 30th each calendar year
010, 023, 024	EMERGING CONTAMINANT SHORT-TERM MONITORING The permittee shall collect grab samples of the effluent from the facility's treatment system(s) associated with the identified outfalls for Per-and Polyfluoroalkyl Substances (PFAS), utilizing EPA analytical method 1633, and 1,4-Dioxane. The samples must represent normal discharge conditions and treatment operations and shall be obtained on a monthly basis for at least three (3) consecutive months, or at the next discharge event if a discharge event does not occur for consecutive months. The results shall be reported through the "Emerging Contaminants Survey for Industrial Facilities" found at: Emerging Contaminants In NY's Waters - NYSDEC. Please utilize the link above to access the chain of custody template, monitoring template for laboratories, and monitoring template instructions for laboratories. For each month, please fill out the chain of custody template to reflect the required analytical sampling for each outfall using the correct sample naming convention (example provided in the form). The chain of custody, monitoring template, and monitoring template instructions should then be provided to the laboratory. The laboratory should complete the monitoring template, utilizing EQuIS EDD format, for each month of sampling. The completed chain of custody, monitoring template, and PDF laboratory reports should be submitted with the Emerging Contaminants Survey. The permittee shall initiate track down of potential sources by completing the "Emerging Contaminants Investigation Checklist for Industrial Facilities" available at the above link. The DEC may periodically request updates or additional monitoring to check progress on track down investigations. Elements of the checklist may be used as permit conditions in future permit modifications.	EDP + 6 Months Within 90 days of DEC written notification

E. Monitoring and analysis shall be conducted using sufficiently sensitive test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

F. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.

G. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

H. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.

I. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

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SPDES Permit Fact Sheet
Amrize Cement Inc.
Amrize Ravena
NY0005037

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NEW YORK STATE | Department of Environmental Conservation

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Summary of Permit Changes

After a full technical review, DEC drafted a State Pollutant Discharge Elimination System (SPDES) permit, which also includes modifications, as requested by the permittee, Amrize Inc. The changes to the permit are summarized below:

General Updates

- Updated permit format, definitions, and general conditions throughout permit
- Removed Outfalls 008, 017, 018, and 019 from the permit
- Added a Mercury Minimization Plan (MMP) for MMP Type III
- Added Emerging Contaminant short-term monitoring program for Per-and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane at Outfalls 010, 023, and 024

Outfall 023A, 023B, and 023

- Removed effluent limitations for aluminum at Outfall 023 (limitations at 023B remain)
- Removed monitoring requirement for molybdenum at Outfall 023
- Removed monthly average monitoring requirements for total residual chlorine (TRC), ammonia, and settleable solids at Outfall 023A (daily max limits remain)
- Removed monthly average monitoring requirements for settleable solids, total dissolved solids (TDS), total suspended solids (TSS)
- Removed monitoring requirements for sulfate at Outfall 023B

Whole Effluent Toxicity (WET) at Outfall 023

- Changed the acute WET action level of 15 TUa to an effluent limitation
- Changed the chronic WET action level to an effluent limitation and increased it from 90 to 100 TUc
- Increased the WET frequency from quarterly for a year, every five years, to continuous quarterly

Mercury Requirements

- Removed monthly average monitoring requirement for mercury at Outfall 023B (daily max remains)
- Reduced the daily max mercury effluent limitation from 50 ng/L to 35 ng/L at Outfall 023B and included an associated Schedule of Compliance item with interim limitation of 98 ng/L
    - Engineering report/study submittal
- Increased mercury sampling frequency from quarterly to monthly at Outfall 023B, with interim frequency of weekly
- Added a requirement to perform short-term mercury sampling at Outfalls 006, 010, 012, 013, 015, 020, 021, 024, and 027

Total Dissolved Solids (TDS)

- Added a daily max effluent limitation for TDS of 500 mg/L at Outfalls 006, 021, and 024 and associated Schedule of Compliance items for each outfall, with individual interim limitations
    - Engineering report/study submittal
- Added monitoring for daily max TDS at Outfalls 010, 014, 015, 016, and 020
- Removed monthly average TDS monitoring requirements at Outfalls 003, 006, 007, 010, 012, 014, 015, 016, 020, 021, 024, 027 (daily max requirements remain)
- Reduced the monitoring frequency for TDS from monthly to quarterly at Outfall 003

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Other Changes

- Updated outfall location coordinates for Outfalls 014 and 016
- Decreased pH effluent limitations from 6.0 – 9.0 to 6.5 – 8.5 at Outfalls 006, 010, 020, 021, and 024
- Added or reduced daily max and monthly average effluent limitations for Total Suspended Solids (TSS) to 40 mg/L and 20 mg/L, respectively, at Outfalls 003, 007, 012, 014, 015, 016, and 027
- Removed monitoring for monthly average sulfate and sulfite at Outfall 012 and 013 (daily max monitor remains)
- Removed monthly average monitoring requirements for settleable solids, and oil and grease at Outfalls 003, 006, 007, 010, 012, 013, 014, 015, 016, 020, 021, 024, and 027 (daily max requirements remain)
- Removed monthly average monitoring requirements for TSS at Outfall 013
- Increased sampling frequency at Outfall 010 and 020 from quarterly to monthly
- Decreased sampling frequency at Outfall 021 and 024 from monthly to quarterly

This factsheet summarizes the information used to determine the effluent limitations (limits) and other conditions contained in the permit. General background information, including the regulatory basis for the effluent limitations and other conditions, is provided in Appendix A, which is linked throughout this factsheet.

Administrative History

10/01/2015 The permit was administratively renewed in 2015 and was effective until 9/30/2020. The 2015 permit, along with all subsequent modifications, has formed the basis of this permit.

6/03/2016 DEC issued a permit modification extending the deadline to install BTA (wedgewire screening system) for Biological Monitoring Requirements.

6/30/2017 DEC issued a permit modification removing Outfall 025.

1/7/2019 DEC issued a permit modification transferring the facility's LRP from Lafarge Building Materials, Inc. to Holcim (US) Inc.

4/22/2019 DEC issued a permit modification to change the location of Outfall 023B.

3/30/2020 The permittee submitted a short-form renewal application that included modification requests for several outfalls.

5/5/2020 DEC issued a letter confirming that, pursuant to SAPA[1], the current permit remains in effect until DEC makes a final decision on the renewal application. The letter also notified the Permittee that DEC would be conducting a full technical review of the permit/facility.

12/23/2021 Permittee submitted a modification request, including items from the short-form renewal from 2020, for the following changes (see Modification Request Response below):

- Remove Outfalls 008, 017, 018, and 019
- Revise the locations (coordinates) of Outfalls 006, 020, 021 & 023
- Remove monitoring and limitation requirements at Outfalls 006, 010, 020, 021 and 024, claiming these outfalls are internal outfalls of 003
- Add a new Outfall 028 for the stormwater from the new haul road

[1] State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(*l*)

- Remove biological monitoring requirements for water withdrawal
- Change the Mercury Minimization Plan (MMP) annual report due date from October 31st to January 31st

10/21/2022 In response to the modification request and the SAPA-extended status of the current permit, DEC sent a Request for Information (RFI) to submit a full NY-2C form for permit renewal.

01/16/2023 Permittee submitted a completed form NY-2C for permit renewal.

09/14/2023 DEC sent a letter to the permittee identifying concerns with 1) the location of Outfalls 014 and 016 within New York State Thruway Authority (NYSTA) property, and 2) the inclusion of a new Outfall 028 for the haul road stormwater in the permit, while review of the project as a whole is ongoing.

03/25/2024 DEC participated in a meeting with the Albany County Department of Public Works (DPW) to discuss their concerns about the proposed haul road and Outfall 028.

06/03/2024 Permittee submitted a response to DEC regarding concerns received from the Albany County DPW regarding the proposed haul road and Outfall 028.

06/25/2024 Permittee submitted a request to remove Outfall 016 from the SPDES permit.

07/22/2024 DEC sent correspondence denying the request to remove Outfall No. 016.

11/01/2024 Permittee submitted plans depicting the removal of piping/relocation of Outfall No. 014 from NYSTA property and extension of piping for Outfall No. 016 to discharge on land owned by the permittee.

11/20/2024 NYSTA indicates they have no comments on Amrize's plans for relocation of Outfalls 014 and 016.

05/05/2025 The permittee submitted a modification request and outfall closure plan to remove Outfall 017 from the permit.

08/29/2025 Permittee submitted revised NY-2C form removing the request to add Outfall No. 28.

09/10/2025 DEC approved the decommissioning plan for Outfall 017.

The Notice of Complete Application, published in the Environmental Notice Bulletin and newspapers, contains information on the public notice process.

Facility Information

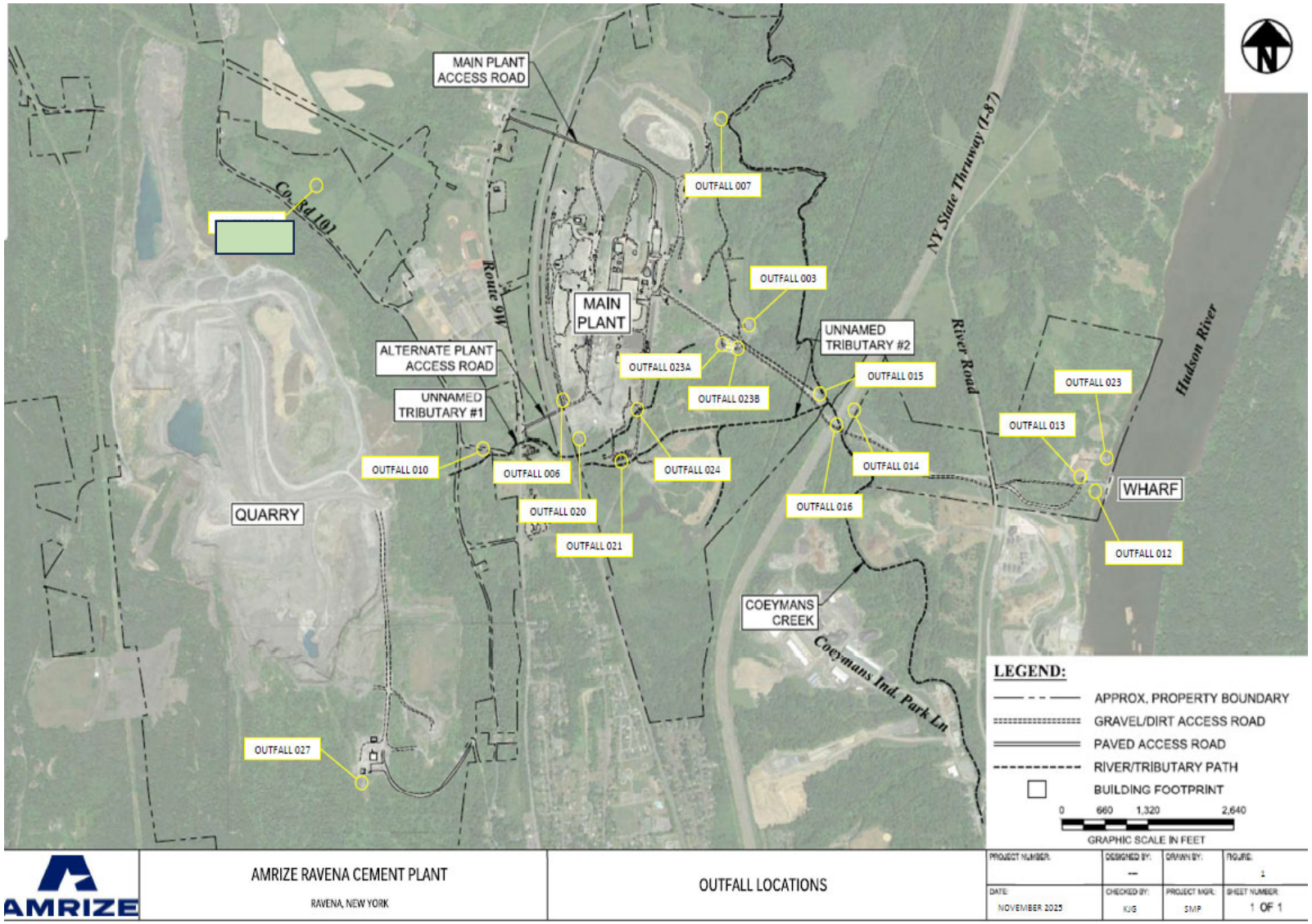
This is an industrial facility (SIC code 3241) that primarily produces hydraulic cement. The facility also produces portland, natural, masonry and pozzolana cements. This facility has 14 outfalls with effluent consisting of stormwater, treated process water, treated sanitary wastewater, and treated Cement Kiln Dust (CKD) landfill leachate. Sludge from the sanitary treatment system and leachate treatment system is disposed of off-site.

As identified by the permittee, Outfalls 006, 010, 013, 020, 021, and 024 are covered by USEPA Effluent Limitation Guidelines (ELGs) under 40 CFR Part 411 Subpart C for Materials Storage Piles Runoff. Outfalls 010 and 020 are also covered by ELGs under 40 CFR Part 436 Subpart B for Mineral Mining and Processing Point Source Category, Subpart B for Crushed Stone (see Effluent Limitation Guidelines section below).

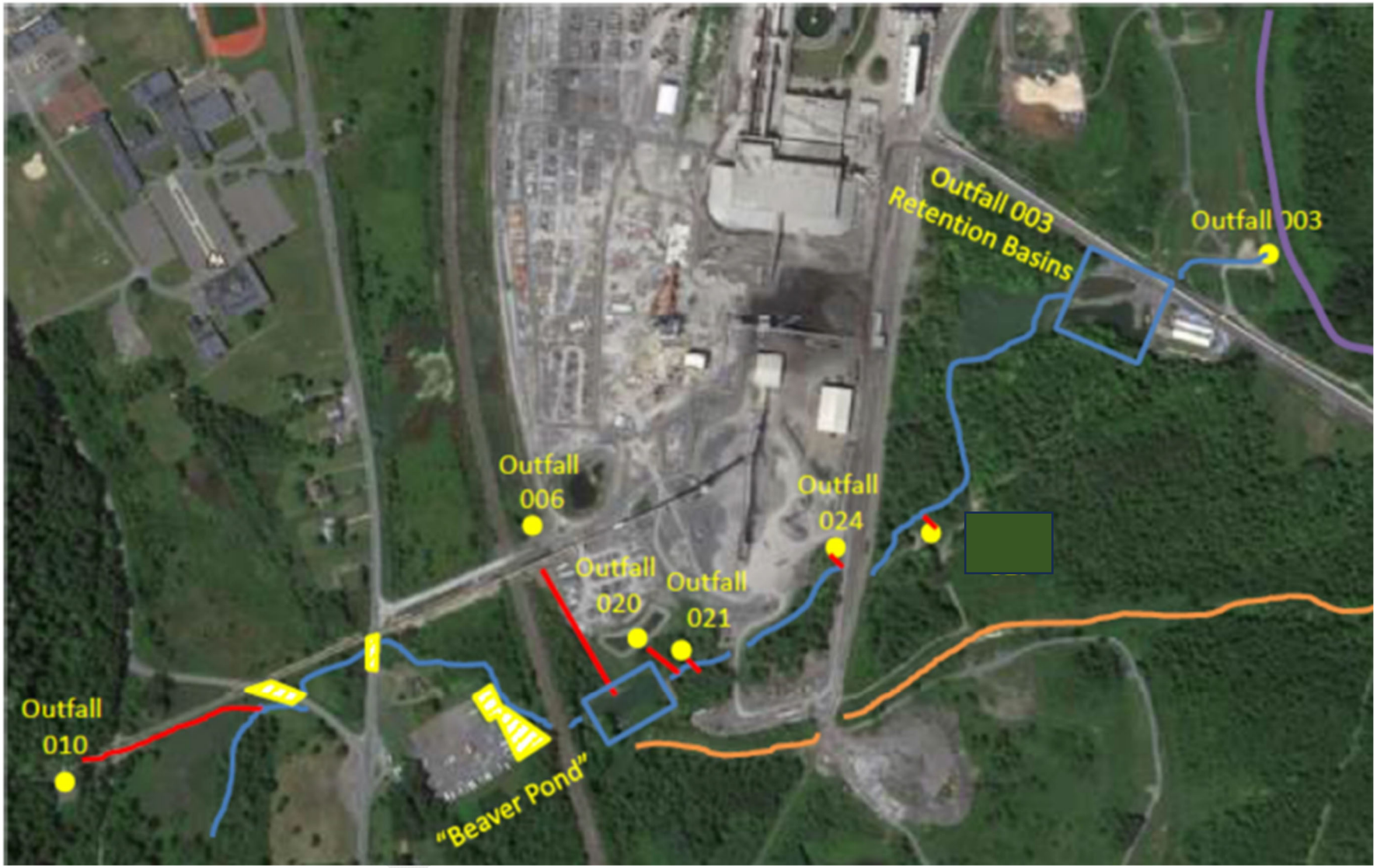
Outfall No.	Wastewater Type	Treatment Description
Removed Outfalls		
008	Removed as the Becraft pond dewatering water no longer exists.	
017	Removed. DEC approved outfall closure plan September 17, 2025.	
018	Removed as DEC approved the outfall closure plan in August 2021.	
019	Removed. Stormwater redirected to Outfall 014. Confirmed by DEC's inspection on 07/22/2020.	
Outfalls to Coeymans Creek, Class C(TS)		
003	Stormwater	Settling Basins
007	Stormwater from CKD landfill	Floc Socks, Drainage Swale and Sediment Trap
014	Stormwater	Riprap swale; Sedimentation Basins/Trap
015	Stormwater	Riprap swales; Floc Sock and Forebay
016	Stormwater	Bio-swales
Outfalls to Unnamed Tributary 1 to Coeymans Creek, Class C		
006	Stormwater	Pond and Swale
010	Quarry pump-out water and stormwater	Swale and Sedimentation Basin
020	Quarry pump-out water and stormwater	Retention Pond
021	Stormwater	Sedimentation Basins
024	Stormwater	Clinker Hall Swale; Fly Ash Swale, Forebay and Sedimentation Basins
Outfalls to Unnamed Tributary 2 to Hannacroix Creek, Class C		
027	Stormwater	Riprap Swale
Outfalls to Hudson River, Class C		
012	Stormwater	Swale and Sedimentation Basins
013	Stormwater	Floc sock and Sedimentation Basins
023 Main Outfall	Treated sanitary wastewater and treated CKD leachate	See Outfall 023A and 023B
023A Internal to 023	Treated sanitary wastewater	Septic Tank, Bioclere units and Disinfection
023B Internal to 023	Treated CKD landfill leachate	pH Correction, Sedimentation, and Filtration

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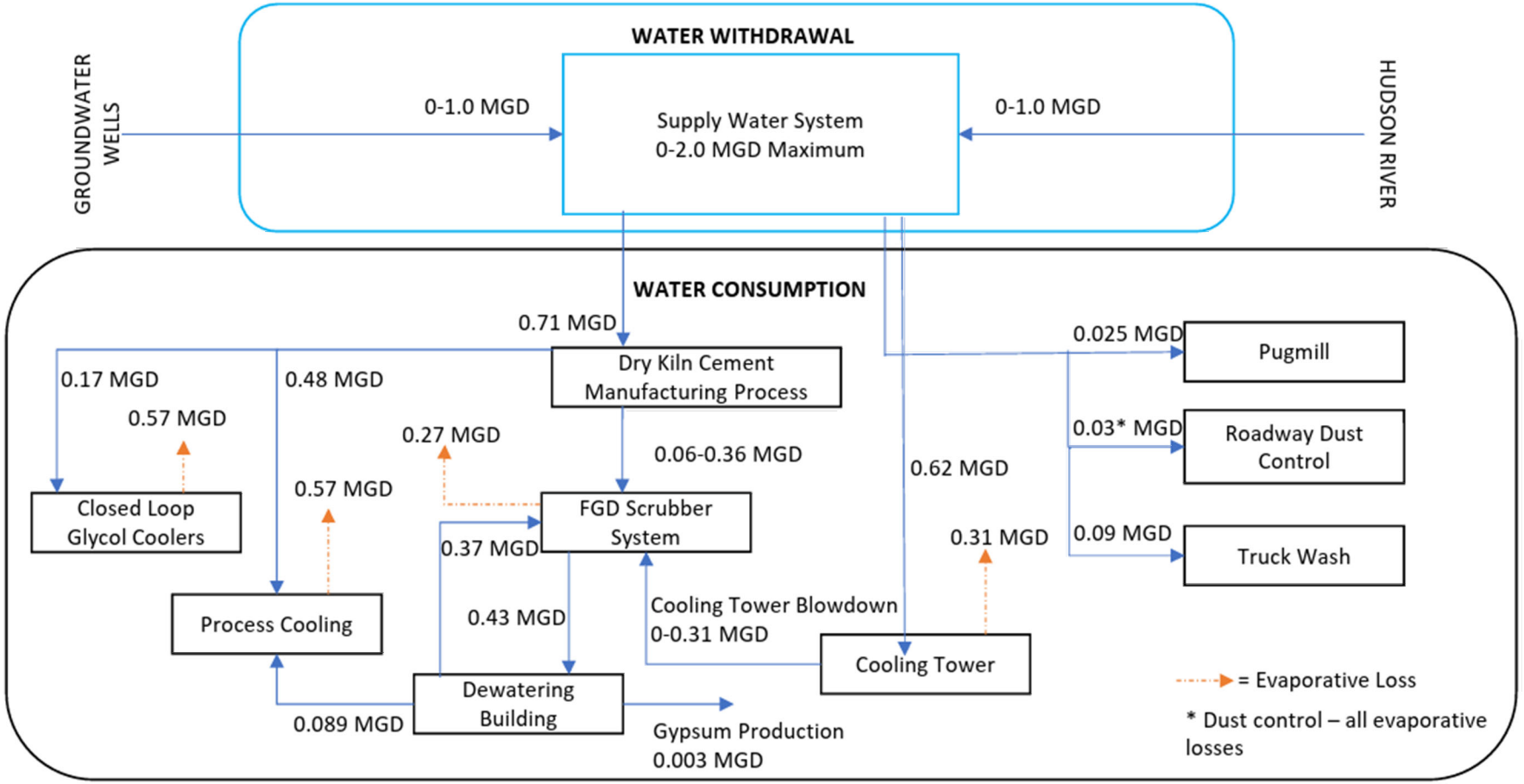
Site Overview



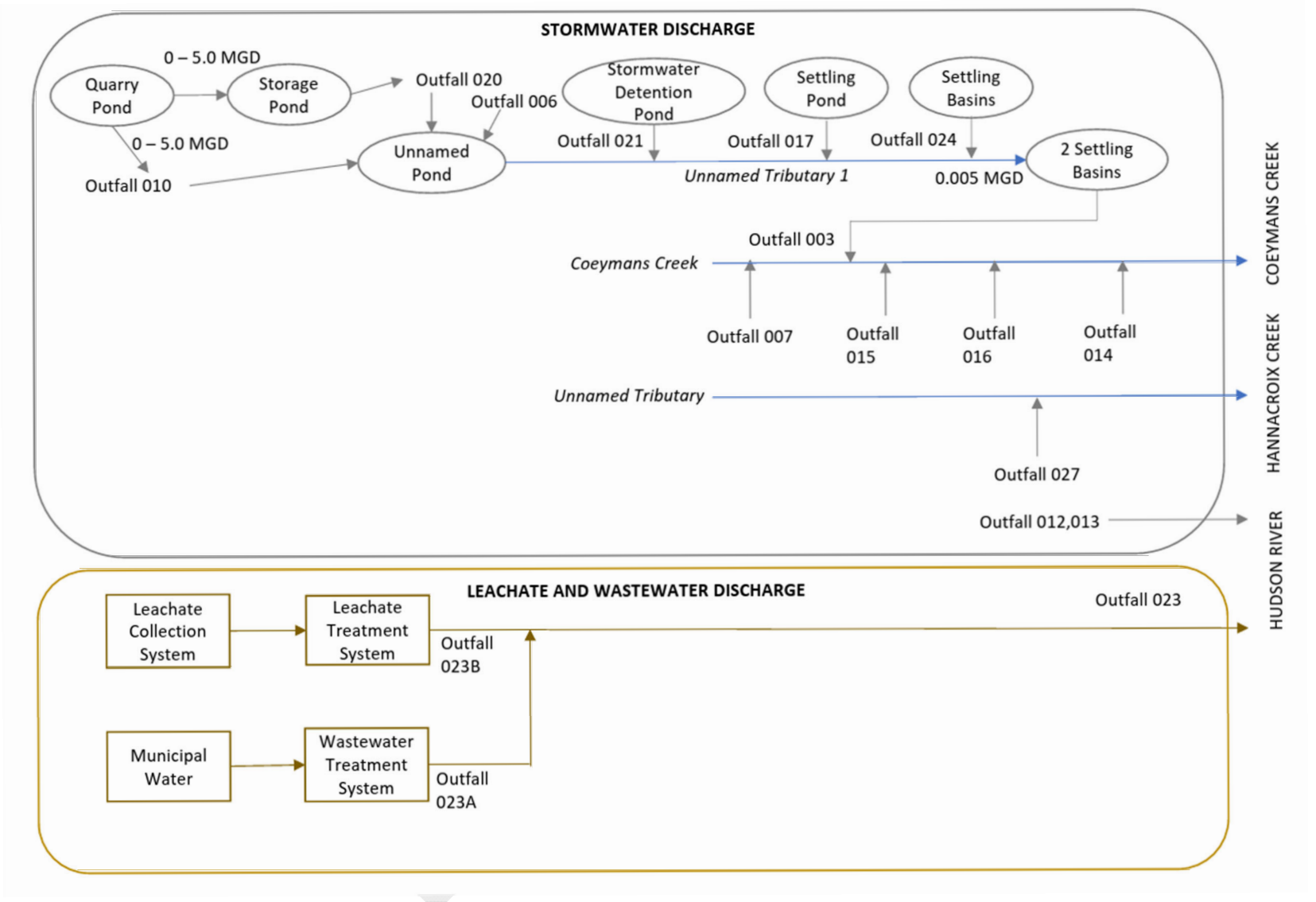
Site Overview: Contributions to Unnamed Trib 1 of Coeymans Creek



Process Flow Diagram



Outfall Treatment Schematic



Discussion on Outfall 014 and 016

To meet the requirements of 6 NYCRR 750-2.3(f), the permittee has proposed to permanently move Outfalls 014 and 016 to locations not on New York State Thruway Authority (NYSTA) property. Thus, the permit includes the proposed coordinates for Outfall 014 and 016. As the new location will continue to discharge to the same waterbody, with same classification, the same permit requirements apply for the proposed locations as the existing locations. The outfall relocation work will take place prior to the effective date of the SPDES permit.

Modification Request Response

The SPDES permit includes the following modifications (see Administrative History for modification request dates):

1. Outfalls 008, 017, 018 and 019 have been removed from the permit with justifications provided in the table above.
2. Location coordinates for Outfalls 006, 020, 021 and 023 have been updated.
3. The reporting requirement for cumulative reductions in impingement and entrainment, and analysis of technologies was removed.
4. The annual submission date for the Mercury Minimization Plan (MMP) was changed from October 31 to January 31 of each year.

Enforcement History

The permittee entered into a Consent Decree Civil Action No. 1:21-cv-490 (GTS/DJS), dated April 12, 2021. The Consent Decree required the facility to implement corrective measures and meet compliance requirements, including developing and implementing a Best Management Practices (BMP) Plan and an Operations and Maintenance (O&M) Plan. The facility was also required to comply with all SPDES permit effluent limitations, including toxicity reduction/evaluation requirements, a mercury minimization plan, and biological monitoring requirements.

On November 3, 2025, the United States Attorney for the Northern District of New York submitted a request letter to the U.S. District Judge to terminate the Consent Decree. The letter stated that Amrize, LLC fulfilled all corrective measures and compliance requirements outlined in the Consent Decree.

Additional compliance and enforcement information can be found on the EPA's Enforcement and Compliance History Online (ECHO) website.

Existing Effluent Quality

The Pollutant Summary Table presents the existing effluent quality (EEQ) as determined from Discharge Monitoring Reports (DMRs) submitted by the permittee for the period of 01/1/2021 to 12/31/2025. This information has not been updated with more recent data, as the 2021-2025 data remains representative of the facility's general performance and significant changes in facility operations have not occurred in more recent years. Appendix A

Cooling Water Intake Structure (CWIS)

The facility currently uses a closed-cycle cooling system that withdraws make-up water from on-site wells, quarry water, and as the last option during drought conditions, the Hudson River. The cooling water intake structure is subject to the performance goals of Commissioner's Policy 52 (CP-52). Appendix B contains the Biological Fact Sheet with details of the permit requirements related to the CWIS.

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Receiving Water Information

See the Outfall and Receiving Water Summary Table and Appendix A for additional information.

Impaired Waterbody Information

The Hudson River segment (PWL No. 1301-0002) is listed on the 2020-2022 New York State Section 303(d) List of Impaired/TMDL Waters (303d List) as impaired due to PCBs. A TMDL has not been developed to address the impairment and, therefore, there are no applicable wasteload allocations for PCBs for this discharge.

None of the other receiving waterbodies are listed on the 303d list.

Critical Flows and Dilution Ratios

Critical Flow for Hudson River, Class C:
Consistent with TOGS 1.3.1.D, page 3, the USGS gage for the Hudson River at Green Island (Gage ID: 01358000), located approximately 20 miles upstream from Outfall 023, and the USGS/NYSDEC Bulletin 74, 1979, document are the basis for the 7Q10 low flow condition for the Hudson River (Outfalls 012, 013, and 023). Consistent with TOGS 1.3.1, page 8, DEC set the 1Q10 flow as half the 7Q10. DEC set the 30Q10 flow as 1.2 x 7Q10.

Gage ID: 01358000
Drainage Area at Gage (mi^2): 8090
7Q10 Flow at Gage (CFS): 2780 (1796 MGD)

The dilution ratios were calculated using the standard formula shown below with the acute dilution using the 1Q10, chronic dilution using the 7Q10, and HEW dilution using the 30Q10. However, given the discharge flows from Outfalls 012, 013, and 023 (as shown in the Outfall and Receiving Water Summary Table) the dilution ratios exceed the maximum allowed values in TOGS 1.3.1, page 7, for large flowing rivers. As a result, DEC applied the maximum dilution ratios; 50:1 for acute and 100:1 for chronic/HEW :

Dilution Ratio = Dilution Ratio = (Facility Flow + Critical Low Flow) / Facility Flow

Critical Flow for Coeymans Creek, Class C(TS):
The low flow conditions and dilution ratio calculations for Coeymans Creek (Outfalls 003, 007, 014, 015, and 016) followed the same process and rationale as described above for the Hudson River, except the USGS gage for Coeymans Creek near Selkirk, NY (Gage ID: 01359902) was used. This gage is located approximately 3.5 miles upstream from Outfall 003. The low flow conditions at the gage were additionally adjusted using a drainage basin ratio analysis to reflect the downstream condition at the point of discharge.

Gage ID: 01359902
Drainage Area at Gage (mi^2): 35
Drainage Area at discharge point (near Outfall 003) = 53
7Q10 Flow at Gage (CFS): 1.6 (1.0 MGD)
7Q10 Flow at the Outfall (CFS) = 2.4 (1.6 MGD)

Using the critical low flows above and the facility flows shown in the Outfall and Receiving Water Summary Table, DEC calculated the dilution ratios from the following formula:

Dilution Ratio = (Facility Flow + Critical Low Flow) / Facility Flow

Stormwater Outfalls 014, 015, and 016, discharging to Coeymans Creek, do not have a formal outfall structures and accurate flow data is not feasible to routinely collect and has not been a

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permit requirement. As such, dilution ratios cannot be calculated. The requirements for these outfalls are driven by TBELs, as explained further in the Pollutant Summary Table.

Coeymans Creek Outfalls					
Outfall No.	Wastewater Type	Dilution Ratios			Basis
		Acute	Chronic	HEW	
003	Stormwater	5.5:1	10:1	12:1	Average monthly flow of 0.17 MGD
007	Stormwater from CKD landfill	8.5:1	16:1	18:1	Average monthly flow of 0.102 MGD
014	Stormwater	-	-	-	Flow is not monitored, and outfalls have not been assigned dilution ratios
015	Stormwater	-	-	-	
016	Stormwater	-	-	-	

Outfalls Discharging to Unnamed Tributary 1 to Coeymans Creek, Class C, and Unnamed Tributary 2 to Hannacroix Creek, Class C:

DEC applied intermittent stream effluent limits (ISEL) to Outfalls 006, 010, 020, 021, 024, and 027 as the receiving tributaries have upstream drainage areas less than one acre. This indicates low critical flow conditions. Thus, consistent with TOGS 1.3.1, page 11, and TOGS 1.3.1.B, DEC applied the WQS as end-of-pipe limitations with no mixing or dilution (see Outfall and Receiving Water Summary Table).

Permit Requirements

The technology based effluent limitations (TBELs), water quality-based effluent limitations (WQBELs) for the protection of WQS (WQS), Existing Effluent Quality and a discussion of the selected effluent limitation for each pollutant present in the discharge are provided in the Pollutant Summary Table.

Anti-backsliding

The limitations contained in the permit are at least as stringent as the previous permit limits and there are no instances of backsliding. Appendix A Link

Antidegradation

The permit contains effluent limitations which ensure that the best usages of the receiving waters will be maintained. The Notice of Complete Application published in the Environmental Notice Bulletin contains information on the State Environmental Quality Review (SEQR)[2] determination. Appendix A Link

[2] As prescribed by 6 NYCRR Part 617

Whole Effluent Toxicity (WET) Testing

Consistent with TOGS 1.3.2, pages 8-9 and 23-24, DEC reviewed the January through July 2025 WET results for Outfall 023 (see table summary below) and determined that reasonable potential does exist to violate the acute and chronic WQS. As such, DEC modified the acute and chronic action levels to effluent limitations. The acute limit represents the acute dilution ratio times the acute criterion of 0.3 and is unchanged from the existing action levels. The chronic limit represents the chronic dilution ratio and is a slight change from 90 TUc to 100 TUc.

Under the new permit, and consistent with TOGS 1.3.2, page 10, the facility is required to perform continuous quarterly chronic testing. Chronic testing is required given the historical toxicity observed with this discharge and eliminates having to run a round of chronic testing immediately after the acute testing. A report of all testing activity and results is to be sent to DEC and should contain the specific data outlined in TOGS 1.3.2, Appendix I. Appendix A Link

Test Date	[1]MSS 48H LC50 (%Effluent)	[2]MSS TUa	[3]TUa Action Level	[4]MSS Survival 40% Effluent	[5]Acute Test Result	[6]MSS RPD TUa	[7]Acute WET Limit Required	[8]MSS 7D NOEC/IC25 (%Effluent)	[9]MSS NOEC/IC25 TUc	[10]TUc Limit	[11]Chronic Test Result NOEC/IC25	[12]MSS RPD IC25 TUc	[13]Chronic WET Limit Required
01/25	12.3% (I)	8.1 (I)	15.0	0% (FI)	Pass	21.1	**Yes**	<2.5% (I)/1.6% (I)	>40.0 (I)/62.5 (I)	100.0	*Pass*/Pass	162.5	**Yes**
04/25	>40% (FI)	<2.5 (FI)	15.0	100% (FI)	Pass	<6.5	No	[A]5% (I)/8.9% (I)	[a]20.0 (I)/11.2 (I)	100.0	Pass/Pass	29.1	No
07/25	>40% (FI)	<2.5 (FI)	15.0	97.5% (F)	Pass	<6.5	No	5% (I)/6.9% (I)	20.0 (I)/14.5 (I)	100.0	Pass/Pass	37.7	No
10/25	15.2% (I)	6.6 (I)	15.0	10% (I)	Pass	17.2	**Yes**	5% (I)/7.2% (I)	20.0 (I)/13.9 (I)	100.0	Pass/Pass	36.1	No

[A]The reported Q2 invertebrate NOEC reproductive result of 10% or 10.0 TUc is likely underestimated based on the elevated Percent Minimum Significant Difference (PMSD) of 40%, which is nearing the upper bound, meaning the test has low sensitivity. Comparing the Control vs. 10% effluent, there is a 25% reproductive effect with an average of 16.3, 18.7, 19.4, 12.3 (25% effect), 2.1 (87% effect), and 0.0 (100% effect) young produced in the Control, 2.5%, 5%, 10%, 20%, and 40% effluent respectively. Therefore, the NOEC result is considered to be 5% or 20.0 TUc, which is more in line with the generated IC25.

[1]Most Sensitive Species 48-hour Lethal Concentration: (F=Fish; I=Invertebrate) is the percentage of effluent that is lethal to 50% of the exposed organisms over a 48-hour period, and often indicates one species is more sensitive than the other during effluent testing.

[2]Most Sensitive Species Toxic Units Acute: is calculated as (100 / MSS 48H LC50). However, because ≤ 0.3 TUa is defined as the acceptable amount of Acute toxicity at the edge of the Acute mixing zone, and mathematically 100 / 100 = 1.0 (i.e. a failing result), non-toxic Acute test results are indicated as < 0.3.

[3]Toxic Unit Acute Action Level/Limit: is calculated as [Acute Dilution Factor x 0.3 TUa] representing the maximum allowable effluent TUa at the edge of the Acute mixing zone ensuring Acute protection of the receiving water. When the Acute Dilution Factor is < 3.3, the default Acute Action Level/Limit of 0.3 TUa is used representing the maximum allowable effluent TUa at the end of pipe.

[4]Most Sensitive Species Survival in 100% Effluent: is the lowest percentage of surviving organisms in 100% effluent, providing additional evidence of unacceptable Acute toxicity when the necessary 50% or greater mortality required to generate an LC50 has not been attained. *Denotes statistically significant mortality in 100% effluent as compared to the control.

[5]Acute Test Result: MSS TUa ≤ TUa Action Level/Limit for passing effluent test result and MSS TUa > TUa Action Level//Limit for a failing effluent test result. If unacceptable mortality (i.e. statistically significant as compared to the control) is noted in 100% effluent, this may also be considered a failing test result.

[6]Most Sensitive Species Reasonable Potential Determination Toxic Units Acute: is calculated as (MSS TUa x 2.6), the Reasonable Potential Multiplier when four tests have been completed, taking into account the statistical potential for effluent variability to occur causing an exceedance of the Acute Action Level, triggering the need for Acute Limits.

[7]Acute Whole Effluent Toxicity Limit Required: MSS RPD TUa ≤ TUa Action Level, then an Acute Limit is not required, and the Action Level remains in place. If MSS RPD TUa > TUa Action Level, then an Acute Limit is required, and the Action Level becomes the Limit. **In low dilution situations, the application of the Reasonable Potential Multiplier to the Acute results often mathematically suggests the need for Acute Limits even when there is no toxicity evident in 100% effluent (i.e. a non-detect). Therefore, this data cannot be used to implement an Acute Limit.

[8]Most Sensitive Species 7-day No Observed Effect Concentration or 25% Inhibition Concentration: is the highest percentage of effluent tested that causes no statistically significant effect to the exposed test organisms as compared to the control over a 7-day period or the percentage of effluent that causes a 25% reduction in survival, growth, or reproduction for the test population.

[9]Most Sensitive Species Toxic Units Chronic: is calculated as (100 / MSS 7D NOEC) or (100 / MSS 7D IC25).

[10]Toxic Unit Chronic Action Level/Limit: is calculated as [Chronic Dilution Factor x 1.0 TUc] representing the maximum allowable effluent TUc at the edge of the Chronic mixing zone ensuring Chronic protection of the receiving water.

[11]Chronic Test Result: MSS NOEC/IC25 TUc ≤ TUc Action Level/Limit for passing effluent test result and MSS NOEC/IC25 TUc > TUc Action Level/Limit for a failing effluent test result.

[12]Most Sensitive Species Reasonable Potential Determination Toxic Units Chronic: is calculated as (MSS IC25 TUc x 2.6), the Reasonable Potential Multiplier when four tests have been completed, taking into account the statistical potential for effluent variability to occur causing an exceedance of the toxicity-based Action Level, triggering the need for Chronic Limits.

[13]Chronic Whole Effluent Toxicity Limit Required: MSS RPD IC25 TUc ≤ TUc Action Level, then a Chronic Limit is not required, and the Action Level remains in place. If MSS RPD IC25 TUc > TUc Action Level, then a Chronic Limit is required, and the Action Level becomes the Limit. ***In low dilution situations, the application of the Reasonable Potential Multiplier the Chronic results often mathematically suggests the need for Chronic Limits even when there is no toxicity evident in 100% effluent (i.e. a non-detect). Therefore, this data cannot be used to implement a Chronic Limit.

Discharge Notification Act Requirements

In accordance with the ECL 17-0815-a and 6 NYCRR 750-1.12, the permittee is required to continue to post a sign at each point of wastewater discharge to surface waters. Additionally, the permit contains a requirement to make the DMR sampling data available to the public in accordance with 6 NYCRR 750-1.12(b)(2).

Best Management Practices (BMPs) for Industrial Facilities

In accordance with 6 NYCRR 750-1.14(f) and 40 CFR 122.44(k), the permittee is required to continue implementation of a BMP plan that prevents or minimizes the potential for the release of toxic or hazardous pollutants to state waters. The BMP plan requires annual review by the permittee. Appendix Link

Water Treatment Chemical (WTC) Annual Report

In accordance with 6 NYCRR 750-2.1(i), the permit continues to require submission of an annual report each year that the permittee uses and discharges WTCs. The permittee must summarize all WTC use for the prior calendar year, January 1 through December 31, and attach it either to the December DMR or annual monitoring report required by the permit. More information is located on the DEC's website under SPDES Permitting of Water Treatment Chemicals.

Biological Monitoring

Appendix B contains the Biological Fact Sheet with details of the permit requirements related to biological monitoring and the CWIS. These requirements are continued from the previous permit.

Stormwater Pollution Prevention Requirements

The facility discharges stormwater associated with industrial activity and requires SPDES permit coverage under 40 CFR 122.26(a)(6).

As the facility's operation may expose stormwater to pollutants, stormwater discharges at this facility cannot obtain coverage under the current Multi-Sector General Permit (MSGP) (GP-0-23-001). Thus, the facility's operations require coverage under an individual SPDES permit. The permit continues requirements for the stormwater outfalls that are consistent with the MSGP Sector E.

Schedule of Compliance

The permit includes a Schedule of Compliance for the following items (Appendix A Link):

- Compliance period for attainment of final effluent limits for TDS (Outfalls 006, 021, & 024) and Mercury (Outfall 023B)
    - A major modification to the treatment facility or operations may be needed and will take a significant amount of time to properly plan, design, fund, and construct

Mercury[3]

The Multiple Discharge Variance (MDV) for mercury provides the framework for NYSDEC to require mercury monitoring and Mercury Minimization Programs (MMPs), through SPDES permitting. Appendix A Link

The facility is an EPA-designated significant Class 03 industrial facility located outside the Great Lakes watershed. Consistent with DOW 1.3.10, DEC updated the permit MMP requirements for the implementation of MMP Type III.

Consistent with DOW 1.3.10, DEC decreased daily max effluent limitation at Outfall 023B (CKD landfill leachate) from 50 to 35 ng/L to match the General Level Currently Achievable (GLCA). From 2021 – 2025 the effluent at Outfall 023B measured a maximum concentration of 71 ng/L, a minimum of 9.8 ng/L, and an average of 35 ng/L. Based on this data, the facility cannot immediately achieve the reduced daily max limit. Thus, the permit includes a five-year Schedule of Compliance with an interim effluent limitation set at the EEQ of 98 ng/L (99th lognormal percentile), consistent with TOGS 1.2.1, page 16. In accordance with 6 NYCRR 750-1.14(b), the facility is also required to submit a semi-annual Mercury Minimization Program (MMP) status report.

Outfalls 003, 007, 014, and 023A were sampled in March 2026 and do not have any mercury sources. Therefore, consistent with TOGS 1.3.10, Part III.E., the permit does not include effluent limitations or monitoring requirements for these outfalls.

The remaining outfalls (Outfalls 006, 010, 012, 013, 015, 020, 021, 024, and 027) were not required to be sampled for mercury as part of the NY-2C application. However, due to the potential source of mercury in the stormwater on the site, the permit includes a requirement in the Schedule of Additional Submittals to perform short-term mercury monitoring to confirm no mercury sources exist for the stormwater outfalls, consistent with TOGS 1.3.10, Part III.E. The exception is Outfall 015, which is very close in proximity to Outfall 014, and does not regularly discharge. The result for Outfall 014 is assumed representative of the Outfall 015 drainage area.

Emerging Contaminant Short-term Monitoring

Pursuant to 6 NYCRR 750-1.13(b), to evaluate the effluent discharge levels of Per-and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane, the permit includes a short-term monitoring program, listed in the Schedule of Additional Submittals, for Outfalls 10, 023, and 024. The permit includes sampling at these three outfalls as representative stormwater outfalls for the site; however, depending on those results, additional sampling at other stormwater outfalls may be required. This monitoring program is consistent with guidance released in EPA guidance memos dated April 28, 2022, and December 5, 2022.

On a monthly basis for at least three consecutive months, the permittee shall collect, under normal discharge conditions, grab samples of the effluent for analysis. Results must be reported through the “Emerging Contaminants Survey for Industrials” and on the provided monitoring template, which can be found at this link: Emerging Contaminants In NY's Waters - NYSDEC.

The DEC will review the monitoring results and, pursuant to 6 NYCRR 750-2.1(i), may notify the permittee of the need for further monitoring to identify potential sources as specified in the Emerging Contaminants Investigation Checklist for Industrial Facilities to determine whether cause exists to modify the permit to incorporate a pollutant minimization program per 6 NYCRR 750-1.14(f).

[3] In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.

Schedule of Additional Submittals

The permit includes a schedule of additional submittals for the following (Appendix A Link):

- BMP Plan for Industrial Facilities
- Mercury short-term monitoring at Outfalls 006, 010, 012, 013, 015, 020, 021, 024, and 027
- Emerging Contaminant short-term monitoring at Outfalls 010, 023, and 024
- Water Treatment Chemical (WTC) Annual Report
- Whole Effluent Toxicity (WET) Testing Report
- Mercury Minimization Plan (MMP) Status Report
- Biological Monitoring Requirements – Annual Water Use Summary Report

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OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/L)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow[4] (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
003	42° 29' 7.00" N	73° 48' 3.00" W	Coeymans Creek	C(TS)	H-214 PWL: 1301-0095	13 / 01	-	0.77	1.6	1.9	0.17	5.5:1	10:1	12:1
007	42° 30' 7.00" N	73° 48' 2.00" W									0.10	8.5:1	16:1	18:1
014	42° 29' 32" N	73° 48' 05" W									No flow data as permit does not require any flow monitoring			
015	42° 29' 38" N	73° 48' 10" W									No flow data as permit does not require any flow monitoring			
016	42° 29' 32" N	73° 48' 05" W									No flow data as permit does not require any flow monitoring			
006	42° 29' 7.00" N	73° 48' 9.64" W	Unnamed Tributary 1 to Coeymans Creek	C	H-214 PWL: 1301-0095	13 / 01	-	-	-	-	0.042	1:1		
010	42° 29' 28" N	73° 49' 26" W									0.099			
020	42° 29' 31" N	73° 48' 03" W									0.36			
021	42° 29' 33" N	73° 48' 53" W									0.043			
024	42° 29' 35" N	73° 48' 47" W									0.028			
012	42° 29' 24" N	73° 47' 14" W	Hudson River	C	H (portion 5) PWL: 1301-0095	13 / 01	138[5]	898	1796	2156	0.043	50:1	100:1	100:1
013	42° 29' 24" N	73° 47' 18" W									0.043	50:1	100:1	100:1
023	42° 29' 28" N	73° 47' 11" W									0.11	50:1	100:1	100:1
023A	42° 29' 46" N	73° 48' 30" W	Hudson River via Outfall 023											
023B	42° 29' 44" N	73° 48' 26" W	Hudson River via Outfall 023											
027	42° 28' 45" N	73° 49' 43" W	Unnamed Tributary 2 to Hannacroix Creek	C	H 214-2 Trib PWL: 1301-0095	13 / 01	-	-	-	-	-	1.1		

[4] Critical effluent flow calculated as the average of the monthly average flow rate as reported on the DMRs for January 2021 through December 2025. Outfall 027 has had no reported discharge events.
[5] Ambient hardness was established from a 2023 analysis of median watershed specific data collected by DEC through the Rotating Integrated Basin Studies (RIBS) program from 2012-2022. This data is available through the RIBS Data Portal.

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Permittee: Amrize Cement Inc.
Facility: Amrize Ravena
SPDES Number: NY0005037
USEPA Major/Class 03 Industrial

Date: March 5, 2026 v.1.13
Permit Writer: Rashid Ahmed, PE
Water Quality Reviewer: Rashid Ahmed, PE
Full Technical Review

POLLUTANT SUMMARY TABLE

Outfalls to Coeymans Creek, Class C(TS)

Outfall 003

Outfall # Coeymans Crk	003	**Description of Wastewater:** Stormwater														
		Type of Treatment: Pond/Settling Pond														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: DEC obtained existing discharge data from 1/1/2021 to 12/31/2025 from Discharge Monitoring Reports provided by the permittee. DEC reviewed all applicable WQS for development of the WQBELs. The WQS and resulting WQBEL, shown below, represent the most stringent of any applicable WQS.																
Flow Rate	GPD	Daily Max & Monthly Avg	**Monitor**	165,922 Actual Average	58	-	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Continued Monitor 750-1.13(b)
	In accordance with 6 NYCRR 750-1.13(b), the permit continues to require flow monitoring.															
pH	SU	Minimum	**6.0**	8.73	58	-	-	7.9*	-	6.5 – 8.5	Range	No Reasonable Potential	703.3	-	Continued 750-1.10(c)
		Maximum	**9.0**	8.72	58										
	The permit continues the existing effluent limitations to prevent backsliding, which given the available dilution, will reasonably protect the classified water use and assure compliance with applicable WQS. *Ambient pH was established from the median of 31 samples collected from stations 13-COEY-0.3, 4.0, 6.9, 8.6, 9.5, and 11.7 from 1984-2013. This data is available through the RIBS Data Portal.															
Total Suspended Solids (TSS)	mg/L	Monthly Avg	Monitor	16 Max	58	**20**	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBEL
		Daily Max	50	16 Max	58	**40**	TOGS 1.2.1								
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit includes effluent limitations reduced to the TBELs set at the expected treatment performance for a detention pond (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS.															

[6] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # Coeymans Crk	003	**Description of Wastewater:** Stormwater **Type of Treatment:** Pond/Settling Pond													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Dissolved Solids	mg/L	Monthly Avg	Monitor	899 Avg	56	-	-	*	-	-	-	-	-	-	Discontinued
		Daily Max	**Monitor**	1160 Max	56	-	-		116	500		No Reasonable Potential	703.3	-	Continued Monitor 750-1.13(a)
	DEC calculated the projected instream concentration using the maximum reported effluent concentration of 1160, a multiplier of 1.0, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. DEC selected the multiplier from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, the permit does not include a WQBEL. The permit continues daily max monitoring, which is useful to capture effluent variability. Because daily max monitoring captures the worst-case data, DEC discontinued the monthly average monitoring requirement. *Upstream TDS data is unavailable.														
Settleable Solids	mL/L	Daily Max	**0.1**	0.1	1/58	0.1	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues a daily max effluent limit equal to the TBEL, set at the expected treatment performance for a detention pond (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Oil and Grease	mL/L	Daily Max	**15**	5.5	60	15	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues a daily max effluent limit equal the TBEL set at the expected treatment performance for a detention pond (oil separation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Mercury	ng/L	Daily Max	-	1.2	2	-	-	-	-	0.7	H(FC)	-	703.5	-	No Limitation or Monitoring
	Sampling for mercury was conducted in March 2026. See mercury section of the fact sheet for more information.														

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Outfall 007

Outfall # Coeymans Crk	007	**Description of Wastewater:** Stormwater from CKD landfill **Type of Treatment:** Floc-sock, swale and sediment trap														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[7]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: DEC obtained existing discharge data from 1/1/2021 to 12/31/2025 from Discharge Monitoring Reports provided by the permittee. DEC reviewed all applicable WQS for development of the WQBELs. The WQS and resulting WQBEL, shown below, represent the most stringent of any applicable WQS.															
Flow Rate	GPD	Daily Max & Monthly Avg	**Monitor**	102,432 Actual Average	44	-	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Continued Monitor 750-1.13(b)
	In accordance with 6 NYCRR 750-1.13(b), the permit continues to require flow monitoring.														
pH	SU	Minimum	**6.0**	8.84	44	-	-	7.9*	-	6.5 – 8.5	Range	No Reasonable Potential	703.3	-	Continued 750-1.10(c)
		Maximum	**9.0**	9.12	44	-									
	The permit continues the existing effluent limitations to prevent backsliding, which given the available dilution, will reasonably protect the classified water use and assure compliance with applicable WQS. *Ambient pH was established from the median of 31 samples collected from stations 13-COEY-0.3, 4.0, 6.9, 8.6, 9.5, and 11.7 from 1984-2013. This data is available through the RIBS Data Portal.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	25	16	44	**20**	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBEL
		Daily Max	45	25	44	**40**	TOGS 1.2.1								
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit includes effluent limitations reduced to the TBELs set at the expected treatment performance for a detention pond (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS.														

[7] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # Coeymans Crk	007	**Description of Wastewater:** Stormwater from CKD landfill **Type of Treatment:** Floc-sock, swale and sediment trap													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[7]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Dissolved Solids	mg/L	Monthly Avg	Monitor	780	45	-	-	*	-	-	-	-	-	-	Discontinued
		Daily Max	**Monitor**	2500	45	-	-		172	500		No Reasonable Potential	703.3	-	Continued Monitor 750-1.13(a)
	DEC calculated the projected instream concentration using the maximum reported effluent concentration of 2500, a multiplier of 1.1, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. DEC selected the multiplier from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, the permit does not include a WQBEL. The permit continues daily max monitoring, which is useful to capture effluent variability. Because daily max monitoring captures the worst-case data, DEC discontinued the monthly average monitoring requirement. *Upstream TDS data is unavailable.														
Settleable Solids	mL/L	Daily Max	**0.1**	<0.1	44	0.1	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include a daily max effluent limit equal to the TBEL set at the expected treatment performance for a sediment trap (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Mercury	ng/L	Daily Max	-	1.5	1	-	-	-	-	0.7	H(FC)	-	703.5	-	No Limitation or Monitoring
	Sampling for mercury was conducted in March 2026. See mercury section of the fact sheet for more information.														
Oil and Grease	mg/L	Daily Max	**15**	5.7 Max	44	15	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include a daily max effluent limitation equal to the TBEL set at the expected treatment performance for a sediment trap (oil separation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

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Outfall 014

Outfall # Coeymans Crk	014	**Description of Wastewater:** Stormwater, Roadside Drainage Near and Under Conveyor Belt **Type of Treatment:** Riprap Swale, Sedimentation Basin, Sedimentation Trap														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: DEC obtained existing discharge data from 1/1/2021 to 12/31/2025 from Discharge Monitoring Reports provided by the permittee. Outfall 014 does not have a formal outfall structure and accurate flow data is not feasible to routinely collect and has not been a permit requirement. DEC reviewed all applicable WQS for development of the WQBELs. The WQS and resulting WQBEL, shown below, represent the most stringent of any applicable WQS.															
pH	SU	Minimum	**6.0**	8.11	16	-	-	7.9*	-	6.5 – 8.5	Range	No Reasonable Potential	703.3	-	Continued 750-1.10(c)
		Maximum	**9.0**	8.37	16	-									
	The permit continues the previous minimum and maximum pH limitations to prevent backsliding. While a calculated dilution is unavailable for this outfall, given the low flow condition of the receiving waterbody compared with flows from other similar outfalls, the existing limitation will reasonably protect the classified water use and assure compliance with applicable WQS. *Ambient pH was established from the median of 31 samples collected from stations 13-COEY-0.3, 4.0, 6.9, 8.6, 9.5, and 11.7 from 1984-2013. This data is available through the RIBS Data Portal.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	Monitor	10.2	16	**20**	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBEL
		Daily Max	50	40.8 Actual Max	16	**40**	TOGS 1.2.1								
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit includes reduced effluent limitations equal to the TBELs set at the expected treatment performance for a sedimentation trap (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS.														
Settleable Solids	mL/L	Daily Max	**0.1**	<0.1	16	0.1	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include a daily max effluent limit equal to the TBEL set at the expected treatment performance for a sedimentation trap (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

[8] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # Coeymans Crk	014	**Description of Wastewater:** Stormwater, Roadside Drainage Near and Under Conveyor Belt **Type of Treatment:** Riprap Swale, Sedimentation Basin, Sedimentation Trap

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Oil and Grease	mg/L	Daily Max	**15**	5.7	16	15	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include a daily max effluent limitation equal to the TBEL set at the expected treatment performance for a sedimentation trap (oil separation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Mercury	ng/L	Daily Max	-	4.8	1	-	-	-	-	0.7	H(FC)	35	MDV	-	No Limitation or Monitoring
	Sampling for mercury was conducted in March 2026. See mercury section of the fact sheet for more information.														
Total Dissolved Solids (TDS)	mg/L	Daily Max	-	-	-	-	-	*	-	500		-	703.3	-	**Monitor** 750-1.13(a)
	Given the TDS results at other similar outfalls, and consistent with 750-1.13(a), the permit includes monitoring for TDS to evaluate reasonable potential during the next permit review. *Upstream TDS data is unavailable.														

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Outfall 015

Outfall # Coeymans Crk	015	**Description of Wastewater:** Stormwater, Roadside Drainage Near and Under Conveyor Belt **Type of Treatment:** Floc Sock and forebay														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[9]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
General Notes: DEC obtained existing discharge data from 1/1/2021 to 12/31/2025 from Discharge Monitoring Reports provided by the permittee. Outfall has only one reported monitoring data point for the period. Outfall 015 does not have a formal outfall structure and accurate flow data is not feasible to routinely collect and has not been a permit requirement. DEC reviewed all applicable WQS for development of the WQBELs. The WQS and resulting WQBEL, shown below, represent the most stringent of any applicable WQS.															
pH	SU	Minimum	**6.0**	7.7	1	-	-	7.9*	-	6.5 – 8.5	Range	No Reasonable Potential	703.3	-	Continued 750-1.10(c)
		Maximum	**9.0**												
	The permit continues the previous minimum and maximum pH limitations to prevent backsliding. While a calculated dilution is unavailable for this outfall, given the low flow condition of the receiving waterbody compared with flows from other similar outfalls, the existing limitation will reasonably protect the classified water use and assure compliance with applicable WQS. *Ambient pH was established from the median of 31 samples collected from stations 13-COEY-0.3, 4.0, 6.9, 8.6, 9.5, and 11.7 from 1984-2013. This data is available through the RIBS Data Portal.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	Monitor	9.1	1	**20**	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBEL
		Daily Max	50			**40**	TOGS 1.2.1								
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit includes reduced effluent limitations equal to the TBELs set at the expected treatment performance for a sedimentation trap (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS.														
Settleable Solids	mL/L	Daily Max	**0.1**	<0.1	1	0.1	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include a daily max effluent limit equal to the TBEL set at the expected treatment performance for a sedimentation trap (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

[9] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # Coeymans Crk	015	**Description of Wastewater:** Stormwater, Roadside Drainage Near and Under Conveyor Belt **Type of Treatment:** Floc Sock and forebay

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Oil and Grease	mg/L	Daily Max	**15**	5.3	1	15	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include a daily max effluent limitation equal to the TBEL set at the expected treatment performance for a sedimentation trap (oil separation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Total Dissolved Solids (TDS)	mg/L	Daily Max	-	-	-	-	-	*	-	500		-	703.3	-	**Monitor** 750-1.13(a)
	Given the TDS results at other similar outfalls, and consistent with 750-1.13(a), the permit includes monitoring for TDS to evaluate reasonable potential during the next permit review. **Upstream TDS data is unavailable.														

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Outfall 016

Outfall # Coeymans Crk	016	**Description of Wastewater:** Stormwater, Roadside Drainage Near and Under Conveyor Belt **Type of Treatment:** Bio swales														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[10]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: There was no discharge during the period from 01/1/2021 to 12/31/2025 for this outfall. Outfalls 016 does not have a formal outfall structure and accurate flow data is not feasible to routinely collect and has not been a permit requirement. DEC reviewed all applicable WQS but without effluent data, was unable to calculate reasonable potential for the inclusion of any new WQBELs.															
pH	SU	Minimum	**6.0**	-	-	-	-	7.9*	-	6.5 – 8.5	Range	No Reasonable Potential	703.3	-	Continued 750-1.10(c)
		Maximum	**9.0**		-	-									
	The permit continues the previous minimum and maximum pH limitations to prevent backsliding. While a calculated dilution is unavailable for this outfall, given the low flow condition of the receiving waterbody compared with flows from other similar outfalls, the existing limitation will reasonably protect the classified water use and assure compliance with applicable WQS. *Ambient pH was established from the median of 31 samples collected from stations 13-COEY-0.3, 4.0, 6.9, 8.6, 9.5, and 11.7 from 1984-2013. This data is available through the RIBS Data Portal.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	Monitor	-	-	**20**	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBEL
		Daily Max	50	-	-	**40**	TOGS 1.2.1								
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit includes reduced effluent limitations equal to the TBELs set at the expected treatment performance for a sedimentation trap (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS.														
Settleable Solids	mL/L	Daily Max	**0.1**	-	-	0.1	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include a daily max effluent limit equal to the TBEL set at the expected treatment performance for a sedimentation trap (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

[10] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # Coeymans Crk	016	**Description of Wastewater:** Stormwater, Roadside Drainage Near and Under Conveyor Belt **Type of Treatment:** Bio swales

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[10]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Oil and Grease	mg/L	Daily Max	**15**	-	-	15	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include a daily max effluent limitation equal to the TBEL set at the expected treatment performance for a sedimentation trap (oil separation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Total Dissolved Solids (TDS)	mg/L	Daily Max	-	-	-	-	-	*	-	500		-	703.3	-	**Monitor** 750-1.13(a)
	Given the TDS results at other similar outfalls, and consistent with 750-1.13(a), the permit includes monitoring for TDS to evaluate reasonable potential during the next permit review. *Upstream TDS data is unavailable.														

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Outfalls to Unnamed Tributary 1 of Coeymans Creek, Class C

Outfall 006

Outfall # Trib to Coey	006	**Description of Wastewater:** Stormwater **Type of Treatment:** Detention Pond													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[11]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
General Notes:. DEC obtained existing discharge data from 1/1/2021 to 12/31/2025 from Discharge Monitoring Reports provided by the permittee. DEC reviewed all applicable WQS for development of the WQBELs. The WQS and resulting WQBEL, shown below, represent the most stringent of any applicable WQS.															
Flow Rate	GPD	Daily Max & Monthly Avg	**Monitor**	42,426 Actual Average	18	-	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Continued Monitor 750-1.13(b)
	In accordance with 6 NYCRR 750-1.13(b), the permit continues to require flow monitoring.														
pH	SU	Minimum	6.0	6.5 Min	18	6.0	40 CFR Part 411	7.8*	-	6.5 – 8.5	Range	**6.5 – 8.5**	703.3	-	WQBEL
	SU	Maximum	9.0	8.1 Max	18	9.0	40 CFR Part 411	7.8*	-	6.5 – 8.5	Range	**6.5 – 8.5**	703.3	-	WQBEL
	As no dilution is available, the permit includes effluent limitations reduced to the WQBEL. *Ambient pH was established from a 2023 analysis of median watershed specific data collected by DEC through the Rotating Integrated Basin Studies (RIBS) program from 2012-2022. This data is available through the RIBS Data Portal.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	**25**	10	18	-	-	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	Continued 750-1.10(c)
	mg/L	Daily Max	**45**	15	18	50	40 CFR Part 411	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	Continued 750-1.10(c)
	There are no numeric WQS or guidance values for this parameter. The permit continues the existing effluent limitations to prevent backsliding, which due to the absence of any reported WQS violations, will reasonably protect the classified water use and assure compliance with applicable WQS.														

[11] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # Trib to Coey	006	**Description of Wastewater:** Stormwater **Type of Treatment:** Detention Pond

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[11]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Dissolved Solids	mg/L	Monthly Avg	Monitor	801 Avg	18	-	-	*	-	-	-	-	-	-	Discontinued
		Daily Max	Monitor	1640 Max	18	-	-		2087	500		**500**	703.3	-	WQBEL
	DEC calculated the projected instream concentration using the maximum reported effluent concentration of 1640, a multiplier of 1.4, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. DEC selected the multiplier from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation. Therefore, the permit includes a new WQBEL. The permit also includes a Schedule of Compliance with an interim limit set at the 99th percentile EEQ, consistent with TOGS 1.2.1, page 16. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement. *Upstream TDS data is unavailable.														
Settleable Solids	mL/L	Daily Max	**0.1**	<0.1	18	0.1	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include daily max effluent limitations equal to the TBEL set at the expected treatment performance for a detention pond (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Oil and Grease	mL/L	Daily Max	**15**	5.2	18	15	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include effluent limitations equal to the TBEL set at the expected treatment performance for a detention pond (oil separation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

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Outfall 010

Outfall # Trib to Coey	010	**Description of Wastewater:** Quarry Pump-out Water, Stormwater **Type of Treatment:** Swale and sedimentation basin													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[12]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: DEC obtained existing discharge data from 1/1/2021 to 12/31/2025 from Discharge Monitoring Reports provided by the permittee. DEC reviewed all applicable WQS for development of the WQBELs. The WQS and resulting WQBEL, shown below, represent the most stringent of any applicable WQS.															
Flow Rate	GPD	Daily Max & Monthly Avg	**Monitor**	99,120 Actual Average	15	-	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Continued Monitor 750-1.13(b)
	In accordance with 6 NYCRR 750-1.13(b), the permit continues to require flow monitoring.														
pH	SU	Minimum	6.0	8.36	15	6.0	40 CFR Part 411 & 436	7.8*	-	6.5 – 8.5	Range	**6.5 – 8.5**	703.3	-	WQBEL
		Maximum	9.0	8.61	15	9.0									
	As no dilution is available, the permit includes effluent limitations reduced to the WQBEL. *Ambient pH was established from a 2023 analysis of median watershed specific data collected by DEC through the Rotating Integrated Basin Studies (RIBS) program from 2012-2022. This data is available through the RIBS Data Portal.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	**25**	8.04	15	-	-	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	Continued 750-1.10(c)
		Daily Max	**45**	13.12	15	50	40 CFR Part 411								
	There are no numeric WQS or guidance values for this parameter. The permit continues the existing effluent limitations to prevent backsliding, which due to the absence of any reported WQS violations, will reasonably protect the classified water use and assure compliance with applicable WQS.														
Settleable Solids	mL/L	Daily Max	**0.1**	<0.1	15	0.1	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include daily max effluent limitations equal to the TBEL set at the expected treatment performance for a detention pond (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

[12] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # Trib to Coey	010	**Description of Wastewater:** Quarry Pump-out Water, Stormwater **Type of Treatment:** Swale and sedimentation basin

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[12]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Oil and Grease	mL/L	Daily Max	**15**	5.3 Max	15	15	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include effluent limitations equal to the TBEL set at the expected treatment performance for a detention pond (oil separation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Total Dissolved Solids (TDS)	mg/L	Daily Max	-	-	-	-	-	*	-	500		-	703.3	-	**Monitor** 750-1.13(a)
	Given the TDS results at other similar outfalls, and consistent with 750-1.13(a), the permit includes monitoring for TDS to evaluate reasonable potential during the next permit review. *Upstream TDS data is unavailable.														

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Outfall 020

Outfall # Trib to Coey	020	**Description of Wastewater:** Quarry Pump-out Water, Stormwater **Type of Treatment:** Floc – Retention Pond													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[13]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: DEC obtained existing discharge data from 1/1/2021 to 12/31/2025 from Discharge Monitoring Reports provided by the permittee. DEC reviewed all applicable WQS for development of the WQBELs. The WQS and resulting WQBEL, shown below, represent the most stringent of any applicable WQS.															
Flow Rate	GPD	Daily Max & Monthly Avg	**Monitor**	364,400 Actual Avg	18	-	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Continued Monitor 750-1.13(b)
	In accordance with 6 NYCRR 750-1.13(b), the permit continues to require flow monitoring. The existing permit has units of MGD but reporting appears to be as GPD and the permit has been adjusted to reflect GPD.														
pH	SU	Minimum	6.0	8.34	18	6.0	40 CFR Part 411 & 436	7.8*	-	6.5 – 8.5	Range	**6.5 - 8.5**	703.3	-	WQBEL
		Maximum	9.0	8.62	18	9.0									
	As no dilution is available, the permit includes effluent limitations reduced to the WQBEL. *Ambient pH was established from a 2023 analysis of median watershed specific data collected by DEC through the Rotating Integrated Basin Studies (RIBS) program from 2012-2022. This data is available through the RIBS Data Portal.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	Monitor	4.94	18	-	-	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	Continued TBEL
		Daily Max	**50**	9.4 Max	18	50	40 CFR Part 411								
	There are no numeric WQS or guidance values for this parameter. Consistent with 40 CFR Part 411, the permit continues daily max effluent limitations equal to the TBEL. Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS.														
Settleable Solids	mL/L	Daily Max	**0.1**	0.1	1/17	0.1	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include daily max effluent limitations equal to the TBEL set at the expected treatment performance for a detention pond (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

[13] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # Trib to Coey	020	**Description of Wastewater:** Quarry Pump-out Water, Stormwater **Type of Treatment:** Floc – Retention Pond

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[13]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Oil and Grease	mg/L	Daily Max	**15**	<5.4	18	15	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include effluent limitations equal to the TBEL set at the expected treatment performance for a detention pond (oil separation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Total Dissolved Solids (TDS)	mg/L	Daily Max	-	-	-	-	-	-	-	500		-	703.3	-	**Monitor** 750-1.13(a)
	Given the TDS results at other similar outfalls, and consistent with 750-1.13(a), the permit includes monitoring for TDS to evaluate reasonable potential during the next permit review.														

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Outfall 021

Outfall # Trib to Coey	021	**Description of Wastewater:** Stormwater from cement manufacturing area **Type of Treatment:** Forebay and sedimentation basin													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[14]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: DEC obtained existing discharge data from 1/1/2021 to 12/31/2025 from Discharge Monitoring Reports provided by the permittee. DEC reviewed all applicable WQS for development of the WQBELs. The WQS and resulting WQBEL, shown below, represent the most stringent of any applicable WQS.															
Flow Rate	GPD	Monthly Avg	**Monitor**	43,386 Actual Average	58	-	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Continued Monitor 750-1.13(b)
	In accordance with 6 NYCRR 750-1.13(b), the permit continues to require flow monitoring.														
pH	SU	Minimum	6.0	8.3	58	6.0	40 CFR Part 411	7.8*	-	6.5 – 8.5	Range	**6.5 – 8.5**	703.3	-	WQBEL
		Maximum	9.0	8.5	58	9.0									
	As no dilution is available, the permit includes effluent limitations reduced to the WQBEL. *Ambient pH was established from a 2023 analysis of median watershed specific data collected by DEC through the Rotating Integrated Basin Studies (RIBS) program from 2012-2022. This data is available through the RIBS Data Portal.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	**25**	4.95	58	-	-	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	Continued 750-1.10(c)
		Daily Max	**45**	30 Max	58	50	40 CFR Part 411								
	There are no numeric WQS or guidance values for this parameter. Consistent with 40 CFR Part 411, the permit continues effluent limitations equal to the TBEL to prevent backsliding. Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS.														

[14] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 non-detects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 non-detects)

Outfall # Trib to Coey	021	**Description of Wastewater:** Stormwater from cement manufacturing area **Type of Treatment:** Forebay and sedimentation basin

Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[14]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Basis for Permit Requirement
Total Dissolved Solids	mg/L	Monthly Avg	Monitor	845	57	-	-	-	-	-	-	-	-	-	Discontinued
		Daily Max	Monitor	1560	57	-	-		1560	500		**500**	703.3	-	WQBEL
	DEC calculated the projected instream concentration using the maximum reported effluent concentration of 1560, a multiplier of 1.0, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. DEC selected the multiplier from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation. Therefore, the permit includes a new WQBEL. The permit also includes a Schedule of Compliance with an interim limit set at the 99th percentile EEQ, consistent with TOGS 1.2.1, page 16. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Settleable Solids	mL/L	Daily Max	**0.1**	0.1	58	0.1	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include daily max effluent limitations equal to the TBEL set at the expected treatment performance for a detention pond (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Oil and Grease	mg/L	Daily Max	**15**	5.8 Actual Max	58	15	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include effluent limitations equal to the TBEL set at the expected treatment performance for a detention pond (oil separation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

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Outfall 024

Outfall # Trib to Coey	024	**Description of Wastewater:** Stormwater from cement manufacturing area														
		Type of Treatment: Clinker Hall Swale, Fly Ash Swale, Forebay, Sedimentation Basin														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[15]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: DEC obtained existing discharge data from 1/1/2021 to 12/31/2025 from Discharge Monitoring Reports provided by the permittee. DEC reviewed all applicable WQS for development of the WQBELs. The WQS and resulting WQBEL, shown below, represent the most stringent of any applicable WQS.															
Flow Rate	GPD	Monthly Avg	**Monitor**	28,800 Actual Average	13	-	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Continued Monitor 750-1.13(b)
	In accordance with 6 NYCRR 750-1.13(b), the permit continues to require flow monitoring.														
pH	SU	Minimum	6.0	8.46	13	6.0	40 CFR Part 411	7.8*	-	6.5 – 8.5	Range	**6.5 – 8.5**	703.3	-	WQBEL
		Maximum	9.0	8.9	13	9.0									
	As no dilution is available, the permit includes effluent limitations reduced to the WQBEL. *Ambient pH was established from a 2023 analysis of median watershed specific data collected by DEC through the Rotating Integrated Basin Studies (RIBS) program from 2012-2022. This data is available through the RIBS Data Portal.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	**25**	10.7	13	-	-	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	Continued 750-1.10(c)
		Daily Max	**45**	42.5 Max	13	50	40 CFR Part 411								
	There are no numeric WQS or guidance values for this parameter. Consistent with 40 CFR Part 411, the permit continues effluent limitations equal to the TBEL to prevent back-sliding. Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS.														

[15] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # Trib to Coey	024	**Description of Wastewater:** Stormwater from cement manufacturing area **Type of Treatment:** Clinker Hall Swale, Fly Ash Swale, Forebay, Sedimentation Basin

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[15]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Dissolved Solids	mg/L	Monthly Avg	Monitor	1193 Avg	13	-	-	-	-	-	-	-	-	-	Discontinued
		Daily Max	Monitor	1330 Max	13	-	-		2128	500		**500**	703.3	-	WQBEL
	DEC calculated the projected instream concentration using the maximum reported effluent concentration of 1330 mg/L, a multiplier of 1.6, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. DEC selected the multiplier from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates reasonable potential to cause or contribute to a WQS violation. Therefore, the permit includes a new WQBEL. The permit also includes a Schedule of Compliance with interim limit set at the 99th percentile EEQ, consistent with TOGS 1.2.1, page 16. Because the limit is established as a daily maximum and captures worst-case data, DEC discontinued the monthly average monitoring requirement.														
Settleable Solids	mL/L	Daily Max	**0.1**	<0.1	13	0.1	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include daily max effluent limitations equal to the TBEL set at the expected treatment performance for a detention pond (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Oil and Grease	mg/L	Daily Max	**15**	<5.9	13	15	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include effluent limitations equal to the TBEL set at the expected treatment performance for a detention pond (oil separation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

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Outfalls to Hudson River, Class C

Outfall 023

Outfall # Hudson River	023	**Description of Wastewater:** Cement kiln dust landfill leachate treated effluent and sanitary wastewater treated effluent **Type of Treatment:** 023A Sanitary: Septic Tank, Bioclere Units and Disinfection 023B Leachate: Hydro Cyclone, pH Correction, Sedimentation, and Filtration

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: DEC obtained existing discharge data from 1/1/2021 to 12/31/2025 from Discharge Monitoring Reports provided by the permittee. DEC reviewed all applicable WQS for development of the WQBELs at Outfall 023. TBELs were evaluated at the two internal outfalls, 023A and 023B. The WQS and resulting WQBEL, shown below, represent the most stringent of any applicable WQS.															
Flow Rate	GPD	Daily Max & Monthly Avg	**Monitor**	107,567 Actual Average	60	-	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Continued Monitor 750-1.13(b)
	In accordance with 6 NYCRR 750-1.13(b), the permit continues to require flow monitoring.														
pH	SU	Minimum	**6.0**	7.62	60	See Outfall 023A & 023B		7.7*	-	6.5 – 8.5	Range	No Reasonable Potential	703.3	-	Continued 750-1.10(c)
		Maximum	**9.0**	8.45	60										
	The permit continues the existing effluent limitations to prevent backsliding, which given the available dilution, will reasonably protect the classified water use and assure compliance with applicable WQS. *Ambient pH was established from the median of 37 datapoints collected from 2005-2025 at stations 13-LHUD-125.5 and 13-LHUD-130.6. This data is available through the RIBS Data Portal.														
Dissolved Oxygen	mg/L	Minimum	**2.0**	6.3 Min	60	See Outfall 023A for BOD_5		-	-	4.0 Min	Narrative	No Reasonable Potential	703.3	-	Continued 750-1.10(c)
	mg/L	Maximum	**Monitor**	15 Max	60										
	Amrize's Outfall 023 consists of flows from two internal outfalls, sanitary outfall (023A) and CKD landfill leachate outfall (023B), that have very small discharges (~ 0.09 cfs and 0.11 cfs, respectively). As a result, the discharge from Outfall 023 is also very small when compared with the critical receiving water's flow (7Q10 flow of ~2700 cfs), and therefore, does not have reasonable potential to impact the receiving water's dissolved oxygen. Because of this, DEC did not develop a model to evaluate downstream dissolved oxygen. The permit continues the existing effluent limitations for DO at Outfall 023 to prevent backsliding, which given the available dilution, will reasonably protect the classified water use and assure compliance with applicable WQS .														

[16] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # Hudson River	023	**Description of Wastewater:** Cement kiln dust landfill leachate treated effluent and sanitary wastewater treated effluent **Type of Treatment:** 023A Sanitary: Septic Tank, Bioclere Units and Disinfection 023B Leachate: Hydro Cyclone, pH Correction, Sedimentation, and Filtration

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Suspended Solids (TSS)	mg/L	Monthly Avg	**Monitor**	6.8	60	See Outfall 023A & 023B TSS and Settleable Solids Requirements		-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	Continued 750-1.10(c)
		Daily Max	**20**	19 Actual Max	60										
	There are no numeric WQS or guidance values for this parameter. The permit continues to include the existing limitation and monitoring requirement at Outfall 023 to prevent backsliding, which given the dilution available, will reasonably protect the classified water use and assure compliance with applicable WQS.														
Total Dissolved Solids	mg/L	Monthly Avg	**Monitor**	12,068 Avg	60	-	-	139*	-	-	-		-	-	Continued Monitor 750-1.13(a)
		Daily Max	**32,000**	17,800 Max	60	-	-		-	500		36,000	703.3	-	Continued 750-1.10(c)
	DEC calculated the WQBEL by multiplying the WQS by the chronic dilution ratio, taking into account the background concentration of TDS. The permit continues to include the existing limitation, which is more stringent than the calculated WQBEL, to prevent backsliding. *Median value of 115 upstream datapoints collected from 2001-2025.														
Total Residual Chlorine (TRC)	ug/L	Daily Min	**Monitor**	93 Average	60	See Outfall 023A		-	-	-	-	-	-	-	Continued Monitor 750-1.13(a)
	ug/L	Daily Max	**450**	260 Max	60			-	-	5	A(C)	500	703.5	-	Continued 750-1.10(c)
	DEC calculated the WQBEL by multiplying the WQS by the chronic dilution ratio. The permit continues to include the existing limitation, which is more stringent than the calculated WQBEL, to prevent backsliding.														

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Outfall # Hudson River	023	**Description of Wastewater:** Cement kiln dust landfill leachate treated effluent and sanitary wastewater treated effluent **Type of Treatment:** 023A Sanitary: Septic Tank, Bioclere Units and Disinfection 023B Leachate: Hydro Cyclone, pH Correction, Sedimentation, and Filtration

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Aluminum	mg/L	Monthly Avg	2.0	0.13	9/51	See Outfall 023B		pH 7.3*	-	-	-	-	-	-	Discontinued
	mg/L	Daily Max	4.0	0.18 Actual Max	9/51				-	0.1 Ionic	A(C)	-	703.5	-	Discontinued
	Consistent with TOGS 1.3.1E, when the receiving waterbody pH exceeds 6.5, TBELs are adequate to meet the WQS for ionic aluminum. As such, the permit continues TBELs at Outfall 023B, where they appropriately reflect the leachate treatment performance, and DEC has discontinued effluent limitations at Outfall 023. The removal of limitations at Outfall 023 does not constitute backsliding as the limitations at Outfall 023B remain just as protective. *Ambient pH was established from the 20th percentile of 37 datapoints collected from 2005-2025 at stations 13-LHUD-125.5 and 13-LHUD-130.6. This data is available through the RIBS Data Portal.														
Total Molybdenum	mg/L	Monthly Avg	Monitor	0.71	60	-	-	-	Narrative: None in amounts that will adversely affect the taste, color or odor thereof, or impair the waters for their best usages.				703.2	-	Discontinued
	mg/L	Daily Max	Monitor	0.90	47	-	-	-						-	Discontinued
	There are no numeric WQS or guidance values for this parameter. DEC has discontinued the monitoring requirement for molybdenum. Whole Effluent Toxicity (WET) testing measures the combined impact of the effluent on aquatic organisms and compliance with the narrative standard is expected to be achieved through compliance with WET testing at Outfall 023.														
Nitrogen, Ammonia (as N)	mg/L	Daily Max	-	See Outfall 023A for Performance Data		-	-	0.082*	-	0.83	H(WS)	75	703.5	-	No Limitation Needed at Outfall 023 See Existing Limitation at Outfall 023A
	Consistent with TOGS 1.3.1E, the ammonia WQS was found from a pH of 7.9** and a temperature of 25°C. DEC calculated the WQBEL by multiplying the WQS by the HEW dilution ratio taking into account an ambient upstream concentration. The existing permit limit at Outfall 023A is more stringent than the calculated WQBEL at Outfall 023 and is therefore protective of water quality. Additional monitoring or effluent limitations at Outfall 023 are unnecessary for the protection of water quality. *Ambient ammonia established from TOGS 1.3.1D **Ambient pH was established from the 75th percentile of 37 datapoints collected from 2005-2025 at stations 13-LHUD-125.5 and 13-LHUD-130.6. This data is available through the RIBS Data Portal.														

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Outfall 023A

Outfall # Internal	023A	**Description of Wastewater:** Sanitary Wastewater Treated Effluent **Type of Treatment:** Septic Tank, Bioclere Units and Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[17]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
General Notes: DEC obtained existing discharge data from 1/1/2021 to 12/31/2025 from Discharge Monitoring Reports provided by the permittee. As Outfall 023A is internal to Outfall 023, DEC's water quality review at the final Outfall 023 will reasonably protect the classified water use and assure compliance with applicable WQS.TBELs were evaluated at internal outfalls 023A and 023B.															
Flow Rate	GPD	Daily Max & Monthly Avg	**Monitor**	8463 Actual Average	60	-	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Continued Monitor 750-1.13(b)
	In accordance with 6 NYCRR 750-1.13(b), the permit continues to require flow monitoring.														
pH	SU	Minimum	**6.0**	6.3 Min	60	6.0	TOGS 1.2.1	-	-	6.5-8.5	Range	See Outfall 023	703.3	-	Continued TBEL
		Maximum	**9.0**	8.1 Max	60	9.0									
	Consistent with TOGS 1.2.1, the permit continues the existing effluent limitations equal to the TBELs for the biological treatment technology listed in Attachment C.														
5-day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg	**30**	7.98 Average	60	30	TOGS 1.2.1	-	See Dissolved Oxygen Discussion for Outfall 023				703.3	-	Continued TBEL
		Daily Max	**45**	15 Max	60	45	TOGS 1.2.1								
	Consistent with TOGS 1.2.1, the permit continues the existing effluent limitations equal to the TBELs for the biological treatment technology listed in Attachment C.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	**30**	4.5 Actual Average	60	30	TOGS 1.2.1	-	See Outfall 023				703.2	-	Continued TBEL
		Daily Max	**45**	12.8 Actual max	460	45	TOGS 1.2.1								
	Consistent with TOGS 1.2.1, the permit continues the existing effluent limitations equal to the TBELs for the biological treatment technology listed in Attachment C.														

[17] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

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Outfall # Internal	023A	**Description of Wastewater:** Sanitary Wastewater Treated Effluent **Type of Treatment:** Septic Tank, Bioclere Units and Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[17]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Basis for Permit Requirement
Settleable Solids	mL/L	Daily Max	**0.1**	0.1	60	0.1	TOGS 1.2.1	-	See Outfall 023				703.2	-	Continued TBEL
	Consistent with TOGS 1.2.1, the permit continues the existing effluent limitations equal to the TBELs for sedimentation technology in Attachment C. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Nitrogen, Ammonia (as N)	mg/L	Daily Max	**20**	22.9* Max 3.7 Average	60	-	-	-	See Outfall 023				703.5	-	Continued 750-1.10(c)
	The permit continues to include the existing effluent limitation for ammonia at Outfall 023A, to prevent backsliding, as this is more stringent then the DEC calculated WQBEL for Outfall 023. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement. *A single violation occurred in the reporting period in March 2025.														
Coliform, Fecal	#/100 ml	30-Day Geo Mean	**200**	287	14/46	200	TOGS 1.3.3	-	Narrative: The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.				703.4	-	Continued TBEL
		7-Day Geo Mean	**400**	2419	14/46	400	TOGS 1.3.3	-							
	The permit continues to include year-round disinfection at Outfall 023A. The permit also continues to include the existing fecal coliform effluent limitations equal to the TBEL and WQS. Given that 023B is the only sanitary source to Outfall 023, the effluent limitations at 023B will reasonably protect the classified water use and assure compliance with applicable WQS at Outfall 023.														
Mercury	ng/L	Daily Max	-	1.2	1	-	-	-	-	0.7	H(FC)	35	MDV	-	No Limitation or Monitoring
	Sampling for mercury was conducted in March 2026. See mercury section of the fact sheet for more information.														
Total Residual Chlorine (TRC)	mg/L	Daily Max	**2.0**	1.75 Avg 2.44 Max	60	2.0	TOGS 1.3.3	-	See Outfall 023				703.5	-	Continued TBEL
	The permit continues to include year-round disinfection at Outfall 023A. The permit also continues to include the existing effluent limitations equal to the TBELs presented in TOGS 1.3.3 for chlorine addition at biological treatment plants. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

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Outfall 023B

Outfall # Internal	023B	**Description of Wastewater:** Cement Kiln Dust Landfill Leachate Treated Effluent **Type of Treatment:** pH correction, Sedimentation, and Filtration													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[18]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Basis for Permit Requirement
General Notes: DEC obtained existing discharge data from 1/1/2021 to 12/31/2025 from Discharge Monitoring Reports provided by the permittee. As Outfall 023B is internal to Outfall 023, DEC's water quality review at the final Outfall 023 will reasonably protect the classified water use and assure compliance with applicable WQS. TBELs were evaluated at internal Outfalls 023A and 023B.															
Flow Rate	GPD	Daily Max & Monthly Avg	**Monitor**	93,605 Actual Average	60	-	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Continued Monitor 750-1.13(b)
	In accordance with 6 NYCRR 750-1.13(b), the permit continues to require flow monitoring.														
pH	SU	Minimum	**6.0**	7.81	60	6.0	TOGS 1.2.1	-	-	6.5 – 8.5	Range	See Outfall 023	703.3	-	Continued TBEL
	SU	Maximum	**9.0**	8.84	60	9.0	TOGS 1.2.1	-	-	6.5 – 8.5	Range	See Outfall 023	703.3	-	Continued TBEL
	Consistent with TOGS 1.2.1, the permit continues to include the existing limitations equal the TBELs for sedimentation technology listed in Attachment C. As Outfall 023B is internal to 023, the water quality review for Outfall 023 will reasonably protect the classified water use and assure compliance with applicable WQS.														
Settleable Solids	mL/L	Daily Max	**0.1**	0.1 Max	60	0.1	TOGS 1.2.1	-	See Outfall 023				703.2	-	Continued TBEL
	Consistent with TOGS 1.2.1, the permit continues the existing effluent limitations equal to the TBELs for sedimentation technology in Attachment C. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	Monitor	10.3	60	20	TOGS 1.2.1	-	See Outfall 023				703.2	-	Discontinued
	mg/L	Daily Max	**20**	30.8	60	40	TOGS 1.2.1	-	See Outfall 023				703.2	-	Continued 750-1.10(c)
	The permit continues to include the existing effluent limitation to prevent backsliding. Because the limit is established as a daily maximum and captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

[18] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # Internal	023B	**Description of Wastewater:** Cement Kiln Dust Landfill Leachate Treated Effluent **Type of Treatment:** pH correction, Sedimentation, and Filtration

Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[18]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
Total Dissolved Solids (TDS)	mg/L	Monthly Avg	Monitor	12988 Avg	58	-	-	-	See Outfall 023				703.3	-	Discontinued
		Daily Max	**Monitor**	18400 Max	58	-	-								Continued Monitor 750-1.13(a)
	Consistent with 750-1.13(a), the permit continues to include monitoring at Outfall 023B to assess the contribution of the landfill leachate to the overall concentration at Outfall 023. Because the daily max monitoring captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Total Sulfate, (SO4)	mg/L	Monthly Avg	Monitor	14,853	60	-	-	12*	Narrative: None in amounts that will adversely affect the taste, color or odor thereof, or impair the waters for their best usages.				703.2	-	Discontinued
		Daily Max	Monitor	15,117	60	-	-							-	Discontinued
	There are no numeric WQS or guidance values for this parameter. DEC has discontinued monitoring of this pollutant. Whole Effluent Toxicity (WET) testing measures the combined impact of the effluent on aquatic organisms and compliance with the narrative standard is expected to be achieved through compliance with WET testing at Outfall 023. * Ambient sulfate was taken as the median of 199 samples collected on the lower Hudson from 2001 – 2025.														
Aluminum	mg/L	Monthly Avg	**2.0**	0.14 Max	11/49	2.0	TOGS 1.2.1	7.3*	See Outfall 023				703.5	-	Continued TBEL
	mg/L	Daily Max	**4.0**	0.23 Avg	11/49	4.0	TOGS 1.2.1							-	Continued TBEL
	Consistent with TOGS 1.3.1E, when the receiving waterbody pH exceeds 6.5 the TBELs are adequate to meet the WQS for ionic aluminum. As such, the permit continues to include TBELs at Outfall 023B, where they appropriately reflect the leachate treatment performance, and DEC has discontinued limitations at Outfall 023. *Ambient pH was established from the 20th percentile of 37 datapoints collected from 2005-2025 at stations 13-LHUD-125.5 and 13-LHUD-130.6. This data is available through the RIBS Data Portal.														

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Outfall # Internal	023B	**Description of Wastewater:** Cement Kiln Dust Landfill Leachate Treated Effluent **Type of Treatment:** pH correction, Sedimentation, and Filtration

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[18]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Mercury	ng/L	Monthly Avg	Monitor	9.8 Min	20	-	-	-	-	-	-	-	-	-	Discontinued
	ng/L	Daily Max	50	34 Avg 71 Max	20	-	-	-	-	0.7	A(C)	**35**	GLCA	-	MDV
	See Mercury section of the factsheet and Schedule of Compliance. Interim limits were established at the EEQ, set at the 99th percentile delta lognormal of 98 ng/L, consistent with TOGS 1.2.1., page 16. Because the daily max limit captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

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Outfall 012

Outfall # Hudson River	012	**Description of Wastewater:** Stormwater **Type of Treatment:** Swale and sedimentation basin													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[19]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Basis for Permit Requirement
General Notes: DEC obtained existing discharge data from 1/1/2021 to 12/31/2025 from Discharge Monitoring Reports provided by the permittee. The Outfall had only one recorded discharge within the reporting period. DEC reviewed all applicable WQS for development of the WQBELs. The WQS and resulting WQBEL, shown below, represent the most stringent of any applicable WQS.															
Flow Rate	GPD	Daily Max & Monthly Avg	**Monitor**	43,200	1	-	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Continued Monitor 750-1.13(b)
	In accordance with 6 NYCRR 750-1.13(b), the permit continues to require flow monitoring.														
pH	SU	Minimum	**6.0**	8.07	1	-	-	7.7*	-	6.5 – 8.5	Range	No Reasonable Potential	703.3	-	Continued 750-1.10(c)
	SU	Maximum	**9.0**												
	The permit continues to include the existing effluent limitations to prevent backsliding and given the available dilution, will reasonably protect the classified water use and assure compliance with applicable WQS. *Ambient pH was established from the median of 37 datapoints collected from 2005-2025 at stations 13-LHUD-125.5 and 13-LHUD-130.6. This data is available through the RIBS Data Portal.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	Monitor	20.8	1	**20**	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBEL
	mg/L	Daily Max	50			**40**	TOGS 1.2.1								
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit includes reduced effluent limitations equal to the TBELs set at the expected treatment performance for a sedimentation basin (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS.														

[19] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

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Outfall # Hudson River	012	**Description of Wastewater:** Stormwater **Type of Treatment:** Swale and sedimentation basin

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[19]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Settleable Solids	mL/L	Daily Max	**0.1**	<0.1	1	0.1	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include effluent limitations equal to the TBEL set at the expected treatment performance for a sedimentation basin (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum, DEC has discontinued the monthly average monitoring requirement.														
Oil and Grease	mg/L	Daily Max	**15**	<5.2	1	15	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include effluent limitations equal to the TBEL set at the expected treatment performance for sedimentation basin (oil separation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the limit is established as a daily maximum, DEC has discontinued the monthly average monitoring requirement.														
Total Sulfate, (SO_4)	mg/L	Monthly Avg.	Monitor	4,310	1	-	-	12*	Narrative: None in amounts that will adversely affect the taste, color or odor thereof, or impair the waters for their best usages.				703.2	-	Discontinued
	mg/L	Daily Max	**Monitor**			-	-							-	Continued Monitor 750-1.13(a)
	The single reported value for sulfate is significantly higher than the ambient concentration and the permit will continue to require daily max monitoring to assess variability during the next permit review. Because the daily max monitoring captures the worst-case data, DEC discontinued the monthly average monitoring requirement. *Ambient sulfate was taken as the median of 199 samples collected on the lower Hudson from 2001 – 2025.														
Sulfite, (SO_3)	ug/L	Monthly Avg.	Monitor	<1.0	1	-	-	-	-	-	-	-	-	-	Discontinued
	ug/L	Daily Max	**Monitor**			-	-	-	-	200	A(C)	No Reasonable Potential	703.5	-	Continued Monitor 750-1.13(a)
	Given the reported concentration for sulfate and potential for sulfate to influence concentrations of sulfite, the permit will continue to require daily max monitoring to evaluate variability and reasonable potential during the next permit review. Because the daily max monitoring captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

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Outfall # Hudson River	012	**Description of Wastewater:** Stormwater **Type of Treatment:** Swale and sedimentation basin

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[19]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Dissolved Solids (TDS)	mg/L	Daily Max	-	-	-	-	-	139*	-	500		No Reasonable Potential	703.3	-	No Monitoring or Limitation
	Given the dilution was set at the maximum value of 100:1, the permit does not include limitations as there is no reasonable potential to violate the WQS. Also, the permit does not include monitoring as such information would not be useful given the dilution. *Median value of 115 upstream datapoints collected from 2001-2025.														

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Outfall 013

Outfall # Hudson River	013	**Description of Wastewater:** Stormwater – Near gypsum pile **Type of Treatment:** Floc-sock, Drainage Channel & Sedimentation Basins													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality [20]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
General Notes: DEC obtained existing discharge data from 1/1/2021 to 12/31/2025 from Discharge Monitoring Reports provided by the permittee. The Outfall had only one recorded discharge in March 2021 within the reporting period. DEC reviewed all applicable WQS for development of the WQBELs. The WQS and resulting WQBEL, shown below, represent the most stringent of any applicable WQS.															
Flow Rate	GPD	Daily Max & Monthly Avg	**Monitor**	43,200	1	-	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Continued Monitor 750-1.13(b)
	In accordance with 6 NYCRR 750-1.13(b), the permit continues to require flow monitoring.														
pH	SU	Minimum	**6.0**	8.5	1	6.0	40 CFR Part 411	7.7*	-	6.5 – 8.5	Range	No Reasonable Potential	703.3	-	Continued TBEL
		Maximum	**9.0**			9.0									
	The permit continues to include effluent limitations equal to the TBEL and given the available dilution will reasonably protect the classified water use and assure compliance with applicable WQS. *Ambient pH was established from the median of 37 datapoints collected from 2005-2025 at stations 13-LHUD-125.5 and 13-LHUD-130.6. This data is available through the RIBS Data Portal.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	Monitor	20.7	1	-	-	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	Discontinued
		Daily Max	**50**			50	40 CFR Part 411								Continued TBEL
	There are no numeric WQS or guidance values for this parameter. The permit continues the existing effluent limitations equal to the TBEL and due to the absence of any reported WQS violations, will reasonably protect the classified water use and assure compliance with applicable WQS. Because the daily max limit captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

[20] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # Hudson River	013	**Description of Wastewater:** Stormwater – Near gypsum pile **Type of Treatment:** Floc-sock, Drainage Channel & Sedimentation Basins												
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality [20]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Settleable Solids	mL/L	Daily Max	**0.1**	<0.1	1	0.1	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include effluent limits equal to the TBEL set at the expected treatment performance for a sedimentation basin (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the daily max limit captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Oil and Grease	mg/L	Daily Max	**15**	<5.3	1	15	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include effluent limits equal to the TBEL set at the expected treatment performance for sedimentation basin (oil separation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the daily max limit captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Total Sulfate, (SO_4)	mg/L	Monthly Avg	Monitor	138	1	-	-	12*	-	Narrative: None in amounts that will adversely affect the taste, color or odor thereof, or impair the waters for their best usages.			703.2	-	Discontinued
	mg/L	Daily Max	**Monitor**			-	-		-					-	Continued Monitor 750-1.13(a)
	There are no numeric WQS or guidance values for this parameter. The single reported value for sulfate is significantly different from both that reported at Outfall 012 and the ambient concentration, and therefore, the permit continues to include a monitoring requirement to assess variability during the next permit review. Because the daily max monitoring captures the worst-case data, DEC discontinued the monthly average monitoring requirement. *Ambient sulfate was taken as the median of 199 samples collected on the lower Hudson from 2001 – 2025.														

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Outfall # Hudson River	013	**Description of Wastewater:** Stormwater – Near gypsum pile **Type of Treatment:** Floc-sock, Drainage Channel & Sedimentation Basins													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality [20]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Sulfite, (SO_3)	ug/L	Monthly Avg	Monitor	1000	1	-	-	-	-	-	-	-	-	-	Discontinued
	ug/L	Daily Max	**Monitor**	1000	1	-	-	-	63	200	A(C)	No Reasonable Potential	703.5	-	Continued Monitor 750-1.13(a)
	The projected instream concentration was calculated using the reported effluent concentration, a multiplier of 6.3, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. However, given the reported concentration for sulfate at Outfall 012 may indicate variability across the site, and the potential for sulfate to influence concentrations of sulfite, the permit continues monitoring requirements to evaluate variability and reasonable potential during the next permit review. Because the daily max monitoring captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Total Dissolved Solids (TDS)	mg/L	Daily Max	-	-	-	-	-	139*	-	500		No Reasonable Potential	703.3	-	No Limitation or Monitoring
	Given the dilution was set at the maximum value of 100:1, the permit does not include limitations as there is no reasonable potential to violate the WQS. Also, the permit does not include monitoring as such information would not be useful given the dilution. *Median value of 115 upstream datapoints collected from 2001-2025.														

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Outfalls to Unnamed Tributary 2 of Hannacroix Creek, Class C

Outfall 027

Outfall # Trib to Hanna	027	**Description of Wastewater:** Stormwater from Truck unloading Pad **Type of Treatment:** Riprap Swale													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[21]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: There was no discharge during the period from 01/1/2021 to 12/31/2025 for this outfall. DEC reviewed all applicable WQS but without effluent data, was unable to calculate reasonable potential for the inclusion of any new WQBELs.															
Flow Rate	GPD	Daily Max & Monthly Avg	**Monitor**	No discharge for last five years		-	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Continued Monitor 750-1.13(b)
	In accordance with 6 NYCRR 750-1.13(b), the permit continues to require flow monitoring.														
pH	SU	Minimum	**6.5**	-	-	-	-	7.8*	-	6.5 – 8.5	H(WS)	6.5 - 8.5	703.3	-	Continued WQBEL
		Maximum	**8.5**	-	-										
	The permit continues to include the existing effluent limitations as they are equal to the WQS. *Ambient pH was established from a 2023 analysis of median watershed specific data collected by DEC through the Rotating Integrated Basin Studies (RIBS) program from 2012-2022. This data is available through the RIBS Data Portal.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	25	-	-	**20**	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBELs
		Daily Max	45	-	-	**40**	TOGS 1.2.1								
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit effluent limitations have been reduced to the TBELs set at the expected treatment performance for a rip rap swale (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS.														

[21] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # Trib to Hanna	027	**Description of Wastewater:** Stormwater from Truck unloading Pad **Type of Treatment:** Riprap Swale

Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[21]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
Total Dissolved Solids	mg/L	Monthly Avg	Monitor	-	-	-	-	-	-	-	-	-	-	-	Discontinued
		Daily Max	**Monitor**	-	-	-	-		-	500		-	703.3	-	Continued Monitor 750-1.13(a)
	Given the lack of available data for this outfall, and the TDS results at other similar outfalls, the permit continues to include monitoring. Due to the low number of discharge events, collection of daily max data will provide worst-case data for the reasonable potential evaluation and DEC has discontinued the monthly average monitoring.														
Settleable Solids	mL/L	Daily Max	**0.1**	-	-	0.1	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include effluent limitations equal to the TBEL set at the expected treatment performance for a rip rap swale (sedimentation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the daily max limit captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														
Oil and Grease	mg/L	Daily Max	**15**	-	-	15	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Continued TBEL
	There are no numeric WQS or guidance values for this parameter. Consistent with TOGS 1.2.1 Attachment C, the permit continues to include effluent limitations equal to the TBEL set at the expected treatment performance for a rip rap swale (oil separation). Due to the absence of any reported WQS violations, the TBEL will reasonably protect the classified water use and assure compliance with applicable WQS. Because the daily max limit captures the worst-case data, DEC discontinued the monthly average monitoring requirement.														

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USEPA EFFLUENT LIMITATION GUIDELINE (ELG) CALCULATIONS

Appendix Link

For the applicable categorical limitations under 40 CFR Part 411 Subpart C, DEC determined the TBEL based on the following basis:

Outfall	**006, 010, 013, 020, 021, & 024**
40 CFR Part/Subpart	§411
Subpart Name	Subpart C Materials Storage Piles Runoff Subcategory

Effluent characteristic	Effluent limitations
TSS	Not to exceed 50 mg/l.
pH	Within the range 6.0 to 9.0.

Outfall	**010, 020**
40 CFR Part/Subpart	§436 Mineral Mining and Processing Point Source Category
Subpart Name	Subpart B Crushed Stone Subcategory

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
pH	([1])	([1])

[1] *Within the range 6.0 to 9.0.*

Appendix A: Regulatory and Technical Basis of Permit Authorizations

The Appendix is meant to supplement the fact sheet for multiple types of SPDES permits. Portions of this Appendix may not be applicable to this specific permit.

Regulatory References

The provisions of the permit are based largely upon 40 CFR 122 subpart C and 6 NYCRR Part 750 and include monitoring, recording, reporting, and compliance requirements, as well as general conditions applicable to all SPDES permits. Below are the most common citations for the requirements included in SPDES permits:

- Clean Water Act (CWA) 33 section USC 1251 to 1387
- Environmental Conservation Law (ECL) Articles 17 and 70
- Federal Regulations
  - 40 CFR, Chapter I, subchapters D, N, and O
- State environmental regulations
  - 6 NYCRR Part 621
  - 6 NYCRR Part 750
  - 6 NYCRR Parts 700 - 704 – Best use and other requirements applicable to water classes
  - 6 NYCRR Parts 800 – 941 - Classification of individual surface waters
- NYSDEC water program policy, referred to as Technical and Operational Guidance Series (TOGS)
- USEPA Office of Water Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E

The following is a quick guide to the references used within the fact sheet:

SPDES Permit Requirements	Regulatory Reference
Anti-backsliding	6 NYCRR 750-1.10(c) and 750-1.10(d), CWA sections 402(o), 303(d)(4), ECL 17-0809, 40 CFR 122.44(*l*)
Best Management Practices (BMPS) for CSOs	6 NYCRR 750-2.8(a)(2)
Environmental Benefits Permit Strategy (EBPS)	6 NYCRR 750-1.18, NYS ECL 17-0817(4), TOGS 1.2.2 (revised January 25,2012)
Exceptions for Type I SSO Outfalls (bypass)	6 NYCRR 750-2.8(b)(2), 40 CFR 122.41
Mercury Multiple Discharge Variance	Division of Water Program Policy 1.3.10 (DOW 1.3.10)
Mixing Zone and Critical Water Information	TOGS 1.3.1 & Amendments
PCB Minimization Program	40 CFR Part 132 Appendix F Procedure 8, 6 NYCRR 750-1.13(a) and 750-1.14(f), and TOGS 1.2.1
Pollutant Minimization Program (PMP)	6 NYCRR 750-1.13(a), 750-1.14(f), TOGS 1.2.1
Schedules of Compliance	6 NYCRR 750-1.14
Sewage Pollution Right to Know (SPRTK)	NYS ECL 17-0826-a, 6 NYCRR 750-2.7
State Administrative Procedure Act (SAPA)	State Administrative Procedure Act Section 401(2), 6 NYCRR 621.11(l)
State Environmental Quality Review (SEQR)	6 NYCRR Part 617
USEPA Effluent Limitation Guidelines (ELGs)	40 CFR Parts 405-471
USEPA National CSO Policy	33 USC Section 1342(q)
Whole Effluent Toxicity (WET) Testing	TOGS 1.3.2
General Provisions of a SPDES Permit Department Request for Additional Information	NYCRR 750-2.1(i)

Outfall and Receiving Water Information

Impaired Waters

The NYS 303(d) List of Impaired/TMDL Waters identifies waters where specific best usages are not fully supported. The state must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) that restrict waterbody

uses, in order to restore and protect such uses. SPDES permits must include effluent limitations necessary to implement a waste load allocation (WLA) of an EPA-approved TMDL (6 NYCRR 750-1.11(a)(5)(ii)), if applicable. In accordance with 6 NYCRR 750-1.13(a), permittees discharging to waters which are on the list but do not yet have a TMDL developed may be required to perform additional monitoring for the parameters causing the impairment. Accurate monitoring data is needed to determine the existing capabilities of the wastewater treatment plants and to assure that WLAs are allocated equitably.

Existing Effluent Quality

The existing effluent quality is determined from a statistical evaluation of effluent data in accordance with TOGS 1.2.1 and the USEPA Office of Water, Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E (TSD). The existing effluent quality is equal to the 95th (monthly average) and 99th (daily maximum) percentiles of the lognormal distribution of existing effluent data. When there are greater than three non-detects, a delta-lognormal distribution is assumed, and delta-lognormal calculations are used to determine the monthly average and daily maximum pollutant concentrations. Statistical calculations are not performed for parameters where there are less than ten data points. If additional data is needed, a monitoring requirement may be specified either through routine monitoring or a short-term high intensity monitoring program. The Pollutant Summary Table identifies the number of sample data points available.

Permit Requirements

Basis for Effluent Limitations

Sections 101, 301, 304, 308, 401, 402, and 405 of the CWA and Titles 5, 7, and 8 of Article 17 ECL, as well as their implementing federal and state regulations, and related guidance, provide the basis for the effluent limitations and other conditions in the permit.

When conducting a full technical review of an existing permit, the previous effluent limitations form the basis for the next permit. Existing effluent quality is evaluated against the existing effluent limitations to determine if these should be continued, revised, or deleted. Generally, existing limitations are continued unless there are changed conditions at the facility, the facility demonstrates an ability to meet more stringent limitations, or in response to updated regulatory requirements. Pollutant monitoring data is also reviewed to determine the presence of additional contaminants that should be included in the permit based on a reasonable potential analysis to cause or contribute to a WQS violation.

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*l*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law[22] and USEPA interpretation[23] anti-backsliding requirements do not apply should a revision to the final effluent limitation take effect before the scheduled date of compliance for that final effluent limitation.

Antidegradation Policy

New York State implements the antidegradation portion of the CWA based upon two documents: (1) Organization and Delegation Memorandum #85-40, “Water Quality Antidegradation Policy”

[22] American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)

[23] U.S. EPA, WQS; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; 65 Fed. Reg. 31682, 31704 (May 18, 2000); Proposed Water Quality Guidance for the Great Lakes System, 58 Fed. Reg. 20802, 20837 & 20981 (April 16, 1993)

(September 9, 1985); and, (2) TOGS 1.3.9, "Implementation of the NYSDEC Antidegradation Policy – Great Lakes Basin (Supplement to Antidegradation Policy dated September 9, 1985) (undated)." The permit for the facility contains effluent limitations which ensure that the existing best usage of the receiving waters will be maintained. To further support the antidegradation policy, SPDES applications have been reviewed in accordance with the State Environmental Quality Review Act (SEQR) as prescribed by 6 NYCRR Part 617.

Effluent Limitations

In developing a permit, the DEC determines the technology-based effluent limitations (TBELs) and then evaluates the water quality expected to result from technology controls to determine if any exceedances of water quality criteria in the receiving water might result. If there is a reasonable potential for exceedances of water quality criteria to occur, water quality-based effluent limitations (WQBELs) are developed. A WQBEL is designed to ensure that the WQS of receiving waters are met. In general, the CWA requires that the effluent limitations for a particular pollutant are the more stringent of either the TBEL or WQBEL.

Technology-based Effluent Limitations (TBELs) for Industrial Facilities

A TBEL requires a minimum level of treatment for industrial point sources based on currently available treatment technologies or Best Management Practices (BMPs). CWA sections 301(b) and 402, ECL sections 17-0509, 17-0809 and 17-0811, and 6 NYCRR 750-1.11 require technology-based controls on effluents. TBELs are set based upon an evaluation of New Source Performance Standards (NSPS), Best Available Technology Economically Achievable (BAT), Best Conventional Pollutant Control Technology (BCT), Best Practicable Technology Currently Available (BPT), and Best Professional Judgment (BPJ).

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

In many cases, BPT, BCT, BAT and NSPS limitations are based on effluent guidelines developed by USEPA for specific industries, as promulgated under 40 CFR Parts 405-471. Applicable guidelines, pollutants regulated by these guidelines, and the effluent limitation derivation for facilities subject to these guidelines is in the USEPA Effluent Limitation Guideline Calculations Table.

Best Professional Judgement (BPJ)

For substances that are not explicitly limited by regulations, the permit writer is authorized to use BPJ in developing TBELs. Consistent with section 402(a)(1) of the CWA, and NYS ECL section 17-0811, the DEC is authorized to issue a permit containing "any further limitations necessary to ensure compliance with WQS adopted pursuant to state law". BPJ limitations may be set on a case-by-case basis using any reasonable method that takes into consideration the criteria set forth in 40 CFR 125.3. Applicable state regulations include 6 NYCRR 750-1.11. The BPJ limitation considers the existing technology present at the facility, the statistically calculated existing effluent quality for that parameter, and any unique or site-specific factors relating to the facility. Technology limitations generally achievable for various treatment technologies are included in TOGS 1.2.1, Attachment C. These limitations may be used for the listed parameters when the technology employed at the facility is listed.

Water Quality-Based Effluent Limitations (WQBELs)

In addition to the TBELs, permits must include additional or more stringent effluent limitations and conditions, including those necessary to protect water quality. CWA sections 101 and 301(b)(1)(C), 40 CFR 122.44(d)(1), and 6 NYCRR 750-1.11 require that permits include limitations for all pollutants or parameters which are or may be discharged at a level which may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. Additionally, 6 NYCRR 701.1 prohibits

the discharge of pollutants that will cause impairment of the best usages of the receiving water as specified by the water classifications at the location of discharge and at other locations that may be affected by such discharge. WQS can be found under 6 NYCRR Parts 700-704. The limitations must be stringent enough to ensure that WQS are met at the point of discharge and in downstream waters and must be consistent with any applicable WLA which may be in effect through a TMDL for the receiving water. These and other requirements are summarized in TOGS 1.1.1, 1.3.1, 1.3.2, 1.3.5 and 1.3.6. The DEC considers a mixing zone analysis, critical flows, and reasonable potential analysis when developing a WQBEL.

Mixing Zone Analyses

In accordance with TOGS 1.3.1., the DEC may perform additional analysis of the mixing condition between the effluent and the receiving waterbody. Mixing zone analyses using plume dispersion modeling are conducted in accordance with the following:
"EPA Technical Support Document for Water Quality-Based Toxics Control" (March 1991); EPA Region VIII's "Mixing Zones and Dilution Policy" (December 1994); NYSDEC TOGS 1.3.1, "Total Maximum Daily Loads and Water Quality-Based Effluent Limitations" (July 1996); "CORMIX v11.0" (2019).

Critical Flows

In accordance with TOGS 1.2.1 and 1.3.1, WQBELs are developed using dilution ratios that relate the critical low flow condition of the receiving waterbody to the critical effluent flow. The critical low flow condition used in the dilution ratio will be different depending on whether the limitations are for aquatic or human health protection. For chronic aquatic protection, the critical low flow condition of the waterbody is typically represented by the 7Q10 flow and is calculated as the lowest average flow over a 7-day consecutive period within 10 years. For acute aquatic protection, the critical low flow condition is typically represented by the 1Q10 and is calculated as the lowest 1-day flow within 10 years. However, NYSDEC considers using 50% of the 7Q10 to be equivalent to the 1Q10 flow. For the protection of human health, the critical low flow condition is typically represented by the 30Q10 flow and is calculated as the lowest average flow over a 30-day consecutive period within 10 years. However, NYSDEC considers using 1.2 x 7Q10 to be equivalent to the 30Q10. The 7Q10 or 30Q10 flow is used with the critical effluent flow to calculate the dilution ratio. The critical effluent flow can be the maximum daily flow reported on the permit application, the maximum of the monthly average flows from discharge monitoring reports for the past three years, or the facility design flow. When more than one applicable standard exists for aquatic or human health protection for a specific pollutant, a reasonable potential analysis is conducted for each applicable standard and corresponding critical flow to ensure effluent limitations are sufficiently stringent to ensure all applicable WQS are met as required by 40 CFR 122.44(d)(1)(i). For brevity, the pollutant summary table reports the results of the most conservative scenario.

Reasonable Potential Analysis (RPA)

The Reasonable Potential Analysis (RPA) is a statistical estimation process, outlined in the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (TSD), Appendix E. This process uses existing effluent quality data and statistical variation methodology to project the maximum amounts of pollutants that could be discharged by the facility. This projected instream concentration (PIC) is calculated using the appropriate ratio and compared to the water quality standard (WQS). When the RPA process determines the WQS may be exceeded,

a WQBEL is required. The procedure for developing WQBELs includes the following steps:

1) identify the pollutants present in the discharge(s) based upon existing data, sampling data collected by the permittee as part of the permit application or a short-term high intensity monitoring program, or data gathered by the DEC;

2) identify water quality criteria applicable to these pollutants;

3) determine if WQBELs are necessary (i.e. reasonable potential analysis (RPA)). The RPA will utilize the procedure outlined in Chapter 3.3.2 of EPA's Technical Support Document (TSD). As outlined in the TSD, for parameters with limited effluent data the RPA may include multipliers to account for effluent variability; and,

4) calculate WQBELs (if necessary). Factors considered in calculating WQBELs include available dilution of effluent in the receiving water, receiving water chemistry, and other pollutant sources.

The DEC uses modeling tools to estimate the expected concentrations of the pollutant in the receiving water and develop WQBELs. These tools were developed in part using the methodology referenced above. If the estimated concentration of the pollutant in the receiving water is expected to exceed the ambient water quality standard or guidance value (i.e. numeric interpretation of a narrative water quality standard), then there is a reasonable potential that the discharge may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. If a TMDL is in place, the facility's WLA for that pollutant is applied as the WQBEL.

For carbonaceous and nitrogenous oxygen demanding pollutants, the DEC uses a model which incorporates the Streeter-Phelps equation. The equation relates the decomposition of inorganic and organic materials along with oxygen reaeration rates to compute the downstream dissolved oxygen concentration for comparison to WQS.

The Division of Water has been using the TMDL approach in permit limit development for the control of toxic substances. Since the early 1980's, the loading capacity for specific pollutants has been determined for each drainage basin. Water quality-limiting segments and pollutants have been identified, TMDLs, wasteload allocations and load allocations have been developed, and permits with water quality-based effluent limits have been issued. In accordance with TOGS 1.3.1, the Division of Water implements a Toxics Reduction Strategy which is committed to the application of the TMDL process using numeric, pollutant-specific WQS through the Watershed Approach. The Watershed Approach accounts for the cumulative effect of multiple discharges of conservative toxic pollutants to ensure WQS are met in downstream segments.

Whole Effluent Toxicity (WET) Testing:

WET tests use small vertebrate and invertebrate species to measure the aggregate toxicity of an effluent. There are two different durations of toxicity tests: acute and chronic. Acute toxicity tests measure survival over a 96-hour test exposure period. Chronic toxicity tests measure reductions in survival, growth, and reproduction over a 7-day exposure. TOGS 1.3.1 includes guidance for determining when aquatic toxicity testing should be included in SPDES permits. The authority to require toxicity testing is in 6 NYCRR 702.9. TOGS 1.3.2 describes the procedures which should be followed when determining whether to include toxicity testing in a SPDES permit and how to implement a toxicity testing program. Per TOGS 1.3.2, WET testing may be required when any one of the following seven criteria are applicable:

1. There is the presence of substances in the effluent for which ambient water quality criteria do not exist.
2. There are uncertainties in the development of TMDLs, WLAs, and WQBELs, caused by inadequate ambient and/or discharge data, high natural background concentrations of pollutants, available treatment technology, and other such factors.
3. There is the presence of substances for which WQBELs are below analytical detectability.
4. There is the possibility of complex synergistic or additive effects of chemicals, typically when the number of metals or organic compounds discharged by the permittee equals or exceeds five.
5. There are observed detrimental effects on the receiving water biota.
6. Previous WET testing indicated a problem.
7. POTWs which exceed a discharge of 1 MGD. Facilities of less than 1 MGD may be required to test, e.g., POTWs <1 MGD which are managing industrial pretreatment programs.

Monitoring Requirements

CWA section 308, 40 CFR 122.44(i), 6 NYCRR 750-1.13, and 750-2.5 require that monitoring be included in permits to determine compliance with effluent limitations. Additional effluent monitoring may also be required to gather data to determine if effluent limitations may be required. The permittee is responsible for conducting the monitoring and reporting results on Discharge Monitoring Reports (DMRs). The permit contains the monitoring requirements for the facility. Monitoring frequency is based on the minimum sampling necessary to adequately monitor the facility's performance and characterize the nature of the discharge of the monitored flow or pollutant. Variable effluent flows and pollutant levels may be required to be monitored at more frequent intervals than relatively constant effluent flow and pollutant levels (6 NYCRR 750-1.13). For industrial facilities, sampling frequency is based on guidance provided in TOGS 1.2.1. For municipal facilities, sampling frequency is based on guidance provided in TOGS 1.3.3.

Other Conditions

Mercury

Mercury is widespread in New York State (NYS) waters at levels above the most stringent dissolved mercury water quality standard (WQS) of 0.7 ng/L. SPDES permittees cannot comply with a Water Quality-Based Effluent Limitation (WQBEL) for mercury. Therefore, an MDV is appropriate, in accordance with 6 NYCRR 702.17(h), "to address widespread standard or guidance value attainment issues including the presence of a ubiquitous pollutant or naturally high levels of a pollutant in a watershed." The first MDV was issued in October 2010 and subsequently revised and reissued in 2015, 2020, and 2025. Each iteration of the MDV builds off the previous version supporting the State's effort to reduce mercury pollution and make reasonable progress toward achieving the WQBEL for mercury. This iteration of the MDV refines the content and application of the MDV for mercury.

The MDV does not change the WQS of 0.7 ng/L; it establishes a variance of the WQBEL which is based on the WQS. SPDES permits which include this variance comply with 40 CFR 122.44.

DOW 1.3.10 explains which surface water permittees are eligible for the MDV.

Schedules of Compliance

Schedules of compliance are included in accordance with 40 CFR Part 132 Attachment F, Procedure 9, 40 CFR 122.47 and 6 NYCRR 750-1.14. Schedules of compliance are intended to, in the shortest reasonable time, achieve compliance with applicable effluent standards and limitations, WQS, and other applicable requirements. Where the time for compliance is more than nine months, the schedule of compliance must include interim requirements and dates for their

achievement. If the time necessary to complete the interim milestones is more than nine months, and not readily divisible into stages for completion, progress reports must be required.

Emerging Contaminants

Emerging Contaminants, such as Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), and 1,4-Dioxane (1,4-D), have been used in a wide variety of consumer and industrial products as well as in manufacturing processes for decades. Based on available research, water quality assessments for 1,4-D will follow existing WQBEL development. PFOA and PFOS do not break down easily; therefore, their presence in wastewater can remain a concern for years following their discontinued use. As the science surrounding these contaminants is still evolving, additional monitoring is needed to better understand potential sources and background levels. For more information on emerging contaminants, please see the DEC Division of Water web page: Emerging Contaminants In NY's Waters - NYSDEC.

Schedule(s) of Additional Submittals

Schedules of Additional Submittals are used to summarize the deliverables required by the permit not identified in a separate Schedule of Compliance.

Best Management Practices (BMP) for Industrial Facilities

BMP plans are authorized for inclusion in NPDES permits pursuant to Sections 304(e) and 402 (a)(1) of the Clean Water Act, and 6 NYCRR 750-1.14(f). The regulations pertaining to BMPs are promulgated under 40 CFR Part 125, Subpart K. These regulations specifically address surface water discharges.

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Appendix B: Biological Fact Sheet - Cooling Water Intake Structure

Bureau of Habitat, Energy Unit

Name of Facility: Amrize Inc.
Owner/Operator: Amrize Inc.
SPDES #: NY-0005037
Location: Ravena, New York
Hudson River

1. Description of Facility

The Amrize, Inc. facility ("Amrize"), formerly Holcim, operates a cement manufacturing facility on the west shore of the Hudson River in the village of Ravena. In 2011 the plant began the process to modernize its operations with an energy efficient "dry" cement-making process. The facility upgrade included replacing the former once-through cooling water system with a new closed-cycle glycol cooling water system. In addition to modernizing its cement-manufacturing process, the facility installed a steam-turbine driven cogeneration plant to recover waste heat generated from the kilns. The cogeneration plant uses a closed-cycle cooling system to condense the steam used in the generation process. Make-up water for the cooling towers is supplied first by ground water, then by quarry water, and finally, during drought conditions, Hudson River water. Blow-down discharge from the towers is recycled for the flue-gas desulfurization system, in order to avoid a thermal discharge to Coeyman's Creek.

The cooling water intake structure (CWIS) used to supply river water to the facility can withdraw up to 2 MGD of Hudson River water. The intake is screened with 0.5 mm slot width cylindrical wedgewire screens. These screens will nearly eliminate impingement mortality and further reduce entrainment from that achieved with the closed-cycle cooling system.

2. Ecological Resource

The Hudson River in the vicinity of the intake structure is fresh water tidal and is classified as a Class C water body. The best usages of Class C waters include fishing, and primary and secondary contact recreation. These waters must also support fish propagation and survival.

Impingement and entrainment studies have not been performed at the Amrize facility. However, studies in the Hudson River in the vicinity of the CWIS show that fish species expected in the area include (but are not limited to): shortnose sturgeon, Atlantic sturgeon, striped bass, white perch, American shad, alewife, blueback herring, American eel, gizzard shad, spottail shiner, largemouth bass, smallmouth bass, white catfish, tessellated darter, yellow perch, and blue crab. Eggs, larvae and juvenile shortnose and Atlantic sturgeon occur in the Hudson River near the facility intake (Bain 1997).

3. Discussion of Best Technology Available

According to 6 NYCRR Part 704.5 - *Intake Structures* and Section 316(b) of the federal Clean Water Act, the location, design, construction, and capacity of cooling water intake structures must reflect the "best technology available" (BTA) for minimizing adverse

environmental impact. The identification of BTA is a technology driven determination; however, the final decision may also consider cost.

The 2010 SPDES permit contained conditions describing the Best Technology Available for the facility intake. The New York State Department of Environmental Conservation affirms that, in combination, the following technologies meet the requirements of 6 NYCRR § 704.5 and Section 316(b) CWA: closed-cycle glycol cooling for the cement manufacturing process, closed-cycle cooling for the cogeneration plant, 2 MGD maximum capacity, alternative primary water sources, and installation of 0.5 mm CWWS at the existing CWIS. In addition to reductions in impingement and entrainment, recycling of the cooling tower blow-down to the facility's air pollution control system eliminated the prior thermal discharge to Coeyman's Creek.

In keeping with DEC's established, environmentally protective BTA requirements, an approximately 100 percent reduction in impingement mortality and approximately 97 percent reduction in entrainment, from calculation baseline level, are the minimum impact reductions DEC expects to be achieved from implementation of these technologies at the Amrize facility.

4. Monitoring Requirements

In accordance with Biological Monitoring Requirement No. 2 of the SPDES permit, the permittee must submit *Annual Water Use Summary* Reports. These reports shall contain the daily maximum flow for each month, and monthly summaries of flows of Hudson River water used for the previous year.

5. Legal Requirements

The requirements for the cooling water intake structure in this State Pollutant Discharge Elimination System permit are consistent with the policies and requirements embodied in the New York State Environmental Conservation Law, in particular - Sec.1-0101.1.; 1-0101.2.; 1-0101.3.b., c.; 1-0303.19.; 3-0301.1.b., c., i., s. and t.; 11-0107.1; 11-0303.; 11-0535.2; 11-1301.; 11-1321.1.; 17-0105.17.; 17-0303.2., 4.g.; 17-0701.2., and the rules thereunder, specifically 6NYCRR Part 704.5 and Section 316(b) CWA.

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6. Summary of Proposed Permit Changes

Deletion

Permit Condition	Requirements
Biological Monitoring Requirement 5	Requires submission of status reports.

Additions/Modifications

Permit Condition	Requirements
Biological Monitoring Requirement 1	Requires continued implementation of BTA measures.
Biological Monitoring Requirement 2	Requires submission of annual reports documenting Hudson River cooling water use. Condition renumbered.
Biological Monitoring Requirement 3	Requires maintenance of records for a minimum of 10 years from EDP. Condition renumbered.
Biological Monitoring Requirement 4	Clarifies this permit does not allow take of listed species.
Biological Monitoring Requirement 5	Requires no modifications made to the intake structure without prior Department approval. Conditions renumbered.

7. References

6 NYCRR 701.8 Classifications- fresh surface waters

6 NYCRR Part 704.5 Intake Structures

ASA 2004. 2002 Hudson River Year Class Report. October 2004.

Bain M.B. (1997). Atlantic and shortnose sturgeons of the Hudson River: common and divergent life history attributes. Environ. Biol. of Fishes 48: 347-358.

HDR (2013). Lafarge Ravena Plant Wedge-Wire Intake Screen Feasibility Study FINAL REPORT – Amended October 2013 Henningson, Durham & Richardson Architecture and Engineering, P.C. in association with HDR Engineering Inc.

HDR (2010). Draft Environmental Impact Statement- Ravena Plant Modernization Project. March 2010. Henningson, Durham & Richardson Architecture and Engineering, P.C. in association with HDR Engineering Inc.

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