

State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code: 4952	NAICS Code:	221320		SPDES Number:	NY0026450
Discharge Class (CL):	05			DEC Number:	1-2820-00652/00002
Toxic Class (TX):	Т			Effective Date (EDP):	02/01/2021
Major-Sub Drainage Basin:	17 - 01			Expiration Date (ExDP):	01/31/2026
Water Index Number:	MDB-RC portion	Item No.:	885-168	Modification Dates (EDPM):	04/07/2022
Compact Area:	IEC			modification buttoo (EDI W).	EDPM

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	PERMITTEE NAME AND ADDRESS										
Name:	Nassau County	Attention:	Kennetl	h Arnold							
Street:	1 West Street		Commis	ssioner, DP	w						
City:	Mineola	State:	NY	Zip Code:	11501						
Email:	karnold@nassaucountyny.gov	Phone:	(516) 57	1-7346							

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL																		
Name:	South S	South Shore Water Reclamation Facility																
Address / Location:	2 Marjo	Marjorie Lane County: Nassau																
City:	East Ro	ckaway								State:	NY	Zip C	od	le:	115	18	-202	0
Facility Location:		Latitude:		40	0	3	37 [,]	50	.3	" N	& Longitude:	73	0		39	,	47.7	" W
Primary Outfall No.:	001	01 Latitude: 40 ° 35 ' 45.7 " N & Longitude: 73 ° 40 ' 32.3 " W																
Outfall Description:	Treated	reated Sanitary Receiving Water: Reynolds Channel Class: SB																

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. The copermittees subject to one or more conditions of this permit are listed on page 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 CO BWC - SCIS RWE RPA EPA Region II NYSEFC

Permit Administrator:				
Address:	SUNY @ Stony Brook, 50 Circle 11790-3409	e Road,	Stony	Brook, NY
Signature:		Date:	/	/

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SUMMARY OF ADDITIONAL OUTFALLS

Outfall	Wastewater Description	Outfall	L	atitude				Outfall Longitude					
002	Treated Sanitary	40	0	37	' 43.3 " N		" N	73	٥	° 39 ' 40.7		40.7	" W
Receiving Wat	er: East Rockaway Channel (WIN: HB 233 port	ion; Pa	Class: SC										
Emergency O	<i>y</i> Outfall												
Outfall	Wastewater Description	Outfall	L	atitude				Outfall	L	ongitu	dε	•	
003	Treated Sanitary	40	0	34	,	1	" N	73	۰	26	,	50	" W
Receiving Wat	eiving Water: Atlantic Ocean (WIN: AO; Part-Item: 885-78) Class: SA												
Proposed combined outfall for Cedar Creek WPCP (NY0026859) and South Shore WRF (NY0026450)													

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DEFINITIONS FOR PERMIT LIMITS, LEVELS AND MONITORING TERMS

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 12.
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

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All Year	Reynolds Channel	EDP	ExDP

	EFF	LUENT L	IMITATIO	ON		MONITO	RING REQUIRE	MEN	TS	
PARAMETER Outfall 001								Loca	ation	FN
	Туре	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	70	MGD	-	-	Continuous	Recorder		Х	
рН	Range	6.0-9.0	SU	-	-	6/day	Grab		Х	
Temperature	Daily Maximum	Monitor	°C	-	-	6/day	Grab		Х	
CBOD ₅	Monthly Average	25	mg/L	15,000	lbs/d	1/day	24-hr. Comp.	Χ	Х	1
CBOD₅	7-Day Average	40	mg/L	23,000	lbs/d	1/day	24-hr. Comp.		Χ	
BOD₅	6 cons hr. sample mean	50	mg/L	-	-	-	Grab			2
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	18,000	lbs/d	1/day	24-hr. Comp.	X	х	1
Total Suspended Solids (TSS)	7-Day Average	45	mg/L	26,000	lbs/d	1/day	24-hr. Comp.		Х	
Total Suspended Solids (TSS)	6 cons hr. sample mean	50	mg/l	-	-	-	Grab			2
Settleable Solids	Daily Maximum	0.3	mL/L	-	-	6/day	Grab		Х	
Orthophosphate (As P)	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/month	24-hr. Comp.		Х	
Total Phosphorus (as P)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/month	24-hr. Comp.		Х	
Copper	Daily Maximum	monitor	mg/L	24	lbs/d	1/week	24-hr. Comp.		Х	
Mercury	12 MRA	16	ng/L	-	-	1/quarter	Calculated		Х	11
Mercury	Daily Maximum	50	ng/L	-	-	1/quarter	24-hr. Comp.		Х	11 13 14
Methyl Chloride	Daily Maximum	Monitor	μg/L	-	-	1/quarter	24-hr. Comp.		Х	11 13
alpha-Endosulfan	Daily Maximum	Monitor	μg/L	-	-	1/quarter	24-hr. Comp.		Х	11 13
Biennial Pollutant Scan	Daily Maximum	-	-	-	_	1/Two Years	24-hr. Comp.		Х	3

ACTION LEVEL	LI	MITATIO	NS APPI	_Y		RE	CEIVING WAT	ER		
PARAMETERS Outfall 001	Туре	Action Level	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FI
Cadmium, Total	Daily Maximum	Monito	r µg/L	1.5	lbs/day	1/month	Grab		Х	1
Chromium, Total	Daily Maximum	Monito	r µg/L	5.2	lbs/day	1/month	Grab		Х	1
Nickel, Total	Daily Maximum	Monito	r μg/L	9.3	lbs/day	1/month	Grab		Х	1
Lead, Total	Daily Maximum	Monito	r μg/L	4.2	lbs/day	1/month	Grab		Х	1
Silver, Total	Daily Maximum	Monito	r μg/L	0.9	lbs/day	1/month	Grab		Х	1
Zinc, Total	Daily Maximum	Monito	r µg/L	87	lbs/day	1/month	Grab		Х	1
Methylene Chloride	Daily Maximum	Monito	r µg/L	5.9	lbs/day	1/ quarter	24-hr. Comp.		x	1 1 1
1,1-Dichloroethylene	Daily Maximum	Monito	r µg/L	0.8	lbs/day	1/ quarter	24-hr. Comp.		Х	1 1 1
1,1,1-Trichloroethane	Daily Maximum	Monito	r µg/L	1.4	lbs/day	1/ quarter	24-hr. Comp.		Х	1 1 1
Trichloroethylene	Daily Maximum	Monito	r μg/L	1.7	lbs/day	1/ quarter	24-hr. Comp.		Х	1 1 1
Tetrachloroethane	Daily Maximum	Monito	r µg/L	2.2	lbs/day	1/ quarter	24-hr. Comp.		Х	1 1 1
Tetrachloroethylene	Daily Maximum	Monito	r µg/L	3.8	lbs/day	1/ quarter	24-hr. Comp.		Х	1 1 1
Benzo (a) Anthracene	Daily Maximum	Monito	r µg/L	0.6	lbs/day	1/ quarter	Grab		Х	1
Benzo (k) Fluoranthene	Daily Maximum	Monito	r µg/L	0.6	lbs/day	1/ quarter	Grab		Х	
Diethyl Phthalate	Daily Maximum	Monito	r µg/L	2.4	lbs/day	1/ quarter	Grab		Х	1
Di-n-Butyl Phthalate	Daily Maximum	Monito	r µg/L	11	lbs/day	1/ quarter	Grab		Х	1
Bis (2-ethylhexyl) Phthalate	Daily Maximum	Monito	r µg/L	11	lbs/day	1/month	Grab		Х	1
Pentachlorophenol	Daily Maximum	Monito	r μg/L	1.0	lbs/day	1/month	Grab		Х	1
Benzene	Daily Maximum	Monito	r µg/L	0.6	lbs/day	1/ quarter	24-hr. Comp.		Х	
Toluene	Daily Maximum	Monito	r µg/L	1.1	lbs/day	1/ quarter	24-hr. Comp.		Х	
Phenolics, Total	Daily Maximum	Monito	r µg/L	91	lbs/day	1/ quarter	24-hr. Comp.		Х	
FFLUENT DISINFECTION utfall 001 equired All Year		Limit	Units	Limit	Units F	Sample Frequency	Sample Type	Inf.	Eff.	FN

Coliform, Fecal	30-Day Geometric Mean	200	No./ 100 mL	-	-	1/day	Grab	Х	5,6,7 8,9
Coliform, Fecal	7-Day Geometric Mean	400	No./ 100 ml	-	-	1/day	Grab	Х	5,6,7 8,9
Coliform, Fecal	6-hour geometric mean	800	No./ 100 ml	-	-	1/day	Grab		2
Coliform, Fecal	Individual Sample	2,400	No./ 100 mL	-	-	1/day	Grab		2
Coliform, Total	Monthly Median	700	No./ 100 mL	-	-	1/day	Grab	х	5,6,7 8,9
Enterococci	30-Day Geometric Mean	Monitor	No./ 100 mL	-	-	1/week	Grab	х	6,7 8,9
Chlorine, Total Residual	Daily Maximum	0.5	mg/L	-	-	Continuous	Analyzer	х	4,7 8,9

WHOLE EFFLUENT TOXICI Outfall 001	TY (WET) TESTING	Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote	2.4	TUa	-	-	1/quarter	See footnote		Х	11 12 15
WET - Acute Vertebrate	See footnote	2.4	TUa	-	-	1/quarter	See footnote		Х	11 12 15
WET - Chronic Invertebrate	See footnote	10	TUc	1	ı	1/quarter	See footnote		X	11 12 15
WET - Chronic Vertebrate	See footnote	10	TUc	-	-	1/quarter	See footnote		Х	11 12 15

OUTFAL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
002	Emergency Outfall. No discharge allowed without prior DEC approval.	East Rockaway Channel	EDP	ExDP

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
003	All Year	Atlantic Ocean	Upon DEC's acceptance of the permittee's certification of the completion of the conveyance project in accordance with the approved engineering report, plans and specifications ¹	ExDP

	EFF	LUENT L	IMITATIO	ON		MONITO	RING REQUIRE	EMEN	TS		
PARAMETER Outfall 003								Loca	ation	FN	
	Туре	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.		
Flow	Monthly Average	70	MGD	-	-	Continuous	Recorder		Х		
рН	Range	6.0-9.0	SU	-	-	6/day	Grab		Х		
Temperature	Daily Maximum	Monitor	°C	-	-	6/day	Grab		Х		
CBOD ₅	Monthly Average	25	mg/L	15,000	lbs/d	1/day	24-hr. Comp.	Х	Х	1	
CBOD ₅	7-Day Average	40	mg/L	23,000	lbs/d	1/day	24-hr. Comp.		Х		
BOD ₅	6 cons hr. sample mean	50	mg/L	-	-	-	Grab			2	
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	18,000	lbs/d	1/day	24-hr. Comp.	х	х	1	
Total Suspended Solids (TSS)	7-Day Average	45	mg/L	26,000	lbs/d	1/day	24-hr. Comp.		Х		
Total Suspended Solids (TSS)	6 consecutive hour sample mean	50	mg/l	-	-	-	Grab			2	
Settleable Solids	Daily Maximum	0.3	mL/L	_	-	6/day	Grab		Х		
Orthophosphate (As P)	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/month	24-hr. Comp.		Х		
Total Phosphorus (as P)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/month	24-hr. Comp.		Х		
Copper	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/month	24-hr. Comp.		Х		
Mercury	12 MRA	16	ng/L	-	-	1/quarter	Calculated		Х	11	
Mercury	Daily Maximum	50	ng/L	-	-	1/quarter	24-hr. Comp.		x	11 13 14	
Methyl Chloride	Daily Maximum	Monitor	μg/L	-	-	1/quarter	r 24-hr. Comp.		х	11 13	
alpha-Endosulfan	Daily Maximum	Monitor	μg/L	-	-	1/quarter	arter 24-hr. Comp.		х	11 13	
Biennial Pollutant Scan	Daily Maximum	-	-	-	-	1/Two Years 24-hr. Comp.			х	3	

¹ 6 NYCRR 1.14(c) & 6 NYCRR 2.10(c)

ACTION LEVEL	LIN	MITATION	IS APPL`	Y		RE	CEIVING WATE	ĒR		
PARAMETERS Outfall 003	Туре	Action Level	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Cadmium, Total	Daily Maximum	Monitor	μg/L	1.5	lbs/day	1/month	Grab		Х	12
Chromium, Total	Daily Maximum	Monitor	μg/L	5.2	lbs/day	1/month	Grab		Х	12
Nickel, Total	Daily Maximum	Monitor	μg/L	9.3	lbs/day	1/month	Grab		Х	12
Lead, Total	Daily Maximum	Monitor	μg/L	4.2	lbs/day	1/month	Grab		Х	12
Silver, Total	Daily Maximum	Monitor	μg/L	0.9	lbs/day	1/month	Grab		Х	12
Zinc, Total	Daily Maximum	Monitor	μg/L	87	lbs/day	1/month	Grab		Х	12
Methylene Chloride	Daily Maximum	Monitor	μg/L	5.9	lbs/day	1/ quarter	24-hr. Comp.		Х	11 12 13
1,1-Dichloroethylene	Daily Maximum	Monitor	μg/L	0.8	lbs/day	1/ quarter	24-hr. Comp.		Х	11 12 13
1,1,1-Trichloroethane	Daily Maximum	Monitor	μg/L	1.4	lbs/day	1/ quarter	24-hr. Comp.		Х	11 12 13
Trichloroethylene	Daily Maximum	Monitor	μg/L	1.7	lbs/day	1/ quarter	24-hr. Comp.		Х	11 12 13
Tetrachloroethane	Daily Maximum	Monitor	μg/L	2.2	lbs/day	1/ quarter	24-hr. Comp.		Х	11 12 13
Tetrachloroethylene	Daily Maximum	Monitor	μg/L	3.8	lbs/day	1/ quarter	24-hr. Comp.		Х	11 12 13
Benzo (a) Anthracene	Daily Maximum	Monitor	μg/L	0.6	lbs/day	1/ quarter	Grab		Х	11 12
Benzo (k) Fluoranthene	Daily Maximum	Monitor	μg/L	0.6	lbs/day	1/ quarter	Grab		Х	11 12
Diethyl Phthalate	Daily Maximum	Monitor	μg/L	2.4	lbs/day	1/ quarter	Grab		Х	11 12
Di-n-Butyl Phthalate	Daily Maximum	Monitor	μg/L	11	lbs/day	1/ quarter	Grab		Х	11 12
Bis (2-ethylhexyl) Phthalate	Daily Maximum	Monitor	μg/L	11	lbs/day	1/month	Grab		Х	12
Pentachlorophenol	Daily Maximum	Monitor	μg/L	1.0	lbs/day	1/month	Grab		Х	12
Benzene	Daily Maximum	Monitor	μg/L	0.6	lbs/day	1/ quarter	24-hr. Comp.		Х	11 12 13
Toluene	Daily Maximum	Monitor	μg/L	1.1	lbs/day	1/ quarter	24-hr. Comp.		Х	11 12 13
Phenolics, Total	Daily Maximum	Monitor	μg/L	91	lbs/day	1/ quarter	24-hr. Comp.		Х	11 12 13

EFFLUENT DISINFECTION Outfall 003 Required All Year			Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Coliform, Fecal	30-Day Geometric Mean	200	No./ 100 mL	1	-	1/day	Grab		Х	5,6 7,8
Coliform, Fecal	7-Day Geometric Mean	400	No./ 100 ml	ı	1	1/day	Grab		Х	5,6 7,8
Coliform, Fecal	6 hour geometric mean	800	No./ 100 ml	1	-	1/day	Grab			2
Coliform, Fecal	Individual Sample	2,400	No./ 100 mL	1	-	1/day	Grab			2
Coliform, Total	Monthly Median	700	No./ 100 mL	-	-	1/day	Grab		Х	5,6 7,8
Enterococci	30-Day Geometric Mean	Monitor	No./ 100 mL	-	-	1/week	Grab		Х	6,7,8
Chlorine, Total Residual	Daily Maximum	0.79	mg/L	-	-	6/day	Continuous Analyzer		Х	4 10

WHOLE EFFLUENT TOXICITY (WET) TESTING Outfall 003			Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote	-	-	8.4	TUa	1/quarter	See footnote		Х	11 12 15
WET - Acute Vertebrate	See footnote	-	-	8.4	TUa	1/quarter	See footnote		Х	11 12 15
WET - Chronic Invertebrate	See footnote	-	1	70	TUc	1/quarter	See footnote		X	11 12 15
WET - Chronic Vertebrate	See footnote	-	-	70	TUc	1/quarter	See footnote		Х	11 12 15

FOOTNOTES:

- 1. Effluent shall not exceed 15% and 15% of influent concentration values for BOD₅ & TSS respectively.
- 2. This is an Interstate Environmental Commission (IEC) requirement. The permittee is not required to perform this sampling but shall be required to meet the permit limit at all times. EPA, DEC or IEC may perform this sampling.
- 3. Biennial Pollutant Scan: The permittee shall perform effluent sampling every two (2) years for all pollutants identified in the NY-2A Application, Tables A D. Sampling data shall be collected and maintained by the permittee. Monitoring results shall not be submitted on the DMR. Data shall be submitted with the next submission of the NY-2A form. These samples must be collected prior to mixing with the Cedar Creek effluent.
- 4. Reporting for Total Residual Chlorine is only applicable if chlorine is used for disinfection, elsewhere in the treatment process, or the facility otherwise has reasonable potential to discharge chlorine.
- 5. Additional Coliform limits and requirements
 - a. The multiple tube fermentation procedure (MPN) is the only approved fecal and total coliform testing procedure.
 - b. Facilities may regularly sample on a more frequent schedule than the minimum required by this permit

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c. For facilities sampling less than ten (10) times per month, the estimated 90th percentile of total coliform readings shall not exceed an MPN of 3,300/100 ml for the 3 tube per decimal dilution MPN test, nor an MPN of 2,300/100 ml for the 5 tube per decimal dilution MPN test. The estimated 90th percentile is calculated using the Guideline in the National Shellfish Sanitation Program Manual of Operation, 1989 revision, Page APF-3.

- d. For facilities sampling ten (10) or more times per month, no more than 10 percent of the total coliform readings shall exceed an MPN of 3,300/100 ml for the 3 tube per decimal dilution MPN test, nor an MPN of 2,300/100 ml for the 5 tube per decimal dilution MPN test.
- 6. Grab samples shall be taken during periods that include normally high effluent flows.
- 7. In addition, Permittee shall report in an addendum to the applicable Discharge Monitoring Report, the analysis of samples taken at the "chlorine residual monitoring location" each April and August in accordance with the following schedules:
 - a. Every two hours on one day to assure adequacy and consistency of disinfection; and
 - b. Twice on each of seven consecutive days to compute a geometric mean for fecal coliform.
- 8. The permittee shall collect grab samples at the "chlorine residual monitoring" location twice weekly, once during peak and once during low flow, for Dissolved Oxygen (DO), TRC and coliform analysis. Results shall be included in the Monthly Wastewater Facility Operation. The permittee shall meet effluent limits and an effluent (minimum) design level of 2.0 mg/l for DO at all times.
- 9. The permittee shall collect grab samples once per year (1/year) at the outfall structure, located in Reynolds Channel, for DO, TRC and coliform analysis. Results shall be included in the Monthly Wastewater Facility Operation. The permittee shall meet effluent limits and an effluent design level of 2.0 mg/l for Dissolved Oxygen at all times.
- 10. The calculated WQBEL is 0.36 mg/L but the 0.79 mg/L is the compliance level adjusted for instantaneous decay in ambient receiving water without adjustment for pipe decay. The compliance level applies at the sampling point approximately 70' downstream of the confluence of the South Shore Water Reclamation Facility (WRF) and Cedar Creek Water Pollution Control Plant (WPCP) effluents in the Cedar Creek outfall pipe.
- 11. Quarterly samples shall be reported as 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).
- 12. <u>Action Levels</u>: If the action level is exceeded, the additional monitoring requirement is triggered, and the permittee shall undertake a short-term, high-intensity, monitoring program for the appropriate parameter. Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive days and analyzed. Results shall be expressed in both mass and concentration. If levels higher than the action levels are confirmed, the permittee shall evaluate the treatment system operation and identify and employ actions to reduce concentrations present in the discharge. The permit may also be reopened by the Department for consideration of revised action levels or effluent limits. Action level monitoring results and the effectiveness of the actions taken shall be summarized and submitted with the monthly operating report or DMR data.
- 13. At least 4 individual manual grab samples must be collected over the course of 24 hours and composited in the laboratory and analyzed as a single sample or analyzed separately and the concentrations averaged. Where effluent flows do not vary more than 10 percent over the course of composite sample collection, composite samples may be composed of equal size grab samples taken at equal time intervals. Where effluent flows do vary more than 10 percent over the course of sample collection, composite samples must be flow-proportioned.
- 14. EPA Method 1631 shall be used for mercury analysis. EPA Method 1669 is recommended for mercury sample collection.

15. Whole Effluent Toxicity (WET) Testing:

<u>Testing Requirements</u> – 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 Mysidopsis bahia (mysid shrimp - invertebrate) and Cyprinodon variegatus (sheepshead minnow - vertebrate). Artificial salt water should be used for dilution. All tests

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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. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

Outfall 001: The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 8:1 for acute, and 10:1 for chronic.

Outfall 003: The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 28:1 for acute, and 70:1 for chronic.

<u>Monitoring Period</u> - WET testing shall be performed quarterly (calendar quarters) for an entire year during calendar years ending in 2 and 7, beginning in January and 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 the WET@dec.ny.gov email address. 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.

<u>WET Testing Action Level Exceedances</u> - If an action level is exceeded then the Department 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 Department guidance. Enforceable WET limits may also apply. The permittee shall be notified in writing by their Regional DEC office of additional requirements. The written notification shall include the reason(s) why such testing, TI/RE and/or limits are required.

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Permit Limits for Total Nitrogen

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001 & 003	All Year	Reynolds Channel	EDP	ExDP

	EFF	LUENT L	IMITATIO	ON		MONITO	RING REQUIRE	MEN	TS	
PARAMETER								Location		FN
	Туре	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Total Nitrogen	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/day	24-hr. Comp.	Х	Х	1,3
Total Nitrogen	n 12-MRA Monitor mg/L 11,584 lbs/d 1/month Calculated		Х	Х	2					
Ammonia (as N) June 1 – October 31	Monthly Average	11	mg/L	Monitor	lbs/d	1/day	24-hr. Comp.	х	Х	4,5
Ammonia (as N) November 1 – May 31			1/day	24-hr. Comp.	х	Х	4,5			
Total Kjeldahl Nitrogen (TKN) (as N)	Monthly Average		mg/L	Monitor	lbs/d	1/day	24-hr. Comp.	Х	Х	
Total Kjeldahl Nitrogen (TKN) (as N)		Monitor	mg/L	Monitor	lbs/d	1/month	Calculated	Х	Х	2
Nitrate (As N)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/day	24-hr. Comp.	Х	Х	
Nitrate (As N)	12-MRA	Monitor	mg/L	Monitor	lbs/d	1/month	Calculated	Х	Х	2
Nitrite (As N)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/day	24-hr. Comp.	Х	Х	
Nitrite (As N)	12-MRA	Monitor	mg/L	Monitor	lbs/d	1/month	Calculated	Х	Х	2

Footnotes for Total Nitrogen

(1) A. Interim nitrogen effluent limits and a compliance schedule to meet the final nitrogen effluent limits for the South Shore WRF are included in *Bay Park Agreement*, Consent Order No. CO 1-20170626-244 entered **January 11, 2018**, modified in 2023 ("2022 Modified Order),² and are incorporated herein. The interim nitrogen effluent limits in the Bay Park Agreement and this SPDES Permit ("Performance-Based Limits") are based on the actual future performance of the South Shore WRF, as described below in Paragraph 2. The interim nitrogen effluent limits are:

Table: Total Nitrogen – Interim Effluent Limits

Effective Date	South Shore WRF Limits - These interim limits are step-down aggregate limits for WRF, expressed as a 12- month rolling average.
January 11, 2018	16,500 lbs/day
June 30, 2022 – (19 months after the	11,584 lbs/day, based on actual performance of
commencement of operation of the Level 1 BNR	the South Shore WRF from January 2021 through
at the South Shore WRF)	December 2021
In accordance with the 2022 Modified	TBD based on actual performance of the South
Agreement	Shore WRF

B. Performance-based limits to be determined in accordance with Appendix D of the 2022 Modified Order as follows:

(a) Upon commencement of operation of both BNR operations (6/1/2020) and Side-stream Treatment (11/1/2022) at the South Shore WRF, the County shall begin a 6-month startup operational period. After such

² The 2022 Modified Agreement CO 1-20170626-244-M2 was executed on February 24, 2023.

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6-month operational period, the County shall undertake a 12-month performance evaluation to establish a new interim nitrogen step-down limit;

- (b) The County shall submit the performance data from the performance evaluation period to DEC within 90 days of the end of the 12-month performance period. DEC shall calculate Performance-Based Limits using actual monthly total nitrogen loadings from the South Shore WRF, consistent with TOG 1.3.3. In calculating the Performance-Based Limit, DEC shall utilize the 95th percentile of the 12 data points collected during the period. The 12-monthly data points shall represent each of the 12 months during the performance period; . Upon calculation by DEC of the numeric value of each Performance-Based Limit, DEC shall provide written notice to the Permittee of the results of such calculation. Such writing from DEC shall include a replacement permit page with the calculated Performance-Based Limit. This replacement page shall be automatically deemed as substituted into the permit in place of the existing page
- (c) The County shall make best efforts in operating the South Shore WRF during the 6-month Operational and 12-month Performance Evaluation Period (and while interim limits are in place;) and,
- (d) DEC shall use its best professional judgment to assure that loading anomalies or other loading variations are not calculated into the Performance-Based Limits.

Until nitrogen limits are effective in the SPDES permit, the County shall continue compliance with the milestones and schedule established in Appendix C of the 2022 Modified Agreement to improve BNR, and shall meet the interim nitrogen limits as set forth in Appendix D of the 2022 Modified Agreement, including any modification of Appendix D to incorporate performance-based limits, and shall operate the South Shore WRF in accordance with the preliminary Operation and Maintenance ("O&M") Plans submitted in accordance with the schedules contained in Appendix D.

The preliminary O&M plans shall contain details for wet weather operations. The preliminary O&M Plans shall also include an initial optimization program pursuant to which the County shall operate the South Shore WRF facility for a pilot period of six months, beginning upon completion of Phase I construction, to evaluate and establish the maximum and optimal nitrogen removal rates for the facility. Thereafter, the County shall make all best efforts to optimally perform nitrogen removal.

- (2) A 12-month rolling average is defined as the average of the current month with the eleven previous months. Effluent mass loads are calculated using total effluent flow.
- (3) Total Nitrogen = Total Kjeldahl Nitrogen (TKN) + Nitrite (NO₂) + Nitrate (NO₃).
- (4) The ammonia limit is applicable only to Outfall 001. Outfall 003 shall have Monitor Only for ammonia.
- (5) This is a final effluent limit for outfall 001. See compliance schedule for interim limit.

SPECIAL CONDITIONS

- 1. No sewer extensions outside the approved district without prior DEC approval. Any proposed connections, not identified and qualified in an approved facility engineering report will require necessary on-line capacity and separate DEC approval.
- Accuracy of the effluent flow meter, chlorination and dechlorination dose-meters shall be verified annually by an
 engineer. A Calibration Report, certifying flow accuracy and detailing calibration procedures, shall be submitted
 annually by a NYS licensed Professional Engineer. This report shall be submitted with the annual Flow
 Management Certification Form.

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STORMWATER POLLUTION PREVENTION REQUIREMENTS

NO EXPOSURE CERTIFICATION

On September 29, 2020, the permittee submitted a Conditional Exclusion for No Exposure Form certifying that all industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt, and/or stormwater runoff. The permittee must maintain a condition of no exposure for the exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to stormwater, the permittee must notify the Regional Water Engineer. The permittee must recertify a condition of no exposure every five years by completing the "No Exposure Certification Form" found on the NYSDEC website.

MERCURY MINIMIZATION PROGRAM (MMP) Type 1

- 1. General The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below, to reduce mercury effluent levels with the goal of achieving the WQBEL.
- 2. MMP Elements The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements as described in detail below:
 - a. Monitoring 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.

Minimum required monitoring is as follows:

- i. <u>Sewage Treatment Plant Influent & Effluent</u> The permittee must collect samples at each of these locations in accordance with the minimum frequency specified on the pages of the SPDES permit that contain the mercury effluent limitations.
- ii. <u>Key Locations and Potential Mercury Sources</u> The permittee must sample *key locations*, chosen to identify *potential mercury sources*, at least semi-annually. Sampling of discharges from dental facilities in compliance with 6 NYCRR 374.4 is not required.
- iii. <u>Hauled Wastes</u> The permittee must establish procedures for the acceptance of hauled waste to ensure the hauled waste is not a potential mercury source. Loads which may exceed 500 ng/L³, must receive approval from the Department prior to acceptance.
- iv. <u>Decreased Monitoring Requirements</u> As is written in PartIII.A.5.c.v.a) of *DOW 1.3.10*, facilities with EEQ at or below 12 ng/L are eligible for the following:
 - 1) Reduced requirements, through a permittee-initiated permit modification
 - a) Conduct influent monitoring, sampling quarterly, in lieu of monitoring within the collection system, such as at *key locations*; and
 - b) Conduct effluent compliance sampling quarterly.
 - 2) If a facility with reduced requirements reports discharges above 12 ng/L for two of four consecutive effluent samples, the Department may undertake a Department-initiated modification to remove the allowance of reduced requirements.
 - 3) Under the decreased permit requirements, the facility must continue to conduct an annual status report, as applicable in accordance with 2.c of this MMP, to determine if any waste streams have changed.
- v. Additional monitoring must be completed as required elsewhere in this permit (e.g., locations tributary to compliance points).

³ A level of 0.2 mg/L (200,000 ng/L) or more is considered hazardous per 40 CFR Part 261.11. 500 ng/L is used here to alert the permittee that there is an unusual concentration of mercury and that it will need to be managed appropriately.

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- b. <u>Control Strategy</u> The control strategy must contain the following minimum elements:
 - i. <u>Pretreatment/Sewer Use Law</u> The permittee must review pretreatment program requirements and the Sewer Use Law (SUL) to ensure it is up-to-date and enforceable with applicable permit requirements and will support efforts to achieve a dissolved mercury concentration of 0.70 ng/L in the effluent.
 - ii. Monitoring and Inventory/Inspections -
 - 1) Monitoring shall be performed as described in 2.a above. As mercury sources are found, the permittee must enforce its sewer use law to track down and minimize these sources.
 - The permittee must inventory and/or inspect users of its system as necessary to support the MMP.
 - a) Dental Facilities
 - i. The permittee must maintain an inventory of each dental facility.
 - ii. The permittee must inspect each dental facility at least once every five years to verify compliance with the wastewater treatment operation, maintenance, and notification elements of 6 NYCRR 374.4. Alternatively, the permittee may develop and implement an outreach program, which informs users of their responsibilities, and collect the "Amalgam Waste Compliance Report for Dental Dischargers" form, as needed, to satisfy the inspection requirements. The permittee must conduct the outreach program at least once every five years and ensure the "Amalgam Waste Compliance Report for Dental Dischargers" are submitted by new users, as necessary. The outreach program could be supported by a subset of site inspections.
 - iii. A file shall be maintained containing documentation demonstrating compliance with 2.b.ii.2)a) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.
 - b) Other potential mercury sources
 - i. The permittee must maintain an inventory of other *potential mercury* sources.
 - ii. The permittee must inspect other *potential mercury sources* once every five years. Alternatively, the permittee may develop and implement an outreach program which informs users of their responsibilities as *potential mercury sources*. The permittee must conduct the outreach program at least once every five years. The outreach program should be supported by a subset of site inspections.
 - iii. A file shall be maintained containing documentation demonstrating compliance with 2.b.ii.2)b) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.
 - iii. <u>Systems with CSO & Type II SSO Outfalls</u> Permittees must prioritize *potential mercury sources* upstream of CSOs and Type II SSOs for mercury reduction activities and/or controlled-release discharge.
 - iv. <u>Equipment and Materials</u> Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.
 - v. <u>Bulk Chemical Evaluation</u> For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury concentration and the detection limit achieved. If possible, the permittee

⁴ For example, the outreach program could include education about sources of mercury and what to do if a mercury source is found.

⁵ The form, "Amalgam Waste Compliance Report for Dental Dischargers," can be found here: https://www.dec.ny.gov/docs/water_pdf/dentalform.pdf

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must only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.

- c. Annual Status Report An annual status report must be completed and maintained on site summarizing:
 - i. All MMP monitoring results for the previous year;
 - ii. A list of known and potential mercury sources
 - 1) If the permittee meets the criteria for MMP Type IV, the permittee must notify the Department for a permittee-initiated modification;
 - iii. All actions undertaken, pursuant to the control strategy, during the previous year;
 - iv. Actions planned, pursuant to the control strategy, for the upcoming year; and
 - v. Progress towards achieving a dissolved mercury concentration of 0.70 ng/L in the effluent (e.g., summarizing reductions in effluent concentrations as a result of the control strategy implementation and/or installation/modification of a treatment system).

The first annual status report is due in accordance with the Schedule of Additional Submittals. The permittee must maintain a file with all MMP documentation, including the dental forms required by 6 NYCRR 374.4. The file must be available for review by Department representatives and copies must be provided upon request in accordance with 6 NYCRR 750-2.1(i) and 750-2.5(c)(4).

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 judgement.

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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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 discharge.
- (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.
- (g) If the permittee believes that any outfall which discharges wastewater from the permitted facility meets any of the DNA waiver criteria, notification must be made to the Department's Bureau of Water Permits. Provided there is no objection by the Department, a sign for the involved outfall(s) are not required. This notification must include the facility's name, address, telephone number, contact, permit number, outfall number(s), and reason why such outfall(s) is waived from the requirements of discharge notification. The Department may evaluate the applicability of a waiver at any time and take appropriate measures to assure that the ECL and associated regulations are complied with.

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INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS

- A. <u>DEFINITIONS</u>: Generally, terms used in this Section shall be defined as in the General Pretreatment Regulations (40 CFR Part 403). Specifically, the following definitions apply to terms used in this Section:
 - 1. <u>Categorical Industrial User (CIU)</u>: an industrial user of the POTW that is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N;
 - 2. Local Limits: General Prohibitions, specific prohibitions and specific limits as set forth in 40 CFR 403.5.
 - 3. The Publicly Owned Treatment Works (POTW): as defined by 40 CFR 403.3(q) and that discharges in accordance with this permit.
 - 4. <u>Program Submission(s):</u> requests for approval or modification of the POTW Pretreatment Program submitted in accordance with 40 CFR 403.11 or 403.18 and approved by USEPA in July, 1984.
 - 5. Significant Industrial User (SIU):
 - a) CIUs;
 - b) Except as provided in 40 CFR 403.3(v)(3), any other industrial user that discharges an average of 25,000 gallons per day or more of process wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater) to the POTW;
 - c) Except as provided in 40 CFR 403.3(v)(3), any other industrial user that contributes a process waste stream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant;
 - d) Any other industrial user that the permittee designates as having a reasonable potential for adversely affecting the POTW's operation or for violating a pretreatment standard or requirement.
 - 6. <u>Substances of Concern:</u> Substances identified by the New York State Department of Environmental Conservation Industrial Chemical Survey as substances of concern.
- B. <u>IMPLEMENTATION</u>: The permittee shall implement a POTW Pretreatment Program in accordance 40 CFR Part 403 and as set forth in the permittee's approved Program Submission(s). Modifications to this program shall be made in accordance with 40 CFR 403.18. Specific program requirements are as follows:
 - 1. <u>Industrial Survey:</u> To maintain an updated inventory of industrial dischargers to the POTW the permittee shall:
 - a) Identify, locate and list all industrial users who might be subject to the industrial pretreatment program from the pretreatment program submission and any other necessary, appropriate and available sources. This identification and location list will be updated, at a minimum, every five years. As part of this update the permittee shall collect a current and complete New York State Industrial Chemical Survey form (or equivalent) from each SIU.
 - b) Identify the character and volume of pollutants contributed to the POTW by each industrial user identified in B.1.a above that is classified as a SIU.
 - c) Identify, locate and list, from the pretreatment program submission and any other necessary, appropriate and available sources, all SIUs of the POTW.
 - 2. <u>Control Mechanisms:</u> To provide adequate notice to and control of industrial users of the POTW the permittee shall:
 - a) Inform by certified letter, hand delivery courier, overnight mail, or other means which will provide written acknowledgment of delivery, all industrial users identified in B.1.a. above of applicable pretreatment standards and requirements including the requirement to comply with the local sewer use law, regulation or ordinance and any applicable requirements under section 204(b) and 405 of the Federal Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

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INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

- b) Control through permit or similar means the contribution to the POTW by each SIU to ensure compliance with applicable pretreatment standards and requirements. Permits shall contain limitations, sampling frequency and type, reporting and self-monitoring requirements as described below, requirements that limitations and conditions be complied with by established deadlines, an expiration date not later than five years from the date of permit issuance, a statement of applicable civil and criminal penalties and the requirement to comply with Local Limits and any other requirements in accordance with 40 CFR 403.8(f)(1).
- 3. <u>Monitoring and Inspection:</u> To provide adequate, ongoing characterization of non-domestic users of the POTW, the permittee shall:
 - a) Receive and analyze self-monitoring reports and other notices. The permittee shall require all SIUs to submit self-monitoring reports at least every six months unless the permittee collects all such information required for the report, including flow data.
 - b) The permittee shall adequately inspect each SIU at a minimum frequency of once per year.
 - c) The permittee shall collect and analyze samples from each SIU for all priority pollutants that can reasonably be expected to be detectable at levels greater than the levels found in domestic sewage at a minimum frequency of once per year.
 - d) Require, through permits, each SIU to collect at least one 24 hour, flow proportioned composite (where feasible) effluent sample every six months and analyze each of those samples for all priority pollutants that can reasonably be expected to be detectable in that discharge at levels greater than the levels found in domestic sewage. The permittee may perform the aforementioned monitoring in lieu of the SIU except that the permittee must also perform the compliance monitoring described in 3.c.
- 4. <u>Enforcement</u>: To assure adequate, equitable enforcement of the industrial pretreatment program the permittee shall:
 - a) Investigate instances of noncompliance with pretreatment standards and requirements, as indicated in self-monitoring reports and notices or indicated by analysis, inspection and surveillance activities. Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions. Enforcement activities shall be conducted in accordance with the permittee's Enforcement Response Plan developed and approved in accordance with 40 CFR Part 403.
 - b) Enforce compliance with all national pretreatment standards and requirements in 40 CFR Parts 406 471.
 - c) Provide public notification of significant non-compliance as required by 40 CFR 403.8(f)(2)(viii).
 - d) Pursuant to 40 CFR 403.5(e), when either the Department or the USEPA determines any source contributes pollutants to the POTW in violation of Pretreatment Standards or Requirements the Department or the USEPA shall notify the permittee. Failure by the permittee to commence an appropriate investigation and subsequent enforcement action within 30 days of this notification may result in appropriate enforcement action against the source and permittee.
- 5. <u>Recordkeeping:</u> The permittee shall maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by SIUs. Records shall be maintained in accordance with 6 NYCRR 750-2.5(c).
- 6. <u>Staffing</u>: The permittee shall maintain minimum staffing positions committed to implementation of the Industrial Pretreatment Program in accordance with the approved pretreatment program.
- C. <u>SLUDGE DISPOSAL PLAN</u>. The permittee shall notify NYSDEC, and USEPA as long as USEPA remains the approval authority, 60 days prior to any major proposed change in the sludge disposal plan. NYSDEC may require additional pretreatment measures or controls to prevent or abate an interference incident relating to sludge use or disposal.

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INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

- D. <u>REPORTING</u>: The permittee shall provide to the offices listed on the Monitoring, Reporting and Recording page of this permit and to the Chief-Water Compliance Branch, USEPA Region II, 290 Broadway, New York, NY 10007, a periodic report that briefly describes the permittee's program activities over the previous year. This report shall be submitted in accordance with the Schedule of Submittals to the above noted offices within 60 days of the end of the reporting period. The periodic report shall include:
 - 1. <u>Industrial Survey:</u> Updated industrial survey information in accordance with 40 CFR 403.12(i)(1) (including any NYS Industrial Chemical Survey forms updated during the reporting period).
 - 2. Implementation Status: Status of Program Implementation, to include:
 - a) Any interference, upset or permit violations experienced at the POTW directly attributable to industrial users.
 - b) Listing of SIUs issued permits.
 - c) Listing of SIUs inspected and/or monitored during the previous reporting period and summary of results.
 - d) Listing of SIUs notified of promulgated pretreatment standards or applicable local standards who are on compliance schedules. The listing should include for each facility the final date of compliance.
 - e) Summary of POTW monitoring results not already submitted on Discharge Monitoring Reports and toxic loadings from SIU's organized by parameter.
 - f) A summary of additions or deletions to the list of SIUs, with a brief explanation for each deletion.
 - 3. <u>Enforcement Status</u>: Status of enforcement activities to include:
 - a) Listing of SIUs in significant non-compliance (as defined by 40 CFR 403.8(f)(2)(viii) with federal or local pretreatment standards at end of the reporting period.
 - b) Summary of enforcement activities taken against non-complying SIUs. The permittee shall provide a copy of the public notice of significant violators as specified in 40 CFR 403.8(f)(2)(viii).

E. ADDITIONAL PRETREATMENT CONDITIONS:

1. <u>Notification of Material Change:</u> Facility shall notify the NYSDEC prior to the addition of any SIUs or CIUs which may materially change the nature of the discharge from the POTW or increase the discharge of one or more substances authorized in this permit or discharge a substance not currently authorized in this permit (6 NYCRR Part 750-2.9(a)(1)). The noticed act is prohibited until the Department determines whether a permit modification is necessary pursuant to 750-2.9(a)(2).

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SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Due Date
001	The permittee shall meet the final effluent limit for Ammonia. Interim status reports shall include a data analysis of ammonia concentrations as BNR and Side Stream Deammonification projects are completed and optimized.	In accordance with the 2022 Modified Order
001	Enterococcus The permittee shall submit an approvable work plan that details a sampling program to evaluate the disinfection practices at the STP and determine if modifications are necessary to ensure compliance with 6 NYCRR 703.4(f)(1). The work plan shall identify the sampling parameters, location(s) and frequency to evaluate the effectiveness of the existing disinfection system and generate sufficient data (52 data points) to demonstrate whether there is a reasonable potential to exceed ambient WQS for enterococcus	EDP + 3 months
	The permittee shall submit an approvable engineering report that comports with the NYSDEC/EFC Engineering Report Outline, October 2020. The engineering report must include the results of the sampling program and present alternatives to ensure compliance with 6 NYCRR 703.4(f)(1), including the "no action" alternative, recommend a solution, and include an implementation schedule for that solution. Upon approval by DEC, the schedule shall be incorporated into this permit and become enforceable through this permit.	DEC approval of Work Plan + 18 months
001 & 003	SCHEDULE OF COMPLIANCE STATUS REPORTS Submit interim status reports on the progress related to meeting the specified final limits.	EDP + 9 months, and every 9 months thereafter

The above compliance actions are one-time requirements. The permittee shall comply with the above compliance actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submission(s) noted above. The above due dates are independent from the effective date of the permit stated in the "SPDES NOTICE/RENEWAL APPLICATION/PERMIT" letter.

INTERIM EFFLUENT LIMITS FOR PARAMETERS SUBJECT TO THIS SCHEDULE OF COMPLIANCE

0.46-11	Damana tanta) Affa ataul	Interim Effluent Limit				NI - 4	Laterday I taking Paralay			
Outfall	Parameter(s) Affected	Type	Limit	imit Units Limits Apply		Notes	Interim Limits Expire			
001	Ammonia (as N)	Daily Max	Monitor Only	mg/L	Year-Round	1	In accordance with the 2022 Modified Order			
Notes:	See Permit Limit Table for sample type and frequency									

- 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:
 - a. A short description of the non-compliance;
 - b. 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;
 - c. Any details which tend to explain or mitigate an instance of non-compliance; and
 - d. 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

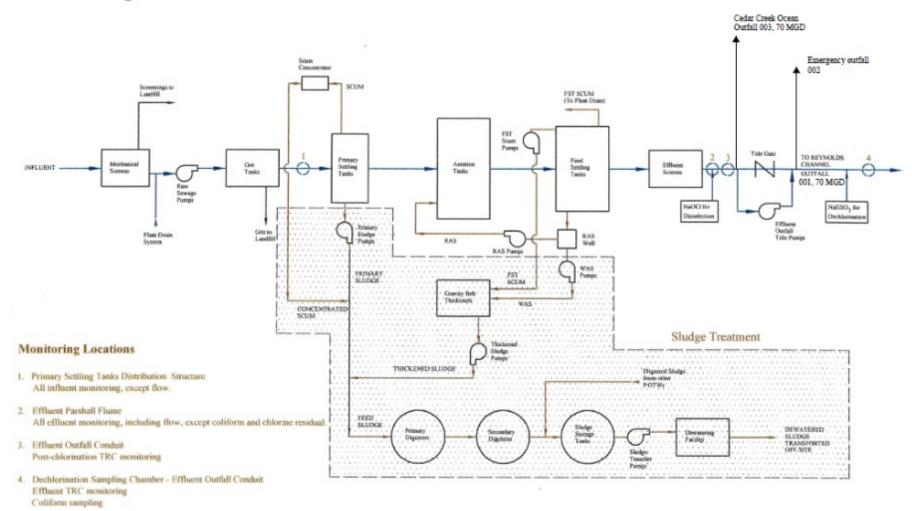
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Regional Water Engineer and to the Bureau of Water Permits.

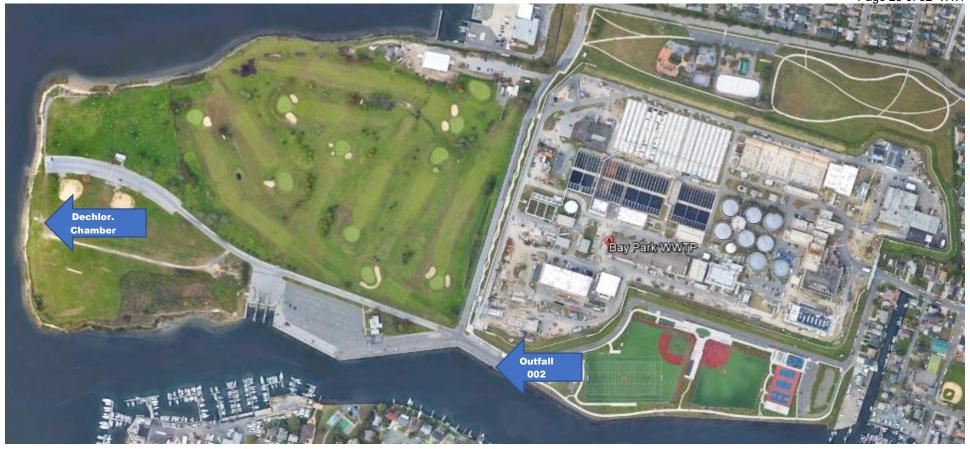
MONITORING LOCATIONS

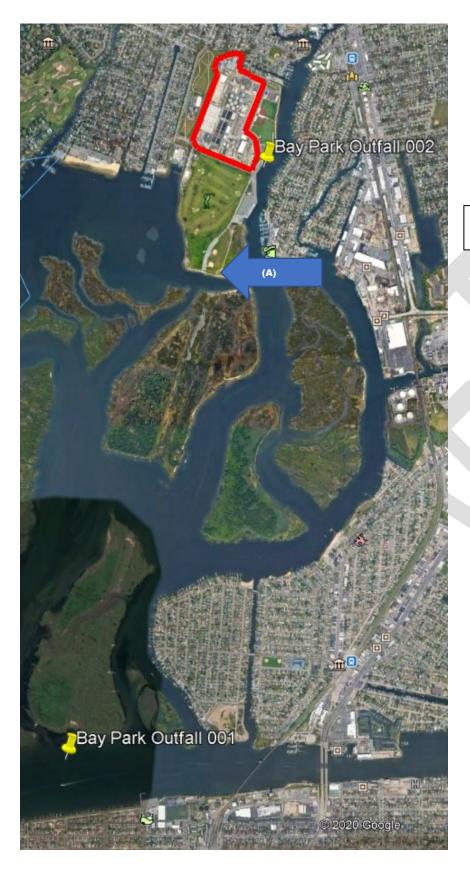
The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the locations(s) specified below:

SPDES Permit Renewal Application Form NY-2A Process Flow Diagram



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Dechlorination chamber; TRC Monitoring Location



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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 I 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	6 NYCRR 750-2.5, 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)
9.	Additional conditions applicable to a POTW	6 NYCRR 750-2.9 (

F. Planned Changes

- 1. The permittee shall give notice to the Department as soon as possible of planned physical alterations or additions to the permitted facility when:
 - a. The alteration or addition to the permitted facility may meet any of the criteria for determining whether facility is a new source in 40 CFR §122.29(b); or
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject either to effluent limitations in the permit, or to notification requirements under 40 CFR §122.42(a)(1); or
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

In addition to the Department, the permittee shall submit a copy of this notice to the United States Environmental Protection Agency at the following address: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

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GENERAL REQUIREMENTS (continued)

2. Notification Requirement for POTWs

All POTWs shall provide adequate notice to the Department and the USEPA of the following:

- a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; or
- b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- c. For the purposes of this paragraph, adequate notice shall include information on:
 - i. the quality and quantity of effluent introduced into the POTW, and
 - ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

POTWs shall submit a copy of this notice to the United States Environmental Protection Agency, at the following address:

U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866

G. Sludge Management

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

H. 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.

I. 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 in writing 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 that 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. <u>Discharge Monitoring Reports (DMRs)</u>: 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 for the Bureau of Water Permits, if a waiver from the electronic submittal requirements has been granted by DEC to the facility.

Attach the monthly "Wastewater Facility Operation Report" (form 92-15-7) and any required DMR attachments electronically to the DMR or with the hardcopy submittal.

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. The monitoring information required 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

S25 Broadway, Albany, New York 12233-3505 Phone: (518) 402-8111

Department of Environmental Conservation Regional Water Engineer, Region 1 50 Circle Road, Stony Brook, New York, 11790-3409 Phone: (631) 444-0405

D. Annual SPDES Monitoring Reports: An annual report shall be submitted to the Department by February 1st each year.

The report shall summarize information for January to December of the previous year and shall be submitted electronically, or in hardcopy format, utilizing the SPDES Annual Report Form available on the Department's website.

Hard copy submission of the Annual Report shall be submitted to the Regional Water Engineer at the address below:

Department of Environmental Conservation Regional Water Engineer, Region 1 50 Circle Road, Stony Brook, New York, 11790-3409 Phone: (631) 444-0405

- Bypass and Sewage Pollutant Right to Know Reporting: In accordance with the Sewage Pollutant Right to Know Act (ECL § 17-0826-a), Publicly Owned Treatment Works (POTWs) are required to notify DEC and Department of Health within two hours of discovery of an untreated or partially treated sewage discharge and to notify the public and adjoining municipalities within four hours of discovery. Information regarding reporting and other requirements of this program may be found on the Department's website. In addition, POTWs are required to provide a five-day incident report and supplemental information to the DEC in accordance with Part 750-2.7(d) by utilizing the Division of Water Report of Noncompliance Event form unless waived DEC on case-by-case basis. by
- F. Schedule of Additional Submittals:

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

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SCHEDULE OF ADDITIONAL SUBMITTALS							
Outfall(s)	Required Action	Due Date					
001 & 003	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.	With December DMR					
001 & 003	BIENNIAL POLLUTANT SCAN The permittee shall implement an ongoing monitoring program and perform effluent sampling every two years as specified in Footnote 3. Retain and submit with next NY-2A Application						
001	WHOLE EFFLUENT TOXICITY (WET) TESTING WET testing shall be performed on a Chronic testing, but report both the acute and chronic results basis, at the specified sample frequency during calendar years ending in 2 and 7. 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. WET testing shall be performed on a Chronic testing, but report both the acute and chronic results basis, at the specified sample frequency during calendar years ending in 2 and 7. 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.						
	STORMWATER NO EXPOSURE CERTIFICATION Permittee must recertify every five years a condition of no exposure to stormwater in order to continue to qualify for the no exposure exclusion. The No Exposure Certification Form can be found on the NYSDEC website.	September 29, 2025, and every 5 years thereafter					
001 & 003	 MERCURY MINIMIZATION PLAN (MMP) Type I An annual status report must be completed and maintained on site summarizing: 1. All MMP monitoring results for the previous year; 2. A list of known and potential mercury sources 1) If the permittee meets the criteria for MMP Type IV, the permittee must notify the Department for a permittee-initiated modification; 3. All actions undertaken, pursuant to the control strategy, during the previous year; 4. Actions planned, pursuant to the control strategy, for the upcoming year; and 5. Progress towards achieving a dissolved mercury concentration of 0.70 ng/L in the effluent (e.g., summarizing reductions in effluent concentrations as a result of the control strategy implementation and/or installation/modification of a treatment system). 	February 1 st of each year					
001 & 003	PRETREATMENT PROGRAM Submit a report that briefly describes the permittee's program activities over the previous year. The report shall follow the guidelines contained in this permit and be submitted to the Regional Water Engineer and the Bureau of Water permits as well as the USEPA Region II office.						

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SCHEDULE OF ADDITIONAL SUBMITTALS								
Outfall(s)	Outfall(s) Required Action							
001 & 003	ANNUAL FLOW METER & CHLORINATION/DECHLORINATION DOSE-METER REPORT	February 1 st , each year						

Unless noted otherwise, the above actions are one-time requirements. The permittee shall submit the results of the above actions to the satisfaction of the Department. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT", the permittee is not required to repeat the above submittal(s), unless noted otherwise. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."

- G. 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.
- H. 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.
- I. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- J. 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.
- K. 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.

Permittee: Nassau County Facility: South Shore Water Reclamation Facility

SPDES Number: NY0026450 USEPA Major/Class 05 Municipal Date: Date v.1.21

Permit Writer: Erik Posner

Water Quality Reviewer: Erik Posner

SPDES Permit Fact Sheet Nassau County South Shore Water Reclamation Facility NY0026450



Facility: South Shore Water Reclamation Facility

SPDES Number: NY0026450 USEPA Major/Class 05 Municipal Date: Date v.1.21
Permit Writer: Erik Posner

Water Quality Reviewer: Erik Posner

Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) permittee-initiated permit modification has been drafted for the South Shore Water Reclamation Facility. The changes to the permit are summarized below:

- Chloroform monitoring and action level have been removed from outfalls 001 and 003
- Total Nitrogen Interim Effluent Limits, Effective Date (pg. 13) has been modified to refer to the 2022 Modified Order.
- Completed Schedule of Compliance items have been removed
- Schedule of Compliance Due Date for the final effluent limit for Ammonia has been modified to refer to the 2022 Modified Order

This fact sheet 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 are in the Appendix linked throughout this fact sheet.

Administrative History

2/1/2021 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 1/31/2026. The 2021 permit, along with all subsequent modifications, has formed the basis of this permit.

4/7/2022 Permit was modified to include revised nitrogen limits in accordance with the 2020 Modified Order.

9/12/2023 Nassau County submitted a request to modify the permit to remove the chloroform

action level since there are no applicable water quality standards or guidance values for saline receiving waters.

9/19/2023 Nassau County submitted a request to extend the compliance date for the

implementation of the final ammonia limit by 88 days.

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

Facility Information

The facility is a publicly owned treatment works that receives flow from domestic and industrial users, including waste from categorical industrial users. Wastewater consists of treated sanitary wastes and industrial wastes subject to the pretreatment program. The sewage collection system consists of separate sewers. The facility was constructed in 1950 to provide treatment for 27 MGD of sanitary waste. It was first expanded in 1960 to provide secondary treatment and increase its capacity to 60 MGD. The facility was expanded in the mid-1980s to achieve secondary treatment and expanded to treat an average daily flow of 70 MGD.

Pursuant to an administrative Consent Order dated January 11, 2018 (CO 1-20170626-244), as modified January 12, 2021, Nassau County (the "County") is obligated to implement a number of projects at the facility to reduce total nitrogen (TN). Many of the projects impact the draft South Shore WRF SPDES permit, including:

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Permit Writer: Erik Posner

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- 1. construction completion of Biological Nitrogen Removal (BNR) through upgrades to the aeration tanks, final settling tanks, and waste activated sludge system;
- 2. construction completion of Sidestream Deammonification; and
- removing wastewater effluent from the <u>Western Bays</u> by diverting the treated effluent from the facility through an unused, historic steel aqueduct along Sunrise Highway to combine with the treated effluent in the Atlantic Ocean outfall associated with the Cedar Creek Water Pollution Control Plant (WPCP) (NY 002 6859) ("Bay Park Conveyance Project").

Enforcement History

2011 Order

DEC and the County entered into an administrative Consent Order dated June 28, 2011 (R1-2100517-46) (the "2011 Order"), addressing violations of the County's SPDES permit (e.g. effluent limitations, unpermitted releases, reporting violations). Among other things, the 2011 Order required the County to perform operational and repair work on settling tanks and sludge handling facilities. The 2011 Order also required the County to submit an approvable infrastructure assessment plan for wastewater treatment infrastructure and a process flow diagram identifying the replacement of certain equipment. The County has completed many of the tasks required by the 2011 Order.

The 2011 Order also addressed violations of water quality standards. In June 2013, also in accordance with the requirements of the 2011 Order, the County timely submitted a report, "Nassau County Bay Park Sewage Treatment Plant Report for the Conceptual Study of Alternatives to Meet Future Nutrient Limits." Consistent with the technical analysis and recommendation of the report, DEC and the County agreed that an ocean outfall provides the preferred project alternative to improve water quality in the Western Bays taking into account constructability, life cycle cost, and environmental benefit.

2018 Order

The 2018 Order replaced the 2011 Order. Appendix A of the 2018 Order includes a catalogue of requirements remaining from the 2011 Order. Any requirements not yet completed pursuant to the 2011 Order were included in the 2018 Order with modified milestones. These include milestones for the County to repair and rebuild equipment at the facility and tributary pump stations, damaged by Superstorm Sandy in October 2012, and provide resiliency to ensure operational continuity. New requirements, and associated milestones, were included in the 2018 Order for the County to 1) implement BNR and Sidestream Deammonification, and 2) complete the Bay Park Conveyance Project. By letter modification, dated September 12, 2018, the requirements to implement BNR and Sidestream Deammonification were separated into two distinct requirements under the 2018 Order. That same letter modification gave the County additional time to complete construction of the Sidestream Deammonification (July 8, 2021).

2021 Modified Order

On November 23, 2020, the County Legislature voted in favor of the draft modification to a prior Consent Order (CO-1-20170626-244). The modification was executed by the parties on January 12, 2021 (CO-20170626-244-M1) ("2021 Modified Order"). The 2021 Modified Order requires that the County continue to meet the obligations set forth in the 2018 Order. Appendix A of the 2021 Modified Order includes a catalogue of requirements remaining from the 2018 Order. Appendix B of the 2021 Modified Order is the compliance schedule for the Bay Park Conveyance Project, including completion of repairs to the diffuser at the ocean outfall for the Cedar Creek WPCP. The 2021 Modified Order modified the milestones and schedules for the

Facility: South Shore Water Reclamation Facility

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Water Quality Reviewer: Erik Posner

obligations in Appendix B. based on the use of design-build (see Conveyance of South Shore WRF flow to Cedar Creek WPCP Ocean Outfall (new Outfall 003)). On November 24, 2020, pursuant to the terms of item 4 of Appendix B of the 2021 Modified Order, the County submitted a request to change the name of the Bay Park Sewage Treatment Plant to the "South Shore Water Reclamation Facility."

Appendix C of the 2021 Modified Order includes a compliance schedule providing the County with additional time to complete construction of the Sidestream Deammonification (October 2022). Once the County completes construction of the BNR and Sidestream Deammonification at the facility, in accordance with Appendix C of the 2021 Modified Order, a final TN effluent limitation will be calculated and incorporated into the South Shore WRF SPDES permit. Appendix D of the 2021 Modified Order includes a modified schedule for performance-based interim step-down effluent limitations for TN and for completion of updated Operation & Maintenance plans. Appendix D also includes the methodology DEC will use, consistent with TOGS 1.3.1, to calculate the interim effluent limitations using actual monthly TN loadings. Pursuant to Appendix F of the 2021 Modified Order, the County must also conduct a flow study.

2022 Modified Order

On April 1, 2022, the County requested a modification of Modified Agreement (CO 1-2017-0626-244-M1), to modify completion dates for three minor Conveyance Project Milestones and a formal update of Appendix B to incorporate the milestone; revisions to the CMOM / I&I Appendix F milestones; and addition of the Hassocks Restoration project to Appendix A. The modification was executed by the parties on February 24, 2023.

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 and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports submitted by the permittee for the period 9/1/2018 to 8/31/2023. Appendix Link

Critical receiving water data are listed in the Pollutant Summary Table at the end of this fact sheet. Appendix Link

Permit Requirements

The technology based effluent limitations (TBELs), water quality-based effluent limitations (WQBELs), 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

Action levels are not effluent limitations as defined in 6 NYCRR 750-1.2 and therefore are not subject to anti-backsliding restrictions in Part 750 1.10; therefore, removing the chloroform action level is not backsliding.

Appendix Link

Facility: South Shore Water Reclamation Facility

SPDES Number: NY0026450 USEPA Major/Class 05 Municipal Date: Date v.1.21

Permit Writer: Erik Posner

Water Quality Reviewer: Erik Posner

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)¹ determination. Appendix Link



¹ As prescribed by 6 NYCRR Part 617

Permittee: Nassau County Facility: South Shore Water Reclamation Facility

SPDES Number: NY0026450 USEPA Major/Class 05 Municipal Date: Date v.1.21

Permit Writer: Erik Posner

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POLLUTANT SUMMARY TABLE

Outfall 001

Description of Wastewater: Treated sanitary sewage																	
Outrail #	Outfall # Type of Treatment: Secondary/tertiary treatment with activated sludge																
			Existing Discharge Data				TBELs	Water Quality Data & WQBELs						Б : (
Effluent Parameter Ur		Averaging Period	Permit Limit	Existing Effluent Quality ²	# 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	ML	Basis for Permit Requirement		
General Notes: Existing discharge data from 9/1/2018 to 8/31/2023 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.																	
Chloroform	μg/L	Daily Max	Monitor	7.3	14 / 16	200	TOGS 1.2.1 Att. C - Biological	-	1	-	-	Х	<u>703.5</u>	-	- Discontinued		
	lb/d	Daily Max	1.7	19	14 / 16	-		-	-	-	-	Х					
The action level for chloroform has remained in the SPDES permit since at least 2006. Effluent data shows a maximum concentration of 9.9 µg/L and an average concentration of 5.3 µg/L. This equates to mass loading with a maximum of 4.2 lbs/d and an average of 2.1 lbs/d. There are no water quality standards for chloroform in saline water. There is no reasonable potential to exceed the TBEL in TOGS 1.2.1, Table C – Biological Treatmen There is no justification for maintaining the action level in the SPDES permit, therefore, it is being discontinued.																	

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² 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)

Facility: South Shore Water Reclamation Facility

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Appendix: 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
 - o 40 CFR, Chapter I, subchapters D, N, and O
- State environmental regulations
 - o 6 NYCRR Part 621
 - o 6 NYCRR Part 750
 - o 6 NYCRR Parts 700 704 Best use and other requirements applicable to water classes
 - o 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)
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(I)
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	ent NYCRR 750-2.1(i)
Request for Additional Information	

Outfall and Receiving Water Information 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, <u>Technical Support Document for Water Quality-based Toxics Control</u>, 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

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be specified either through routine monitoring or a short-term high intensity monitoring program. The <u>Pollutant</u> 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, and/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 water quality standards 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(*I*) 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 law³ and USEPA interpretation⁴ 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" (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 Department 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 water quality standards 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.

Minimum Level of Detection

Pursuant to 40 CFR 122.44(i)(1)(iv) and 6 NYCRR 750-2.5(d), SPDES permits must contain monitoring requirements using sufficiently sensitive test procedures approved under 40 CFR Part 136. A method is "sufficiently sensitive" when the method's minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant parameter; or the lowest ML of the analytical methods approved under 40 CFR Part 136. The ML represents the lowest level that can be measured within specified limitations of precision and accuracy during routine laboratory operations on most effluent matrices. When establishing effluent limitations for a specific parameter (based on technology or water quality requirements), it

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

⁴ U.S. EPA, Water Quality Standards; 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)

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is possible that the calculated limitation will fall below the ML established by the approved analytical method(s). In these instances, the calculated limitation is included in the permit with a compliance level set equal to the ML of the most sensitive method.

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.

