

Environmental Conservation

## State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code: <b>4952</b>	NAICS Code: 22132	0	SPDES Number:	NY0025798
Discharge Class (CL):	05		DEC Number:	7-4930-00027/00001
Toxic Class (TX):	т		Effective Date (EDP):	EDP
Major-Sub Drainage Basin:	06 - 03	06 - 03 E		ExDP
Water Index Number:	SR (portion 3) Item	930 - 3	Modification Dates (EDPM):	
Compact Area:	SRBC			

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.)

Email:	stilest@townofowego.com	Phone:	(607) 6	25-2197					
City:	Apalachin	State:	NY	Zip Code:	1372				
Street:	1319 Main Street		Tyson Stiles, Director of Utilities						
Name:	Town of Owego	Attention:	Typon Stillon Director of Utilition						
PERMITTEE NAME AND ADDRESS									

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL														
Name:	Owego	wego (T) Water Pollution Control Plant #2												
Address / Location:	1319 Ma	9 Main Street County: Tioga												
City:	Apalac	palachin State: NY Zip 0							Zip C	od	e: <b>13732</b>	13732		
Facility Location:		Latitude:	42	0	03	,	41	" N	& Longitude:	76	o	08 '	42	" W
Primary Outfall No.:	001	Latitude:	42	0	03	,	48	" N	& Longitude:	76	o	08 '	29	" W
Outfall Description:	Treated	Sanitary	Receiving Water: Susquehanna River Class: B											

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

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

DISTRIBUTION: CO BWP - Permit Coordinator CO BWC - SCIS RWE	Permit Administrator:			
	Address:	33-1750	50	
RPA EPA Region II NYSEFC	Signature:		Date:	

## 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 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			RECEI	VING W	ATER	EFFECTIVE	EXPIRING		
001		All Year			Susqu	ehanna	River	EDP	<mark>ExDP</mark>		
		EFF	LUENT L	IMITATI	ON		MONITO	RING REQUIR	EMEN	TS	
PARAME	TER		Limit Units						Loca	ation	FN
		Туре			Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
		Monthly Average	2.0	MGD			Continuous	Recorder	х	х	
Flow		Daily Maximum	Monitor	MGD			Continuous	Recorder	х		
		Daily Minimum	6.0	SU			2/Day	Grab		х	
pН		Daily Maximum	9.0	SU			2/Day	Grab		х	
Temperature		Daily Maximum	Monitor	°C			2/Day	Grab		х	
BOD₅		Monthly Average	30	mg/L	500	lbs/d	1/Week	24-hr. Comp.	x	X	(1)
DOD <sup>5</sup>		7-Day Average	45	mg/L	750	lbs/d	1/Week	24-hr. Comp.		Х	
Total Suspended Solids		Monthly Average	30	mg/L	500	lbs/d	1/Week	/Week 24-hr. Comp.		Х	(1)
(TSS)		7-Day Average	45	mg/L	750	lbs/d	1/Week	24-hr. Comp.		Х	
Settleable Solids	;	Daily Maximum	0.3	mL/L			2/Day	Grab		Х	
Ammonia (as N)		Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/Quarter	24-hr. Comp.		Х	(2)
Total Kjeldahl Ni (TKN) (as N)	trogen	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/Week	24-hr. Comp.	х	х	
Nitrate (NO <sub>3</sub> ) (as	N)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/Week	24-hr. Comp.	Х	Х	
Nitrite (NO <sub>2</sub> ) (as	N)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/Week	24-hr. Comp.	Х	Х	
		Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/Week	Calculated	Х	Х	(3)
Total Nitrogen (a	s N)	Monthly Load			Monitor	lbs/mo	1/Month	Calculated		Х	(4)
		12 Month Rolling Load			56,000	lbs/yr	1/Month	Calculated		х	(5,6)
		Monthly Average	1.0	mg/L	Monitor	lbs/d	1/Week	24-hr. Comp.	х	х	(6)
Total Phosphoru	is (as P)	Monthly Load			Monitor	lbs/mo	1/Month	Calculated		х	(4)
	,	12 Month Rolling Load			3,040	lbs/yr	1/Month	Calculated		х	(5,6)
Total Copper		Daily Maximum	Monitor	µg/L	Monitor	lbs/d	1/Quarter	24-hr. Comp.		х	(2)
Total Mercury		Daily Maximum	50	ng/L			1/Month	Grab		х	
Biennial Pollutan	it Scan	Daily Maximum					1/Two Years	24-hr. Comp.		х	(7)

## **CONTINUED ON NEXT PAGE**

## PERMIT LIMITS, LEVELS AND MONITORING (continued)

EFFLUENT DISINFECTION Required Seasonal from May 1st - October 31st			Units	Limit	Units	Sample Frequency	Sample Type	lnf.	Eff.	FN
Coliform, Fecal	30-Day Geometric Mean	200	No./ 100 mL			1/Week	Grab		х	
Coliform, Fecal	7-Day Geometric Mean	400	No./ 100 mL			1/Week	Grab		х	
Chlorine, Total Residual	Daily Maximum	2.0	mg/L			2/Day	Grab		Х	(8)

OUTFALL	OUTFALL LIMITATIONS APPLY				RECE	IVING V	/ATER	EFFECTIVE	EXPIRING		NG
001	All Year				Susqu	uehanna	River	EDP		ExDP	
WHOLE EFFLUENT TOXICITY (WET) TESTING Li				Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Inv	ertebrate	See footnote			15	TUa	Quarterly	See footnote		х	(2,9)
WET - Acute Ver	tebrate	See footnote			15	TUa	Quarterly	See footnote		х	(2,9)
WET - Chronic Invertebrate		See footnote			100	TUc	Quarterly	See footnote		х	(2,9)
WET - Chronic \	/ertebrate	See footnote			100	TUc	Quarterly	See footnote		х	(2,9)

#### FOOTNOTES:

- 1. Effluent shall not exceed 15% of influent concentration values for BOD<sub>5</sub> & TSS.
- Quarterly samples shall be collected in calendar quarters (Q1 January 1<sup>st</sup> to March 31<sup>st</sup>; Q2 April 1<sup>st</sup> to June 30<sup>th</sup>; Q3 July 1<sup>st</sup> to September 30<sup>th</sup>; Q4 October 1<sup>st</sup> to December 31<sup>st</sup>). Quarterly results shall be reported on the DMR for the first month following the quarter (Q1 April DMR; Q2 July DMR; Q3 October DMR; Q4 January DMR).
- 3. Total Nitrogen (as N) = [Total Kjeldahl Nitrogen (TKN), as N] + [Nitrite (NO<sub>2</sub>), as N] + [Nitrate (NO<sub>3</sub>), as N].
- 4. Total Nitrogen (as N) and Total Phosphorus (as P) monthly load (lbs/mo) shall be calculated as the monthly average load (lbs/d) multiplied by the number of days in the month.
- 5. Total Nitrogen (as N) and Total Phosphorus (as P), 12-month rolling load (lbs/year) is calculated as the current month load (lbs/month) added to the month loads from the previous eleven months.
- 6. This is a final effluent limitation. See Schedule of Compliance for applicable interim effluent limitations.
- 7. 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.
- 8. 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.

#### FOOTNOTES CONTINUED ON NEXT PAGE

#### FOOTNOTES CONTINUED

#### 9. Whole Effluent Toxicity (WET) Testing:

<u>Testing Requirements</u> – Acute and if directed Chronic WET testing is required. Testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the Department. The test species shall be Ceriodaphnia dubia (water flea - invertebrate) and Pimephales promelas (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 15:1 for acute, and 100:1 for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

Monitoring Period - WET testing shall be performed quarterly during calendar years ending in 4 and 9.

<u>Reporting</u> - 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 <u>WET@dec.ny.gov</u> 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.

## STORMWATER POLLUTION PREVENTION REQUIREMENTS

#### NO EXPOSURE CERTIFICATION

The permittee submitted a Conditional Exclusion for No Exposure Form on 11/30/2020, 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.

## MINI INDUSTRIAL PRETREATMENT PROGRAM

The permittee previously performed the actions described in items 1 through 4 below in order to develop a mini pretreatment program:

1. Industrial Survey

The permittee submitted the results of an industrial survey.

2. <u>Develop Procedures</u>

The permittee submitted documentation of procedures for obtaining and ensuring compliance with applicable standards. Such procedures include requirements and schedules for discharge permits, industrial self-monitoring, compliance monitoring of industries by the permittee, on-going POTW monitoring, and an enforcement program. Such procedures are equivalent to procedures described or referenced in the document entitled <u>Introduction to the National Pretreatment Program. USEPA, June, 2011</u>, (https://www.epa.gov/npdes/pubs/pretreatment program intro 2011.pdf).

(<u>nttps://www.epa.gov/npdes/pubs/pretreatment\_program\_intro\_201</u>

3. Treatment Plant/Industry Monitoring

The permittee submitted the results of industrial and POTW monitoring and a completed Fast Report On Significant Industries forms (FROSIs) for all significant industrial users (SIUs).

4. Local Sewer Use Law

The permittee submitted a draft local sewer use law equivalent to the <u>DEC Model Sewer Use Law, NYSDEC,</u> <u>1994</u>. Local limits for substance capable of causing SPDES permit violations, endangering municipal employees or limiting sludge disposal options were included in the local law. Such limits were developed in accordance with document entitled <u>Local Limits Development Guidance, US EPA, July 2004, EPA 833-R-04-002A</u> (<u>https://www.epa.gov/npdes/pubs/pretreatment\_local\_limits.pdf</u>). After approval by the Department, dated **September 1, 1995**, the permittee submitted a copy of the enacted Law accompanied by proof of enactment.

Therefore, the permittee shall continue to implement the procedures developed in accordance with 2. above and approved by the Department. At a minimum, the following activities shall continue to be undertaken by the permittee:

- 1. Issue permits including limitations, monitoring requirements, and reporting requirements to its significant industrial users.
- 2. Enforce the local limits set forth in the POTW local sewer use law.
- 3. Carry out inspections and monitoring of significant industrial users to determine compliance with categorical standards and local limits.
- 4. Undertake enforcement actions in accordance with Department approved procedures.

In accordance with the Schedule of Submittals, the permittee shall submit yearly Fast Report On Significant Industries forms (FROSIs) for each SIU to the Department. Every third year, on the same date, the permittee shall submit Industrial Chemical Survey forms completed by all SIUs to the Department. At the same time the permittee shall notify the Department of any proposed significant changes to its implementing procedures or local sewer use law.

## MERCURY MINIMIZATION PROGRAM (MMP) - Type I

- 1. <u>General</u> 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 of 0.7 ng/L.
- 2. <u>MMP Elements</u> 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. <u>Monitoring</u> Monitoring at outfall, 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<sup>1</sup>. 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 and/or Effluent</u> The permittee must collect samples at the location(s) and frequency as specified in the SPDES permit limitations table.
- 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/L,<sup>2</sup> must receive approval from the Department prior to acceptance.
- iv. <u>Decreased Monitoring Requirements</u> 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.
  - 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 a 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).
- 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.
    - 2) The permittee must inventory and/or inspect users of its system as necessary to support the MMP.

<sup>&</sup>lt;sup>1</sup> Outfall monitoring must be conducted using the methods specified in Table 8 of *DOW 1.3.10*.

<sup>&</sup>lt;sup>2</sup>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.

## MERCURY MINIMIZATION PROGRAM (MMP) - Type I (Continued)

- a) Dental Facilities
  - 1. The permittee must maintain an inventory of each dental facility.
  - 2. 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,<sup>3</sup> which informs users of their responsibilities, and collect the "Amalgam Waste Compliance Report for Dental Dischargers"<sup>4</sup> 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.
  - 3. 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
  - 1. The permittee must maintain an inventory of other potential mercury sources.
  - 2. 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.
  - 3. 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 must only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.

#### c. Status Report - An annual status report must be completed and maintained on site summarizing:

- i. All MMP monitoring results for the previous reporting period;
- 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 reporting period;
- iv. Actions planned, pursuant to the control strategy, for the upcoming reporting period; 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 status report is required to be completed in accordance with the <u>Schedule of Additional Submittals</u>. The permittee must maintain a file with all MMP documentation. 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).

<sup>&</sup>lt;sup>3</sup> For example, the outreach program could include education about sources of mercury and what to do if a mercury source is found. <sup>4</sup> The form, "Amalgam Waste Compliance Report for Dental Dischargers," can be found here:

https://www.dec.ny.gov/docs/water\_pdf/dentalform.pdf

## MERCURY MINIMIZATION PROGRAM (MMP) - Type I (Continued)

- 3. <u>MMP Modification</u> The MMP must be modified whenever:
  - a. Changes at the facility, or within the collection system, increase the potential for mercury discharges;
  - b. Effluent discharges exceed the current permit limitation(s); or
  - c. A letter from the Department identifies inadequacies in the MMP.

The Department may use information in the status reports, as applicable in accordance with 2.c of this MMP, to determine if the permit limitations and MMP Type is appropriate for the facility.

#### 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.

## 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.

## SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)		Com	oliance A	Action			Due Date				
001	The Total Phosph	PHOSPHORUS CONCENTRATION EFFLUENT LIMITATION The Total Phosphorus monthly average effluent concentration limit of 1.0 will become effective January 1, 2025. This requirement will be monitor only until the limit takes effect.									
001	The total phospho	PHOSPHORUS LOADING LIMITATIONJanuary 1, 2025The total phosphorus 12-month rolling load of 3,040 lbs/yr will be come effective January 1, 2025. The interim limit of 4,850 lbs/yr will be effective until then.January 1, 2025									
001	NITROGEN LOADING LIMITATION   January 1, 2025     The total nitrogen 12-month rolling load of 56,000 lbs/yr will become effective   January 1, 2025     January 1, 2025. The interim limit of 51,000 lbs/yr will be effective until then.   January 1, 2025										
complian NYSDEC repeat the permit sta	letter entitled "SPD submission(s) not ated in the "SPDES	partment's satisf ES NOTICE/RENE ed above. The ab NOTICE/RENEWA	action of WAL AP ove due	nce. Whe PLICATI dates are ICATION	n this permit i ON/PERMIT," 1 independent /PERMIT" lette	s admini the perm from the r.	stratively renewed by ittee is not required to effective date of the				
					I TO THIS SCI	HEDULE					
Outfall	Parameter(s) Affected	Interim Ef	fluent Li Limit	mit Units	Limits Apply	Notes	Interim Limits Expire				
001	Total Phosphorus	Monthly Average	Monitor	mg/L	Year-Round	1	12/31/2024				
001	Total Phosphorus	12 Month Rolling Load	4,850	lbs/yr	Year-Round	1,2	12/31/2024				
001	Total Nitrogen	12 Month Rolling Load	51,000	lbs/yr	Year-Round	1,2	12/31/2024				
Notes:		mits table for samp potnotes for the ca			2						

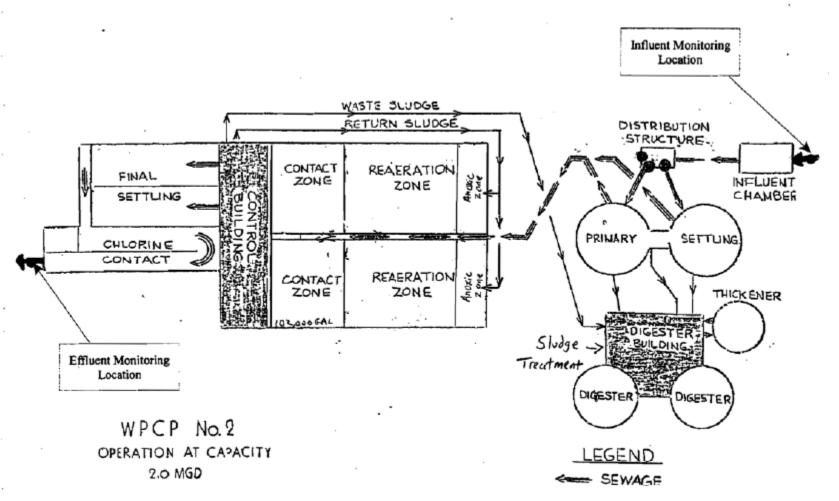
- b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of <u>non-compliance</u> shall include the following information:
  - 1. A short description of the non-compliance;
  - 2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
  - 3. Any details which tend to explain or mitigate an instance of non-compliance; and
  - 4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.
- c) The permittee shall submit copies of any document required by the above schedule of compliance to the NYSDEC Regional Water Engineer and to the Bureau of Water Permits.

## 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:

Influent: After to Screening

Effluent: After Disinfection



## 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:

В.	1. 2. 3. 4. 5. 6.	eral Conditions Duty to comply Duty to reapply Need to halt or reduce activity not a defense Duty to mitigate Permit actions Property rights Duty to provide information Inspection and entry	6 NYCRR 750-2.1(e) & 2.4 6 NYCRR 750-1.16(a) 6 NYCRR 750-2.1(g) 6 NYCRR 750-2.7(f) 6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h) 6 NYCRR 750-2.2(b) 6 NYCRR 750-2.1(i) 6 NYCRR 750-2.1(a) & 2.3
C.	Ope 1. 2. 3.	eration and Maintenance Proper Operation & Maintenance Bypass Upset	6 NYCRR 750-2.8 6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7 6 NYCRR 750-1.2(a)(94) & 2.8(c)
D.	1.	nitoring and Records 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)
E.	2. Rep 1. 2. 3. 4. 5. 6. 7. 8. 9.	Signatory requirements orting Requirements Reporting requirements Anticipated noncompliance Transfers Monitoring reports Compliance schedules 24-hour reporting Other noncompliance Other information Additional conditions applicable to a POTW	6 NYCRR 750-1.8 & 2.5(b) 6 NYCRR 750-2.5, 2.7 & 1.17 6 NYCRR 750-2.7(a) 6 NYCRR 750-1.17 6 NYCRR 750-2.5(e) 6 NYCRR 750-2.5(e) 6 NYCRR 750-2.7(c) & (d) 6 NYCRR 750-2.7(e) 6 NYCRR 750-2.1(f) 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.

## 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: <a href="http://www.dec.ny.gov/permits/93245.html">http://www.dec.ny.gov/permits/93245.html</a>

## 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 <u>https://www.dec.ny.gov/chemical/103774.html</u>. 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. Additional information required to be submitted by this permit shall be summarized and reported to the RWE and Bureau of Water Permits at the following addresses:

Department of Environmental Conservation Division of Water, Bureau of Water Permits 625 Broadway, Albany, New York 12233-3505

Phone: (518) 402-8111

Department of Environmental Conservation Regional Water Engineer, Region 7 615 Erie Boulevard West, Syracuse, New York, 13204-2400 Phone: (315) 426-7500

D. <u>Bypass and Sewage Pollutant Right to Know Reporting</u>: 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 by DEC on a case-by-case basis.

#### E. <u>Schedule of Additional Submittals:</u>

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

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
001	BIENNIAL POLLUTANT SCAN The permittee shall implement an ongoing monitoring program and perform effluent sampling every two years as specified in Footnote 8.	Retain and submit with next NY-2A Application
001	<u>ANNUAL FLOW CERTIFICATION</u> The permittee shall submit an Annual Flow Certification form each year in accordance with 750-2.9(C)(4). The form shall be attached to the February DMR or submitted through nForm.	February DMR (March 28 <sup>th</sup> )

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
001	WHOLE EFFLUENT TOXICITY (WET) TESTING WET testing shall be performed on a Acute and if necessary Chronic basis, WET testing shall be performed quarterly (calendar quarters) during calendar years ending in 4 and 9. The toxicity test report including all information requested of this permit shall be attached to your WET DMRs and sent to the <u>WET@dec.ny.gov</u> email address.	Within 60 days following the end of each monitoring period
001	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.	11/30/2025 and every 5 years thereafter
001	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	<i>Maintained</i> <i>Onsite</i> EDP + 12 months, annually thereafter
001	MINI PRETREATMENT PROGRAM - FROSI Submit completed Fast Report On Significant Industries forms (FROSIs) for each SIU to the Department, or notification letter that no new significant industrial users have been added.	October 28 <sup>th</sup> of each year
001	MINI PRETREATMENT PROGRAM – Industrial Chemical Survey (ICS) Forms Submit Industrial Chemical Survey forms completed by all SIUs to the Department. Notify the Department of any proposed significant changes to its implementing procedures or local sewer use law.	October 28 <sup>th</sup> 2024 and every three years thereafter

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."

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

Date: July 13, 2022 Permit Writer: Abigail Johnson Water Quality Reviewer: Abigail Johnson Full Technical Review

## SPDES Permit Fact Sheet Town of Owego Owego (T) WPCP #2 NY0025798

NEW YORK STATE

Department of Environmental Conservation

Permittee: Town of Owego	
Facility: Owego (T) WPCP #2	
SPDES Number: NY0025798	
USEPA Major/Class 05 Municipal	

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### Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) EBPS permit renewal has been drafted for the Owego (T) WPCP #2. The following is a summary of the changes. The details of these changes are specified below and in the permit:

#### **General Permit Changes**

- Updated cover page including corrected outfall coordinates and Toxic Class from Non-toxic to Toxic
- Updated definitions page
- Added new language for the stormwater no exposure certification requirements
- Added new language for the Type I Mercury Minimization Plan requirements
- Updated monitoring locations page
- Added a new schedule of additional submittals

#### Permit Limits Changes

- Removed Type 1 SSO Outfalls 003 and 008
- Decreased ammonia sampling frequency from monthly to quarterly
- Added a monthly average effluent limitation for total phosphorus of 1.0 mg/L and associated compliance schedule item
- Added a daily maximum effluent mercury limitation of 50 ng/L
- Added Biennial Pollutant Scan requirement
- Changed existing disinfection season from May 31 October 7 to May 1 October 31 to correspond to the current seasonal disinfection time frame
- Added new WET actions levels of 15 TUa and 100 TUc
- Removed the Chesapeake Bay TMDL Implementation tables, removed the adjusted sub-aggregate language specific to Owego SD2 and Owego SD1, and incorporated existing requirements for total nitrogen, TKN, nitrate, nitrite, and total phosphorus into the permit limits table
- Removed Alkalinity monitoring requirement
- Removed influent monitoring/reporting requirements for pH, temperature, and settleable solids

#### Schedule of Compliance

- Added a new compliance deadline for the monthly average total phosphorus of 1.0 mg/L (1/1/2025) with interim limits of monitor only
- Continued compliance schedule for 12-month rolling load for total phosphorus of 3,040 lbs/yr (effective 1/1/2025) with interim limit of 4,850 lbs/yr (expiring 12/31/2024)
- Continued compliance schedule for 12-month rolling load for total nitrogen of 56,000 lbs/yr (effective 1/1/2025) with interim limit of 51,000 lbs/yr (expiring 12/31/2024)

# This factsheet summarizes the information used to determine the effluent limitations and other conditions contained in the permit. General background information about the regulatory basis for the effluent limitations and other conditions contained in this permit are in the <u>Appendix</u> linked throughout this factsheet.

#### Administrative History

- 1/6/2009 The last full technical review was performed as part of a permit modification, which expired 5/31/2011. The 2009 permit, along with all subsequent modifications, has formed the basis of this permit.
- 5/31/2011 The permit was administratively renewed.
- 9/1/2014 Permit was modified to include Chesapeake Bay limits.

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- 5/31/2016 The current permit was extended pursuant to SAPA<sup>1</sup>.
- 7/16/2020 Department issued a Request for Information (RFI) to modify and renew the SPDES permit due to the facility's EBPS score<sup>2</sup>. At the time of the RFI, the facility had an EBPS score of 275 and ranking of 42/742 for DEC Central Office EBPS facilities.
- 12/4/2020 The Town of Owego submitted a complete NY-2A permit application.

Please see the Notice of Complete Application, published in the Environmental Notice Bulletin and newspapers, for information on the public notice process.

## Facility Information



This is a publicly owned treatment works that receives flow from domestic users. Wastewater consists of treated sanitary. The sewage collection system consists of separate sewers. The treatment plant was constructed to provide secondary treatment for a design flow of 2.0 MGD.

The current treatment plant consists of:

• Preliminary Treatment: Auger Monster (screens, grinds, and compacts), grit removal (grit classifier).

• Primary Treatment: Primary clarification

• Secondary Treatment: Activated sludge/Secondary clarification

• Tertiary Treatment: Alum addition for Phosphorous removal (Summer – after primary clarifiers, Winter – after aeration tanks)

• Disinfection: Chlorine gas

Sludge is thickened via gravity thickener prior to being anaerobically digested. After digestion the sludge is dewatered via belt filter press. Sludge is then transported to Dickson Environmental in Bath for land application or taken to Steuben Co. Landfill.

<sup>&</sup>lt;sup>1</sup> State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(*I*) <sup>2</sup> Pursuant to 6 NYCRR 750-1.18 and NYS Environmental Benefit Permit Strategy (EBPS) PAGE 4 OF 24

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Outfall 001 is a 24" pipe that extends into the Susquehanna River and ends in a 24"x18"x10" tee. The 10" outlet has a raised pipe that is capped. The 18" pipe continues to another 18"x10"x10" tee where the pipe extends upward, and the discharge is capped. It then goes to the final 10"x10"x10" tee. One side of the tee is capped and one side is open for discharge. This is the only port that effluent flows from.

The facility accepts wastewater from the following municipalities:

Municipality	POSS Registration # or SPDES #	Combined Sewer Overflow (CSO)?	Sanitary Sewer Overflow (SSO)?
Town of Owego	NY0025798	No	Yes



Type I Sanitary Sewer Overflows (SSOs) are classified as permanent emergency overflow structures which are designed, approved, constructed, and intended only for emergency discharges. Type I SSOs are typically located at or immediately upstream of a pump station or at the headworks of the treatment plant.

The facility has the following Type I SSO(s):

- Outfall 003 (located at 17C pump station) receives no treatment.
- Outfall 008 (located at Glann Rd & Route 434 pump station) receives no treatment.

Bypass from these outfalls is prohibited, with limited exceptions<sup>3</sup>, and thus, these outfalls are not authorized and have been removed from the permit. Each discharge event is evaluated against emergency discharge criteria and must be reported in accordance with the Sewage Pollution Right to Know Act (SPRTK)<sup>4</sup>.

All lift stations are checked daily to ensure pumps are working correctly or if repairs/replacements are necessary. The Town conducts I&I inspections to try and reduce the amount of I&I in the collection system. The Town also cleans all flat lines 2-3 times a year to prevent any blockages.

<sup>3</sup> Exceptions noted in 6 NYCRR 750-2.8(b)(2) and 40 CFR § 122.41(m)(4)(i)

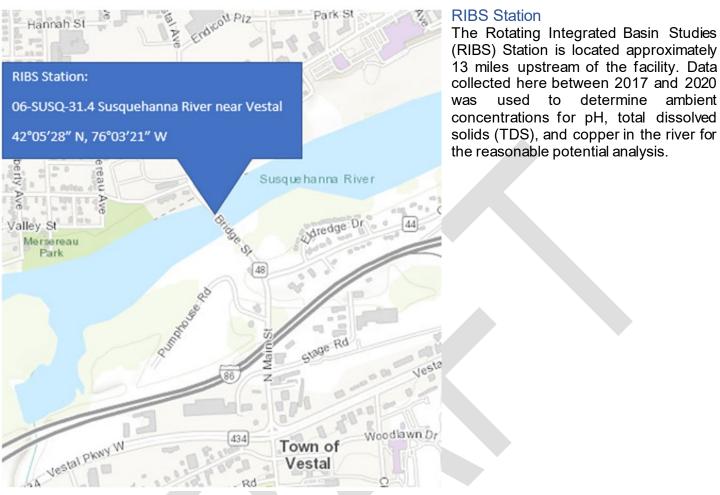
<sup>4</sup> NYS Environmental Conservation Law Section 17-0826-a and 6 NYCRR 750-2.7 PAGE 5 OF 24

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to

determine

ambient



#### **Enforcement History**

Environmental regulatory compliance and enforcement information for this facility can be found on the Enforcement and Compliance History Online at https://echo.epa.gov.

#### Existing Effluent Quality

The Pollutant Summary Table presents the existing effluent quality and permit limitations for discharges from the facility. Concentration and mass data are presented, based on Discharge Monitoring Reports submitted by the permittee for the period 10/1/2015 to 9/30/2020. In addition, data from the NY-2A application was used to supplement this information. Appendix Link

#### Additional Site-Specific Concerns

As required by ECL 17-0828, the permittee submitted a completed Application Supplement B: Discharges within Sole Source Aquifers form identifying the following water purveyors within a three-mile radius of the facility: Town of Owego - Main St. Well House, Tobey Rd. Well House, Depot St. Well House, and Water 3 Pump House.

#### Interstate Water Pollution Control Agencies

Outfall(s) 001 is located within the Chesapeake Bay watershed and the Susquehanna River Basin Commission (SRBC) compact area. Appendix Link

### Receiving Water Information

The facility discharges via the following outfall(s):

Outfall No.	SIC Code	Receiving Water	
001	4952	Susquehanna River, Class B	
003		hitary Sewage – Pump Station Overflow (SSO) – no treatment has been removed from the permit as SSOs are no longer permitted	Susquehanna River, Class B
008		nitary Sewage – Pump Station Overflow (SSO) – no treatment has been removed from the permit as SSOs are no longer permitted	Glann Creek, Class B

The location of the outfall(s), and the name, classification, and index numbers of the receiving waters are indicated in the <u>Outfall and Receiving Water Summary Table</u> at the end of this fact sheet. <u>Appendix Link</u>

#### Impaired Waterbody Information

The Susquehanna River (PWL No. 0603-0013) is not listed on the 2018 <u>New York State Section 303(d) List</u> of Impaired/Total Maximum Daily Load (TMDL) waters; however, this waterbody segment is located within the Chesapeake Bay Watershed and is subject to the applicable requirements of the Chesapeake Bay TMDL and New York's Phase III Watershed Implementation Plan (Phase III WIP) for the TMDL<sup>5</sup>, as discussed below.

#### Chesapeake Bay TMDL Watershed Information

The Town of Owego SD2 is considered a "Bay-Significant" municipal facility because its design flow is equal to or greater than 400,000 gallons per day. In accordance with the Phase III WIP, the nitrogen and phosphorus loads warrant discharge limits and effluent monitoring for these parameters.

The Town of Owego SD2 is required to sample and report Total Phosphorus as P, as well as Total Kjeldahl Nitrogen (TKN) as N, Nitrite (NO<sub>2</sub>) as N, Nitrate (NO<sub>3</sub>) as N, and to calculate Total Nitrogen as N. The Total Nitrogen and Total Phosphorus 12-month loads (TN 12-ML and TP 12-ML respectively) are defined as the sum of the current month loads added to the month loads from the eleven previous months for Nitrogen and Phosphorus, respectively. The Total Phosphorus and Total Nitrogen Sub-Aggregate language specific to Owego SD2 and Owego SD1 (NY0022730) will be removed from both permits under the Phase III WIP. The applicable limitations will now appear on the main effluent limitations table. See the Pollutant Summary Table for a discussion on the derivation of Total Nitrogen and Total Phosphorus effluent limits.

The Water Quality Based Effluent Limits (WQBELs) below are set by DEC in accordance with the Phase II and III WIP.

#### Interim Limits Effective through 12/31/2024

Total Phosphorus (as P) 12-month Load (TP 12-ML): 4,850 lb/year Total Nitrogen (as N) 12-month Load (TN 12-ML): 51,000 lb/year

#### Final Limits Effective 1/1/2025

Total Phosphorus (as P) 12-month Load (TP 12-ML): 3,040 lb/year Total Nitrogen (as N) 12-month Load (TN 12-ML): 56,000 lb/year

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#### Mixing Zone and Critical Receiving Water Data

The 7Q10 flow calculated for the Susquehanna River at the facility was 230 MGD (350 CFS). Per TOGS 1.3.1, for large flow rivers, the chronic A(C) dilution ratio will be limited to 100:1. The 7Q10 flow was obtained from the drainage basin ratio and gage station data.

Gage Name: Susquehanna River at Vestal, NY Gage ID: 01513500 Drainage Area at Gage (mi<sup>2</sup>): 3960 Drainage Area at Facility (mi<sup>2</sup>): 4140 7Q10 Flow at Gage (CFS): 340 Source: USGS SWToolbox (1938-2020) Calculated 7Q10 Flow at Facility (CFS): 350

The 30Q10 flow of 270 MGD (410 CFS) was obtained from the same source. Per TOGS 1.3.1, for large flow rivers, the Human, Aesthetic, Wildlife (HEW) dilution ratio will be limited to 100:1. The 1Q10 flow of 215 MGD (330 CFS) was obtained from the same source. Per TOGS 1.3.1, for large flow rivers, the acute A(A) dilution ratio will be limited to 50:1.

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

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001	50:1	100:1	100:1	TOGS 1.3.1

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

### Permit Requirements

The technology based effluent limitations (<u>TBELs</u>), water quality-based effluent limitations (<u>WQBELs</u>), <u>existing</u> <u>effluent quality</u> and a discussion of the selected effluent limitation for each pollutant present in the discharge are provided in the <u>Pollutant Summary Table</u>.

#### Whole Effluent Toxicity (WET) Testing

An evaluation of the discharge indicates the potential for toxicity based on the following criteria: Appendix Link

Treatment plants which equal or exceed a discharge of 1MGD. (#7)

The requirement for WET testing is new. While one quarter of WET testing data (2020-Q4) was submitted as part of the NY-2A application, this is not enough data to perform a reasonable potential analysis. Consistent with TOGS 1.3.2, given the dilution available and location outside of the Great Lakes basin, the permit requires acute and if necessary chronic WET testing. Samples will be collected quarterly in years ending in 3 and 8. WET testing action levels of 15 TUa and 100 TUc have been included in the permit for each species. The acute action levels for each species represent the acute dilution ratio times a factor of 0.3. The chronic action levels represent the chronic dilution ratio. <u>Appendix Link</u>

#### Anti-backsliding

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

Date: July 13, 2022 Permit Writer: Abigail Johnson Water Quality Reviewer: Abigail Johnson Full Technical Review

#### Antidegradation

The permit contains effluent limitations which ensure that the designated best use of the receiving waters will be maintained. Please see the Environmental Notice Bulletin for information on the State Environmental Quality Review (SEQR)<sup>6</sup> determination. <u>Appendix Link</u>

#### **Discharge Notification Act Requirements**

In accordance with the Discharge Notification Act (ECL 17-0815-a), the permittee is required to post a sign at each point of wastewater discharge to surface waters. The permit also contains a requirement that the permittee make the sampling data available, upon request, to the public.

#### Mercury<sup>7</sup>

The multiple discharge variance (MDV) for mercury provides the framework for NYSDEC to require mercury monitoring and mercury minimization programs (MMPs), through SPDES permitting. The facility is located outside of the Great Lakes watershed, is an EPA major Class 05 POTW which will receive hauled wastes (introduced at the head of the plant) and flows from mercury sources (dental facilities), and the permit includes requirements for the implementation of MMP Type I.

Based on 1 data point of 1.34 ng/L, collected as part of the application, the permit includes the general level currently achievable (GLCA) of 50 ng/L as the daily max effluent limitation with monthly sampling. A mercury minimization program consisting of the following is also required:

- Additional key location monitoring
- Control strategy for implementation of the MMP
- Annual status report

The data collected will be used to establish a 12-month rolling average effluent limit during the next permit review. <u>Appendix Link</u>

#### **Biennial Pollutant Scan**

As required under 40CFR 122.21(j)(4)(vi) three effluent samples must be submitted with an NY-2A Application. The permit includes a requirement to perform biennial sampling (once every two years) for the parameters in the NY-2A Application, Tables A – D. This requirement ensures the data is representative of effluent conditions over the permit term and will be available for the next application submittal and permit review.

#### Mini Industrial Pretreatment Program

While the facility does not currently have any Significant Industrial Users (SIUs), the Town would like to continue to have the mini-pretreatment program in their permit for any future SIUs which may move to the Town. The program requires implementation of an industrial user compliance program, submission of user information, modification of local sewer use law (if necessary), and periodic reporting. This requirement is being continued from the previous permit.

<sup>6</sup> As prescribed by 6 NYCRR Part 617

<sup>7</sup> In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020. PAGE 9 OF 24

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#### Schedule(s) of Compliance

A Schedule of Compliance is being included in the permit<sup>8</sup> based on a reasonable finding of the following:

- New schedule for total phosphorus monthly average concentration limit of 1.0 mg/L (effective 1/1/2025)
  - This is a new requirement and the permittee has had no time to meet the WQBEL under prior permits
- Continued schedule for total phosphorus 12-month rolling load of 3,040 lbs/yr (effective 1/1/2025)
- Continued schedule for total nitrogen 12-month rolling load of 56,000 lbs/yr (effective 1/1/2025)

#### Schedule(s) of Additional Submittals

A schedule of submittals has been included:

- Mercury Minimization Plan (MMP) Annual Report (maintain onsite)
- Mini-Pretreatment Program Reports (FROSI and ICS Forms)
- Stormwater No-Exposure Form (every 5 years)
- WET testing results (years ending in 4 & 9)
- Annual Flow Certification

Date: July 13, 2022 Permit Writer: Abigail Johnson Water Quality Reviewer: Abigail Johnson Full Technical Review

## OUTFALL AND RECEIVING WATER SUMMARY TABLE

Γ						Water Index No./	Major/					Critical	D	ilution Ra	atio
	Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Priority WaterbodyListing (PWL)No.	Sub Basin	Hardn <i>e</i> ss (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Effluent Flow (MGD)	A(A)	A(C)	HEW
	001	42° 03' 48" N	76° 08' 29" W	Susquehanna River	В	SR (portion 3) PWL: 0603-0013	06 / 03	122 <sup>9</sup>	215	230	270	2.0	50:1	100:1	100:1

## POLLUTANT SUMMARY TABLE - Outfall 001

		Description	of Wast	t <b>ewater:</b> tr	eated sanita	iry sewage									
Outfall #	001	<b>Type of Tre</b> gas chlorin			, comminuto	r, grit remova	l, primary clarif	ication, ac	tivated slud	ge/second	lary clarifica	ation, chemica	al addition fo	rpho	sphorus removal,
			Exist	ing Discha	arge Data	TB	ELs		Wa	ater Quality	QBELs			Decis for	
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>10</sup>	#ofData 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 10/1/2015 to 9/30/2020 was obtained from Discharge Monitoring Reports provided by the permittee. Ambient data was obtained from RIBS station 06-SUSQ-31.4 Susquehanna River near Vestal (2017-2020).															
	MGD	Monthly Avg	2.0	1.09 Actual Average	60/0	2.0	Design Flow	Narrative: No alterations that will impair the waters for 703.2							TBEL
	MGD	Daily Max	Monitor	5.3 Actual Max	58/0	Monitor	750-1.13	their best	their best usages.						Monitor
Flow Rate	Consis	stent with TO	GS 1.3.3,	a monthly	/ average flo	w limitation e	qual to the aver	age daily	design capa	acity of the	e treatment	plantisspeci	fied.		
	SU	Minimum Maximum	6.0 9.0	6.5 Actual Min 7.6 Actual Max	60/0 60/0	6.0 9.0	TOGS 1.3.3	7.9	-	6.5 – 8.5	Range	6.5 - 8.5	703.3	-	TBEL
pН	protect		QS. Amb												EL is reasonably ′estal from 2017-

<sup>&</sup>lt;sup>9</sup> Ambient hardness data obtained from NY-2A application and corresponds closely with historical hardness used in previous permit reviews.

<sup>&</sup>lt;sup>10</sup> Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with  $\leq$  3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with  $\geq$  3 nondetects)

		Description	n of Wast	t <b>ewater:</b> tr	eated sanita	ry sewage									
)utfall #	001	<b>Type of Tre</b> gas chlorin			, comminuto	r, grit remova	l, primary clarif	ication, ac	tivated slud	ge/second	lary clarifica	ition, chemica	l addition fo	rpho	sphorus remo
			Existi	ing Discha	arge Data	TB	ELs		Wa	ter Quality	y Data & W	QBELs			Basis for
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>10</sup>	# 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	Permit Requireme
emperature	°C	Daily Max	Monitor	24 Actual Max	60/0	Monitor	750-1.13 Monitor	surface 90F at an		shall not shall no	be raised to ot be raised ature that ex		704.2	-	TBEL
	Consis permit		YCRR750	D-1.13(a),	monitoring is	s required and	d may be used	to inform f	uture permit	tting decis	sions. This r	equirementis	continued t	from tł	ne previous
	mg/L	Daily Min	-	5.8	1/0	-		-	7.0 Critical Point	(Non- Trout) 4.0 mg/L	Narrative	No Reasonable Potential	703.3	-	No Limitati or monitori
hissolved Dxygen DO)	= 2.0 r concer	ng/I (assump ntration of an	otion for a nmonia re	activated s	sludge plants	s per TOGS ´ ars). The mod	ter-Phelps equ I.3.3), Effluent del showed tha	$BOD_5 = 4$	15 mg/L (7-0	day avera	ige limit), A	mmonia (as Ì	l) = 9.0 mg	g/Ľ (m	aximum efflu
	mg/L	Monthly Avg	30	7.4	55/5	30	TOGS 1.3.3								
		7 Day Avg	45	32	55/5	45	TOGS 1.3.3								
	lbs/d	Monthly Avg	500	110	60/0	500	TOGS 1.3.3	-	See Di	ssolved (	Dxygen	No Reasonable Potential	703.3	-	TBEL
-day liochemical		7 Day Avg	750	460	60/0	750	TOGS 1.3.3					Fotential			
Dxygen Demand	% Rem	Minimum	85	83 Actual Min	60/0	85	TOGS 1.3.3								
BOD₅)		stent with TO satisfied und				lect seconda	ry treatment sta	andards.S	See justificat	ion above	e for dissolv	ed oxygen. Tr	ie model sh	owed	thedownstre

		Description	n of Wast	: <b>ewater:</b> tr	eated sanita	ry sewage									
Outfall #	001	<b>Type of Tre</b> gas chlorina			, comminuto	r, grit remova	l, primary clarif	ication, ac	tivated slud	ge/second	lary clarifica	tion, chemica	l addition fo	rphos	sphorus removal,
			Existi	ing Discha	arge Data	ТВ	ELs		Wa	ter Quality	/ Data & W0	QBELs			Decie for
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>10</sup>	# 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
	mg/L	Monthly Avg	30	6.3	57/3	30	TOGS 1.3.3								
		7 Day Avg	45	14	57/3	45	TOGS 1.3.3			None from sewage,					
Total	lbs/d	Monthly Avg	500	90	60/0	500	TOGS 1.3.3	-	industrial wastes that deposition	t will caus	е	-	703.2	-	TBEL
Suspended Solids (TSS)		7 Day Avg	750	550	60/0	750	TOGS 1.3.3		for their be			Ť			
Solius (133)	% Rem	Minimum	85	93 Actual Min	60/0	85	TOGS 1.3.3								
	Consistent with TOGS 1.3.3 for POTWs, TBELs reflect second ary treatment standards. Given that adequate dilution is available, an effluent limitation equal to the TBEL, and consistent with TOGS 1.3.3, is reasonably protective of water quality standards.														
Settleable	mL/L	Daily Max	0.3	0	60/0	0.3	0.3   TOGS 1.3.3   -   Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters   -   703.2								TBEL
Solids		Consistent with TOGS 1.3.3, the effluent limitation is equal to the TBEL of 0.3 mL/L for POTWs providing secondary treatment without filtration. Given that adequate dilution is available the TBEL is reasonably protective of WQS.													
	mg/L	Monthly Avg	Monitor	0.94	24/0	Monitor	750-1.13 Monitor	0.082	0.11	0.9	A(C)	No Reasonable Potential	703.5	_	Monitor
Nitrogen,	lb/d	Monthly Avg	Monitor	17	24/0	Monitor	750-1.13 Monitor	-	-	-	-	-			
Ammonia (as N) June 1 <sup>st</sup> – Oct. 31 <sup>st</sup>	15 data TOGS concer to acco WQS v	a points from 1.3.1E. The ntration was a punt for the n violation: the	n 2017-20 projected assumed umber of refore, no	20 from R d instream to be 0.1 r samples. o limitation	IBS Station concentration g/L as NH <sub>3</sub> A comparis is specified	06-SUSQ-31. on was calcul ( $0.082 \text{ NH}_3$ -N on of the proj . Consistent v	4 Susquehant ated from the ) in accordanc ected instrean	na River n maximum ce with TO n concentr /50-1.13(a)	ear Vestal. reported eff GS 1.3.1D. / ation and th ), monitorin	The temp fluent con A multiplie ie WQS in	erature was centration o r of 1.3 was dicates no i	assumed to f 2.3 mg/L (N applied to th reasonable po	be 25°C w H3-N), and e maximum otential to c	hich i an ar efflue ause c	75 <sup>th</sup> percentile of s consistent with nbient upstream nt concentration or contribute to a nitting decisions.

				t <b>ewater:</b> tr	eated sanita	ry sewage									
Outfall #	001	Type of Tre gas chlorin			, comminuto	r, grit removal	, primary clarif	ication, ac	tivated slud	ge/second	lary clarifica	ation, chemica	l addition fo	rpho	sphorus removal,
			Exist	ing Discha	arge Data	ТВ	ELs		Wa	ater Quality	/ Data & W	QBELs			Decis for
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>10</sup>	# 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
	mg/L	Monthly Avg	Monitor	2.3	35/1	Monitor	750-1.13 Monitor	0.082	0.19	1.3	A(C)	No Reasonable Potential	703.5	-	Monitor
Nitrogen, Ammonia	lb/d	Monthly Avg	Monitor	49	35/1	Monitor	750-1.13 Monitor	-	_	_	-	-			
(as N) Nov. 1 <sup>st</sup> – May 31 <sup>st</sup>	The WQS for Ammonia was determined from 6 NYCRR 703.5 from a pH of 7.9 and a temperature of 10°C. The ambient pH of 7.9 was calculated as the 75 <sup>th</sup> percentile of 15 data points from 2017-2020 from RIBS Station 06-SUSQ-31.4 Susquehanna River near Vestal. The temperature was assumed to be 10°C which is consistent with TOGS 1.3.1E. The projected instream concentration was calculated from the maximum reported effluent concentration of 9.0 mg/L (NH3-N), and an ambient upstream concentration was assumed to be 0.1 mg/L as NH <sub>3</sub> (0.082 NH <sub>3</sub> -N) in accordance with TOGS 1.3.1D. A multiplier of 1.2 was applied to the maximum effluent concentration to account for the number of samples. A comparison of the projected instream concentration and the WQS indicates no reasonable potential to cause or contribute to a WQS violation: therefore, no limitation is specified. Consistent with 6 NYCRR750-1.13(a), monitoring is required and may be used to inform future permitting decisions. This requirement is continued from the previous permit but at a reduced sampling frequency.														
	mg/L	Monthly Avg	Monitor	2.2	59/0	Monitor	WIP III			-	-	-	-	-	Monitor
Total Kjeldahl Nitrogen (TKN)	lb/d	Monthly Avg	Monitor	37	59/0	Monitor	WIP III	-	-	-	-	-	-	-	Monitor
(as N)	Consistent with the Phase III WIP, sampling and reporting for TKN will be continued in the permit and used to inform the individual constituents of Total Nitrogen.														
	mg/L	Monthly Avg	Monitor	14	60/0	Monitor	WIP III	-	-	-	-	-	-	-	Monitor
Nitrate (NO <sub>3</sub> ) (as N)	lb/d	Monthly Avg	Monitor	80	60/0	Monitor	WIP III	-	-	-	-	-	-	-	Monitor
(as N)	Consis	tent with the	Phase III	WIP, sam	pling and re	porting for nit	rate will be con	tinued in t	he permit a	nd used to	inform the	individual cor	nstituen ts of	Total	Nitrogen.
	mg/L	Monthly Avg	Monitor	0.33	59/1	Monitor	WIP III	-	-	-	-	-	-	-	Monitor
Nitrite (NO <sub>2</sub> ) (as N)	lb/d	Monthly Avg	Monitor	7.3	60/0	Monitor	WIP III	-	-	-	-	-	-	-	Monitor
、 <i>′</i>	Consis	tent with the	Phase III	WIP, sam	pling and re	porting for nit	rite will be cont	inued in th	ne permit an	d used inf	orm the ind	ividual constil	tuents of To	tal Nit	rogen.

		Description	Description of Wastewater: treated sanitary sewage Type of Treatment: screening, comminutor, grit removal, primary clarification, activated sludge/secondary clarification, chemical addition for phosphorus removal,															
Outfall #	001	Type of Tre gas chlorin			, comminuto	r, grit remova	l, primary clarif	ication, ac	tivated slud	ge/second	dary clarifica	ition, chemica	al addition fo	rpho	sphorus remo val,			
			Existi	ing Discha	arge Data	TB	ELs		Wa	ater Qualit	y Data & W	QBELs			Basis for			
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>10</sup>	# 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	Permit Requirement			
	mg/L	Monthly Avg	Monitor	11	60/0	Monitor	WIP III	-	-		-	-	-	-	Monitor			
	lb/d	Monthly Avg	Monitor	120	60/0	Monitor	WIP III	-	-		-	-	-	-	Monitor			
<b>T</b> ( 150)	lb/ mon	Monthly Total	Monitor	4,280	60/0	Monitor	WIP III	-	-	-		-	-	-	Monitor			
Total Nitrogen	lb/yr	12 Month Rolling Load	51,000	43,000	60/0	56,000	WIP III	-	-		-	-	-	-	TMDL			
		stent with the discussion in			permit inclu	ides a final ar	nnual loading l	imitation o	of 56,000 lbs	s/yr. Interii	m and final	loading limits	are provid	ed in	<u>Chesapeake Bay</u>			
	mg/L	Monthly Avg	Monitor	0.94	60/0	1.0	WIP III		Norrativo:	None in amounts th <i>a</i> t								
	lb/d	Monthly Avg	Monitor	9.4	60/0	Monitor	WIP III		will result in growth		s of algae,		s of algae, that will	s of algae,		_	_	TMDL
	lb/mon	Avg	Monitor	360	60/0	Monitor	WIP III				-					TMBE		
Total	lb/yr	12 Month Load	4,850	2,900	60/0	3,040	WIP III		acagoor									
Phosphorus	averag facility effectiv	e and a final ; however, ac re 1/1/2025.	annual lo Iditional t The annu	oading lim ime is bein ual loading	itation of 3,04 g given to op g limitation wa	10 lbs/yr. The otimize treatm as calculated	1.0 mg/L phose entand a Sch	sphorus co edule of Co /L concen	oncentratior ompliance h	n is achiev nas been i	able with the	e current trea he permit. Th	tment techr is concentra	nology ation l	sed as a monthly employed at the mit shall become Interim and final			
	ng/L	Daily Max	-	1.34	1/0	-	-	-	-	0.7	H(FC)	50	GLCA	-	DOW 1.3.10			
Mercury	The fac	cility has bee	n given N	1МР Туре	l requiremen	ts. For more i	information, se	ethe <u>Merc</u>	cury section	offactshe	eet.							

<sup>&</sup>lt;sup>11</sup> Consistent with NYCRR 750-2.8(a)(5). PAGE 15 OF 24

		Description	Description of Wastewater: treated sanitary sewage												
Outfall #	001		Type of Treatment: screening, comminutor, grit removal, primary clarification, activated sludge/secondary clarification, chemical addition for phosphorus removal gas chlorination disinfection												sphorus removal,
			Existi	ing Discha	arge Data	TE	BELs	Water Quality Data & WQBELs							Decis for
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>10</sup>	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Projected WO Std Calc Basis for ML		Basis for Permit Requirement					
	mg/L	Monthly Avg	Monitor	110	60/0	-	-				-				Discontinued
Alkalinity	lb/d	Monthly Avg	Monitor	1,580	60/0	-	-				-				Discontinued
5		A water quality standard for Alkalinity does not exist for Class B waterbodies. This monitoring requirement is being discontinued in the permit. This does not constitute backsliding as it was a monitor only parameter.													
	#/100 mL	30d Geo Mean	200	9.0	20/0	200	TOGS 1.3.3	-		The monthly geometric nimum of five examinatio			703.4		TBEL
Coliform, Fecal		7d Geo Mean	400	180	20/0	400	TOGS 1.3.3	-	notexceed			luons, shan	703.4	-	IDEL
- ,	Consistent with TOGS 1.3.3, effluent disinfection will continue to be required seasonally from May 1st - October 31st, due to the class of the receiving waterbody. Feca coliform limits equal to the TBEL are specified.														
	mg/L	Daily Max	2.0	1.8 Actual Max	20/0	2.0	TOGS 1.3.3	-	-	0.005	A(C)	2.5	703.5	-	TBEL
Total Residual Chlorine							ain a permit rec d WQBEL is gre								onic dilution ratio
Additional Poll	utants I	Detected													
	mg/L	Daily Max	-	652	1/0	-	-	141	219	500	Narrative	No Reasonable Potential	703.3	-	No Limitation or Monitoring
Total Dissolved Solids (TDS)	Station is withi mg/L a compa	06-SUSQ-3 <sup>2</sup> n the measur nd an ambier	1.4 Susqu ed range nt upstrea projected	uehanna F for TDS fi am concei	River near Ve or domestic s ntration of 14	stal. The max sewage. The p 1 mg/L. A mu	timum reported projected instro Iltiplier of 6.2 w	effluent conce eam conce as applied	oncentratio entration wa d to the max	n consiste s calculate imum efflu	d of 1 samp ed from the r uent concer	le collected as maximum rep ntration to acc	s part of the orted efflue ount for the	NY-2 ntcor enumb	-2020 from RIBS A application and acentration of 652 per of samples. A e, no limitation or

		Description of Wastewater: treated sanitary sewage													
Outfall #	001		Type of Treatment: screening, comminutor, grit removal, primary clarification, activated sludge/secondary clarification, chemical addition for phosphorus remova gas chlorination disinfection												sphorus removal,
			Existi	ing Discha	arge Data	TB	ELs		Wa	ater Qualit	y Data & W	QBELs			Decis for
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>10</sup>	# 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
	μg/L	Daily Max	-	30 Total	1/0	Monitoring	750-1.13 Monitoring	2.3 Dissolved	4.1 Dissolved	11 Dissolved	A(C)	No Reasonable Potential	703.5	-	750-1.13 Monitoring
	lbs/d	Daily Max	-	-	-	Monitoring	WMDL	-	-	-	-	-	-	-	WMDL
Total Copper	Copper was detected in the effluent. The projected instream concentration was calculated using the maximum measured effluent concentration of 0.030 mg/L (NY-2A an ambient upstream concentration of 0.0023 mg/L (average of 9 samples of dissolved Copper from the upstream RIBS Station 06-SUSQ-31.4 Susquehanna River Vestal). A multiplier of 6.2 was applied to the projected effluent to account for the number of samples. A metals translator of 1.042 was applied to convert between the and dissolved form in accordance with EPA Document 823-D-96-007. A comparison of the projected instream concentration to the WQS indicates no reasonable porto cause or contribute to a WQS violation; however, a watershed analysis indicates that Copper may be a pollutant of concern in the Susquehanna Watershed; ther monitoring is being added to the permit to inform future analyses.									nanna River near between the total sonable potential					
	µg/L	Daily Max	-	23	1/0	-	-	-	1.4	4.6	A(C)	No Reasonable Potential	703.5	-	No Limitation or Monitoring
Total Selenium	Selenium Was detected in the effluent. The projected instream concentration was calculated using the maximum measured effluent conc and the ambient upstream concentration is assumed to be negligible. A multiplier of 6.2 was applied to the projected effluent to account comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS vio monitoring is specified.							unt for the	numb	er of samples. A					
	µg/L	Daily Max	-	62 Total	1/0	-	-	-	3.8 Dissolved	98 Dissolved	A(C)	No Reasonable Potential	703.5	-	No Limitation or Monitoring
Total Zinc	the am transla	bient upstrea tor of 1.022 v	am conce vas appli	entration is ed to conv	assumed to vert between	be negligible the total and o	e. A multiplier o	f6.2 was a in accord	applied to th ance with E	ne project PA Docum	ed effluentt 1ent823-D-9	o account for 96-007. A con	the numbe nparison of	r of sa the pi	g/L (NY-2A) and amples. A metals rojected instream
Chloroform	ug/L	Daily Max	-	17	1/0	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
omererer	A num	eric water qu	ality stan	dard for C	hloroformdo	oes not exist fo	or Class B wate	erbodies;tl	nerefore, no	WQBEL	is specified				
Bromodichloro	ug/L	Daily Max	-	9.8	1/0	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
methane A numeric water quality standard for Bromodichloromethane does not exist for Class B waterbodies; therefore, no WQBEL is sp						is specified.									

Γ		Description of Wastewa	ter: treated sanitary sewage					
	USEPA Major/Clas	ss 05 Municipal	Full Technical Review					
	SPDES Number: N	IY0025798	Water Quality Reviewer: Abigail Johnson	1				
	Facility: Owego (T)	WPCP #2	Permit Writer: Abigail Johnson					
	Permittee: Town of	Owego	Date: July 13, 2022					
	Permittee: Town of	Owego	Date: July 13, 2022					

		Description	of Wast	tewater: tr	eated sanita	ry sewage									
Outfall #	001		<b>/pe of Treatment:</b> screening, comminutor, grit removal, primary clarification, activated sludge/secondary clarification, chemical addition for pho as chlorination disinfection											rpho	sphorus removal,
		Existing Discharge Data				TBELs		Water Quality Data & WQBELs							Decis fee
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>10</sup>	# 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 /L Permit Requirement
Dibromochloro	ug/L	Daily Max	-	1.8	1/0	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
methane	A nume	A numeric water quality standard for Dibromochloromethane does not exist for Class B waterbodies; therefore, no WQBEL is specified.													

## Appendix: Regulatory and Technical Basis of Permit Authorizations

The information presented in the Appendix is meant to supplement the factsheet for multiple types of permits and may not be applicable to this specific permit.

#### **Regulatory References**

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The requirements included in SPDES permits are based on both federal and state laws, regulations, policies, and guidance.

- Clean Water Act (CWA) 33 section USC 1251 to 1387
  - Environmental Conservation Law (ECL) Articles 17 and 70
- Federal Regulations
  - o 40 ČFR, 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, often referred to as Technical and Operational Guidance Series memos (TOGS)
- USEPA Office of Water Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E

The following is a quick guide	a ta tha ratarancas i	lead within the toctchest.
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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 ISSO 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							
	(TOGS 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 Departme	NYCRR 750-2.1(i)							
Request for Additional Information								

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.

#### Outfall and Receiving Water Information

#### Impaired Waters

The NYS 303(d) List of Impaired/TMDL Waters (<u>http://www.dec.ny.gov/chemical/31290.html</u>) identifies waters where specific designated uses are not fully supported and for which the state must consider the development of a TMDL or other strategy to reduce the input of the specific pollutant(s) that restrict waterbody uses, in order to restore and protect such uses. SPDES permits must include effluent limitations necessary to implement a

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WLA of an EPA-approved TMDL (6 NYCRR 750-1.11(a)(5)(ii)), if applicable. In accordance with 6 NYCRR 750-1.13(a), permittees discharging to waters which are on the list but do not yet have a TMDL developed may be required to perform additional monitoring for the parameters causing the impairment. Accurate monitoring data is needed for the development of the TMDL, and to allow the Department to accurately determine the existing capabilities of the wastewater treatment plant to assure that wasteload allocations (WLAs) are allocated equitably.

#### Interstate Water Pollution Control Agencies

Some POTWs may be subject to regulations of interstate basin/compact agencies including: Interstate Sanitation Commission (ISC), International Joint Commission (IJC), Delaware River Basin Commission (DRBC), Ohio River Valley Water Sanitation Commission (ORSANCO), and the Susquehanna River Basin Commission (SRBC). Generally, basin commission requirements focus principally on water quality and not treatment technology. However, interstate/compact agency regulations for the ISC, IJC, DRBC and NYC Watershed contain explicit effluent limits which must be addressed during permit drafting. 6 NYCRR 750-2.1(d) requires SPDES permits for discharges that originate within the jurisdiction of an interstate water pollution control agency, to include any applicable effluent standards or water quality standards (WQS) promulgated by that interstate agency.

#### **Existing Effluent Quality**

During development of the permit, a statistical evaluation of existing effluent quality is performed to calculate the 95<sup>th</sup> (monthly average) and 99<sup>th</sup> (daily maximum) percentiles of the existing effluent quality. That evaluation is completed in accordance with TOGS 1.2.1 and the USEPA Office of Water <u>Technical Support Document for</u> <u>Water Quality-based Toxics Control</u>, March 1991, Appendix E. When there are three or fewer non-detects, a lognormal distribution of the data is assumed, and lognormal calculations are used to determine the monthly average and daily maximum concentrations of the existing effluent. When there are greater than three non-detects, a delta-lognormal distribution is assumed, and delta-lognormal calculations are used to determine the monthly average and daily maximum pollutant concentrations. Statistical calculations are not performed for parameters where there are less than ten data points. If additional data is needed, a monitoring requirement may be specified either through routine monitoring or a short-term high intensity monitoring program. The <u>Pollutant Summary Table</u> 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 permit limitations form the basis for the next permit. Existing effluent quality is evaluated against the existing permit 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-

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by-case basis in this factsheet. Consistent with current case law<sup>12</sup> and USEPA interpretation<sup>13</sup> 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.

#### Technology-based Effluent Limitations (TBELs)

CWA sections 301(b)(1)(B) and 304(d)(1), 40 CFR 133.102, ECL section 17-0509, and 6 NYCRR 750-1.11 require technology-based controls, known as secondary treatment. These and other requirements are summarized in TOGS 1.3.3. Equivalent secondary treatment, as defined in 40 CFR 133.105, allow for effluent limitations of the more stringent of the consistently achievable concentrations or monthly/weekly averages of 45/65 mg/l, and the minimum monthly average of at least 65% removal. Consistently achievable concentrations are defined in 40 CFR 133.101(f) as the 95th percentile value for the 30-day (monthly) average effluent quality achieved by the facility in a period of two years. The achievable 7-day (weekly) average value is equal to 1.5 times the 30-day average value calculated above. Equivalent secondary treatment applies to those facilities where the principal treatment process is either a trickling filter or a waste stabilization pond; the treatment works provides significant biological treatment of municipal wastewater; and, the effluent concentrations consistently achievable through proper operation and maintenance of the facility cannot meet traditional secondary treatment requirements.

#### Other Technology Based Effluent Limitations:

There are no federal technology-based standards for toxic pollutants from POTWs. For each toxic parameter present in the discharge a Reasonable Potential Analysis is conducted. This may be a statistical analysis of existing data in accordance with TOGS 1.2.1, or an assessment of the technology employed at the facility and selection of the appropriate limitation from TOGS 1.2.1 Attachment C. Where the TBEL is more stringent than the WQBEL, the TBEL is applied as an action level in accordance with TOGS 1.3.3.

#### Water Quality-Based Effluent Limitations (WQBELs)

In addition to the TBELs, permits must include additional or more stringent effluent limitations and conditions, including those necessary to protect water quality. CWA sections 101 and 301(b)(1)(C), 40 CFR 122.44(d)(1), and 6 NYCRR Parts 700-704 and 750-1.11 require that permits include limitations for

<sup>12</sup> American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)
<sup>13</sup> 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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all pollutants or parameters which are or may be discharged at a level which may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. The limitations must be stringent enough to ensure that water quality standards are met and must be consistent with any applicable WLA which may be in effect through a TMDL for the receiving water. These and other requirements are summarized in TOGS 1.1.1, 1.3.1, 1.3.2, 1.3.5 and 1.3.6.

#### Mixing Zone Analyses

Mixing zone analyses are conducted in accordance with the following:

"EPA Technical Support Document for Water Quality-Based Toxics Control" (March 1991); EPA Region VIII's "Mixing Zones and Dilution Policy" (December 1994); NYSDEC TOGS 1.3.1, "Total Maximum Daily Loads and Water Quality-Based Effluent Limitations" (July 1996); "CORMIX v11.0" (2019).

#### Critical Flows

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

#### Reasonable Potential Analysis (RPA)

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

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

2) identify water quality criteria applicable to these pollutants;

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

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

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

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

#### Whole Effluent Toxicity (WET) Testing:

WET tests use small vertebrate and invertebrate species to measure the aggregate toxicity of an effluent. There are two different durations of toxicity tests: acute and chronic. Acute toxicity tests measure survival over a 96-hour test exposure period. Chronic toxicity tests measure reductions in survival, growth, and reproduction over a 7-day exposure. TOGS 1.3.1 includes guidance for determining when aquatic toxicity testing should be included in SPDES permits. The authority to require toxicity testing is in Part 702.16(b) of Chapter X, Title 6 of the New York State Codes, Rules, and Regulations. TOGS 1.3.2 describes the procedures which should be followed when determining whether to include toxicity testing in a SPDES permit and how to implement a toxicity testing program. Per TOGS 1.3.2, WET testing may be required when any one of the following seven criteria are applicable:

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

#### Minimum Level of Detection

Pursuant to 40 CFR 122.44(i)(1), 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 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.

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

#### **Other Conditions**

#### Mercury

The multiple discharge variance (MDV) for mercury was developed in accordance with 6 NYCRR 702.17(h) "to address widespread standard or guidance value attainment issues including the presence of a ubiquitous pollutant or naturally high levels of a pollutant in a watershed." The first MDV was issued in October 2010, and subsequently revised and reissued in 2015; each subsequent iteration of the MDV is designed to build off the previous version, to make reasonable progress towards the water quality standard (WQS) of 0.7 ng/L dissolved mercury. The MDV is necessary because human-caused conditions or sources of mercury prevent attainment of the WQS and cannot be remedied (i.e., mercury is ubiquitous in New York waters at levels above the WQS and compliance with a water quality based effluent limitation (WQBEL) for mercury cannot be achieved with demonstrated effluent treatment technologies). The Department has determined that the MDV is consistent with the protection of public health, safety, and welfare. During the effective period of this MDV, any increased risks to human health are mitigated by fish consumption advisories issued periodically by the NYSDOH.

All surface water SPDES permittees are eligible for authorization by the MDV provided they meet the requirements specified in DOW 1.3.10.

#### Schedules of Compliance

Schedules of compliance are included in accordance with 40 CFR Part 132 Attachment F, Procedure 9, 40 CFR 122.47 and 6 NYCRR 750-1.14. Schedules of compliance are intended to, in the shortest reasonable time, achieve compliance with applicable effluent standards and limitations, water quality standards, and other applicable requirements. Where the time for compliance is more than nine months, the schedule of compliance must include interim requirements and dates for their achievement. If the time necessary to complete the interim milestones is more than nine months, and not readily divisible into stages for completion, progress reports must be required.

#### Schedules of Additional Submittals

Schedules of Submittals are used to summarize the deliverables required by the permit.

#### Mini Industrial Pretreatment Program

Pretreatment requirements are intended to protect a WWTP from receiving pollutants that cause pass through or interference to the operations of the POTW receiving such wastes. When necessary, the Department, in accordance with TOGS 1.3.3. and through issued SPDES permits, requires WWTPs to develop and implement mini or partial pretreatment programs. These requirements are consistent with regulations in 6 NYCRR §750-2.9(b)(1), ECL 17-0811, ECL 17-0825, and 40 CFR §403.5.

As part of the mini pretreatment program, a WWTP must identify industrial users; determine whether legal authority controls (e.g. sewer use laws) are adequate; require, issue, and enforce industrial user permits; and, implement the program.