

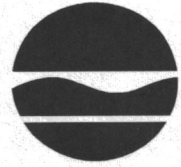
New York State Department of Environmental Conservation

Division of Environmental Permits, 4th Floor

625 Broadway, Albany, NY 12233-1750

Phone: (518) 402-9167 • Fax: (518) 402-9168

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Joe Martens
Commissioner

August 15, 2014

Honorable Richard P. Miller
Mayor, City of Oneonta
City Hall
258 Main Street
Oneonta, NY 13820

Meq

Re: Oneonta Wastewater Treatment Plant
DEC#4-3646-00016/00001 SPDES#: NY0031151

Dear Mayor Miller:

Enclosed is a final modified and renewed State Pollutant Discharge Elimination System (SPDES) permit for the above referenced facility. This permit has been modified pursuant to 6 NYCRR Part 750-1.18. Comments were received from Ms. Michelle Josilo, USEPA, Region 2, on this modification and are addressed in the enclosed responsiveness summary.

Also enclosed is a sample Discharge Monitoring report (DMR) page listing the reporting requirements for the Chesapeake Bay related effluent monitoring data. The Department will be scheduling a webinar in the near future to go over this page and answer any questions that you may have regarding the Chesapeake Bay related reporting requirements. If you have any questions on reporting requirements, please contact either Robert Wither or Steve Vogler, Division of Water, Bureau of Water Compliance, at (518) 402-8177.

Please be advised, the Uniform Procedures Regulations (6 NYCRR Part 621) provide that an applicant may request a public hearing if a permit contains conditions which are unacceptable to them. Any such request must be made in writing within 30 calendar days of the date of permit issuance and must be addressed to the Permit Administrator at the letterhead address. A copy should also be sent to the Chief Administrative Law Judge at NYSDEC, 625 Broadway, 1st Floor, Albany, NY 12233-1550.

Should you have questions on the administration of this modification, please feel free to contact me at the address or phone number listed above. Should you have technical questions on permit content, please contact the permit engineer, Brian Baker, at (518) 402-8111, or the Regional Water Engineer, Andrea Dzierwa, at (518) 357-2377.

Sincerely,

Teresa Diehsner
Division of Environmental Permits

Enclosure

c: B. Clarke, RPA
A. Dzierwa, RWE
B. Baker, Permit Engineer
C. Jamison, CO-BWP Permit Coordinator
N. Myers, NYSEFC
M. Josilo, EPA Reg 2
SRBC
NYSDOH District Office

Responsiveness Summary
Oneonta Wastewater Treatment Plant
SPDES NY0031151 DEC ID 4-3646-00016/00001
August 2014

Background: The department proposed to modify and renew the above referenced SPDES permit. The draft permit was public noticed on 11/6/2013 in the Environmental Notice Bulletin and in the Daily Star on 11/8/2013. Comments dated 12/5/2013 were received from Ms. Michelle Josilo, USEPA, Region 2, and are addressed below.

Comment: Mercury. TOGS 1.3.10 provides that the Multiple Discharger Variance (MDV) is in effect for "five years from the effective date specified on page 1 of this document". Page 1 indicates that the issue date (assuming this is the effective date as well) is October 2010; therefore the MDV is only in effect until September 2015. As the term of the draft Oneonta WWTP permit extends beyond the expiration date of the MDV, the permit must reflect a final water quality-based effluent limit of 0.7 ng/l as of September 2015 unless other relief is provided in the permit (e.g. compliance schedules, renewal of the MDV).

Response: NYSDEC's interpretation of the applicable regulations (40 CFR Part 132, Appendix F, Procedure 2 and 6 NYCRR Part 702.17) and policy (DOW 1.3.10, Section 4.2.1.11) is that the MDV may be applied from October 2010 thru September 2015 and that the "variance" actually happens when an individual permit is changed to include these requirements, i.e., if the MDV is applied to a permit prior to October 2015 then the resulting requirements may be in effect for the permit term which extends past October 2015. NYSDEC's interpretation appears to be consistent with practices in other States.

Comment: Pathogen Criteria Implementation. The Oneonta WWTP discharges to class B waters. As specified in the NYSWQS at 6 NYCRR Part 701.8, the best usage of class B fresh waters is primary and secondary contact recreation and fishing. These waters shall be suitable for fish, shellfish, and wildlife propagation and survival. The draft Oneonta WWTP permit establishes effluent limitations for fecal coliforms but does not establish limits for total coliforms... In order to comply with the NYSWQS and ensure that the best usages of the receiving water are not impaired, please conduct a reasonable potential analysis for total coliforms and, if necessary establish total coliforms effluent limitations in the Oneonta WWTP permit.

Response: Compliance with water quality standards for Total Coliforms is indicated by Fecal Coliforms limits. Additional limits for Total Coliforms are unnecessary, consistent with DEC's existing disinfection policy in TOGS 1.3.3. Parallel monitoring for total coliform would be redundant.

Comment: Sanitary Sewer Overflows. The draft Oneonta WWTP permit section "Sanitary Sewer Overflows Prohibited" should have bypass language that conforms to 40 CFR 122.41 (m). It could read as follows: "In accordance with 6 NYCRR Part 750-2.8(b)(2) and 40 CFR 122.41, bypass of the collection and treatment system is prohibited, and the Director may take enforcement action unless: (1) the bypass is necessary to prevent loss of life, personal injury, public health hazard or severe property damage; and, (2) there is no feasible alternative to the bypass; and, (3) the permittee complies with the notice requirements in 6 NYCRR Part 750-2.7. Bypassing from the following sanitary sewer overflow points in the Oneonta WWTP that are known to or have the potential to be bypass points is prohibited in accordance with the provision noted above:"

Response: The existing language shall remain in the permit. The Department's ability to enforce is captured within Part 750, which is already referenced several times in the permit.

Comment: Whole Effluent Toxicity. The draft Oneonta WWTP permit establishes action levels for whole effluent toxicity (WET) but there is no discussion of the reasonable potential analysis for WET provided in the fact sheet. With no reasonable potential analysis or discussion, it is not clear how the permit meets the requirements of 40 CFR §I 22.44(d)(i) or 40 CFR part 132 which specify that if the WET of an effluent is or

may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any numeric WET criterion, an effluent limitation for WET must be established in the permit. Please provide a reasonable potential analysis for existing WET data or a justification for not establishing effluent limitations for WET.

Response: As part of the permit development process, the SPDES permit application and the facility's submitted data were evaluated using the most recent edition of Division of Water Technical and Operational Guidance Series (1.3.2), ACUTE AND CHRONIC TOXICITY TESTING IN THE SPDES PERMIT PROGRAM. This guidance document, which was reviewed and accepted by EPA, describes the procedures which should be followed when determining whether to include WET testing in a SPDES permit. The 2007 chronic test did indicate the effluent was chronically toxic. Quarterly testing once every five years is the recommended frequency. Initially, the permit should receive WET action levels (i.e. not limits). After a year's worth of testing (i.e four quarterly WET tests) is completed, we will complete the Reasonable Potential Determination (RPD) to determine if the WET action levels need to be elevated to enforceable WET limits. As a result, we believe in accordance with TOGS 1.3.2, the facility has received the appropriate WET program requirements with this initial WET Action Levels.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
**State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT**



First3.99

Industrial Code: **4952**
Discharge Class (CL): **05**
Toxic Class (TX): **T**
Major Drainage Basin: **06**
Sub Drainage Basin: **01**
Water Index Number: **SR (portion 7)**
Compact Area: **SRBC**

SPDES Number: **NY0031151**
DEC Number: **4-3646-00016/00001**
Effective Date (EDP): **09/01/2014**
Expiration Date (ExDP): **08/31/2019**
Modification Dates: (EDPM)

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

PERMITTEE NAME AND ADDRESS

Name: **City of Oneonta**
Street: **City Hall, 258 Main Street**
City: **Oneonta**

Attention: **Mayor, City of Oneonta**

State: **NY** Zip Code: **13820**

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: **Oneonta Wastewater Treatment Plant**
Location (C,T,V): **Oneonta (C)**
Facility Address: **11 Silas Lane**
City: **Oneonta**

County: **Otsego**

State: **NY** Zip Code: **13820**

NYTM -E: **-**
From Outfall No.: **001**

NYTM - N: **-**

at Latitude: **42 ° 26 ' 18 "** & Longitude: **75 ° 06 ' 03 "**

into receiving waters known as: **Susquehanna River**

Class: **B**

and (list other Outfalls, Receiving Waters & Water Classifications): **see page two.**

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.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: **Oneonta Wastewater Treatment Plant**
Street: **11 Silas Lane**
City: **Oneonta**
Responsible Official or Agent: **Steve Kruh, Chief Operator**

State: **NY** Zip Code: **13820**
Phone: **607-432-7210**

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
RWE/RPA
USEPA Region II - Michelle Josilo
NYSEFC
SRBC
NYSDOH District Office

Deputy Chief Permit Administrator: Stuart M. Fox	
Address: Division of Environmental Permits 625 Broadway, 4th Floor Albany, NY 12233-1750	
Signature: <i>Stuart M. Fox</i>	Date: 8/18/14

SANITARY SEWER OVERFLOWS PROHIBITED

In accordance with 6 NYCRR Part 750-2.8(b)(2) and 40 CFR 122.41, bypass of the collection and treatment system without treatment are prohibited except when (1) the bypass is necessary to prevent loss of life, personal injury, public health hazard or severe property damage and (2) there is no feasible alternative to the bypass and (3) the permittee complies with the notice requirements in 6 NYCRR Part 750-2.7.

Bypassing from the following sanitary sewer overflow points in the Oneonta POTW that are known to or have the potential to be bypass points is prohibited except as noted above:

Outfall No.	Description	Latitude/Longitude (deg, min, sec)	Receiving Stream/Class
01A *	Head of plant bypass at flow > 5.0 mgd	42,26,23 N / 75,06,06 W	Susquehanna River / B thru 001
002 **	¼ mile bypass- manual valve -near Interstate 88 Exit 13	42,26,34.9 N / 75,05,55.7 W	Susquehanna River / B

* When Outfall 01A discharges, daily sampling at Outfall 001 shall be taken for the following parameters as specified on the effluent limits pages four and five below: CBOD5, Ultimate Oxygen Demand, Dissolved Oxygen, Total Suspended Solids, Ammonia Total (as NH3), Total Kjeldahl Nitrogen, Total Nitrogen, Total Phosphorus, and Fecal Coliform. This sampling shall be combined with regular Outfall 001 monitoring for the Discharge Monitoring Reports.

** When Outfall 002 discharges, the following parameters shall be measured or estimated: flow rate, duration of discharge, and total volume of discharge.

PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.	This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP)

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.	See below	See below

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL	COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based limits, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the permittee shall use the approved EPA analytical method with the lowest possible detection limit as promulgated under 40CFR Part 136 for the determination of the concentrations of parameters present in the sample unless otherwise specified. If a sample result is below the detection limit of the most sensitive method, compliance with the permit limit for that parameter was achieved. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This ML can be neither lowered nor raised without a modification of this permit.	Action Levels are monitoring requirements, as defined below in Note 2, which trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, temperature, or concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly. All monitoring periods (quarterly, semiannual, annual, etc) are based upon the calendar year unless otherwise specified in this Permit.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

Notes:

1. EFFLUENT LIMIT TYPES:

- a. **DAILY DISCHARGE:** The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
- b. **DAILY MAX.:** The highest allowable daily discharge. **DAILY MIN.:** The lowest allowable daily discharge.
- c. **MONTHLY AVG:** 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.
- d. **7 DAY ARITHMETIC MEAN (7 day average):** The highest allowable average of daily discharges over a calendar week.
- e. **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.
- f. **7 DAY GEOMETRIC MEAN:** The highest allowable geometric mean of daily discharges over a calendar week.
- g. **RANGE:** The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.

- 2. **ACTION LEVELS:** Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	LIMITATIONS APPLY:		RECEIVING WATER			EFFECTIVE	EXPIRING			
001	All Year		Susquehanna River			09/01/2014	08/31/2019			
Outfall 001 PARAMETER	EFFLUENT LIMIT					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average Daily Maximum	4.0 Monitor	MGD	-	-	Continuous	Recorder	X		5
CBOD ₅	Monthly Average 7-Day Average	25 40	mg/l	830 1300	lbs/d	Weekly	24-hr. Comp.	X	X	
CBOD ₅ Percent Removal	Monthly Average	65	%	-	-	Weekly	Calculated			1
Solids, Total Suspended	Monthly Average 7-Day Average	30 45	mg/l	1000 1500	lbs/d	Weekly	24-hr. Comp.	X	X	
TSS Percent Removal	Monthly Average	77	%	-	-	Weekly	Calculated			1
Solids, Settleable	Monthly Average Daily Maximum	Monitor 0.3	ml/l	-	-	2/Day	Grab	X	X	
pH	Range	6.0 - 9.0	SU	-	-	2/Day	Grab	X	X	
Nitrogen, Total Ammonia (as NH ₃) JUN thru OCT	Monthly Average Daily Maximum	11 Monitor	mg/l	Monitor Monitor	lbs/d	Weekly	24-hr. Comp.	X	X	
Nitrogen, Total Ammonia (as NH ₃) NOV thru MAY	Monthly Average Daily Maximum	19 Monitor	mg/l	Monitor Monitor	lbs/d	Weekly	24-hr. Comp.	X	X	
UOD JUN thru OCT	Monthly Average Daily Maximum	Monitor Monitor	mg/l	3000 Monitor	lbs/d	Weekly	Calculated		X	3
UOD NOV thru MAY	Monthly Average Daily Maximum	Monitor Monitor	mg/l	Monitor Monitor	lbs/d	Weekly	Calculated		X	3
Oxygen, Dissolved	Daily Minimum	2.0	mg/l	monitor	lbs/d	Weekly	Grab	X	X	
Temperature	Monthly Average Daily Maximum	Monitor Monitor	Deg F	-	-	2/Day	Grab	X	X	
Copper, Total	Monthly Average Daily Maximum	Monitor 61	ug/l	Monitor 2.0	lbs/d	Once/ 2weeks	24-hr. Comp.	X	X	4
Lead, Total	Monthly Average Daily Maximum	Monitor 35	ug/l	Monitor 1.2	lbs/d	Once/ 2weeks	24-hr. Comp.	X	X	4
Mercury, Total	Monthly Average Daily Maximum	Monitor 50	ng/l	Monitor Monitor	lbs/d	Quarterly	24-hr. Comp.	X	X	4
Zinc, Total	Monthly Average Daily Maximum	Monitor 540	ug/l	Monitor 18	lbs/d	Once/ 2weeks	24-hr. Comp.	X	X	4
WET - Acute Invertebrate	Action Level	1.6	TUa	-	-	Quarterly	See Footnote		X	6
WET - Acute Vertebrate	Action Level	1.6	TUa	-	-	Quarterly	See Footnote		X	6
WET - Chronic Invertebrate	Action Level	9.8	TUc	-	-	Quarterly	See Footnote		X	6
WET - Chronic Vertebrate	Action Level	9.8	TUc	-	-	Quarterly	See Footnote		X	6
Effluent Disinfection required				[X] Seasonal from <u>APRIL 1</u> to <u>OCT 31</u>						
Coliform, Fecal	30-Day Geo Mean 7-Day Geo Mean	200 400	No./ 100 ml	-	-	Weekly	Grab		X	2
Chlorine, Total Residual	Monthly Average Daily Maximum	Monitor 49	ug/l	-	-	2/Day	Grab		X	2

Footnotes listed on page 5 of this permit.

SPECIAL CONDITIONS and DEFINITIONS:

The following special conditions and definitions apply to all activities regulated by this permit.

A. Composite Samples - All 24 hour composite samples must be flow proportional.

FOOTNOTES:

- (1) Effluent shall not exceed 35 % and 23 % of influent concentration values for CBOD₅ & TSS respectively.
- (2) Samples shall be collected at the Effluent Chamber.
- (3) Ultimate Oxygen Demand shall be computed as follows: $UOD = 1.5 \times CBOD_5 + 4.5 \times TKN$ (Total Kjeldahl Nitrogen).
- (4) The following interim limits are in effect **until 09/01/2017**: Mercury Total limit of 200 ng/l daily maximum and once / 2 months sample frequency, Copper Total limit of 680 ug/l and 7.1 #/d daily maximum and weekly sample frequency, Lead Total limit of 170 ug/l and 5.7 #/d daily maximum and weekly sample frequency, and Zinc Total limit of 1000 ug/l and 18 #/d daily maximum and weekly sample frequency.
- (5) Influent flow shall be the sum of the flows from the main parshall flume and the head of plant bypass.
- (6) Whole Effluent Toxicity (WET) Testing:

Testing Requirements - WET testing shall consist of Chronic only. WET 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 bracketing the IWC and including one exposure group of 100% effluent should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test is 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 5.4:1 for acute, and 9.8:1 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 at the specified sample frequency during calendar years ending in 0 and 5 for a period of one full year **beginning in January 2015**.

Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: $TU_a = (100)/(48 \text{ hr LC}_{50})$ or $(100)/(48 \text{ hr EC}_{50})$ (note that Acute data is generated by both Acute and Chronic testing) and $TU_c = (100)/(NOEC)$ when Chronic testing has been performed or $TU_c = (TU_a) \times (10)$ when only Acute testing has been performed and is used to predict Chronic test results, where the 48 hr LC₅₀ or 48 hr EC₅₀ and NOEC are expressed in % effluent. This must be done for both species and using the Most Sensitive Endpoint (MSE) or the lowest NOEC and corresponding highest TU_c. Report a TU_a of 0.3 if there is no statistically significant toxicity in 100% effluent as compared to control.

The complete test report including all corresponding results, 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 to the Toxicity Testing Unit Toxicity Testing Unit, Bureau of Watershed Assessment and Management, 625 Broadway, Fourth Floor, Albany, NY 12233-3502. A summary page of the test results for the invertebrate and vertebrate species indicating TU_a, 48 hr LC₅₀ or 48 hr EC₅₀ for Acute tests and/or TU_c, NOEC, IC₂₅, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

WET Testing Action Level Exceedances - 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 Reduction Evaluation (TRE) in accordance with Department guidance. If such additional testing or performance of a TRE is necessary, the permittee shall be notified in writing by the Regional Water Engineer. The written notification shall include the reason(s) why such testing or a TRE is required.

**PERMIT LIMITS, LEVELS AND MONITORING:
Chesapeake Bay TMDL Implementation - Water Quality Based Effluent Limits and Monitoring:**

PARAMETER	OUTFALL No.:	CHESAPEAKE BAY NUTRIENT MONITORING - PHOSPHORUS		EFFECTIVE : 09/01/2014		EXPIRING: 08/31/2019						
		ENFORCEABLE EFFLUENT LIMITATIONS				MONITORING REQUIREMENTS						
		Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location			
Total Phosphorus, as P		Monthly average	Monitor	mg/l	Monitor	lbs/day	1/week	24-hr comp	Inf.	Eff.		
Total Phosphorus, as P, month load		Monthly Total	NA	NA	Monitor	lbs/month	1/month	Calculated	X	X		
Total Phosphorus, as P, 12 month load		12 Month Total	NA	mg/l	7,510	lbs/year	1/month	Calculated		X		1
Total Phosphorus, as P, credit		12 Month Total	NA	mg/l	Monitor	lbs/year	1/month	Calculated		X		2,4
										X		3

FOOTNOTES FOR CHESAPEAKE BAY PHOSPHORUS WQ BASED EFFLUENT LIMITS AND MONITORING

1. The **Total Phosphorus, as P, Month Load** is calculated as the **Total Phosphorus, as P monthly average** load multiplied by number of days in the month.
2. The **Total Phosphorus, as P, 12 month load [TP 12-ML]** for your facility is defined as the current **Total Phosphorus, as P month load** added to the **Total Phosphorus, as P month loads** from the previous eleven months for your facility. The 12 month load effluent limit for Total Phosphorus, as P shall become effective 12 months after the effective date of the permit modification.
3. The **Total Phosphorus, as P, credit [TP credit]** is calculated as [12 month load TP limit] - [actual TP 12-ML]. Should the result of this calculation be zero or less than zero, the permittee shall report "0" for this parameter.
4. This is an interim Water Quality Based Effluent Limit based on the Waste Load Allocations in the TMDL. The final WQBEL of 6,080 lb/year shall become effective on January 1, 2025.

PERMIT LIMITS, LEVELS AND MONITORING:

Chesapeake Bay TMDL Implementation - Water Quality Based Effluent Limits and Monitoring:

PARAMETER	OUTFALL No.:	ENFORCEABLE EFFLUENT LIMITATIONS				MONITORING REQUIREMENTS				FN
		CHESAPEAKE BAY NUTRIENT MONITORING - NITROGEN		NITROGEN		Sample Frequency	Sample Type	Location		
		Type	Limit	Units	Limit			Units	Inf.	
Total Kjeldahl Nitrogen (TKN), as N	001	Monthly average	Monitor	mg/l	Monitor	lbs/day	24-hr comp	X	X	1
Nitrate (NO ₃), as N		Monthly average	Monitor	mg/l	Monitor	lbs/day	24-hr comp	X	X	1
Nitrite (NO ₂), as N		Monthly average	Monitor	mg/l	Monitor	lbs/day	24-hr comp	X	X	1
Total Nitrogen, as N		Monthly average	Monitor	mg/l	Monitor	lbs/day	Calculated	X	X	1
Total Nitrogen, as N, month load		Monthly Total	NA	NA	Monitor	lbs/month	Calculated		X	2
Total Nitrogen, as N, 12 month load		12 Month Total	NA	mg/l	Monitor	lbs/year	Calculated		X	3
Total Nitrogen, available from TP credit		12 Month Total	NA	mg/l	Monitor	lbs/year	Calculated		X	4
Total Nitrogen, as N, Adjusted		12 Month Total	NA	mg/l	134,000	lbs/year	Calculated		X	5
Total Nitrogen, as N, Delivered		12 Month Total	NA	mg/l	Monitor	lbs/year	Calculated		X	6,7

FOOTNOTES FOR CHESAPEAKE BAY NITROGEN WQ BASED EFFLUENT LIMITS AND MONITORING

- Total Nitrogen, as N** = [Total Kjeldahl Nitrogen (TKN), as N] + [Nitrite (NO₂), as N] + [Nitrate (NO₃), as N].
- Total Nitrogen, as N, Month Load** is calculated as the monthly average **Total Nitrogen, as N** load multiplied by number of days in the month
- Total Nitrogen, as N, 12 month load [TN 12-ML]** for your facility is defined as the current **Total Nitrogen, as N, month load** added to the **Total Nitrogen, as N, month loads** from the previous eleven months for your facility.
- Total Nitrogen, available from TP credit [TNAP]** is calculated as [TP credit] * [N:P ratio] where the TP credit is as reported on the Phosphorus limits page and the [N:P ratio] for your facility is 6.13. Should the result of this calculation be zero or less than zero, the permittee shall report "0" for this parameter.
- Total Nitrogen, as N, Adjusted [TNA 12-ML]** is calculated as [TN 12-ML] - [TNAP].
- Total Nitrogen Delivered, as N, 12-ML [TND 12-ML]** is calculated as [TN 12-ML] * [Delivery Factor (DF_n)] where DF_n for the City of Oneonta = 0.356.

Footnote 7 listed on page 8 of this permit.

FOOTNOTES FOR CHESAPEAKE BAY NITROGEN WQ BASED EFFLUENT LIMITS AND MONITORING ctd.

7. Monitoring requirements for the parameters listed in this table shall begin on **09/01/2014**. The calculated **Phase II Total Nitrogen Delivered, as N, Aggregate [DA 12-ML]** limit of **976,000 lb/year** and the **Total Nitrogen, as N, Adjusted** limit of **134,000 lb/year** become effective on **January 1, 2016**. The DA 12-ML is calculated by the Department as the sum of the TND 12-ML loadings for the facilities included in each Phase. The facilities included in the Phase II Total Nitrogen Delivered, as N, Aggregate limit are:

Cortland (NY0027561)	Endicott (NY0027669)	Chemung Co. ESD (NY0035742)	Chemung Co. SD #1 (NY0036986)	Chobani (NY0004189)
Kraft Foods (NY0004308)	Painted Post (V) (NY0025712)	Richfield Springs (V) (NY0031411)	Canistota (V) STP (NY0023248)	Cooperstown (NY0023591)
Chenango Northgate WWTP (NY0213781)		Owego (T) #1 (NY0022730)	Hamilton (V) (NY0020672)	Waverly (V) (NY0031089)
Alfred (V) (NY0022357)	Bath (V) (NY0021431)	Owego (V) (NY0029262)	Sidney (V) (NY0029271)	Erwin (T) (NY0023906)
Owego (T) #2 (NY0025798)	Norwich (NY0021423)	Corning (C) (NY0025721)	Hornell (C) (NY0023647)	Oneonta (C) (NY0031151)

The calculated **Phase III Total Nitrogen Delivered, as N, Aggregate [DA 12-ML]** limit is **1,069,000 lb/year** and becomes effective on **January 1, 2017**. The DA 12-ML is calculated by the Department as the sum of the TND 12-ML loadings for the facilities included in each Phase. The facilities included in the Phase III Total Nitrogen Delivered, as N, Aggregate limit are:

Cortland (NY0027561)	Endicott (NY0027669)	Chemung Co. ESD (NY0035742)	Chemung Co. SD #1 (NY0036986)	Chobani (NY0004189)
Kraft Foods (NY0004308)	Painted Post (V) (NY0025712)	Richfield Springs (V) (NY0031411)	Canistota (V) STP (NY0023248)	Cooperstown (NY0023591)
Chenango Northgate WWTP (NY0213781)		Owego (T) #1 (NY0022730)	Hamilton (V) (NY0020672)	Waverly (V) (NY0031089)
Alfred (V) (NY0022357)	Bath (V) (NY0021431)	Owego (V) (NY0029262)	Sidney (V) (NY0029271)	Erwin (T) (NY0023906)
Owego (T) #2 (NY0025798)	Norwich (NY0021423)	Corning (C) (NY0025721)	Hornell (C) (NY0023647)	Oneonta (C) (NY0031151)
Amphenol (NY0003824)	Leprino Foods (NY0157295)	Addison (V) (NY0020320)	Sherburne (V) (NY0021466)	Greene (V) (NY0021407)