C. Discharge Composition

The *Pollutant Summary Table* at the end of this fact sheet presents the existing effluent quality of the facility. Concentration and mass data are presented, based on Discharge Monitoring Report (DMR), permit application, and possibly other data submitted by the permittee for the period 4/2009 to 3/2012. The statistical methods utilized to calculate 95th and 99th percentiles are in accordance with TOGS 1.2.1 and the USEPA, Office of Water, Technical Support Document For Water Quality-based Toxics Control, March 1991, Appendix E. Statistical calculations were not performed for parameters with insufficient data. Generally, ten or more data points are needed to calculate percentiles (See TOGS 1.2.1 Appendix D). Non-detects were included in the statistical calculations.

D. Compliance History

A review of the facility's DMRs and other compliance information from 4/2009 to 3/2012 shows that the facility had the following violations:

Table 2. Effluent violations-Outfall 001.

Parameter	Date	Value	Units	Limit
Flow Rate - MA	3/2011	4.35	MGD	4.0
BOD5 - 7 DA	4/2009	54	mg/l	45
BOD5 percent removal	4/2009	41	%	65
CBOD5 - MA	5/2011	27	mg/l	25
CBOD5 - MA	5/2011	835	#/d	830
CBOD5 (mg/l) MA/7DA	6/2011	28 / 44	mg/l	25 /40
CBOD5 Percent Removal	4/2011	63	%	65
CBOD5 Percent Removal	5/2011	35	%	65
CBOD5 Percent Removal	7/2011	64	%	65
CBOD5 Percent Removal	9/2011	58	%	65
Settleable Solids	11/2009	0.6	ml/l	0.3
Settleable Solids	9/2010	0.5	ml/l	0.3
Settleable Solids	12/2010	0.8	ml/l	0.3
TSS Percent Removal	3/2010	33.5	%	65
TSS Percent Removal	5/2011	63	%	65
Nitrogen, Ammonia Total (as NH3)	9/2009	12	mg/l	11
Nitrogen, Ammonia Total (as NH3)	10/2009	14.7	mg/l	11
Nitrogen, Ammonia Total (as NH3)	9/2010	11.8	mg/l	11
Nitrogen, Ammonia Total (as NH3)	6/2011	12	mg/l	11
Nitrogen, Ammonia Total (as NH3)	7/2011	18	mg/l	11
Nitrogen, Ammonia Total (as NH3)	8/2011	13.7	mg/l	11

III. PROPOSED PERMIT REQUIREMENTS

Sections 101, 301(b), 304, 308, 401, 402, and 405 of the Clean Water Act (CWA) provide the basis for the effluent limitations and other conditions in the draft permit. The NYSDEC evaluates discharges with respect to these sections of the CWA, New York State Environmental Conservation Law, and the relevant federal/state regulations, policy, and guidance to determine which conditions to include in the draft permit.

For existing permittees, the previous permit typically forms the basis for the next permit. Permit revisions are implemented where justified due to changed conditions at the facility and/or in response to updated regulatory requirements.

A. Effluent Limitations

If applicable, the existing permit limits are evaluated to determine if these should be continued, revised, or deleted. Generally, existing limits are continued unless there is justification to do otherwise. Other pollutant monitoring data are also reviewed to determine the presence of additional contaminants that should be included in the permit.

The permit engineer determines the **technology-based effluent limits (TBELs)** that must be incorporated into the permit. A TBEL requires a minimum level of treatment for industrial point sources based on currently available treatment technologies and/or Best Management Practices (BMPs). The Department 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 to occur, **water quality-based effluent limits (WQBELs)** must be included in the permit. A WQBEL is designed to ensure that the water quality standards of receiving waters are being met. In general, the Clean Water Act requires that the effluent limits for a particular pollutant are the more stringent of either the TBEL or WQBEL.

1. TBELs & Anti-Backsliding:

Sections 301(b)(1)(B) and 304(d)(1) of the CWA require technology-based controls, known as secondary treatment, on POTW effluents. The applicable federal regulations are specified in 40 CFR Part 133.102. These and other requirements are summarized in TOGS 1.3.3.

Anti-backsliding requirements are specified in the CWA, sections 402(o) and 303(d)(4), and regulations at 40 CFR 122.44(l). These requirements are summarized in TOGS 1.2.1. Generally, the regulations prohibit the relaxation of effluent limits in reissued permits unless one of the specified exceptions applies. In practice, limits in reissued permits will generally be no less stringent than previous permit limits to ensure compliance with anti-backsliding requirements. Otherwise, the specific exceptions that allow backsliding will be cited on a case-by-case basis.

Following is the TBEL & Anti-backsliding assessment for each pollutant present in the discharge(s). A summary of this analysis is provided in the *Pollutant Summary Table* at the end of this fact sheet.

Pollutant-Specific TBEL & Anti-Backsliding Analysis:

In addition to the concentration limits noted below, 40 CFR 122.45(f) requires that SPDES permits contain mass-based limits for most pollutants. Mass-based limits in lbs/day are derived by multiplying the design flow in MGD by the concentration limit in mg/L by a conversion factor of 8.34. Limits are typically expressed using two significant figures.

Outfall 001 Flow – Consistent with TOGS 1.3.3, a monthly average flow limit of 4.0 MGD is specified, which is equal to the design capacity of the treatment plant.

Outfall 001 pH – 40 CFR 133.102 requires that the effluent pH be within the range of 6.0 to 9.0 standard units (SU).

Outfall 001 Five day Biochemical Oxygen Demand (BOD5) – limits on CBOD5 were implemented in the 8/1/2009 permit, and BOD5 is indicated by CBOD5 and UOD.

Outfall 001 Five day Carbonaceous Biochemical Oxygen Demand (CBOD5) – Rollover of 25/40 mg/l and 830/1300 #/d MA/7DA as required by 40 CFR 133.102 for secondary treatment. Rollover of 65% removal based on equivalent to secondary treatment standards as defined in 40 CFR 133.105. In this case, the principal treatment process is a trickling filter; the treatment works provides significant biological treatment of municipal wastewater; and, the effluent concentrations consistently achievable through proper operation and maintenance

of the POTW cannot meet traditional secondary treatment requirements. Note that CBOD5 TBELs are based on BOD5 limits reduced by 5 mg/l, as per 40 CFR 133.102(a)(4) and 133.105(e).

Outfall 001 Ultimate Oxygen Demand (UOD) – rollover of 3000 #/d MA seasonal WQBEL, June through October. Monitor only November through May.

Outfall 001 Dissolved Oxygen – No monitoring or limit is specified.

Outfall 001 Settleable Solids – In accordance with TOGS 1.3.3, a limit of 0.3 ml/l DM is specified.

Outfall 001 Total Suspended Solids (TSS) – rollover 30/45 mg/l and 1000/1500 #/d MA/7DA based on 40 CFR 133.102 for secondary treatment. As noted above for CBOD5, this facility provides equivalent secondary treatment as defined in 40 CFR 133.105. TSS removal of 77 percent is based on the fifth percentile of DMR data, which exceeds the minimum monthly average of at least 65 percent removal.

Outfall 001 Temperature – Monitoring is required for process control and informational purposes.

Outfall 001 Ammonia (as NH3) –rollover of 11 mg/l MA seasonal WQBEL Jun-Oct and monitor Nov-May.

Outfall 001 Fecal Coliform – See WQBEL section.

Outfall 001 Total Residual Chlorine (TRC) – Effluent disinfection is required as noted below in the WQBEL section. Rollover WQBEL of 50 ug/l DM.

Outfall 001 Antimony, Copper, Lead, and Zinc – No federal technology based standards exist for toxic pollutants from POTWs. See WQBEL section below.

Outfall 001 Mercury and WET testing – See WQBEL section below.

No monitoring or limits are specified for the following parameters, due to monitoring/limits on indicator parameters and/or values detected below a level of concern: Total Solids, Hardness, Total Organic Carbon, and Total Dissolved Solids.

Outfall 01A Plant Bypass

Reporting and monitoring of bypass is discussed in the Best Management Practices (BMPs) for Sanitary Sewer Overflows (SSOs). Monitoring shall also be required for the following parameters at outfall 001 when a bypass occurs: CBOD5, Ultimate Oxygen Demand, Dissolved Oxygen, Total Suspended Solids, Ammonia Total (as NH3), Total Kjeldahl Nitrogen, Total Nitrogen, Total Phosporus, and Fecal Coliform.

Outfall - Onsite Stormwater

Regular monitoring is not required. SWPPP requirements are listed in the permit.

Outfall 002

Due to the nature of the discharge, no regular monitoring has been specified for outfall 002. No data is available for existing effluent quality. During periods of discharge, sampling is required for flow rate, pH, Temperature, CBOD5, Ultimate Oxygen Demand, Dissolved Oxygen, Settleable Solids, Total Suspended Solids, Ammonia Total (as NH3), Total Kjeldahl Nitrogen, Total Nitrogen, Total Phosporus, Fecal Coliform, and Total Residual Chlorine.

2. WQBELs & Anti-Degradation:

In addition to the TBELs previously discussed, the NYSDEC evaluated the discharge to determine compliance with Sections 101 and 301(b)(1)(C) of the CWA and 40 CFR 122.44(d)(1). These require that permits include limits for all pollutants or parameters which are or may be discharged at a level which will cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The limits must be stringent enough to ensure that water quality standards are met and must be consistent with any available wasteload allocation (WLA).

The procedure for developing WQBELs includes knowing the pollutants present in the discharge(s), identifying water quality criteria applicable to these pollutants, determining if WQBELs are necessary (reasonable potential), and calculating the WQBELs. Factors also considered in this analysis include available dilution of effluent in the receiving water, receiving water chemistry, and other pollutant sources. If the expected concentration of the pollutant of concern in the receiving water may exceed the ambient water quality standard or guidance value, then there is reasonable potential that the discharge may cause or contribute to a violation of the water quality, and a WQBEL or WLA for the pollutant is required.

Dissolved to total metals translators were based on EPA translators, June 1996, EPA 823-B-96-007. The Metals Translator: Guidance For Calculating a Total Recoverable Permit Limit from a Dissolved Criterion. US EPA, Office of Water. The metals translators were copper 1.04, Lead 1.21, and Zinc 1.02. Background pollutant of concern concentrations were assumed to be zero, since no data was available on the Susquehanna River main stem upstream of Oneonta and below Goodyear Lake. Also, there are no other permitted discharges with metals for more than 20 miles upstream.

Antidegradation Policy: New York State implements the antidegradation portion of the CWA based upon two documents: (1) Organization and Delegation Memorandum #85-40, entitled "Water Quality Antidegradation Policy," signed by the Commissioner of NYSDEC, dated September 9, 1985; and, (2) TOGS 1.3.9, entitled "Implementation of the NYSDEC Antidegration Policy – Great Lakes Basin (Supplement to Antidegradation Policy dated September 9, 1985)." A SPDES permit cannot be issued that would result in the water quality criteria being violated. The permit for the facility contains effluent limits which ensure that the existing beneficial uses of the receiving waters will be maintained.

Following is the WQBEL analysis for each pollutant present in the discharge(s). Anti-degradation analysis which justifies applying water quality standards of a higher classification is noted below, if applicable. Refer to section II.B. above for information on discharge location, receiving water information (class, dilution, chemistry) and the existence of any TMDLs. A summary of this analysis is provided in the *Pollutant Summary Table* at the end of this fact sheet.

Pollutant-Specific WQBEL & Anti-Degradation Analysis:

pH range – TBEL range of 6.0 – 9.0 SU is acceptable to water quality.

Ultimate Oxygen Demand (UOD) – Rollover limit of 3000 #/d MA seasonal June through October, and rollover of monitoring seasonal November through May. Note that 5 day Carbonaceous Biochemical Oxygen Demand (CBOD5), BOD5, TKN, Nitrate-Nitrogen, and Nitrite-Nitrogen are indicated by UOD.

Dissolved Oxygen – new limit of 2.0 mg/l daily minimum, based on UOD calculations.

Settleable Solids – The narrative water quality standards provided in 6 NYCRR Part 703.2 state that the discharge of settleable solids shall not cause deposition or impair the receiving waters for their best usages. The proposed TBEL of 0.3 ml/l is acceptable to water quality.

Total Dissolved Solids – no limits or monitoring are specified due to the available dilution.

Total Suspended Solids (TSS) – the proposed TBELs of 30/45 mg/l and 1000/1500 #/d MA/7DA are acceptable to water quality.

Temperature – The discharge is to non-trout waters and, typical of STPs, existing effluent quality is below 90 F. Therefore, a limit is not necessary (see 6 NYCRR 704.2(b)(1)(i)).

Ammonia, Total – rollover of 11 mg/l MA seasonal limit June to October, and new limit of 19 mg/l MA during November to May. Currently calculated WQBEL was 13 mg/l summer.

Fecal Coliform – In accordance with TOGS 1.3.3, effluent disinfection is required because the discharge is to a class B water body. Geometric mean limits of 200/100 ml monthly average and 400/100 ml weekly average are specified.

Total Residual Chlorine (TRC) – A daily maximum TRC limit of 49 ug/L is included in the draft permit. The limit was determined by multiplying the water quality standard of 5 ug/L by the 7Q10 chronic dilution factor, as per TOGS 1.3.1.E.

Antimony, Total – a short term high intensity monitoring program will be implemented. No permit limits are specified due to the levels detected and the available dilution.

Copper, Total – Final limit of 61 ug/l and 2.0 #/d DM, based on mass-balance. Interim limit of 680 ug/l and 7.1 #/d based on 99th percentiles of existing data.

Lead, Total – Final limit of 35 ug/l and 1.2 #/d DM, based on mass-balance. Interim limit of 170 ug/l and 5.7 #/d, concentration based on three times the existing effluent quality and mass converted from concentration at flow limit.

Mercury, Total - Mercury was detected in the effluent at a level of 66 ng/L average, which exceeds the water quality standard of 0.7 ng/L. New York State's mercury multiple discharge variance (MDV) in TOGS 1.3.10 is being applied. Consequently, the permit includes a 200 ng/L interim and 50 ng/L final effluent limit; a mercury minimization program requirement; and routine monitoring using EPA Method 1631. Refer to TOGS 1.3.10 for further detail.

Zinc, Total – final limit of 540 ug/l and 18 #/d DM, based on mass-balance. Interim limit of 1000 ug/l based on 99th percentile of existing data and limit of 18 #/d based on mass-balance.

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. The requirements for WET testing are detailed in the SPDES permit. Action Levels of 1.6 TUa and 9.8 TUc have been included in the draft permit for each species. The chronic Action Level is equal to the chronic dilution ratio. The acute Action Level is equal to 50% of the chronic dilution ration multiplied by 0.3. Per TOGS 1.3.2, WET testing is required when:

- 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.
- Waste treatment plants which exceed a discharge of 1.0 MGD.

CHESAPEAKE BAY WATER QUALITY BASED EFFLUENT LIMITS AND MONITORING

The Department has adopted the *Phase II Watershed Implementation Plan for New York Susquehanna and Chemung River Basins and Chesapeake Bay Total Maximum Daily Load* (Phase II WIP) to satisfy the requirements for meeting the nutrient and sediment loads outlined in the Chesapeake Bay Total Maximum Daily Load (TMDL) developed by the U.S. Environmental Protection Agency (EPA). EPA's objective is for watershed jurisdictions to implement the actions necessary to achieve the nutrient and sediment allocations by 2025 and to have controls in place by 2017 that will achieve 60% of the necessary reductions from 2009 loads. The effluent limits of **7,510 lb/year** for **Total Phosphorus 12 month load [TP 12-ML]** and **134,000 lb/year** for **Total Nitrogen, Adjusted** are Water Quality Based Effluent Limits based on the Waste Load Allocations in the TMDL. The final Water Quality Based Effluent Limit of 6,080 lb/year for **Total Phosphorus 12 month load [TP 12-ML]**, based on the Waste Load Allocations in the TMDL, shall become effective January 1, 2025. In accordance with §621.13 and §750-1.18, these permit limits are subject to revision on the basis of newly discovered material information or a change in environmental condition. A modification by EPA of the Chesapeake Bay TMDL could find that less or more stringent allocations are necessary to meet water quality standards. If the TMDL modification determines that more stringent allocations are necessary to meet water quality standards, New York would explore a range of options to determine the most cost-effective program for permittees to achieve additional required pollution reductions.

The permittee is required to sample and report **Total Phosphorus as P**, as well as Total Kjeldahl Nitrogen (TKN) as N, Nitrite (NO_2) as N, and Nitrate (NO_3) as N, to calculate **Total Nitrogen as N**. The **Total Nitrogen** and **Total Phosphorus 12 month loads [TN 12-ML and TP 12-ML]** are defined as the sum of the current **month loads** added to the **month loads** from eleven previous months for N and P respectively. For the first year of monitoring, each successive month (starting with the first month, then first plus second month, etc.) will be summed until twelve months have passed. On the thirteenth month, the **TN 12-ML and TP 12-ML** will be calculated and used for purposes of determining compliance in accordance with the following paragraphs.

Following 12 months of data, the permittee shall compare the **Total Phosphorus, as P, 12 month load [TP 12-ML]** for each month to the **Total Phosphorus, as P, 12 month load limit**. The permittee then calculates the **Phosphorus, as P, credit [TP credit]** as [12 month load TP limit] - [actual TP 12-ML]. Should the result of this calculation be zero or less than zero (i.e. the TP 12-ML is being met or exceeded), the permittee shall report "0" for this parameter.

The permittee may exchange any available N, as calculated from the TP credit, towards meeting the **Total Nitrogen, Adjusted** effluent limit. The **Total Nitrogen, available from TP credit [TNAP]** is calculated as [TP credit] x [N:P ratio], where the [N:P ratio] for this facility is 6.13. The TNAP is calculated and applied to each facility individually, rather than the aggregate of the two facilities. The **Total Nitrogen, Adjusted** load is calculated as [TN 12-ML] - [TNAP]. The Total Nitrogen, Adjusted load is used to determine compliance with the individual wasteload allocation. The individual wasteload allocation for this facility is 134,000 lb/year.

The **Total Nitrogen Delivered, as N, Aggregate 12-ML [DA 12-ML]** is an aggregate limit for the Bay-significant wastewater treatment plants identified in each Phase. This facility is included in Phases II and III of the WIP. For permits that become effective in a given year, for example 2015, monthly loads in January 2015 begin to count towards compliance with the first calculation of compliance occurring after December 2015. The individual **Total Nitrogen Delivered 12-MLs** are calculated as the TN 12-ML load multiplied by the delivery factor, which varies depending on the location of the facility within the watershed. The delivery factor for this facility is 0.356. The result of this calculation is reported by each of the individual permittees on their Discharge Monitoring Report. The **DA 12-ML** will then be calculated by the Department by summing the individual Delivered 12-MLs for each facility included in the aggregate during each phase. The sum of the

reported **Total Nitrogen Delivered 12-MLs** for the permittees limited during that Phase will be used by the Department to assess compliance with the **DA 12-ML** limit.

If the DA 12-ML limit is exceeded, the individual 12-month **Total Nitrogen, Adjusted** loads (rather than delivered loads) shall be used for purposes of compliance to determine which permittee(s) were the cause of the exceedance. If the DA 12-ML limit is exceeded but the facility is in compliance with the individual 12-month **Total Nitrogen, Adjusted** load, the facility will be deemed to be in compliance. If the DA 12-ML limit is exceeded and the individual 12-month **Total Nitrogen, Adjusted** load for the facility is also exceeded, the facility will be in noncompliance.

Outfalls 01A, 01B, 002 – WQBELs are not applicable.

B. Monitoring & Reporting Requirements

Section 308 of the Clean Water Act and federal regulations 40 CFR 122.44(i) 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 for reporting results on 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. For municipal facilities, sampling frequency is based on guidance provided in TOGS 1.3.3.

C. Other Conditions Specific To This Permit

Quantification and Removals Study: The permittee shall quantify sources of Total Copper, Total Lead, and Total Zinc and submit an approvable engineering report for actions necessary to achieve compliance with the water quality based effluent limits. Subsequently, the report recommendations shall be implemented. Interim limits are in place to allow time for implementation and compliance with final limits.

Best Management Practices (BMPs) for Sanitary Sewer Overflows (SSOs): The permittee shall implement BMPs for SSOs as described in the permit. These BMPs are designed to implement operation and maintenance procedures, use the existing treatment facility and collection system to the maximum extent practicable, effect sewer design replacement and drainage planning, maximize pollutant capture and minimize water quality impacts from sanitary sewer overflows. This requirement is new.

Pollutant Minimization Program (PMP): A PMP for Mercury is being implemented at the facility because the WQBEL of 0.7 ng/L is lower than the compliance limit of 50 ng/L. The goal of the PMP is to meet the calculated WQBEL. This requirement is new.

Discharge Notification Act: In accordance with 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 permittee is also required to provide a public repository for DMRs as required by the SPDES permit. This requirement is being continued from the previous permit.

Stormwater Pollution Prevention Plan: The permittee is required to develop a stormwater pollution prevention plan to minimize contamination of stormwater run-off from the facility. This requirement is new.

Schedule of Submittals: Short-term monitoring is specified for Antimony Total.

D. General Conditions Applicable To All Permits

The permit contains standard regulatory language that is required to be in all SPDES permits. These permit provisions, based largely upon 40 CFR 122 subpart C and 6 NYCRR Part 750, include requirements pertaining to monitoring, recording, reporting, and compliance responsibilities. These "general conditions" of permits are typically specified, summarized, or referenced on the first and last pages of the permit.

OUTFALL & RECEIVING WATER LOCATION TABLE

Outfall Number	Latitude	Longitude	Receiving Water Name	Water Class	Water Index Number	Major/Sub Basin
001	42° 26' 18"	75° 06' 03"	Susquehanna River	B	SR (Portion 7)	06-01
01A	42° 26' 23"	75° 06' 06"	bypass from head of plant to final clarifier and outfall 001.	na	na	na
stormwater	42° 26' 18.7"	75° 06' 04.5"	on site stormwater to effluent chamber and outfall 001, downstream from outfall 001 monitoring location.	na	na	na
002	42° 26' 34.9"	75° 05' 55.7"	Susquehanna River	B	SR (Portion 7)	06-01

POLLUTANT SUMMARY TABLE(S)

Outfall #	001

Outfall 001 **Effluent Parameter** (concentration in ug/l and mass in lbs/day unless otherwise specified)	Existing Effluent Quality				TBELs				Water Quality Data & WQBELs					Permit Basis
	concentration		mass					PQL	Ambient Criteria	Ambient Background	WQBEL			(T or WQ or NA)
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	conc.	conc.	conc.	mass	Type	
Flow Rate, units = MGD	Average 2.2		Maximum 10.2		4.0/ monitor		MA/DM	NA	7Q10 = 35 , 30Q10 = 42 , Dilution/Mixing = 9.8:1, 12:1					T
pH (su)	Minimum 6.0		Maximum 7.3		6.0 – 9.0		Range		6.5 – 8.5	7.9 (80%ile)	tech ok			T
Hardness (mg/L)	No data	-	-		-	-	-		NA	80.				na
BOD5 (mg/l)	19/ 54	-	310/ 940	-	indicated by UOD	-	-		Part 703.3	-	See UOD			na
BOD5 percent removal (%)	77/ 41min	-	-	-	indicated by UOD	-	-		NA					na
CBOD5- 30 day avg (mg/l)	14/ 28	23/ 30	260/ 835	490/ 670	25	830	MA		Part 703.3	-	See UOD			T
CBOD5- 7 day avg (mg/l)	19/ 44	35/ 47	350/ 790	700/ 980	40	1300	7DA		Part 703.3	-	See UOD			T

Outfall 001 **Effluent Parameter** (concentration in ug/l and mass in lbs/day unless otherwise specified)	**Existing Effluent Quality**				**TBELs**				**Water Quality Data & WQBELs**					**Permit Basis**
	concentration		mass					PQL	Ambient Criteria	Ambient Background	WQBEL			(T or WQ or NA)
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	conc.	conc.	conc.	mass	Type	
CBOD5 Percent Removal (%)	80/ 35min	5%/1% 67/ 61	-	-	65	-	MA		NA					T
Oxygen Demand, Ultimate Jun-Oct (mg/l)	100/ 210	-	1700/ 4900	-	monitor	3000/ monitor	MA/DM		part 703.3	Assume 3.0	Monitor	3000	MA	WQ
Oxygen Demand, Ultimate Nov-May (mg/l)	340/ 1200	-	7040/ 31000	-	monitor	monitor	monitor		part 703.3		monitor	monitor	monitor	WQ
Oxygen, Dissolved (mg/l)	6.9/ 8.0	6.3-20%ile	-	-	NA	-	-		5.0/ 4.0min	assume 7.2	2.0	monitor	daily min.	WQ
Solids, Total (mg/l)	450	-	-	-	-	-	-		Part 703.2	-	See	TSS and	SS.	na
Solids, Total Dissolved (mg/l)	320	-	-	-	-	-	-		Part 703.2	-	-	-	-	na
Solids, Settleable (ml/l)	0.03/ 0.8	0.37/ 0.51	-	-	0.3	-	DM		Part 703.2	-	tech ok			T
Solids, Total Suspended (mg/l)	12/ 37	31/ 40	210/ 1100	720/ 1000	30/ 45	1000/ 1500	MA/ 7DA		Part 703.2	-	tech ok			T
Solids, Total Suspended Percent Removal (%)	87/ 34min	5%/1% 77/ 73	-	-	77	-	MA		NA	-				T
Temperature May-Sept (deg F)	66/ 75	76/ 79	-	-	monitor	-	monitor		90	assume 77	tech ok			T
Temperature Oct-Apr (deg F)	53/ 67	-	-	-	monitor	-	monitor		Part 704.2	assume 50	tech ok			T
Ammonia Total (as NH3) Jun-Oct (mg/l)	8.7/ 23	29/ 44	160/ 310	420/610	11	monitor	MA		1.12	-	13	-	-	WQ
Ammonia Total (as NH3) Nov-May (mg/l)	11/ 26	-	210/ 460	-	monitor	monitor	monitor		1.62	-	19	monitor	MA	WQ
Nitrogen, Total Kjeldahl (as N) (mg/l)	14/ 30	29/ 36	260/ 620	520/ 670	monitor	monitor	monitor		Part 703.3	-	monitor	monitor	monitor	WQ
NITRITE Total (as N) (mg/l)	0.31/ 2.3	0.94/ 1.2	5.6/ 33	18/ 228	monitor	monitor	monitor		NA	-	monitor	monitor	monitor	WQ
NITRATE Total (as N) (mg/l)	4.6/ 16	19/ 32	81/ 210	350/ 640	monitor	monitor	monitor		NA	-	monitor	monitor	monitor	WQ
Nitrogen, Total (as N) Annual Average (mg/l)	19/ 21	21/ 22	370/ 460	420/ 450	-	-	-		see Chesapeake bay narrative above and permit page eight.					WQ

Outfall 001 **Effluent Parameter** (concentration in ug/l and mass in lbs/day unless otherwise specified)	**Existing Effluent Quality**				**TBELs**				**Water Quality Data & WQBELs**					**Permit Basis**
	concentration		mass					PQL	Ambient Criteria	Ambient Background	WQBEL			(T or WQ or NA)
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	conc.	conc.	conc.	mass	Type	
Nitrogen, Total (as N) (mg/l)	19/ 31	30/ 33	360/ 640	590/ 710	monitor	monitor	monitor			-	monitor			WQ
Phosphorus, Total (as P) Annual Average (mg/l)	2.1/ 2.6	2.5/ 2.7	46/ 47.3	73/ 92	2.9	96	12MRA		see Chesapeake bay narrative above and permit page seven.					WQ
Phosphorus, Total (as P) (mg/l)	2.1/ 4.3	3.8/ 4.4	38/ 64	59/ 69	monitor	monitor	monitor			-	monitor			WQ
Total Organic Carbon (mg/l)	21	-	-	-	indicated by	CBOD5	-		NA	-				na
Coliform, Fecal (#/100mL)	51/ 390	-	-	-	200 – 30 day geo mean 400 – 7 day geo mean				Part 703.4	-	tech ok			T
Metals and Inorganics														
Antimony Total	4.0	-	0.073	-	see WQBEL	-	-		3.0	-	30	0.98	DM	na
Chlorine, Total Residual	12/ 50	57/ 64	0.23/ 0.46	0.38/ 0.45	50	monitor	DM		5.0	-	49	monitor	DM	WQ
Copper, Total (2) interim final	140/ 200	410/ 680	2.4/ 3.8	5.2/ 7.1	see WQBEL	-	-		7.4d 7.7t	-	680 61	7.1 2.0	DM	WQ
Lead, Total (2) interim final	57	-	1.0	-	see WQBEL	-	-		3.0d 3.6t	-	170 35	5.7 1.2	DM	WQ
Mercury, Total (ng/l) interim final	66/ 103	-	0.0012/ 0.0019	-	see WQBEL	-	-		0.70d	-	200 50.	monitor monitor	DM	WQ
Zinc, Total (2) interim final	450/ 630	800/ 1040	7.8/ 11	13/ 17	see WQBEL	-	-		68d 69t	-	1000 540	18 18	DM	WQ
organics														
WET – Acute Invertebrate (TUa) (1)	0.3	-	-	-	see WQBEL	-	-			NA	1.6	-	AL	WQ
WET – Acute Vertebrate (TUa) (1)	0.3	-	-	-	see WQBEL	-	-			NA	1.6	-	AL	WQ

Outfall 001 **Effluent Parameter** (concentration in ug/l and mass in lbs/day unless otherwise specified)	**Existing Effluent Quality**				**TBELs**				**Water Quality Data & WQBELs**					**Permit Basis**
	concentration		mass					PQL	Ambient Criteria	Ambient Background	WQBEL			(T or WQ or NA)
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	conc.	conc.	conc.	mass	Type	
WET – Chronic Invertebrate (TUc) (1)	2.0	-	-	-	see WQBEL	-	-			NA	9.8	-	AL	WQ
WET – Chronic Vertebrate (TUc) (1)	2.0	-	-	-	see WQBEL	-	-			NA	9.8	-	AL	WQ

Outfall #	stormwater

Effluent Parameter (concentration in ug/l and mass in lbs/day unless otherwise specified)	**Existing Effluent Quality**				**TBELs**				**Water Quality Data & WQBELs**					**Permit Basis**
	concentration		mass					PQL	Ambient Criteria	Ambient Background	WQBEL			(T or WQ or NA)
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	conc.	conc.	conc.	mass	Type	
Flow Rate, units = MGD	Average	no data	Maximum		-				NA					na
pH (su)	Minimum	10.0	Maximum	10.9	-		Range		NA					na
BOD5 (mg/l)	8.0	-	-	-	-	-	-		NA					na
Chemical Oxygen Demand (mg/l)	78	-	-	-	-	-	-		NA					na
Total Suspended Solids (mg/l)	95	-	-	-	-	-	-		NA					na
Nitrogen, Total (mg/l)	0.27	-	-	-	-	-	-		NA					na
Phosphorus, Total (mg/l)	1.22	-	-	-	-	-	-		NA					na
Oil and Grease	nondetect	-	-	-	-	-	-		NA					na

Footnotes:
(1) WET testing data is from 4/26/2007 report submitted to NYS DEC on 5/10/2007.
(2) abbreviations: d dissolved; t total.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*

NAME: GREENE (V)
ADDRESS: 49 GENESEE ST, BOX 207
GREENE, NY 13778-0207
FACILITY: GREENE (V) WWTP
LOCATION: WATER STREET
GREENE, NY 13778

ATTN: ROBERT NOWALK, CHIEF OPERATOR

NY0021407	CBY-M
PERMIT NUMBER	**DISCHARGE NUMBER**

MONITORING PERIOD	
MM/DD/YYYY	**MM/DD/YYYY**
05/01/2015	05/31/2015

DMR Mailing ZIP CODE: 13778-0207
MINOR
(SUBR 07)
CHESAPEAKE BAY TMDL IMPLEMENTATION
External Outfall

No Discharge ☐

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Nitrogen, total [as N]	SAMPLE MEASUREMENT		******		******		******				
00600 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	******	lb/d	******	Req. Mon. MO AVG	******	mg/L		Twice Per Month	CALCTD
Nitrogen, total [as N]	SAMPLE MEASUREMENT		******		******		******				
00600 G 0 Raw Sewage Influent	PERMIT REQUIREMENT	Req. Mon. MO AVG	******	lb/d	******	Req. Mon. MO AVG	******	mg/L		Twice Per Month	CALCTD
Nitrogen, total [as N]	SAMPLE MEASUREMENT		******		******	******	******	******			
00600 P 0 See Comments	PERMIT REQUIREMENT	Req. Mon. ANNL AVG	******	lb/yr	******	******	******	******		Monthly	CALCTD
Nitrogen, nitrite total [as N]	SAMPLE MEASUREMENT		******		******		******				
00615 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	******	lb/d	******	Req. Mon. MO AVG	******	mg/L		Twice Per Month	COMP24
Nitrogen, nitrite total [as N]	SAMPLE MEASUREMENT		******		******		******				
00615 G 0 Raw Sewage Influent	PERMIT REQUIREMENT	Req. Mon. MO AVG	******	lb/d	******	Req. Mon. MO AVG	******	mg/L		Twice Per Month	COMP24
Nitrogen, nitrate total [as N]	SAMPLE MEASUREMENT		******		******		******				
00620 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	******	lb/d	******	Req. Mon. MO AVG	******	mg/L		Twice Per Month	COMP24
Nitrogen, nitrate total [as N]	SAMPLE MEASUREMENT		******		******		******				
00620 G 0 Raw Sewage Influent	PERMIT REQUIREMENT	Req. Mon. MO AVG	******	lb/d	******	Req. Mon. MO AVG	******	mg/L		Twice Per Month	COMP24

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE
	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.				
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NITROGEN (T) WITH MONITORING LOCATION 'P' IS THE 12 MONTH LOAD, NITROGEN (T) [ADJUSTED] WITH MONITORING LOCATION 'P' IS THE SUB-AGGREGATE, NITROGEN (T) [CREDIT] WITH MONITORING LOCATION 'P' IS THE SUB-AGGREGATE, PHOSPHORUS (T) WITH MONITORING LOCATION 'P' IS THE 12 MONTH LOAD

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*

NAME: GREENE (V)
ADDRESS: 49 GENESEE ST, BOX 207
GREENE, NY 13778-0207
FACILITY: GREENE (V) WWTP
LOCATION: WATER STREET
GREENE, NY 13778

ATTN: ROBERT NOWALK, CHIEF OPERATOR

PERMIT NUMBER	DISCHARGE NUMBER
NY0021407	CBY-M

MONITORING PERIOD	
MM/DD/YYYY	MM/DD/YYYY
05/01/2015	05/31/2015

DMR Mailing ZIP CODE: 13778-0207
MINOR
(SUBR 07)
CHESAPEAKE BAY TMDL IMPLEMENTATION
External Outfall

No Discharge ☐

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Nitrogen, Kjeldahl, total [as N]	SAMPLE MEASUREMENT		******		******		******				
00625 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	******	lb/d	******	Req. Mon. MO AVG	******	mg/L		Twice Per Month	COMP24
Nitrogen, Kjeldahl, total [as N]	SAMPLE MEASUREMENT		******		******		******				
00625 G 0 Raw Sewage Influent	PERMIT REQUIREMENT	Req. Mon. MO AVG	******	lb/d	******	Req. Mon. MO AVG	******	mg/L		Twice Per Month	COMP24
Phosphorus, total [as P]	SAMPLE MEASUREMENT		******		******		******				
00665 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	******	lb/d	******	Req. Mon. MO AVG	******	mg/L		Twice Per Month	COMP24
Phosphorus, total [as P]	SAMPLE MEASUREMENT		******		******		******				
00665 G 0 Raw Sewage Influent	PERMIT REQUIREMENT	Req. Mon. MO AVG	******	lb/d	******	Req. Mon. MO AVG	******	mg/L		Twice Per Month	COMP24
Phosphorus, total [as P]	SAMPLE MEASUREMENT		******		******	******	******	******			
00665 P 0 See Comments	PERMIT REQUIREMENT	Req. Mon. ANNL AVG	******	lb/yr	******	******	******	******		Monthly	CALCTD
Nitrogen, total [as N] [adjusted]	SAMPLE MEASUREMENT		******		******	******	******	******			
0600A 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. ANNL AVG	******	lb/yr	******	******	******	******		Monthly	CALCTD
Nitrogen, total [as N] [adjusted]	SAMPLE MEASUREMENT		******		******	******	******	******			
0600A P 0 See Comments	PERMIT REQUIREMENT	Req. Mon. AGGROLAV	******	lb/yr	******	******	******	******		Monthly	CALCTD

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE
	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.				
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NITROGEN (T) WITH MONITORING LOCATION 'P' IS THE 12 MONTH LOAD, NITROGEN (T) [ADJUSTED] WITH MONITORING LOCATION 'P' IS THE SUB-AGGREGATE, NITROGEN (T) [CREDIT] WITH MONITORING LOCATION 'P' IS THE SUB-AGGREGATE, PHOSPHORUS (T) WITH MONITORING LOCATION 'P' IS THE 12 MONTH LOAD

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*

NAME: GREENE (V)
ADDRESS: 49 GENESEE ST, BOX 207
GREENE, NY 13778-0207
FACILITY: GREENE (V) WWTP
LOCATION: WATER STREET
GREENE, NY 13778

ATTN: ROBERT NOWALK, CHIEF OPERATOR

NY0021407	CBY-M
PERMIT NUMBER	**DISCHARGE NUMBER**

MONITORING PERIOD	
MM/DD/YYYY	**MM/DD/YYYY**
05/01/2015	05/31/2015

DMR Mailing ZIP CODE: 13778-0207
MINOR
(SUBR 07)
CHESAPEAKE BAY TMDL IMPLEMENTATION
External Outfall

No Discharge ☐

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Nitrogen, total [as N] [credit]	SAMPLE MEASUREMENT		******		******	******	******	******			
0600C 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. ANNL AVG	******	lb/yr	******	******	******	******		Monthly	CALCTD
Nitrogen, total [as N] [credit]	SAMPLE MEASUREMENT		******		******	******	******	******			
0600C P 0 See Comments	PERMIT REQUIREMENT	Req. Mon. AGGROLAV	******	lb/yr	******	******	******	******		Monthly	CALCTD
Nitrogen, total [as N] [delivered]	SAMPLE MEASUREMENT		******		******	******	******	******			
0600D 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. ANNL AVG	******	lb/yr	******	******	******	******		Monthly	CALCTD
Phosphorus, total [as P] [credit]	SAMPLE MEASUREMENT		******		******	******	******	******			
0665C 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. ANNL AVG	******	lb/yr	******	******	******	******		Monthly	CALCTD

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		TELEPHONE		DATE
		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT			
TYPED OR PRINTED			AREA Code	NUMBER	MM/DD/YYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NITROGEN (T) WITH MONITORING LOCATION 'P' IS THE 12 MONTH LOAD, NITROGEN (T) [ADJUSTED] WITH MONITORING LOCATION 'P' IS THE SUB-AGGREGATE, NITROGEN (T) [CREDIT] WITH MONITORING LOCATION 'P' IS THE SUB-AGGREGATE, PHOSPHORUS (T) WITH MONITORING LOCATION 'P' IS THE 12 MONTH LOAD