

State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code: 4952	NAICS Code: 2	21320	SPDES Number:	NY0269336	
Discharge Class (CL): 07			DEC Number:	9-5626-00211/00001	
Toxic Class (TX):	N		Effective Date (EDP):	xx/xx/xxxx	
Major-Sub Drainage Basin:	ajor-Sub Drainage Basin: 04 - 03			xx/xx/xxxx	
Water Index Number:	Ont. 117-87	tem No.: 821-328	Madification Dates (EDDM).		
Compact Area:	IJC	-	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.)

PERMITTEE NAME AND ADDRESS						
Name: Village of Castile			Attention	Kalah Washing Mayor		
Street:	51 North Main Street		Attention:	: Keith Washburn, Mayor		
City:	Castile		State:	NY	Zip Code:	14427
Email:	villageofcastile@gmail.com		Phone:	(585) 4	93-0446	

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL												
Name:	Village	Ilage of Castile WWTP										
Address / Location:	ss / Location: Park Road East County: Wyoming											
City:	Castile	,				State:	NY	Zip Code) :	1442	27	
Facility Location:		Latitude:	42 °	37	30	" N	& Longitude:	78	0	02	30	" W
Primary Outfall No.:	001	Latitude:	42 °	37	30	" N	& Longitude:	78	0	02	30	" W
Outfall Description:	Treate	d Sanitary	Receiving	Water.	Wo	If Creek	(Class:	С	Sta	ndard:	С

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1 and 750-2. The co-permittees subject to one or more conditions of this permit are listed on page 2.

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

DISTRIBUTION:

BWP Permit Coordinator (permit.coordinator@dec.ny.gov)

BWP Permit Writer

RWE RPA

EPA Region II (Region2_NPDES@epa.gov)

NYSEFC (sara.tully@efc.ny.gov)

Administrator:	Lisa M. Czechowicz		
Address:	700 Delaware Avenue Buffalo, NY 14209		
Signature		Date	

SPDES Number: **NY0269336** Page 2 of 13 v.1.32

DEFINITIONS

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

Page 3 of 13 v.1.32

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Year Round	Wolf Creek	EDP	ExDP

	LUENT L	IMITATIO	N		MONITORING REQUIRE			MENTS		
PARAMETER								Loca	ation	FN
	Туре	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	0.175	MGD			Continuous	Meter	Х	Х	
Hα	Daily Minimum	6.0	SU			1/Day	Grab	X	X	
рп	Daily Maximum	9.0	SU			1/Дау	Grab	^	^	
Temperature	Daily Maximum	Monitor	°F			1/Day	Grab	Х	Х	
BOD₅	Monthly Average	30	mg/L	44	lbs/d	1/Month	6-hr. Comp.	Х	Х	1
BOD₅	7-Day Average	45	mg/L	66	lbs/d	1/Month	6-hr. Comp.	Х	Х	
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	44	lbs/d	1/Month	6-hr. Comp.	х	х	1
Total Suspended Solids (TSS)	7-Day Average	45	mg/L	66	lbs/d	1/Month	6-hr. Comp.	Х	х	
Settleable Solids	Daily Maximum	0.3	mL/L			1/Day	Grab	Х	Х	
Ammonia (as N) June 1 st – October 31 st	Monthly Average	5.1	mg/L			1/Month	6-hr. Comp.		х	
Ammonia (as N) November 1 st – May 31 st	Monthly Average	7.4	mg/L			1/Month	6-hr. Comp.		Х	
Total Phosphorus (as P)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/Month	6-hr. Comp.		Х	
EFFLUENT DISINFECTION Required Seasonal from May 1st - October 31st		Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Coliform, Fecal	30-Day Geometric Mean	200	No./ 100 mL			1/Month	Grab		х	
Coliform, Fecal	7-Day Geometric Mean	400	No./ 100 mL			1/Month	Grab		х	
Chlorine, Total Residual	Daily Maximum	0.03	mg/L			1/Day	Grab		Х	2

FOOTNOTES:

- 1. Effluent shall not exceed 15% and 15% of influent concentration values for BOD₅ & TSS respectively.
- 2. Sampling and reporting for total residual chlorine are only necessary if chlorine is used for disinfection, elsewhere in the treatment process, or the facility otherwise has reasonable potential to discharge chlorine. Otherwise, the permittee shall report NODI-9 on the DMR.

SPDES Number: **NY0269336**Page 4 of 13 v.1.32

MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

1. <u>General</u> - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below.

- 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 ¹ as described in detail below:
 - a. <u>Conditional Exclusion Certification</u> A certification (Appendix D of *DOW 1.3.10*), signed in accordance with 750-1.8 Signature of SPDES forms, must be submitted once every five (5) years to the Regional Water Engineer and to the Bureau of Water Permits certifying that the facility is neither a mercury source nor receives flows from a mercury source. Criteria to determine if a facility has a mercury source are as follows:
 - The facility is or receives discharge from 1) individually permitted combined sewer overflow (CSOs)² communities and/or 2) Type II sanitary sewer overflow (SSO)³ facilities;
 - One or more effluent samples which exceed 12 ng/L, including samples taken as a result of the SPDES application process;
 - Internal or tributary waste stream samples exceed the GLCA effluent limitation <u>AND</u> the final effluent samples are less than the GLCA due primarily to dilution by uncontaminated or less contaminated waste streams. Both components of this criterion may include samples taken as a result of the SPDES application process;
 - A permit application or other information indicates that mercury is handled on site and could be discharged through outfalls;
 - Outfalls which contain legacy mercury contamination;
 - The facility's collection system receives discharges from a dental and/or categorical industrial user (CIU)⁴ that may discharge mercury;
 - The facility accepts hauled wastes; or,
 - The facility is defined as a categorical industry that may discharge mercury. This may also include dentists, universities, hospitals, or laboratories which have their own SPDES permit.
 - b. <u>Control Strategy</u> The control strategy must contain the following minimum elements:
 - i. <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.
 - ii. <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.

¹Neither monitoring nor outreach is required for facilities meeting the criteria for MMP Type IV, but monitoring and/or outreach can be included in the permittee's control strategy.

²CSO permits are included under the 05 and 07 permit classifications.

³These are overflow retention facilities (ORFs) and are included under the 05 and 07 permit classifications.

⁴CIUs include those listed under Federal Regulation in 40 CFR Part 400.

Page 5 of 13 v.1.32

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

- c. <u>Status Report</u> An **annual** status report must be developed and maintained on site, in accordance with the <u>Schedule of Additional Submittals</u>, summarizing:
 - i. Review of criteria to determine if the facility has a potential mercury source;
 - a. If the permittee no longer meets the criteria for MMP Type IV, the permittee must notify the DEC for a permittee-initiated permit modification;
 - ii. All actions undertaken, pursuant to the control strategy, during the previous year; and
 - iii. Actions planned, pursuant to the control strategy, for the upcoming year.

The permittee must maintain a file with all MMP documentation. The file must be available for review by DEC representatives and copies must be provided upon request in accordance with 6 NYCRR 750-2.1(i) and 750-2.5(c)(4).

- 3. MMP Modification The MMP must be modified whenever:
 - a. Changes at the facility, or within the collection system, increase the potential for mercury discharges;
 - b. A letter from the Department identifies inadequacies in the MMP.

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

DEFINITIONS:

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.

Page 6 of 13 v.1.32

DISCHARGE NOTIFICATION REQUIREMENTS

- (a) The permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit, unless the Permittee has obtained a waiver in accordance with the Discharge Notification Act (DNA). Such signs shall be installed before initiation of any new discharge location.
- (b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.
- (c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.
- (d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

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

N.Y.S. PERMITTED DISCHARGE POINT				
SPDES PERMIT No.: NY				
OUTFALL No. :				
For information about this permitted discharge contact:				
Permittee Name:				
Permittee Contact:				
Permittee Phone: () - ### - ####				
OR:				
NYSDEC Division of Water Regional Office Address:				
NYSDEC Division of Water Regional Phone: () - ### - ####				

- (e) Upon request, the permittee shall make available electronic or hard copies of the sampling data to the public. In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained (either electronically or as a hard copy) on record for a period of five years.
- (f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.

SPDES Number: **NY0269336** Page 7 of 13 v.1.32

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Compliance Date⁵				
001	MERCURY - CONDITIONAL EXCLUSION CERTIFICATION Submit a conditional exclusion certification form for mercury. As part of the certification, submit sampling results for mercury using USEPA Method 1631 in accordance with DOW 1.3.10, Mercury – SPDES Permitting and Multiple Discharge Variance.	EDP + 3 months				
Unless noted otherwise, the above actions are one-time requirements.						

- b) The permittee shall submit a Report of Non-Compliance Event form 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 notifications shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:
 - 1. A short description of the non-compliance;
 - 2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
 - 3. Any details which tend to explain or mitigate an instance of non-compliance; and
 - 4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.
- c) The permittee shall submit copies of any document required by the above schedule of compliance to the DEC Regional Water Engineer and to the Bureau of Water Permits.

-

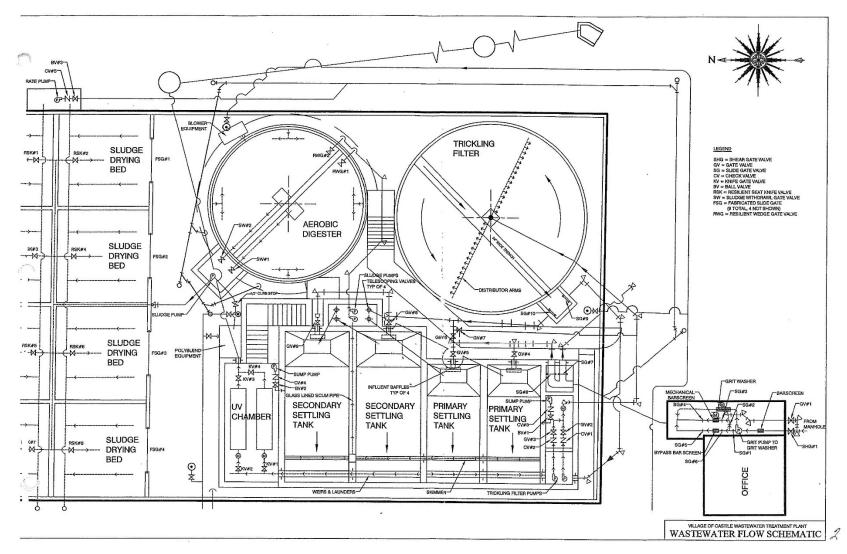
⁵ 6 NYCRR 750-1.14 (a)

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: Upstream of all treatment units

Effluent: Downstream of UV treatment



Page 9 of 13 v.1.32

GENERAL REQUIREMENTS

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

B. General Conditions

1.	Duty to comply	6 NYCRR 750-2.1(e) & 2.4
2.	Duty to reapply	6 NYCRR 750-1.16(a)
3.	Need to halt or reduce activity not a defense	e6 NYCRR 750-2.1(g)
4.	Duty to mitigate	6 NYCRR 750-2.7(f)
5.	Permit actions	6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h)
6.	Property rights	6 NYCRR 750-2.2(b)
7.	Duty to provide information	6 NYCRR 750-2.1(i)
8.	Inspection and entry	6 NYCRR 750-2.1(a) & 2.3
	•	• •

C. Operation and Maintenance

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

D. Monitoring and Records

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

E. Reporting Requirements

	orting requirements	
1.	Reporting requirements	6 NYCRR 750-2.5, 2.7 & 1.17
	Anticipated noncompliance	6 NYCRR 750-2.7(a)
3.	Transfers	6 NYCRR 750-1.17
4.	Monitoring reports	6 NYCRR 750-2.5(e)
5.	Compliance schedules	6 NYCRR 750-1.14(d)
6.	24-hour reporting	6 NYCRR 750-2.7(c) & (d)
7.	Other noncompliance	6 NYCRR 750-2.7(e)
8.	Other information	6 NYCRR 750-2.1(f)
9.	Additional conditions applicable to a POTW	6 NYCRR 750-2.9

F. Planned Changes

- 1. The permittee shall give notice to the DEC 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 DEC, 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.

Page 10 of 13 v.1.32

GENERAL REQUIREMENTS (continued)

2. Notification Requirement for POTWs

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

- 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.
- 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 DEC, 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 DEC review and authorization. At a minimum, the permittee must notify the DEC in writing of its intent to change WTC use by submitting a completed WTC Notification Form for each proposed WTC. The DEC 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 DEC. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, seguestrants, and settling aids.

- 1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized in writing by the DEC.
- 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 DEC's website at: http://www.dec.nv.gov/permits/93245.html

Page 11 of 13 v.1.32

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 DEC 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 DEC's website.

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by DEC. Instructions on the use of NetDMR can be found at https://www.dec.ny.gov/chemical/8461.html. Hardcopy paper DMRs will only be accepted 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.

Phone: (518) 402-8111

C. Additional information required to be submitted by this permit shall be summarized and reported to the Regional Water Engineer 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

Department of Environmental Conservation Regional Water Engineer, Region 9 700 Delaware Avenue, Buffalo, NY 14209

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 DEC'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.

Page 12 of 13 v.1.32

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS (continued)

E. Schedule of Additional Submittals:

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

	SCHEDULE OF ADDITIONAL SUBMITTALS	
Outfall(s)	Required Action	Due Date
001	EMERGING CONTAMINANT SHORT-TERM MONITORING PROGRAM The permittee shall collect grab samples of both the influent and effluent from the facility's treatment system(s) associated with the identified outfall for Per-and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane (1,4-D), unless permittee receives written notification from the DEC during this time that sampling can be discontinued. Samples must be analyzed utilizing EPA method 1633 and EPA Method 8270D SIM or 8270E SIM, respectively. The samples must represent nomal discharge conditions and treatment operations and shall be obtained on a quarterly basis for at least 4 consecutive quarters, unless written notification from the DEC indicates otherwise. Emerging Contaminants results must be reported utilizing the template provided and should be kept on file with the permittee until all 4 sampling event results are obtained. Once all 4 sampling event results are received, they shall be reported together to the DEC through the "Emerging Contaminants Survey for POTWs" found at: Emerging Contaminants In NY's Waters - NYSDEC. The template, instructions for the laboratory, and chain of custody form are also available at this link.	EDP + 18 months
	If results indicate the presence of Emerging Contaminants, the permittee shall initiate track down of potential sources by completing the "Emerging Contaminants Investigation Checklist for POTWs" available at the above link. The DEC may periodically request updates or additional monitoring to check progress on track down investigations. Elements of the checklist may be used as permit conditions in future permit modifications.	Within 90 days of DEC written notification
001	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	December DMR (January 28 th)
001	ANNUAL FLOW CERTIFICATION 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 th)
001	MERCURY - CONDITIONAL EXCLUSION CERTIFICATION Permittee must submit a mercury conditional exclusion certification every five years in order to maintain MMP Type IV status. As part of the certification, the permittee will be required to sample the effluent and measure <12 ng/L.	Every 5 years from date of first certification submission
001	MERCURY MINIMIZATION PLAN The permittee must complete and maintain on-site an annual mercury minimization status report in accordance with the requirements of this permit.	Maintained On-site EDP + 12 months, annually thereafter

Page 13 of 13 v.1.32

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS (continued)

- 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.
- 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: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson and Melanie Wright, P.E. Full Technical Review

SPDES Permit Fact Sheet Village of Castile Village of Castile WWTP NY0269336



Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson

and Melanie Wright, P.E. Full Technical Review

Contents

Summary of Permit Changes	3
Administrative History	3
Facility Information	3
Site Overview	5
Enforcement History	5
Existing Effluent Quality	6
Interstate Water Pollution Control Agencies	6
Receiving Water Information	6
Impaired Waterbody Information	6
Critical Receiving Water Data & Mixing Zone	6
Permit Requirements	7
USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility	8
Whole Effluent Toxicity (WET) Testing	8
Anti-backsliding	8
Antidegradation	8
Discharge Notification Act Requirements	8
Mercury	8
Emerging Contaminant Monitoring	8
Schedule of Compliance	g
Schedule of Additional Submittals	9
OUTFALL AND RECEIVING WATER SUMMARY TABLE	10
POLLUTANT SUMMARY TABLE	10
Outfall 001	10
Appendix: Regulatory and Technical Basis of Permit Authorizations	13
Regulatory References	13
Outfall and Receiving Water Information	13
Interstate Water Pollution Control Agencies	14
Existing Effluent Quality	14
Permit Requirements	14

USEPA Non-Major/Class 07 Municipal

Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson

and Melanie Wright, P.E. Full Technical Review

Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) EBPS permit renewal has been drafted for the Village of Castile WWTP. The changes to the permit are summarized below:

- Updated permit format, definitions, and general conditions.
- The pH limit was changed to 6.5 to 8.5 SU (Range) in accordance with the water quality standard.
- The effluent ammonia limits were converted from ammonia as NH₃ to ammonia as N and reduced to 5.1 mg/L and 7.4 mg/L for the summer and winter season, respectively.
- The disinfection season was extended to May 1st to October 31st to comply with standard requirements for seasonal disinfection facilities, and the chlorine limit was reduced to 0.03 mg/L.
- Type IV Mercury Minimization Program (MMP) requirements were added to the permit, including a compliance schedule for the submission of mercury sampling results and a conditional exclusion certification form.
- An Emerging Contaminant short-term monitoring program has been added to the permit.

This fact sheet summarizes the information used to determine the effluent limitations (limits) and other conditions contained in the permit. General background information including the regulatory basis for the effluent limitations and other conditions are in the Appendix linked throughout this fact sheet.

Administrative History

12/1/2003 The SPDES permit was first issued with an expiration date of 12/1/2008. The 2003 permit has formed the basis of this permit.

The permit was administratively renewed in 2009, 2014, 2019, and 2024. The current permit administrative renewal is effective until 12/31/2028.

11/26/2012 The permit was modified via letter to include a monthly effluent phosphorus monitoring requirement.

3/1/2019 DEC issued a Request for Information (RFI) to modify and renew the SPDES permit due to the facility's EBPS score¹. The EBPS score is 126 on the 2024 EBPS list, with a ranking of 24.

6/6/2019 The Village of Castile submitted a complete NY-2A permit application.

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

Facility Information

This facility is a publicly owned treatment works that receives flow from domestic users, with effluent consisting of treated sanitary wastewater. The collection system consists of separate sewers. The facility does not have any significant industrial users (SIUs).

¹ Pursuant to 6 NYCRR 750-1.18 and NYS Environmental Benefit Permit Strategy (EBPS)

USEPA Non-Major/Class 07 Municipal

Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson

and Melanie Wright, P.E. Full Technical Review

The current 0.175 MGD treatment plant consists of:

• Preliminary Treatment: Screening, grit removal

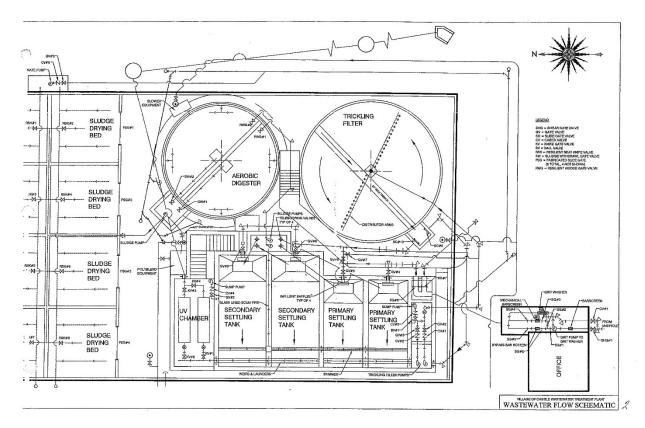
• Primary Treatment: Primary clarification

• Secondary Treatment: Trickling filter, secondary clarification

• Disinfection: UV

Sludge is digested aerobically, dried, and land applied.

A treatment schematic is shown below and included in the permit.



The primary outfall (Outfall 001) is located on the bank of Wolf Creek. The outfall is an 8-inch pipe with a duckbill type check valve housed in a concrete culvert structure.

The facility does not have any planned improvements.

USEPA Non-Major/Class 07 Municipal

Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson

and Melanie Wright, P.E. Full Technical Review

Site Overview

An aerial image of the site and an image of Outfall 001 are shown below.





Enforcement History

Compliance and enforcement information can be found on the EPA's <u>Enforcement and Compliance History Online (ECHO)</u> website.

USEPA Non-Major/Class 07 Municipal

Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson

and Melanie Wright, P.E. Full Technical Review

Existing Effluent Quality

The <u>Pollutant Summary Table</u> presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports submitted by the permittee for the period 1/1/2022 to 12/31/2024. <u>Appendix Link</u>

Interstate Water Pollution Control Agencies

Outfall 001 is located within the Great Lakes watershed and International Joint Commission (IJC) compact area, which places additional requirements in the SPDES permit. Appendix Link

Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	4952	Treated Sanitary	Wolf Creek, Class C

Reach Description: The facility discharges to Upper Wolf Creek, an unassessed Class C tributary of the Genesee River.

Impaired Waterbody Information

The Wolf Creek segment (PWL No 0403-0003) is not listed on the New York State Section 303(d) List of Impaired/TMDL Waters, and therefore, there are no applicable wasteload allocations (WLAs) for this discharge. The existing permit includes an effluent phosphorus monitoring requirement to collect data in support of the Genesee River 9-Element Plan.

Critical Receiving Water Data & Mixing Zone

The low flow condition for Wolf Creek was obtained from a drainage basin ratio analysis as follows:

Gage Name: Wolf Creek near Castile

Gage ID: 04223400

Drainage Area at Gage (mi²): 15.8

Drainage Area at Facility (mi²): 12.3 Source: USGS StreamStats

7Q10 Flow at Gage (cfs): 0.9Source: Bulletin 74 Calculated 7Q10 Flow at Facility (cfs): 0.70

Estimated 1Q10 (cfs): 0.35 Estimated 30Q10 (cfs): 0.84

USEPA Non-Major/Class 07 Municipal

Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson

and Melanie Wright, P.E. Full Technical Review

StreamStats Report

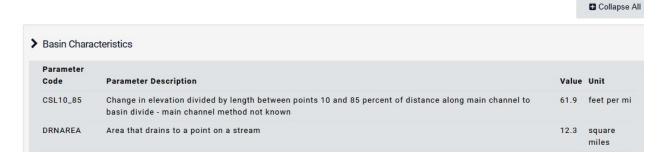
 Region ID:
 NY

 Workspace ID:
 NY20250219162112052000

 Clicked Point (Latitude, Longitude):
 42.62936, -78.04469

 Time:
 2025-02-19 11:21:42 -0500





The 1Q10 flow was estimated as half the 7Q10 and the 30Q10 flow was estimated as 1.2 x 7Q10. The 1Q10, 7Q10, and 30Q10 flows were used to calculate the acute, chronic, and human, aesthetic, wildlife (HEW) dilution ratios, respectively. The facility flow is 0.175 MGD, or 0.271 cfs.

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	2.3:1	3.6:1	4.1:1	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 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>.

USEPA Non-Major/Class 07 Municipal

Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson

and Melanie Wright, P.E. Full Technical Review

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

Best Practicable Control Technology Currently Available (BPT), Best Conventional Pollutant Control Technology (BCT), Best Available Technology Economically Achievable (BAT), and New Source Performance Standards (NSPS) limitations are based on <u>Effluent Limitation Guidelines</u> developed by USEPA for specific industries². For this facility there are no promulgated effluent guidelines. <u>Appendix Link</u>

Whole Effluent Toxicity (WET) Testing

None of the seven criteria that are indicative of potential toxicity are applicable to this facility; therefore, WET testing is not included in the permit. <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>

Antidegradation

The permit contains effluent limitations which ensure that the best usages of the receiving waters will be maintained. The Notice of Complete Application published in the Environmental Notice Bulletin contains information on the State Environmental Quality Review (SEQR)³ determination. Appendix Link

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, unless a waiver is obtained. This requirement is being continued from the previous permit.

Additionally, the permit contains a requirement to make the DMR sampling data available to the public upon request. This requirement is being continued from the previous permit.

Mercury⁴

The multiple discharge variance (MDV) for mercury provides the framework for DEC to require mercury monitoring and mercury minimization programs (MMPs), through SPDES permitting. Appendix Link

The facility is a Class 07 municipal facility located in the Great Lakes Basin without a mercury source. It is expected that the facility will be able to submit a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10 and the effluent measured <12 ng/L. Therefore, consistent with DOW 1.3.10, the permit includes requirements for the implementation of MMP Type IV and does not include mercury effluent limitations. The Schedule of Additional Submittals includes a mercury minimization plan annual status report (maintained on-site), and re-certification of the exclusion every five years. As part of the re-certification, the effluent must be sampled and continue to measure <12 ng/L. This requirement is new.

Emerging Contaminant Monitoring

Emerging Contaminants, such as Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), and 1,4-Dioxane (1,4-D), have been used in a wide variety of consumer and industrial

² As promulgated under 40 CFR Parts 405 - 471

³ As prescribed by 6 NYCRR Part 617

⁴ In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.

USEPA Non-Major/Class 07 Municipal

Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson

and Melanie Wright, P.E. Full Technical Review

product as well as in manufacturing processes for decades. These contaminants do not break down easily, therefore their presence in wastewater can remain a concern for years following their discontinued use. As the science surrounding these contaminants is still evolving, additional monitoring is needed to better understand potential sources and background levels. For more information on emerging contaminants, please see the DEC Division of Water web page: Emerging Contaminants In NY's Waters - NYSDEC.

Required Sampling: Pursuant to 6 NYCRR Part 750-1.13(b), the permit includes a short-term monitoring program listed in the Schedule of Additional Submittals to evaluate the influent and effluent discharge levels of Per-and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane. This monitoring program is consistent with guidance released in EPA guidance memos dated April 28, 2022, and December 5, 2022.

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

The DEC will consider this information and progress made to track down and reduce or eliminate the source of the identified pollutants in determining if a permit modification is needed.

Schedule of Compliance

A Schedule of Compliance is being included⁵ for the following items (Appendix Link):

• Submission of the Mercury Conditional Exclusion Certification form and mercury sampling results using USEPA method 1631.

Schedule of Additional Submittals

A schedule of additional submittals has been included for the following (Appendix Link):

- Emerging Contaminant Short-Term Monitoring
- Water Treatment Chemical Reporting
- Annual Flow Certification
- Mercury Conditional Exclusion Certification and Mercury Minimization Plan

-

⁵ Pursuant to 6 NYCRR 750-1.14

USEPA Non-Major/Class 07 Municipal

Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson

and Melanie Wright, P.E. Full Technical Review

OUTFALL AND RECEIVING WATER SUMMARY TABLE

					Water Index No. /	Maior					Critical	Dil	ution Ra	tio
Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Priority Waterbody Listing (PWL) No.	/ Sub Basin	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Effluen t Flow (MGD)	A(A)	A(C)	HEW
001	42° 37' 30" N	78° 02' 30" W	Wolf Creek	С	Ont. 117-87 PWL: 0403-0003	04/03	220	0.23	0.45	0.54	0.175	2.3:1	3.6:1	4.1:1

POLLUTANT SUMMARY TABLE

Outfall 001

O.,46-11.#		Description	Description of Wastewater: Treated Sanitary												
Outfall #	001	Type of Treatment: Screening and Grit Removal, Clarification, Trickling Filter, UV Disinfection													
			Existi	ing Discha	arge Data	TBELs		Water Quality Data & WQBELs							
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality ⁶	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis	ML	Basis for Permit Requirement
	General Notes: Existing discharge data from 1/1/2022 to 12/31/2024 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.														
Flow Rate	MGD	Monthly Avg	0.175	0.068 Actual Average	36	0.175	Design Flow	No alterations that will impair the waters for their best usages.					-	Design Flow	
	The flow limit is set at the design flow of the wastewater treatment facility.														
	CI I	Minimum	6.0	6.5 Actual Min	36	6.0	40 CFR	8.0 ⁷		6.5 – 8.5	Banga	65 95	702.2		WQBEL
рН	SU	Maximum	9.0	8.4 Actual Max	36	9.0	133.102	0.0	-	0.5 – 8.5	Range	6.5 - 8.5	<u>703.3</u>	-	W Q DEL
	Consis	tent with TO	GS 1.3.3	for POTW	s, TBELs refl	ect second	lary treatment sta	ndards. G	Given the av	ailable dilu	ution, an effl	uentlimitation	equal to th	e WQ	S is appropriate.

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

⁷ Ambient pH was established from a 2024 analysis of watershed specific data.

Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson

and Melanie Wright, P.E. Full Technical Review

Outfall #	001	Description	of Wast	ewater: T	reated Sanit	nitary									
Outrail #	001	Type of Tre	eatment:	Screening	and Grit Re	emoval, Cla	rification, Trickli	ng Filter,	UV Disinfec	tion					
			Existi	ng Discha	arge Data	TBELs			Wa	ter Quality	/ Data & Wo	QBELs			Dania fam
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality ⁶	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis	ML	Basis for Permit Requirement
Temperature	°F	Daily Max	Monitor	68 Actual Max	36	Monitor	750-1.13 Monitor	-	(Non-Trout): The water temperatur surface of a stream shall not be ra more than 90°F at any point and: be raised or lowered to more than the temperature that existed before addition.		be raised to d shall not nan 5°F over	704.2	-	Monitor	
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions. This requirement is continued from the previou permit.														
Dissolved	mg/L	Daily Min	-	7.99	1	-	-	5.89	- Critical Point	`	rout) 4.0 a/L	-	703.3	-	No Limitation
Oxygen (DO)	ing/E														
	mg/L	Monthly Avg	30	7.3	36	30	40 CFR 133.102					-			
5 do		7 Day Avg	45	11	36	45	40 CFR 133.102					-			
5-day Biochemical Oxygen	lbs/d	Monthly Avg	44	4.6	36	44	-	_	See Dissolved Oxygen		-	<u>703.3</u>	-	TBEL	
Demand		7 Day Avg	68	7.3	36	66	-				-				
(BOD ₅)	% Rem	Minimum	85	95 Actual Minimum	36	85	40 CFR 133.102								
	Consis	tent with 40	CFR Par	t 133.102 a	and TOGS 1.	3.3 for POT	Ws, TBELs refle	ct second	ary treatme	nt standar	ds.				
	m a /l	Monthly Avg	30	11	36	30	40 CFR 133.102								
	mg/L	7 Day Avg	45	19	36	45	40 CFR 133.102								
Total Suspended	lbs/d	Monthly Avg	44	5.6	36	44	-	-				position or	<u>703.2</u>	-	TBEL
Solids (TSS)	150/4	7 Day Avg	68	10	36	66	-		impair the waters for their best usages.						
	% Rem	Minimum	85	88 Actual Minimum	36	85	40 CFR 133.102								
							l analysis. Cons limitation equal t								

Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson

and Melanie Wright, P.E. Full Technical Review

Outfall #	001	Description of Wastewater: Treated Sanitary														
Outrail #	001	Type of Tre	atment:	Screening	and Grit Re	moval, Cla	rification, Trickli	ng Filter,	UV Disinfed	tion						
			Existing Discharge Data			-	ΓBELs	Water Quality Data & WQBELs							Basis for	
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality ⁶	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis	Basis	Permit Requirement	
Settleable Solids	mL/L	Daily Max	0.3	<0.1	36 0/36	0.3	TOGS 1.3.3	-	other was	stes that w	e, industrial rill cause de for their be	position or	<u>703.2</u>	-	TBEL	
Solius		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 protective of WQS.														
Nitrogen, Ammonia	mg/L	Monthly Avg	5.6 (S)/	0.71 (S)/ 1.5 (W)	15 (S)/21 (W)	-	-	-	-	1.23 (S)/1.81 (W)	A(C)	5.1 (S)/7.4(W)	703.5	-	WQBEL	
(as N)	lb/d	Monthly Ava	-	-	-	-	-	-	-	-	-	-				
SUMMER (S) 6/1 – 10/31 WINTER (W) 11/1 – 5/31	Reporting for Ammonia has been changed from (as NH ₃) to (as N) for simpler data reporting, as this is consistent with the laboratory reporting units. Values can be converted using the equation: Ammonia (as N) = Ammonia (as NH ₃) x 0.8224. The WQS for Ammonia was determined from TOGS 1.1.1 from a pH of 7.5 and a summer and winter temperature of 25°C and 10°C, respectively. The temperature of the receiving waterbody was an assumed value and consistent with TOGS 1.3.1E. The 30Q10 flow is applied to the chronic standard and the limit expressed as a monthly average in accordance with TOGS 1.3.1E.															
Total	mg/L	Avg	Monitor		36	-	-	-	None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.						Monitor	
Phosphorus	No efflu		orus limit	is required	l as the desig	ın flow is les	ss than 1 MGD. Ti	ne effluent	monitoring	requireme	ent will be co	ntinued from	the current	permi	for informational	
	#/100	30d Geo Mean	200	58	17	200	TOGS 1.3.3	-			metric mea		703.4	_	TBEL	
Coliform, Fecal	ml	7d Geo Mean	400	98	17	400	TOGS 1.3.3	-	minimum		eed 200.	s, silali liot	<u>703.4</u>		IDLL	
		tent with TO ΓBEL are spe		effluent di	sinfection is	required se	asonally from Ma	ıy 1st - Oct	ober 31st, d	due to the	class of the	receiving wat	erbody.Fe	cal col	iform limits equal	
T / I D	mg/L	Daily Max	0.1	-	0	2.0	TOGS 1.3.3	-	-	0.005	A(C)	0.02	703.4	0.03	ML	
Total Residual Chlorine (TRC)	than th	e minimum le	evel of de	tection. Th	nerefore, an e	effluent limi	emain a permit re tation equal to th cility uses UV for	e minimun	n level of de							

USEPA Non-Major/Class 07 Municipal

Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson

and Melanie Wright, P.E. Full Technical Review

Appendix: Regulatory and Technical Basis of Permit Authorizations

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

Regulatory References

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

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

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

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

Outfall and Receiving Water Information

Impaired Waters

The NYS 303(d) List of Impaired/TMDL Waters identifies waters where specific best usages are not fully supported. The state must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) that restrict waterbody uses, in order to restore and protect such uses. SPDES permits must include effluent limitations necessary to implement a waste load allocation (WLA) of an EPA-approved TMDL (6 NYCRR 750-1.11(a)(5)(ii)), if applicable. In accordance with 6 NYCRR 750-1.13(a), permittees discharging to waters which are on the list but do not yet have a TMDL developed may be required to perform additional monitoring for the parameters causing the impairment. Accurate monitoring data is needed

Permit Writers: Sevon Thompson and Melanie Wright, P.E.

Date: February 18, 2025 v.1.28

Full Technical Review

to determine the existing capabilities of the wastewater treatment plants and to assure that 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

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

Permit Requirements

Basis for Effluent Limitations

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

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

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(I) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law8 and USEPA interpretation9 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.

⁸ American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)

⁹ 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)

USEPA Non-Major/Class 07 Municipal

Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson

and Melanie Wright, P.E. Full Technical Review

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. AWQBEL 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. Where the TBEL is more stringent than the WQBEL, the TBEL is applied as a limit in accordance with 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. There are no federal technology-based standards for toxic pollutants from POTWs. A statistical analysis of existing effluent data, as described in TOGS 1.2.1, may be used to establish other performance-based TBELs.

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 750-1.11 require that permits include limitations for all pollutants or parameters which are or may be discharged at a level which may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. Additionally, 6 NYCRR Part 701.1 prohibits the discharge of pollutants that will cause impairment of the best usages of the receiving water as specified by the water classifications at the location of discharge and at other locations that may be affected by such discharge. Water quality standards can be found under 6 NYCRR Parts 700-704. The limitations must be stringent enough to ensure that water quality standards are met at the point of discharge and in downstream waters and must be consistent with any applicable WLA which may be in effect through a TMDL for the receiving water. These and other requirements are summarized in TOGS 1.1.1, 1.3.1, 1.3.2, 1.3.5 and 1.3.6. The DEC considers a mixing zone analysis, critical flows, and reasonable potential analysis when developing a WQBEL.

Mixing Zone Analyses

In accordance with TOGS 1.3.1., the DEC may perform additional analysis of the mixing condition between the effluent and the receiving waterbody. Mixing zone analyses using plume dispersion modeling are conducted in accordance with the following:

Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson and Melanie Wright, P.E.

and Melanie Wright, P.E. Full Technical Review

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

Critical Flows

In accordance with TOGS 1.2.1 and 1.3.1, WQBELs are developed using dilution ratios that relate the critical low flow condition of the receiving waterbody to the critical effluent flow. The critical low flow condition used in the dilution ratio will be different depending on whether the limitations are for aquatic or human health protection. For chronic aquatic protection, the critical low flow condition of the waterbody is typically represented by the 7Q10 flow and is calculated as the lowest average flow over a 7-day consecutive period within 10 years. For acute aquatic protection, the critical low flow condition is typically represented by the 1Q10 and is calculated as the lowest 1-day flow within 10 years. However, NYSDEC considers using 50% of the 7Q10 to be equivalent to the 1Q10 flow. For the protection of human health, the critical low flow condition is typically represented by the 30Q10 flow and is calculated as the lowest average flow over a 30-day consecutive period within 10 years. However, NYSDEC considers using 1.2 x 7Q10 to be equivalent to the 30Q10. The 7Q10 or 30Q10 flow is used with the critical effluent flow to calculate the dilution ratio. The critical effluent flow can be the maximum daily flow reported on the permit application, the maximum of the monthly average flows from discharge monitoring reports for the past three years, or the facility design flow. When more than one applicable standard exists for aquatic or human health protection for a specific pollutant, a reasonable potential analysis is conducted for each applicable standard and corresponding critical flow to ensure effluent limitations are sufficiently stringent to ensure all applicable 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 DEC;
- 2) identify water quality criteria applicable to these pollutants;
- 3) determine if WQBELs are necessary (i.e. reasonable potential analysis (RPA)). The RPA will utilize the procedure outlined in Chapter 3.3.2 of EPA's Technical Support Document (TSD). As outlined in the TSD, for parameters with limited effluent data the RPA may include multipliers to account for effluent variability; and,
- 4) calculate WQBELs (if necessary). Factors considered in calculating WQBELs include available dilution of effluent in the receiving water, receiving water chemistry, and other pollutant sources.

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

Date: February 18, 2025 v.1.28 Permit Writers: Sevon Thompson and Melanie Wright, P.E.

and Melanie Wright, P.E. Full Technical Review

NYS ECL 17-0301. If a TMDL is in place, the facility's WLA for that pollutant is applied as the WQBEL.

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

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

Whole Effluent Toxicity (WET) Testing:

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

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

Minimum Level of Detection

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

Permit Writers: Sevon Thompson and Melanie Wright, P.E.

Date: February 18, 2025 v.1.28

Full Technical Review

Monitoring Requirements

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

Other Conditions

Mercurv

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 ubiguitous 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 DEC 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.