



Department of  
Environmental  
Conservation

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

SIC Code:	8999	NAICS Code:	814110	SPDES Number:	NY0246191
Discharge Class (CL):	02			DEC Number:	8-2448-00025/00001
Toxic Class (TX):	N			Effective Date (EDP):	EDP
Major-Sub Drainage Basin:	04 - 02			Expiration Date (ExDP):	ExDP
Water Index Number:	ONT117-27-34-P44-7-5-1	Item No.:	821 - 139	Modification Dates (EDPM):	
Compact Area:	IJC				

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:	Richard Shearer	Attention:	Debbie Lewis		
Street:	7199 Mill St. Ext.				
City:	Springwater	State:	NY	Zip Code:	14560
Email:	deblewis80@gmail.com	Phone:	585-734-3267		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL									
Name:	<b>Shearer Family Residence</b>								
Address / Location:	<b>7199 Mill St.</b>						County:	<b>Livingston</b>	
City:	<b>Springwater</b>				State:	<b>NY</b>	Zip Code:	<b>14560</b>	
Facility Location:	Latitude:	<b>42</b> °	<b>38</b> '	<b>27</b> " N	& Longitude:	<b>77</b> °	<b>36</b> '	<b>52</b> " W	
Primary Outfall No.:	<b>001</b>	Latitude:	<b>42</b> °	<b>38</b> '	<b>24</b> " N	& Longitude:	<b>77</b> °	<b>36</b> '	<b>43</b> " W
Wastewater Description:	<b>Treated Sanitary</b>	Receiving Water:	<b>Springwater Creek (Trib)</b>			NAICS:	<b>814110</b>	Class:	<b>C</b>
						Standard:		<b>C(TS)</b>	

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

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

### DISTRIBUTION:

BWP Permit Coordinator ([permit.coordinator@dec.ny.gov](mailto:permit.coordinator@dec.ny.gov))

BWP Permit Writer

RWE

RPA

EPA Region II ([Region2\\_NPDES@epa.gov](mailto:Region2_NPDES@epa.gov))

Permit Administrator:		
Address:	625 Broadway Albany, NY 12233-1750	
Signature		Date

## 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 department review to determine if numerical effluent limitations should be imposed.
Compliance Level / Minimum Level	A compliance level is an effluent limitation. A compliance level is given when the water quality evaluation specifies a Water Quality Based Effluent Limit (WQBEL) below the Minimum Level. The compliance level shall be set at the Minimum Level (ML) for the most sensitive analytical method as given in 40 CFR Part 136, or otherwise accepted by the 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 DEC's "DMR Manual for Completing the Discharge Monitoring Report for the SPDES" for information on sample frequency, type and units.

## PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Residential Wastewater	Tributary to Springwater Creek	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average	390	GPD			Monthly	Estimate	X		
pH	Daily Minimum	6.5	SU			1/Year	Grab		X	
	Daily Maximum	8.5	SU							
Temperature	Daily Maximum	Monitor	°F			1/Year	Grab		X	
CBOD <sub>5</sub>	Daily Maximum	5.0	mg/L			1/Year	Grab		X	1
Total Suspended Solids (TSS)	Daily Maximum	10	mg/L			1/Year	Grab		X	1
Settleable Solids	Daily Maximum	0.1	mL/L			1/Year	Grab		X	1
Dissolved Oxygen	Daily Minimum	7.0	mg/L			1/Year	Grab		X	
Ammonia (as N) June 1 <sup>st</sup> – Oct. 31 <sup>st</sup>	Daily Maximum	1.1	mg/L			1/Year	Grab		X	1
Ammonia (as N) Nov. 1 <sup>st</sup> – May 31 <sup>st</sup>	Daily Maximum	1.6	mg/L			1/Year	Grab		X	
Visual Observation	Monitor	---				Daily	---			2,3

### FOOTNOTES:

1. A maintenance contract is required to maintain and service the aeration unit every 6 months.
2. The tanks shall be inspected by the permittee or his agent for scum and sludge accumulation at intervals not to exceed one year's duration, and such accumulation will be removed before the depth of either exceeds one-fourth of the liquid depth so that no settleable solids or scum will leave in the septic tank effluent.
3. Visual observation is to check the area of the system, components, and effluent for any treatment problems (surface water on ground, aeration system not running, effluent not clear, etc.)

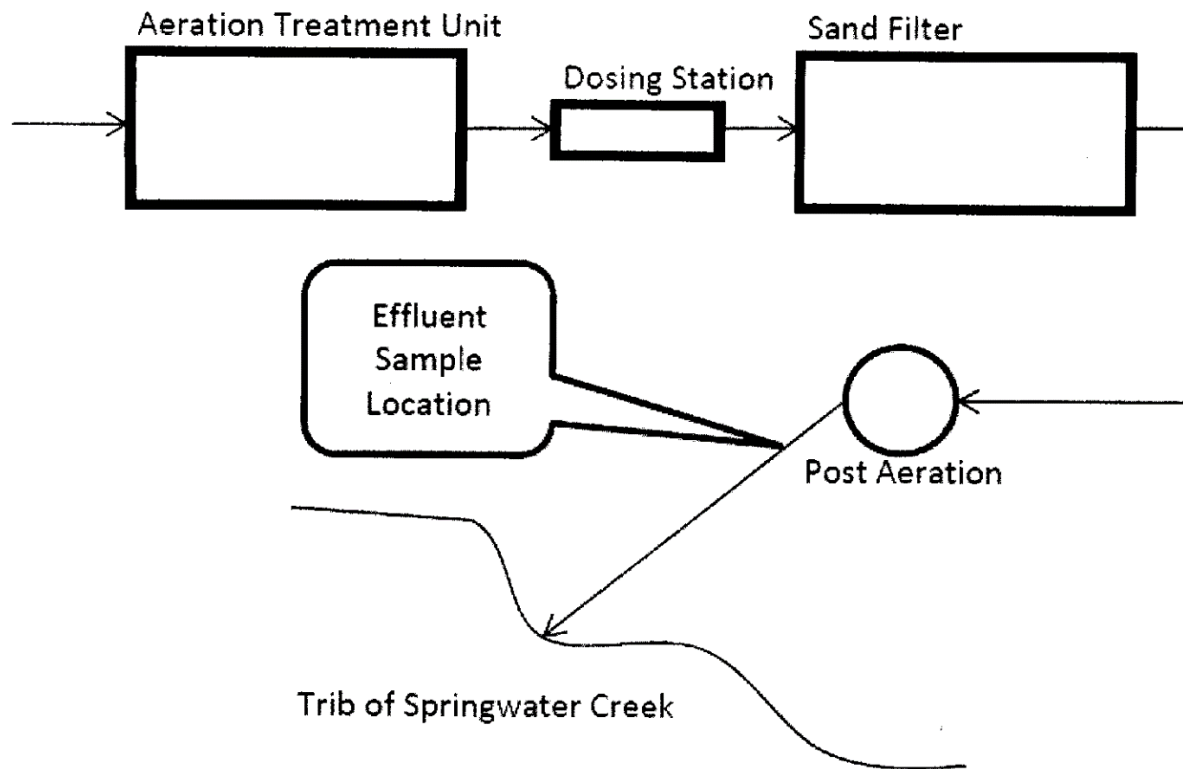
## DISCHARGE NOTIFICATION REQUIREMENTS

The permittee has obtained a waiver for the installation of signs at all outfalls. The waiver was submitted and accepted on January 14, 2025.

## MONITORING LOCATIONS

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

Effluent: Grab samples from the Post Aeration tank:



## 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 H as follows:
- B. General Conditions
- |  |   |
|--|---|
| 1. Duty to comply                                | 6 NYCRR 750-2.1(e) & 2.4                |
| 2. Duty to reapply                               | 6 NYCRR 750-1.16(a)                     |
| 3. Need to halt or reduce activity not a defense | 6 NYCRR 750-2.1(g)                      |
| 4. Duty to mitigate                              | 6 NYCRR 750-2.7(f)                      |
| 5. Permit actions                                | 6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h) |
| 6. Property rights                               | 6 NYCRR 750-2.2(b)                      |
| 7. Duty to provide information                   | 6 NYCRR 750-2.1(i)                      |
| 8. Inspection and entry                          | 6 NYCRR 750-2.1(a) & 2.3                |
- C. Operation and Maintenance
- |                                   |                                      |
|-----------------------------------|--------------------------------------|
| 1. Proper Operation & Maintenance | 6 NYCRR 750-2.8                      |
| 2. Bypass                         | 6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7 |
| 3. Upset                          | 6 NYCRR 750-1.2(a)(94) & 2.8(c)      |
- D. Monitoring and Records
- |                           |  |
|---------------------------|--|
| 1. Monitoring and records | 6 NYCRR 750-2.5(a)(2), 2.5(a)(6), 2.5(c)(1), 2.5(c)(2), & 2.5(d) |
| 2. Signatory requirements | 6 NYCRR 750-1.8 & 2.5(b)   |
- E. Reporting Requirements
- |   |                                   |
|---|-----------------------------------|
| 1. Reporting requirements for non-POTWs | 6 NYCRR 750-2.5, 2.6, 2.7, & 1.17 |
| 2. Anticipated noncompliance            | 6 NYCRR 750-2.7(a)                |
| 3. Transfers                            | 6 NYCRR 750-1.17                  |
| 4. Monitoring reports                   | 6 NYCRR 750-2.5(e)                |
| 5. Compliance schedules                 | 6 NYCRR 750-1.14(d)               |
| 6. 24-hour reporting                    | 6 NYCRR 750-2.7(c) & (d)          |
| 7. Other noncompliance                  | 6 NYCRR 750-2.7(e)                |
| 8. Other information                    | 6 NYCRR 750-2.1(f)                |
- F. Sludge Management
- The permittee shall comply with all applicable requirements of 6 NYCRR Part 360.
- G. SPDES Permit Program Fee
- The permittee shall pay to the DEC 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.
- H. 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, sequestrants, and settling aids.
1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized 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 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.ny.gov/permits/93245.html>

## RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- A. The monitoring information required by this permit shall be retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent.
- B. **Annual SPDES Monitoring Reports:** An annual report shall be submitted to DEC each year. The report shall summarize information for January to December of the previous year and shall be submitted electronically, or in hardcopy format, utilizing the SPDES Annual Report Form available on the DEC's website.

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

Department of Environmental Conservation  
Regional Water Engineer, Region 8  
7291 Coon Road, Bath, New York, 14810

Phone: (607) 776-2165

- C. 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.
- D. 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.
- E. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- F. 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.
- G. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

Permittee: Richard Shearer  
Facility: Shearer Family Residence  
SPDES Number: NY0246191  
USEPA Non-Major/Class 02 PCI

Date: **Date** v.1.25  
Permit Writer: Chris Cicora  
Water Quality Reviewer: Abigail Johnson  
Full Technical Review

# **SPDES Permit Fact Sheet**

## **Richard Shearer**

### **Shearer Family Residence**

#### **NY0246191**



## Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) permit has been drafted for the Shearer Family Residence. The changes to the permit are summarized below:

- Updated permit format, definitions, and general conditions
- Added Temperature monitoring
- Added Nitrite monitoring
- Added a Monitoring Locations page

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

## Administrative History

2/28/2019 The SPDES permit expired.

1/28/2020 Richard Shearer submitted a complete PCI form.

## Facility Information

This is a residential property. The design flow of the system is 390 GPD. The treatment system consists of a 3-chamber aeration system (primary settling, aeration, final settling), followed by a buried sand filter, and post aeration prior to discharging to a tributary of Springwater Creek. Effluent consists of treated residential sanitary wastewater. The outfall is located south-east of the house

Sludge is pumped from the chambers periodically by a septic hauler and transported to a WWTP for additional treatment.

### Existing Effluent Quality

The [Pollutant Summary Table](#) presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from the annual report submitted by the permittee for 10/30/2019.

### Interstate Water Pollution Control Agencies

Outfall(s) 001 is located within the Great Lakes watershed and International Joint Commission (IJC) compact area. [Appendix Link](#)

## Receiving Water Information

The facility discharges via the following outfall:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	8999	Treated Sanitary	Tributary of Springwater Creek , Class C(TS)

**Reach Description:** Unnamed minor tributary that feeds Springwater Creek (ONT117-27-34-P44-7-5-1). Springwater Creek then flows north to Hemlock Lake and then on to the Genesee River.



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See the [Outfall and Receiving Water Summary Table](#) and [Appendix](#) for additional information.

### Critical Receiving Water Data & Mixing Zone

Intermittent stream effluent limits (ISEL) have been applied due regional knowledge of the stream and the small drainage watershed at the discharge point; ISEL limits will continue to be applied. Consistent with TOGS 1.3.1, the water quality standards will be applied as end-of-pipe limitations with no mixing or dilution.

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

## Permit Requirements

The technology based effluent limitations ([TBELs](#)), water quality-based effluent limitations ([WQBELs](#)), [Existing Effluent Quality](#) and a discussion of the selected effluent limitation for each pollutant present in the discharge are provided in the [Pollutant Summary Table](#).

### Anti-backsliding

The limitations contained in the permit are at least as stringent as the previous permit limits and there are no instances of backsliding.

[Appendix Link](#)

### 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)<sup>1</sup> 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. A waiver was granted January 14, 2025.

### Schedule of Additional Submittals

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

- Annual Report

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<sup>1</sup> As prescribed by 6 NYCRR Part 617

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## OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (GPD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	42° 38' 27" N	77° 36' 52" W	Tributary to Springwater Creek	C(TS)	ONT 117-27-34-P44-7-5-1 PWL: 0402-0070	04/02	-		ISEL		390	No Dilution		

## POLLUTANT SUMMARY TABLE

### Outfall 001

Outfall #	001	Description of Wastewater: Residential Wastewater													
		Type of Treatment: Settling basin with Aerobic Biological treatment and Sand filtration.													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>2</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data was obtained from the application. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	390	- Actual Average	-	390	Design Flow	Narrative: No alterations that will impair the waters for their best usages.				<a href="#">703.2</a>	-	Design Flow	
	The flow limit is set at the design flow of the wastewater treatment facility.														
pH	SU	Minimum	6.5	7.1 Actual Min	0/1	6.0	40 CFR 133.102	-	-	6.5 – 8.5	Range	6.5 - 8.5	<a href="#">703.3</a>	-	WQBEL
		Maximum	8.5	7.1 Actual Max		9.0									
	Consistent with ECL 17-0509, TBELs for facilities treating sanitary sewage are reflective of secondary treatment standards . Given the available dilution, an effluent limitation equal to the WQS is appropriate.														
Temperature	°F	Daily Max	-	-	-	Monitor	750-1.13 Monitor	-	Narrative (Trout): No discharge at a temperature over 70F (21C) shall be permitted at any time to streams classified for trout			<a href="#">704.2</a>	-	Monitor	
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions. This requirement is new.														

<sup>2</sup> 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)

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Outfall #	001	Description of Wastewater: Residential Wastewater													
		Type of Treatment: Settling basin with Aerobic Biological treatment and Sand filtration.													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>2</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Dissolved Oxygen (DO)	mg/L	Daily Min	7.0	9.9 Actual Min	0/1	-	-	-	-	(TS) 7.0 mg/L	Narrative	-	<a href="#">703.3</a>	-	ISEL
	Consistent with TOGS 1.3.1B, intermittent stream effluent limits (ISEL) are applied to effluent discharges to streams where little or no streamflow is available for dilution. These limits represent the highest degree of treatment that can reasonably be achieved by a wastewater treatment facility treating domestic type waste.														
5-day Carbonaceous Biochemical Oxygen Demand (CBOD)	mg/L	Daily Max	5.0	<4 Actual Max	0/1	30	40 CFR 133.102	-	See Dissolved Oxygen		5.0	<a href="#">703.3</a>	-	ISEL	
	Consistent with TOGS 1.3.1B, intermittent stream effluent limits (ISEL) are applied to effluent discharges to streams where little or no streamflow is available for dilution.														
Total Suspended Solids (TSS)	mg/L	Daily Max	10	<4 Actual Max	0/1	30	40 CFR 133.102	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.		<a href="#">703.2</a>	-	ISEL		
	Consistent with TOGS 1.3.1B, intermittent stream effluent limits (ISEL) are applied to effluent discharges to streams where little or no streamflow is available for dilution.														
Settleable Solids	mL/L	Daily Max	0.1	<0.1	0/1	0.1	TOGS 1.3.1B	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages		<a href="#">703.2</a>	-	ISEL		
	Consistent with TOGS 1.3.1.B discharges to intermittent streams should receive the highest degree of treatment that can reasonably be achieved by practical technology. An effluent limitation equal to 0.1 mL/L daily max is therefore appropriate.														
Nitrogen, Ammonia (as N)  SUMMER 6/1 – 10/31	mg/L	Daily Max	1.6 As N	-	-	-	-	-	-	1.1	A(C)	1.1	<a href="#">703.5</a>	-	WQBEL
	The WQS for Ammonia was determined from TOGS 1.1.1 from a pH of 7.5 and a summer temperature of 21 °C. The temperature of the receiving waterbody was an assumed value for Trout streams consistent with 6 NYCRR 704.2.  Reporting for Ammonia has been changed from (as NH <sub>3</sub> ) 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 <sub>3</sub> ) x 0.8224.														

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Outfall #	001	Description of Wastewater: Residential Wastewater													
		Type of Treatment: Settling basin with Aerobic Biological treatment and Sand filtration.													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>2</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Nitrogen, Ammonia (as N)	mg/L	Daily Max	1.6 As N	-	0/1	-	-	-	-	1.9	A(C)	1.9	<a href="#">703.5</a>	-	Antibacksliding
			The WQS for Ammonia was determined from TOGS 1.1.1 from a pH of 7.5 and a summer temperature of 10 °C. The temperature of the receiving waterbody was an assumed value and consistent with TOGS 1.3.1E.												
WINTER 11/1 – 5/31			Reporting for Ammonia has been changed from (as NH <sub>3</sub> ) 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 <sub>3</sub> ) x 0.8224.												
Additional Pollutants Detected															
Total Dissolved Solids (TDS)	mg/l	Daily Max	-	280	0/1	-	-	-	-	500	Narrative	No Reasonable Potential	<a href="#">703.2</a>		No Limitation
			The ambient TDS concentration was assumed to be negligible. The effluent value of 280 mg/L consisted of 1 sample collected as part of the PCI application. As the receiving stream is intermittent in nature, the effluent concentration is assumed to be the stream concentration. Therefore, no WQBEL is specified.												
Total Phosphorus (as P)	mg/l	Daily Max	-	2.6	0/1	-	-	-	Narrative: None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.			<a href="#">703.2</a>	-	No Limitation	
			The facility is outside of a TMDL watershed and below the regulatory threshold in TOGS 1.3.6. Therefore, no WQBEL is specified.												
Total Kjeldahl Nitrogen (as N)	mg/l	Daily Max	-	0.62	0/1	-	-	-	-	-	-	-	-	-	No Limitation
			A numeric water quality standard does not exist for Class C waterbodies. Therefore, no limitation or monitoring is specified.												
Nitrate (as N)	mg/l	Daily Max	-	4.7	0/1	-	-	-	-	-	-	-	-	-	No Limitation
			A numeric water quality standard does not exist for Class C waterbodies. Therefore, no limitation or monitoring is specified.												
Nitrite (as N)	mg/l	Daily Max	-	<0.1	0/1	Monitor	750-1.13 Monitor	-	-	0.02	A(C)	0.02	<a href="#">703.5</a>	-	Monitor
			There is not enough data to determine if there is reasonable potential to violate the WQS. Therefore, monitoring is specified.												
Total Nitrogen (as N)	mg/l	Daily Max	-	5.3	0/1	-	-	-	-	-	-	-	-	-	No Limitation
			A numeric water quality standard does not exist for Class C waterbodies. Therefore, no limitation or monitoring is specified.												
Coliform, Fecal	#/100 ml	Daily Max	-	310	0/1	-	-	-	Narrative: The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.			<a href="#">703.4</a>	-	No Limitation	
			The treatment system does not have disinfection capabilities, and the Department has not determined this is necessary for this system.												

## 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
  - 40 CFR, Chapter I, subchapters D, N, and O
- State environmental regulations
  - 6 NYCRR Part 621
  - 6 NYCRR Part 750
  - 6 NYCRR Parts 700 - 704 – Best use and other requirements applicable to water classes
  - 6 NYCRR Parts 800 – 941 - Classification of individual surface waters
- NYSDEC water program policy, referred to as Technical and Operational Guidance Series (TOGS)
- USEPA Office of Water Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E

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

SPDES Permit Requirements	Regulatory Reference
Anti-backsliding	6 NYCRR 750-1.10(c)
Best Management Practices (BMPS) for CSOs	6 NYCRR 750-2.8(a)(2)
Environmental Benefits Permit Strategy (EBPS)	6 NYCRR 750-1.18, NYS ECL 17-0817(4), TOGS 1.2.2 (revised January 25,2012)
Exceptions for Type I SSO Outfalls (bypass)	6 NYCRR 750-2.8(b)(2), 40 CFR 122.41
Mercury Multiple Discharge Variance	Division of Water Program Policy 1.3.10 (DOW 1.3.10)
Mixing Zone and Critical Water Information	TOGS 1.3.1 & Amendments
PCB Minimization Program	40 CFR Part 132 Appendix F Procedure 8, 6 NYCRR 750-1.13(a) and 750-1.14(f), and TOGS 1.2.1
Pollutant Minimization Program (PMP)	6 NYCRR 750-1.13(a), 750-1.14(f), TOGS 1.2.1
Schedules of Compliance	6 NYCRR 750-1.14
Sewage Pollution Right to Know (SPRTK)	NYS ECL 17-0826-a, 6 NYCRR 750-2.7
State Administrative Procedure Act (SAPA)	State Administrative Procedure Act Section 401(2), 6 NYCRR 621.11(l)
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 Request for Additional Information	NYCRR 750-2.1(i)

### Outfall and Receiving Water Information

#### Existing Effluent Quality

The existing effluent quality is determined from a statistical evaluation of effluent data in accordance with TOGS 1.2.1 and the USEPA Office of Water, Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E (TSD). The existing effluent quality is equal to the 95<sup>th</sup> (monthly average) and 99<sup>th</sup> (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(f) 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 law<sup>3</sup> and USEPA interpretation<sup>4</sup> anti-backsliding requirements do not apply should a revision to the final effluent limitation take effect before the scheduled date of compliance for that final effluent limitation.

### Antidegradation Policy

New York State implements the antidegradation portion of the CWA based upon two documents: (1) Organization and Delegation Memorandum #85-40, "Water Quality Antidegradation Policy" (September 9, 1985); and, (2) TOGS 1.3.9, "Implementation of the NYSDEC Antidegradation Policy – Great Lakes Basin (Supplement to Antidegradation Policy dated September 9, 1985) (undated)." The permit for the facility contains effluent limitations which ensure that the existing best usage of the receiving waters will be maintained. To further support the antidegradation policy, SPDES applications have been reviewed in accordance with the State Environmental Quality Review Act (SEQR) as prescribed by 6 NYCRR Part 617.

### Effluent Limitations

In developing a permit, the Department determines the technology-based effluent limitations (TBELs) and then evaluates the water quality expected to result from technology controls to determine if any exceedances of water quality criteria in the receiving water might result. If there is a reasonable potential for exceedances of water quality criteria to occur, water quality-based effluent limitations (WQBELs) are developed. A WQBEL is designed to ensure that the water quality standards of receiving waters are met. In general, the CWA requires that the effluent limitations for a particular pollutant are the more stringent of either the TBEL or WQBEL.

#### *Technology-based Effluent Limitations (TBELs) for Industrial Facilities*

A TBEL requires a minimum level of treatment for industrial point sources based on currently available treatment technologies or Best Management Practices (BMPs). CWA sections 301(b) and 402, ECL sections 17-0509, 17-0809 and 17-0811, and 6 NYCRR 750-1.11 require technology-based controls on effluents. TBELs are set based upon an evaluation of New Source Performance Standards (NSPS), Best Available Technology Economically Achievable (BAT), Best Conventional Pollutant Control Technology (BCT), Best Practicable Technology Currently Available (BPT), and Best Professional Judgment (BPJ).

#### USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

In many cases, BPT, BCT, BAT and NSPS limitations are based on effluent guidelines developed by USEPA for specific industries, as promulgated under 40 CFR Parts 405-471. Applicable

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

<sup>4</sup> U.S. EPA, Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; 65 Fed. Reg. 31682, 31704 (May 18, 2000); Proposed Water Quality Guidance for the Great Lakes System, 58 Fed. Reg. 20802, 20837 & 20981 (April 16, 1993)



guidelines, pollutants regulated by these guidelines, and the effluent limitation derivation for facilities subject to these guidelines is in the [USEPA Effluent Limitation Guideline Calculations Table](#).

#### *Best Professional Judgement (BPJ)*

For substances that are not explicitly limited by regulations, the permit writer is authorized to use BPJ in developing TBELs. Consistent with section 402(a)(1) of the CWA, and NYS ECL section 17-0811, the DEC is authorized to issue a permit containing "any further limitations necessary to ensure compliance with water quality standards adopted pursuant to state law". BPJ limitations may be set on a case-by-case basis using any reasonable method that takes into consideration the criteria set forth in 40 CFR 125.3. Applicable state regulations include 6 NYCRR 750-1.11. The BPJ limitation considers the existing technology present at the facility, the statistically calculated existing effluent quality for that parameter, and any unique or site-specific factors relating to the facility. Technology limitations generally achievable for various treatment technologies are included in TOGS 1.2.1, Attachment C. These limitations may be used for the listed parameters when the technology employed at the facility is listed.

#### *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.

#### *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 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.

#### *Water Quality-Based Effluent Limitations (WQBELs) for Discharges to Groundwater*

The procedure for developing WQBELs includes identifying 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. For groundwater discharges, if the expected concentration of the pollutant of concern in the receiving water may exceed the ambient groundwater 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 for the pollutant is required.

WQBELs for groundwater discharges are based on the groundwater effluent limits set forth in 6 NYCRR Part 703 (Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations) except as noted in 6 NYCRR 702.21. TOGS 1.1.1 provides a listing of groundwater effluent limitations for substances having an ambient water quality standard or guidance value. Groundwater effluent limitations are applied at the point of discharge to the groundwater distribution system.



For land treatment systems with no accessible final sampling points, such as constructed wetland treatment systems or buried sand filters, permit limitations for groundwater discharges are typically based on ambient groundwater quality standards or guidance values applied at representative down gradient monitoring well(s). Limitations at the downgradient sampling point are set at the Class GA ambient groundwater standards, rather than at the groundwater effluent limits promulgated under 6 NYCRR 703.6, as compliance is determined based upon the concentrations present in the downgradient groundwater monitoring well at the groundwater interface.

Class GA standards are established for the protection of sources of drinking water designated as Health (Water Source) or H(WS) in TOGS 1.1.1. As such, effluent limitations based on aquatic life criteria and WET testing requirements are not applicable to groundwater discharges.

#### *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.

#### *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.