# State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

| | | | | | |
|---|---|---|---|---|---|
| SIC Code: | **4952** | NAICS Code: | **221320** | SPDES Number: | **NY0110574** |
| Discharge Class (CL): | **07** | | | DEC Number: | **3-4826-00018/00002** |
| Toxic Class (TX): | **N** | | | Effective Date (EDP): | **EDP** |
| Major-Sub Drainage Basin: | **14 - 01** | | | Expiration Date (ExDP): | **ExDP** |
| Water Index Number: | **D-53** | Item No.: | **815-345** | Modification Dates (EDPM): | |
| Compact Area: | **DRBC** | | | | |

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: | **Town of Delaware** | Attention: | **Scott Dubois, Town Supervisor** | | |
| Street: | **PO Box 129** | | | | |
| City: | **Hortonville** | State: | **NY** | Zip Code: | **12745** |
| Email: | **supervisor@townofdelaware.org** | Phone: | **845-887-5250** | | |

is authorized to discharge from the facility described below:

| FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Name: | **Callicoon Sewer District #1** | | | | | | | | | | | | | | |
| Address / Location: | **36 Viaduct Road** | | | | | | | | | | | County: | **Sullivan** | | |
| City: | **Delaware** | | | | | | State: | **NY** | | | | Zip Code: | **12723** | | |
| Facility Location: | | Latitude: | **41** | ° | **45** | ' | **47.9** | " N | & Longitude: | **75** | ° | **03** | ' | **13.8** | " W |
| Primary Outfall No.: | **001** | Latitude: | **41** | ° | **45** | ' | **51.7** | " N | & Longitude: | **75** | ° | **03** | ' | **15.4** | " W |
| Outfall Description: | **Treated Sanitary** | Receiving Water: | **Callicoon Creek** | | | | | Class: | **C** | | | Standard: | **T** | | |

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)
BWP Permit Writer
RWE
RPA
EPA Region II (Region2_NPDES@epa.gov)
NYSEFC (sara.tully@efc.ny.gov)
Sullivan County Health
Delaware River Basin Commission

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

# Contents

# 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. |

# PERMIT LIMITS, LEVELS AND MONITORING

| OUTFALL | LIMITATIONS APPLY | RECEIVING WATER | EFFECTIVE | EXPIRING |
|---|---|---|---|---|
| 001 | All Year (Unless Otherwise Noted) | Callicoon Creek | EDP | ExDP |

| PARAMETER | EFFLUENT LIMITATION | | | | | MONITORING REQUIREMENTS | | | | FN |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Location | | |
| | Type | Limit | Units | Limit | Units | Sample Frequency | Sample Type | Inf. | Eff. | |
| Flow | Monthly Average | 0.12 | MGD | | | Continuous | Recorder | | X | |
| pH | Daily Minimum | 6.0 | SU | | | 1/day | Grab | | X | |
| | Daily Maximum | 9.0 | SU | | | | | | | |
| Temperature | Daily Maximum | Monitor | ºF | | | 1/day | Grab | | X | |
| $BOD_5$ | Monthly Average | 30 | mg/L | 30 | lbs/d | 1/month | 6-hr. Comp. | X | X | 1 |
| $BOD_5$ | 7-Day Average | 45 | mg/L | 45 | lbs/d | 1/month | 6-hr. Comp. | | X | |
| Total Suspended Solids (TSS) | Monthly Average | 30 | mg/L | 30 | lbs/d | 1/month | 6-hr. Comp. | X | X | 1 |
| Total Suspended Solids (TSS) | 7-Day Average | 45 | mg/L | 45 | lbs/d | 1/month | 6-hr. Comp. | | X | |
| Settleable Solids | Daily Maximum | 0.3 | mL/L | | | 1/day | Grab | | X | |
| Ammonia (as N) | Monthly Average | 20 | mg/L | | | 1/month | Grab | | X | 3 |
| Total Phosphorus (as P) SUMMER 5/1 – 9/30 | Monthly Average | Monitor | mg/L | | | 1/month | 6-hr. Comp. | | X | 3 |
| Total Kjeldahl Nitrogen (as N) SUMMER 5/1 – 9/30 | Monthly Average | Monitor | mg/L | | | 1/month | Grab | | X | 3 |
| Nitrate + Nitrite (as N) SUMMER 5/1 – 9/30 | Monthly Average | Monitor | mg/L | | | 1/month | Grab | | X | 3 |
| Total Dissolved Solids | Monthly Average | Monitor | mg/L | | | 1/quarter | Grab | | X | 3, 4 |

| EFFLUENT DISINFECTION Required All Year | | Limit | Units | Limit | Units | Sample Frequency | Sample Type | Inf. | Eff. | FN |
|---|---|---|---|---|---|---|---|---|---|---|
| Coliform, Fecal | 30-Day Geometric Mean | 200 | No./ 100 mL | | | 1/month | Grab | | X | |
| Coliform, Fecal | 7-Day Geometric Mean | 400 | No./ 100 mL | | | 1/month | Grab | | X | |
| Chlorine, Total Residual | Daily Maximum | 0.16 | mg/L | | | 1/day | Grab | | X | 2 |

**FOOTNOTES:**

1. Effluent shall not exceed 15% and 15% of influent concentration values for $BOD_5$ & 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.

3. This is a Delaware River Basin Commission requirement.

4. Quarterly samples shall be collected in calendar quarters (Q1 – January 1st to March 31st; Q2 – April 1st to June 30th; Q3 – July 1st to September 30th; Q4 – October 1st to December 31st).

# SPECIAL CONDITIONS: DELAWARE RIVER BASIN COMMISSION

The following conditions are required by the Delaware River Basin Commission (DRBC).

1. Prior to the permittee initiating any substantial alterations or additions to the existing WWTP as defined in Section 3.10.3.A.2.a.16 of the Delaware River Basin Commission's Water Quality Regulations (18CFR Part 410), a No Measurable Change to Existing Water Quality Analysis must be conducted by the Delaware River Basin Commission. The No Measurable Change to Existing Water Quality Analysis shall be conducted prior to final design to ensure that the Commission can provide the permittee with proposed effluent limitations to be included in a future SPDES permit for Special Protection Waters specific parameters as guidance for treatment design purposes. The permittee is encouraged to contact DRBC staff during the planning stages of any project that meets the definition of substantial alteration or additions, as per DRBC.

2. Except as otherwise authorized by this permit, if the permittee seeks relief from any limitation based upon a Delaware River Basin Commission water quality standard or minimum treatment requirement, the permittee shall apply for approval from the Delaware River Basin Commission Executive Director and NYSDEC for a permit modification.

3. Prior to accepting for treatment and discharge 50,000 gallons per day or more (as a daily average) of wastewater that is imported from outside the Delaware River Basin, the permittee shall first apply to and obtain approval from the Delaware River Basin Commission.

4. The permittee may conduct a study to determine if specific conductance may be substituted for TDS in the permit. The study should include effluent specific data to be used to determine a correlation between TDS and specific conductance. Upon review, the Delaware River Basin Commission will determine if the permit may be modified to allow the substitution of specific conductivity for TDS monitoring. The TDS limit would then be supplanted by a specific conductance limit in the permit.

5. The WWTP shall have available standby power facilities unless it can be shown that a proposed discharge can be interrupted for an extended period with no threat to the water quality of Delaware River Basin Commission (DRBC)-designated Special Protection Waters (SPW). 18 CFR Part 410 Section 3.10.3. A. 2.d.1.

6. In the event that the WWTP is not staffed 24 hours every day, the WWTP shall have a remote alarm that will continuously monitor plant operations whenever the plant is not staffed. The alarm system shall be designed to alert someone available with authority and knowledge to take appropriate action. 18 CFR Part 410 Section 3.10.3. A. 2.d.2.

7. The permittee shall prepare and implement an emergency management plan (EMP) following the guidance provided in the Water Pollution Control Federation's Manual of Practice SM-8, Emergency Planning for Municipal Wastewater Facilities, the U.S. EPA's Design Criteria for Mechanical, Electric and Fluid System and Component Reliability or other suitable manuals. Emergency management plans shall include an emergency notification procedure covering all affected downstream users. 18 CFR Part 410 Section 3.10.3. A. 2.d.4.

8. Based upon the written recommendation of the DRBC staff, when the discharge is operated in accordance with the provisions and conditions established by this permit, then with respect to effluent quality and stream quality objectives, the project does not substantially impair or conflict with the Commission's Comprehensive Plan.

# STORMWATER POLLUTION PREVENTION REQUIREMENTS

**NO EXPOSURE CERTIFICATION**

The permittee submitted a Conditional Exclusion for No Exposure Form on 12/15/2023, certifying that all industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt, and stormwater runoff except as allowed under 40 CFR 122.26(g)(2). The permittee must maintain a condition of no exposure for the exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to stormwater, the permittee must notify the Regional Water Engineer. The permittee must recertify a condition of no exposure every five years by completing the “No Exposure Certification Form” found on the DEC website.

# MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

On 12/15/2023, the permittee submitted 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.

1. General - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below.
2. MMP Elements - 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. Conditional Exclusion Certification - 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 Outfall 001 for 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 **AND** 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. Control Strategy - The control strategy must contain the following minimum elements:

    i. Equipment and Materials – 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. Bulk Chemical Evaluation – 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.



[1] Neither 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.
[2] CSO permits are included under the 05 and 07 permit classifications.
[3] These are overflow retention facilities (ORFs) and are included under the 05 and 07 permit classifications.
[4] CIUs include those listed under Federal Regulation in 40 CFR Part 400.

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

c. **Status Report** - An **annual** status report must be developed and maintained on site, in accordance with the Schedule of Additional Submittals, 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.

# 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:

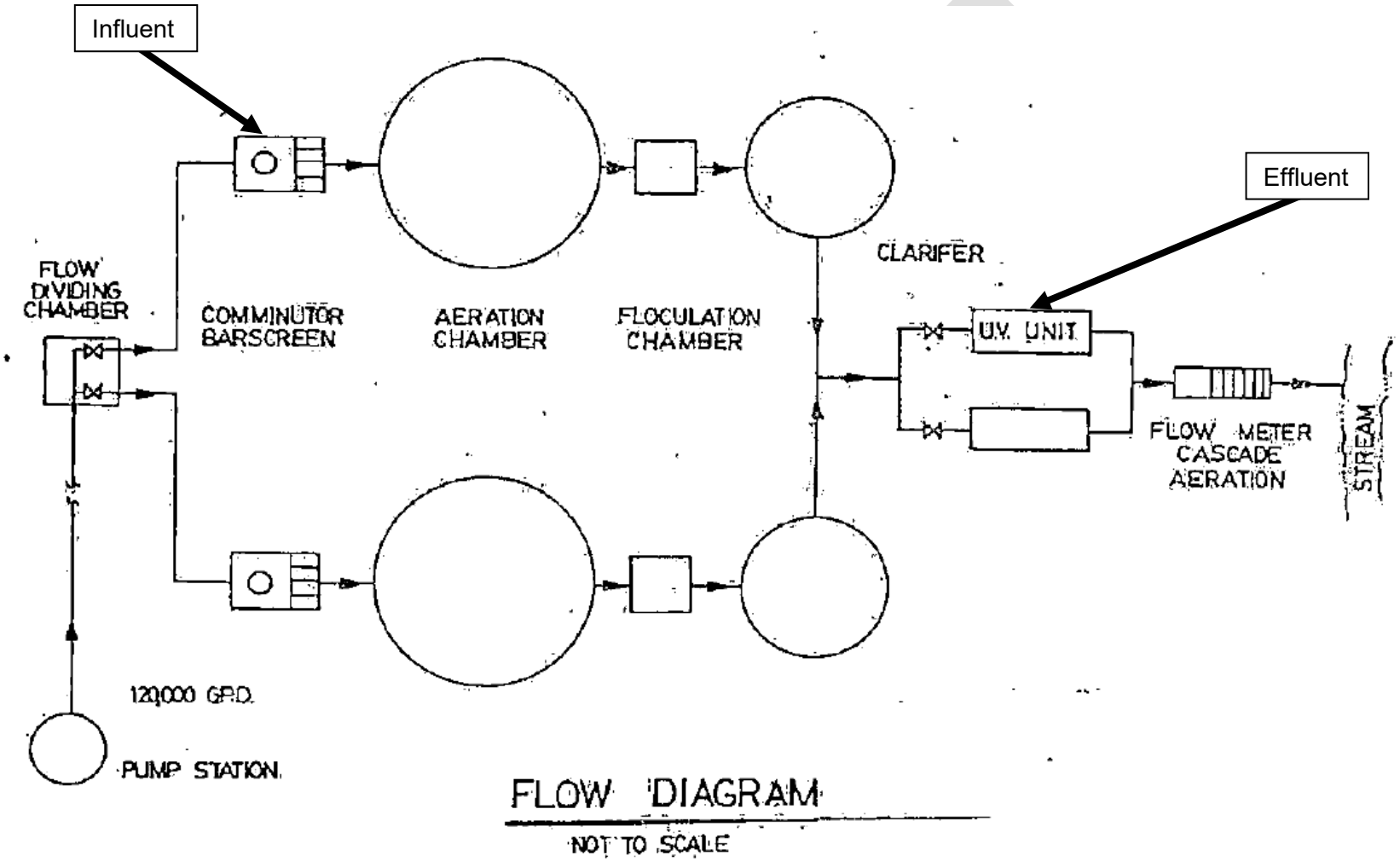
NYSDEC Division of Water Regional Phone: ( ) - ### - ####

(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.

# 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:



# 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 | 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 | 6 NYCRR 750-2.5, 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) |
| 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.

# GENERAL REQUIREMENTS (continued)

2. Notification Requirement for POTWs
   All POTWs shall provide adequate notice to the Department and the USEPA of the following:

   a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; or
   b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
   c. For the purposes of this paragraph, adequate notice shall include information on:
      i. the quality and quantity of effluent introduced into the POTW, and
      ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

   POTWs shall submit a copy of this notice to the United States Environmental Protection Agency, at the following address:
   U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866

G. Sludge Management
   The permittee shall comply with all applicable requirements of 6 NYCRR Part 360.

H. SPDES Permit Program Fee
   The permittee shall pay to the Department an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the 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, sequestrants, 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.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 DEC or its designated agent.

B. Discharge Monitoring Reports (DMRs): 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.

C. Additional information required to be submitted by this permit shall be summarized and reported electronically to the Regional Water Engineer and Bureau of Water Permits at the following email addresses:

| | |
|---|---|
| Department of Environmental Conservation<br>Division of Water, Bureau of Water Permits<br>625 Broadway, Albany, New York 12233-3505 | Email: SPDESApp@dec.ny.gov<br><br>Phone: (518) 402-8111 |
| Department of Environmental Conservation<br>Regional Water Engineer, Region 3<br>21 South Putt Corners Road, New Paltz, New York, 12561-1696 | Email: DOW.r3@dec.ny.gov<br><br>Phone: (845) 256-3000 |

D. Bypass and Sewage Pollutant Right to Know Reporting: 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.

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 | STORMWATER NO EXPOSURE CERTIFICATION<br>Permittee must recertify every five years a condition of no exposure to stormwater in order to continue to qualify for the no exposure exclusion. The No Exposure Certification Form can be found on the DEC website. | 12/15/2028, and every 5 years thereafter |
| 001 | MERCURY - CONDITIONAL EXCLUSION CERTIFICATION<br>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. | 12/15/2028, and every 5 years thereafter |
| 001 | MERCURY MINIMIZATION PLAN<br>The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit. | ***Maintained Onsite***<br>EDP + 12 months, annually thereafter |

**Unless noted otherwise, the above actions are one-time requirements.**

F. Monitoring and analysis shall be conducted using sufficiently sensitive test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

G. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.

H. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

I. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.

J. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

# SPDES Permit Fact Sheet
# Town of Delaware
# Callicoon Sewer District #1
# NY0110574

# Contents

## Summary of Permit Changes

A new State Pollutant Discharge Elimination System (SPDES) EBPS permit renewal has been drafted for the Callicoon Sewer District #1. The changes to the permit are summarized below:

- Updated permit format, definitions, and general conditions
- Updated temperature requirements from a limit to monitor.
- Added Nitrogen Ammonia (as N) limit of 20 mg/L as a monthly average
- Added monitoring requirements for Total Kjeldahl Nitrogen (as N), Total Phosphorus, Total Dissolved solids, and Nitrate + Nitrite.

**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

3/1/2003 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 3/1/2008. The 2003 permit, along with all subsequent modifications,has formed the basis of this permit.

The permit was administratively renewed in 2008 and again in 2013, 2018, and 2023. The current permit administrative renewal is effective until 2/29/2028.

1/2/2008 Permit was modified to include discharge notification act requirements and secondary treatment requirements.

9/12/2023 Department issued a Request for Information (RFI) to modify and renew the SPDES permit due to the facility's EBPS score[1]. At the time of the RFI, the facility had an EBPS score of 99.

12/15/2023 The Town of Delaware submitted a NY-2A permit application.

The Notice of Complete Application, published in the Environmental Notice Bulletin 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).

The current 0.12 MGD treatment plant consists of:

- Preliminary Treatment: Screening
- Primary Treatment: Flocculation
- Secondary Treatment: Clarifier
- Disinfection: Ultraviolet Light

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

Sludge is digested aerobically, dried, and hauled to a landfill.

The primary outfall (Outfall 001) is located 48 feet from the bank of the Callicoon Creek and consists of a 12.0-inch diameter pipe. Discharge from the outfall flows down the hill side and in to the Callicoon Creek from the bank.

The facility does not have any planned improvements.

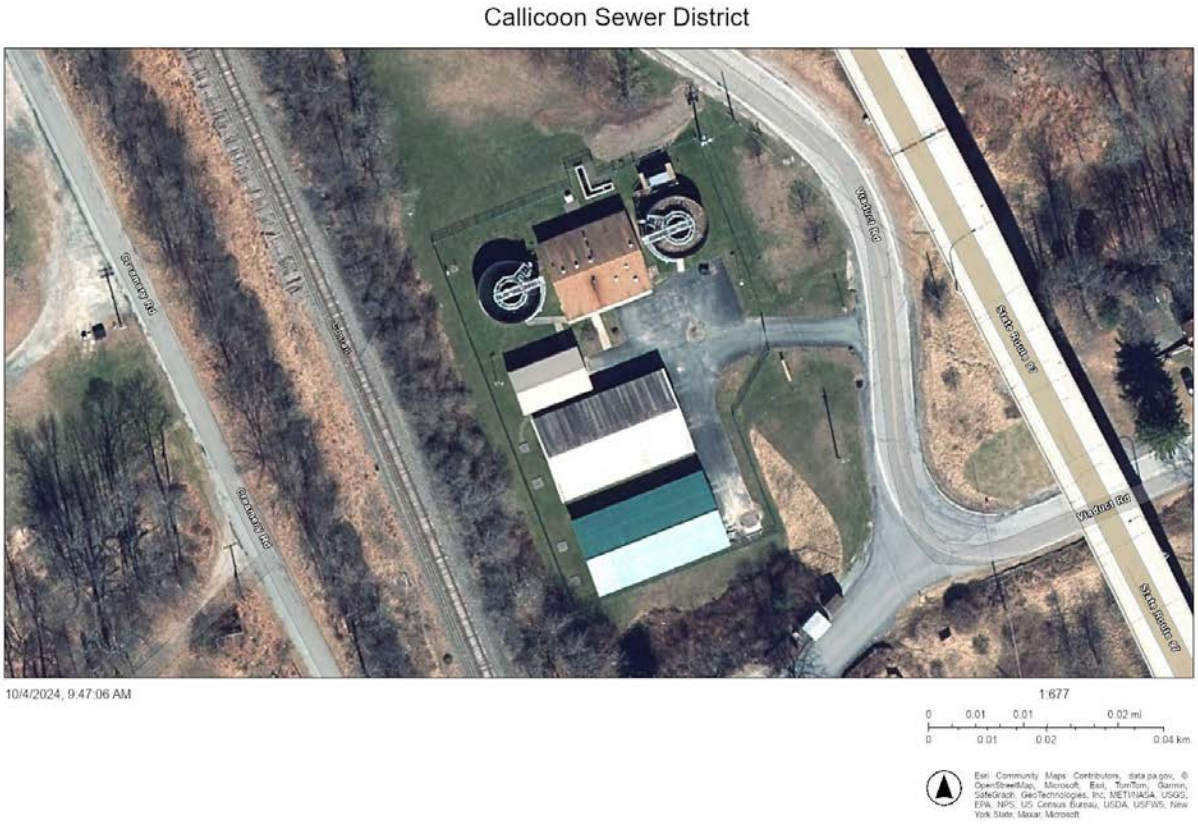
Facility outflow

Source: Permittee submitted

Outflow mouth to Callicoon Creek

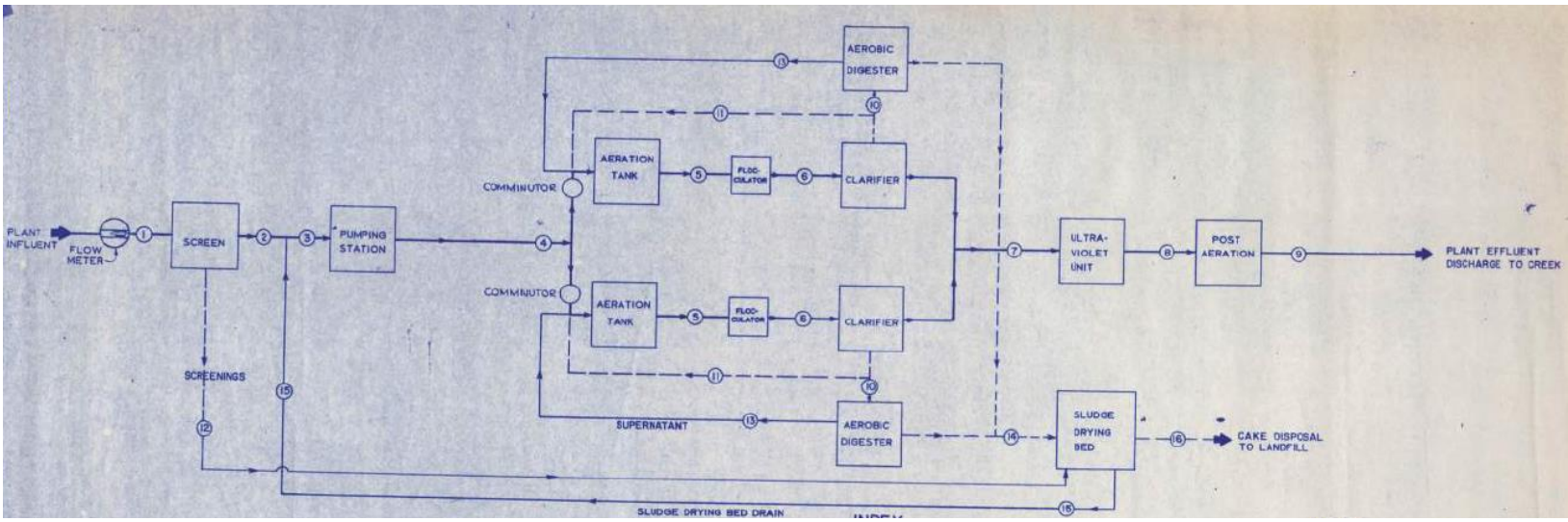
Source: Permittee submitted

## Site Overview

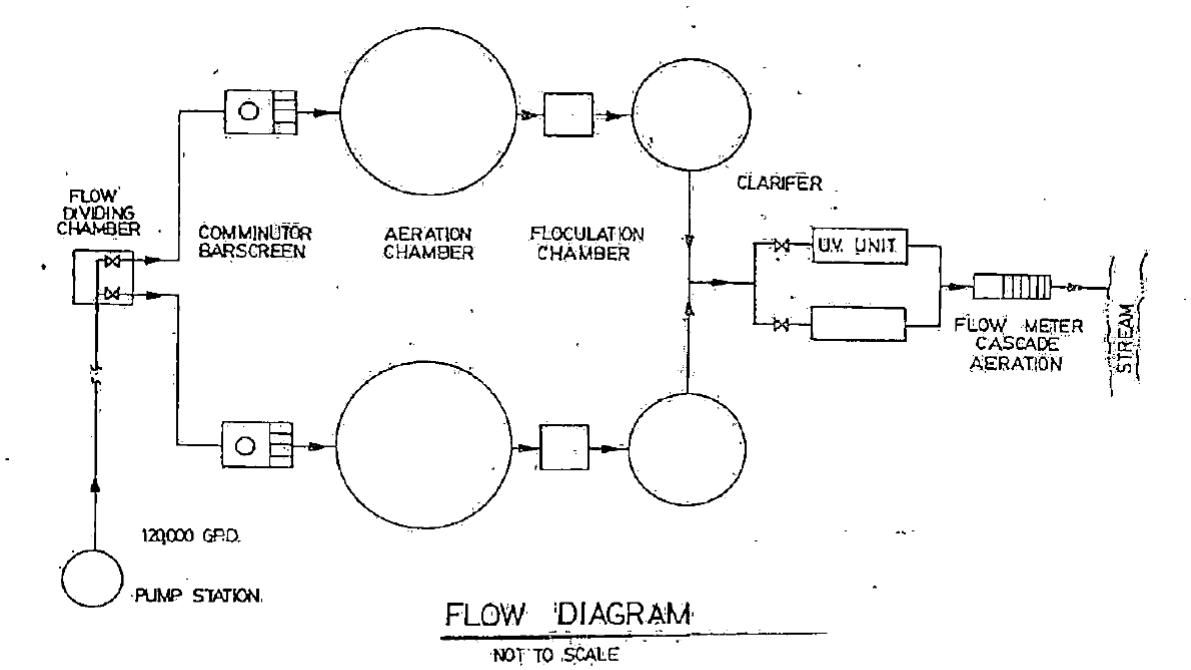



Facility Satellite View

Headwall and Outfall 001
Source: Permittee submitted




Process Flow Diagram
Source: NY-2C Application




Process flow diagram
Source: Current SPDES Permit

## Enforcement History

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

### Existing Effluent Quality

The Pollutant Summary Table presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports and the application submitted by the permittee for the period 1/1/2019 to 1/1/2024.

### Interstate Water Pollution Control Agencies

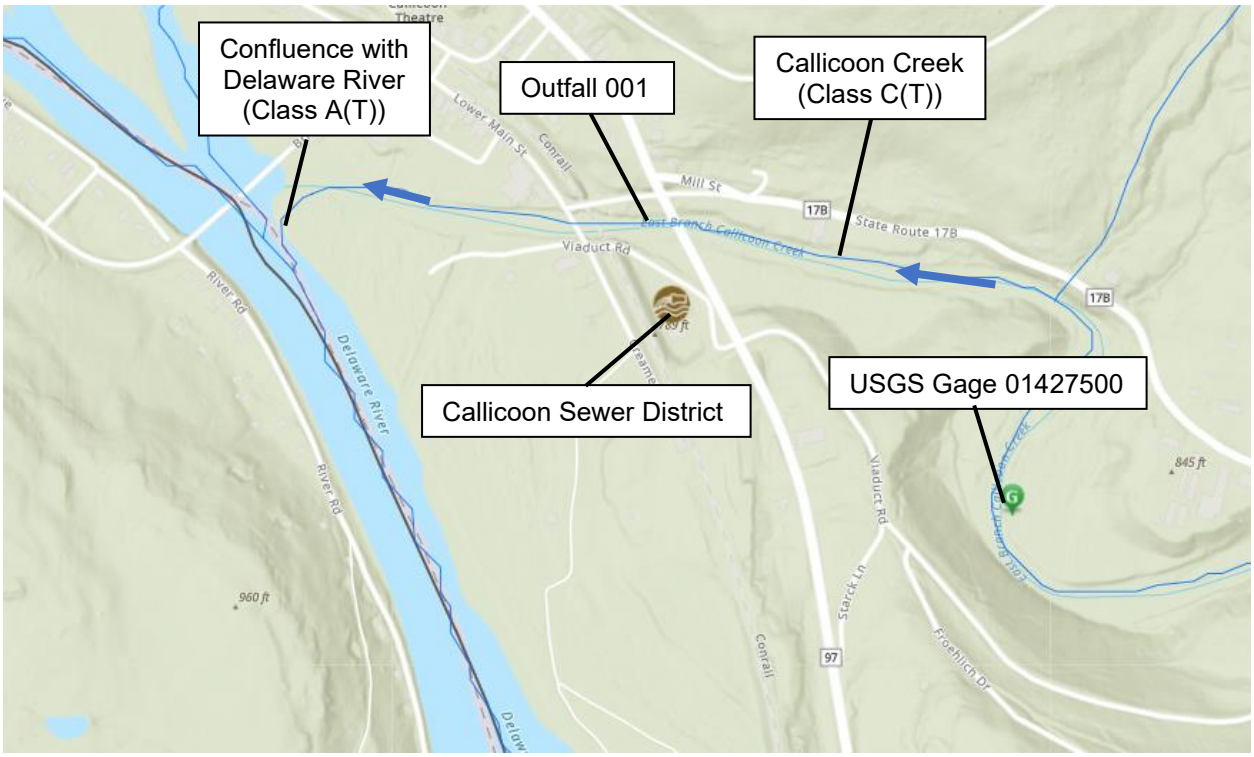
Outfall 001 is located within the Delaware River Basin Commission (DRBC) compact area which places additional requirements in the SPDES permit. Appendix Link

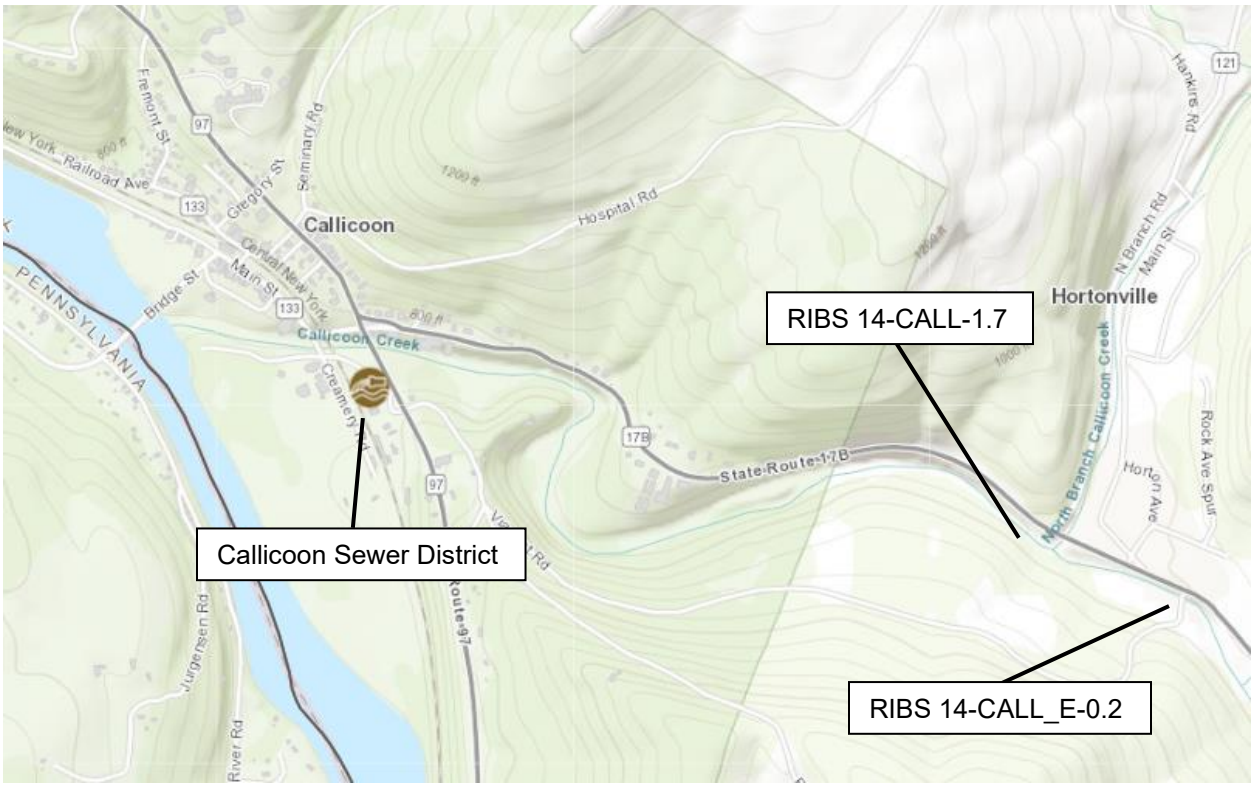
## Receiving Water Information

The facility discharges via the following outfalls:

| Outfall No. | SIC Code | Wastewater Type | Receiving Water |
|---|---|---|---|
| 001 | 4952 | Treated Sanitary Sewage | Callicoon Creek, Class C(T) |

**Reach Description:** The Callicoon Creek is a tributary of the Delaware River. The segment of Callicoon Creek at the point of discharge is C(T). The waterbody classification changes to A(T) ~0.3 miles downstream at the confluence with the Delaware River. Ambient data for Callicoon Creek comes from the Rotating Integrated Basin Stations (RIBS) 14-CALL-1.7 and 14-CALL_E-0.2 location upstream. See the following maps.






See the Outfall and Receiving Water Summary Table and Appendix for additional information.

## Impaired Waterbody Information

The Callicoon Creek segment (PWL No. 1401-0004) is not listed on the 2018 New York State Section 303(d) List of Impaired/TMDL Waters, and therefore, there are no applicable wasteload allocations (WLAs) for this discharge.

## Critical Receiving Water Data & Mixing Zone

The low flow condition for the Callicoon Creek was obtained from a drainage basin ratio analysis with USGS gage station 1427500, Callicoon Creek at Callicoon NY located 0.5 miles upstream of the outfall. The 1Q10, 7Q10 and 30Q10 flows at the gage were found from the USGS Hydrologic Toolbox software and an analysis of data from 1940 to 2023.

The low flows at the facility location were found from a drainage basin ratio analysis and are shown below.

| DRAINAGE BASIN RATIO | 1Q10 | 7Q10 | 30Q10 | |
|---|---|---|---|---|
| Gage Name | Callicoon Creek at Callicoon NY | | | |
| Gage ID Number | 1427500 | 1427500 | 1427500 | |
| Low Flow at Gage (cfs) | 6.1466 | 6.6448 | 8.7223 | USGS HyrdoToolbox |
| Drainage Area at Gage ($mi^2$) | 110 | 110 | 110 | Streamstats |
| Drainage Area at Facility ($mi^2$) | 111 | 111 | 111 | Streamstats |
| Drainage Basin Ratio (facility / gage | 1.0 | 1.0 | 1.0 | |
| **Calculated Flow at Facility (cfs)** | 6.20 | 6.71 | 8.80 | |

The 1Q10, 7Q10, and 30Q10 flows were used to calculate the acute, chronic, and human, aesthetic, wildlife (HEW) dilution ratios, respectively.

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 | 34.1 | 36.8 | 48 | TOGS 1.3.1 |

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.

## 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 Effluent Limitation Guidelines developed by USEPA for specific industries[2]. For this facility there are no promulgated effluent guidelines. Appendix Link

## 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. Appendix Link

## Anti-backsliding

Dilution was calculated based on the flow of the receiving water and the max temperature reported in the last 5 years was 76 °F. This places the facility in Zone 1 (see Temperature Requirements for Municipal Discharges to Trout Streams section of this factsheet), which means a temperature limit is not required. Based on this, it can be determined that a mistake was made in the previous permit and according to 6NYCRR 750-1.10(c)(2)(ii), removal of this limit in lieu of monitoring requirements does not constitute backsliding.

The remaining 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)[3] determination.
Appendix Link

[2] As promulgated under 40 CFR Parts 405 - 471
[3] As prescribed by 6 NYCRR Part 617

## Discharge Notification Act Requirements

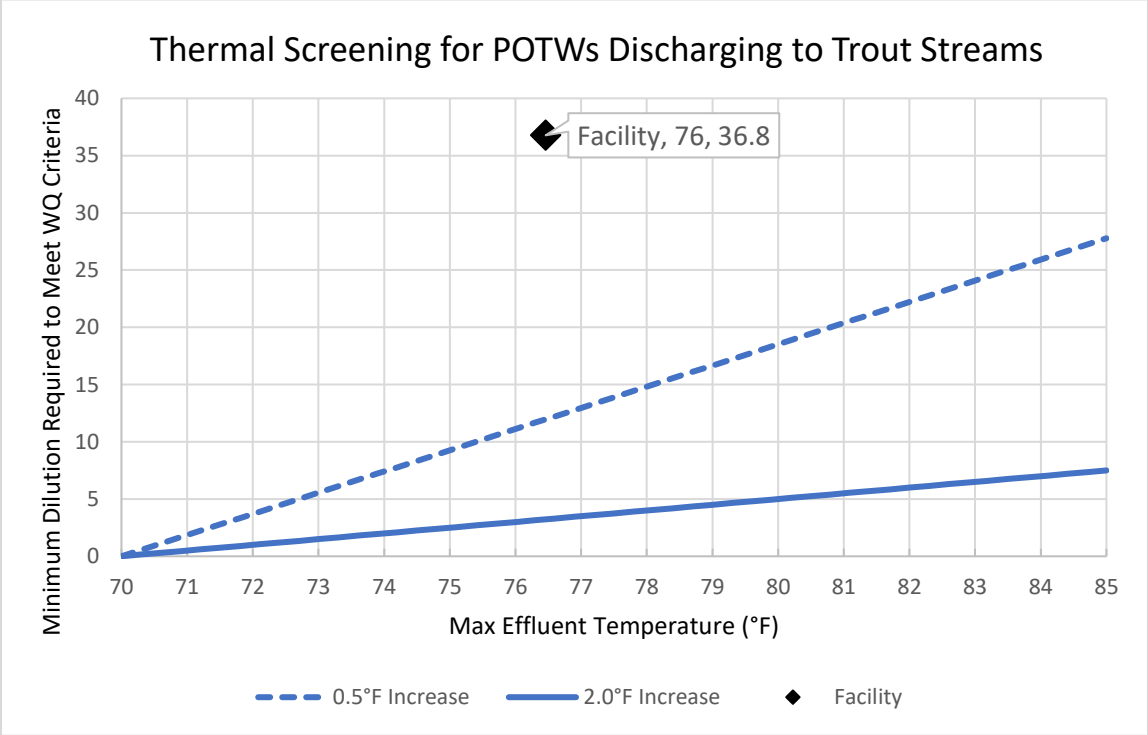
In accordance with the Discharge Notification Act (ECL 17-0815-a), the permittee is required to post a sign at each point of wastewater discharge to surface waters, unless a waiver is obtained. This requirement is being continued from the previous permit.

Additionally, the permit contains a requirement to make the DMR sampling data available to the public upon request. This requirement is new.

## Temperature Requirements for Municipal Discharges to Trout Streams

For municipal discharges to streams classified as trout (T) or trout spawning (TS), the Department has reviewed the dilution and maximum reported effluent temperature.

The facility does not have a reasonable potential to cause or contribute to an excursion above the thermal criteria of 6 NYCRR 704. Therefore, the permit includes "monitor only" for effluent temperature as a year-round requirement.




## Mercury[4]

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

The facility is not in the Great Lakes Basin and does not have a mercury source. On 12/15/2023, the permittee submitted 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

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

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 onsite), 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 Contaminants

Based on the available data submitted with the application and knowledge of this industry, no additional monitoring for perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), and 1,4-dioxane (1,4-D) is required at this time. Please see the Pollutant Summary Table below for more information.

## Schedule(s) of Additional Submittals

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

- Stormwater No Exposure Certification
- Mercury Conditional Exclusion Certification
- Mercury Minimization Program Annual Status Report (maintained onsite)

# 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 (MGD) | Dilution Ratio | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | A(A) | A(C) | HEW |
| 001 | 41° 45' 51" N | 75° 03' 15" W | Callicoon Creek | C(T) | D-53 PWL: 1401-0004 | 14/01 | 35[5] | 3.97 | 4.29 | 5.64 | 0.12 | 34.1 | 36.8 | 48 |

# POLLUTANT SUMMARY TABLE

## Outfall 001

| **Outfall #** | 001 | **Description of Wastewater:** Treated Sanitary Sewage<br>**Type of Treatment:** Screening, Flocculation, Secondary Clarifiers, UV Disinfection and Post Aeration | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Effluent Parameter | Units | Averaging Period | Existing Discharge Data | | | TBELs | | Water Quality Data & WQBELs | | | | | | ML | Basis for Permit Requirement |
| | | | 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 for WQBEL | | |
| **General Notes:** Existing discharge data from 1/1/2019 to 1/1/2024 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 | **0.12** | 0.03 Actual Average | 59/0 | **0.12** | Design Flow | Narrative: No alterations that will impair the waters for their best usages. | | | | | 703.2 | - | Design Flow |
| | Consistent with 40CFR Part 133.102 and TOGS 1.3.3, a monthly average flow limitation equal to the average daily design capacity of the treatment plant is specified. | | | | | | | | | | | | | | |
| pH | SU | Minimum | 6 | 5.4 Actual Min | 59/0 | **6.0** | 40 CFR 133.102 | 7.9[7] | - | 6.5 – 8.5 | Range | - | 703.3 | - | TBEL |
| | | Maximum | 9 | 8.2 Actual Max | 59/0 | **9.0** | | | | | | | | | |
| | Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given the available dilution, an effluent limitation equal to the TBEL is protective of the WQS. There are a total of 2 violations for the minimum pH limit in the obtained data. | | | | | | | | | | | | | | |
| Temperature | °F | Daily Max | 70 | 76 Actual Max | 59/0 | **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 | | | | 704.2 | - | Monitor |

[5] Ambient hardness was calculated from RIBs station 14-CALL_E-0.2, located 1.7 miles upstream from the outfall location, using 1 sample collected 2019.

[6] Existing Effluent Quality: 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 from RIBs station 17-CALL-1.7, located 1.4 miles upstream of the outfall location, using 1 sample collected in 2014.

| **Outfall #** | 001 | **Description of Wastewater:** Treated Sanitary Sewage<br>**Type of Treatment:** Screening, Flocculation, Secondary Clarifiers, UV Disinfection and Post Aeration | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Effluent Parameter | Units | Averaging Period | Existing Discharge Data: Permit Limit | Existing Discharge Data: Existing Effluent Quality[6] | Existing Discharge Data: # of Data Points Detects / Non-Detects | TBELs: Limit | TBELs: Basis | Water Quality Data & WQBELs: Ambient Bkgd. Conc. | Projected Instream Conc. | WQ Std. or GV | WQ Type | Calc. WQBEL | Basis for WQBEL | ML | Basis for Permit Requirement |
| | 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 previous permit.<br>See the Temperature Requirements for Municipal Discharges to Trout Streams section of the fact sheet for a full discussion. | | | | | | | | | | | | | | |
| Dissolved Oxygen (DO) | mg/L | Daily Min | - | 9.6 Actual Average | 3/0 | - | - | - | 6.1 Critical Point | (T) 5.0 mg/L | Narrative | - | 703.3 | - | No Limitation |
| | The downstream DO concentration was modeled using the Streeter-Phelps equations and the following assumptions: Effluent DO = 2 mg/l ((assumed value consistent with TOGS 1.3.1D)), Effluent UOD = 380 mg/L (Calculated from CBOD5 and NOD), Effluent $BOD_5$ = 45 mg/L (Current Permit Limit), Effluent NOD = 321 mg/L (Calculated based on Ammonia limit). Downstream DO is satisfied under typical conditions (Effluent flow = 0.12 MGD)<br><br>3 DO samples were submitted by the permittee in the NY-2A application.<br><br>Reach Description: The model included the segment of river from the point of discharge to the confluence with the Delaware River ~0.3 miles downstream.<br><br>The model showed that DO standards are maintained and consequently WQBELs for DO are unnecessary and the TBELs are protective of water quality. | | | | | | | | | | | | | | |
| 5-day Biochemical Oxygen Demand ($BOD_5$) | mg/L | Monthly Avg | **30** | 9.5 | 52/6 | **30** | 40 CFR 133.102 | - | See Dissolved Oxygen | | | - | 703.3 | - | TBEL |
| | | 7 Day Avg | **45** | 14 | 52/6 | **45** | 40 CFR 133.102 | | | | | - | | | |
| | lbs/d | Monthly Avg | **30** | 3.2 | 52/6 | **30** | TOGS 1.3.3 | | | | | - | | | |
| | | 7 Day Avg | **45** | 5.0 | 53/5 | **45** | TOGS 1.3.3 | | | | | - | | | |
| | % Rem | Minimum | **85** | 92 Actual Min | 56/0 | **85** | 40 CFR 133.102 | | | | | - | | | |
| | Consistent with 40 CFR Part 133.102 and TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. See justification for Dissolved Oxygen. | | | | | | | | | | | | | | |
| Total Suspended Solids (TSS) | mg/L | Monthly Avg | **30** | 30 | 58/0 | **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. | | | | 703.2 | - | TBEL |
| | | 7 Day Avg | **45** | 52 | 58/0 | **45** | 40 CFR 133.102 | | | | | | | | |
| | lbs/d | Monthly Avg | **30** | 9.5 | 58/0 | **30** | TOGS 1.3.3 | | | | | | | | |

| **Outfall #** | 001 | **Description of Wastewater:** Treated Sanitary Sewage | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **Type of Treatment:** Screening, Flocculation, Secondary Clarifiers, UV Disinfection and Post Aeration | | | | | | | | | | | | | |
| Effluent Parameter | Units | Averaging Period | Existing Discharge Data | | | TBELs | | Water Quality Data & WQBELs | | | | | | ML | Basis for Permit Requirement |
| | | | 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 for WQBEL | | |
| | | 7 Day Avg | **45** | 17 | 58/0 | **45** | TOGS 1.3.3 | | | | | | | | |
| | % Rem | Minimum | **85** | 83 Actual Min | 59/0 | **85** | 40 CFR 133.102 | | | | | | | | |
| | Consistent with 40 CFR Part 133.102 and TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given the available dilution, an effluent limitation equal to the TBEL, and consistent with TOGS 1.3.3, is protective of water quality standards. The maximum value reported in the DMR Data for TSS 7 Day Avg is 29.3 mg/L, but due to variability in the data, the 99%tile calculation is over the 45 mg/L TSS Limit. A total of 1 violation is reported for TSS % Removal in the obtained data. | | | | | | | | | | | | | | |
| Settleable Solids | mL/L | Daily Max | 0.3 | ND | 0/59 | **0.3** | TOGS 1.2.1 | - | Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages | | | | 703.2 | - | TBEL |
| | 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 (As N)<br><br>SUMMER<br>6/1 – 10/31 | mg/L | Monthly Avg | - | 0.08 | 3/0 | **20** | DRBC | 0.082 | 0.10 | 0.93 | A(C) | No Reasonable Potential | 703.5 | - | TBEL |
| Nitrogen, Ammonia (As N)<br><br>WINTER<br>11/1 – 5/31 | mg/L | Monthly Avg | - | 0.08 | 3/0 | **20** | DRBC | 0.082 | 0.10 | 1.9 | A(C) | No Reasonable Potential | | | |
| | 3 samples were reported for Ammonia (as N) with the NY-2A Application. The Existing Effluent Quality does not have reasonable potential to violate the WQS. A monthly average limitation of 20 mg/l will be included as required by the Delaware River Basin Commission. | | | | | | | | | | | | | | |
| Total Kjeldahl Nitrogen (as N)<br>SUMMER<br>5/1 – 9/30 | mg/L | Monthly Avg | - | 3.6 | 3/0 | **Monitor** | DRBC | - | - | - | - | - | - | - | Monitor |
| | 3 samples were reported for Total Kjeldahl Nitrogen with the NY-2A Application. Monitoring is required by the Delaware River Basin Commission. | | | | | | | | | | | | | | |
| Total Phosphorus<br>SUMMER<br>5/1 – 9/30 | mg/L | Monthly Avg | - | 2.9 | 3/0 | **Monitor** | DRBC | - | Narrative: None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages. | | | | 703.2 | - | Monitor |
| | 3 samples were reported for Total Phosphorus with the NY-2A Application. Monitoring is required by the Delaware River Basin Commission. | | | | | | | | | | | | | | |

| **Outfall #** | 001 | **Description of Wastewater:** Treated Sanitary Sewage | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **Type of Treatment:** Screening, Flocculation, Secondary Clarifiers, UV Disinfection and Post Aeration | | | | | | | | | | | | | | |
| Effluent Parameter | Units | Averaging Period | Existing Discharge Data | | | TBELs | | Water Quality Data & WQBELs | | | | | | ML | Basis for Permit Requirement |
| | | | 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 for WQBEL | | |
| Total Mercury | ng/L | Daily Max | - | 5.1 Actual Max | 3/0 | - | - | - | - | 0.7 | H(FC) | - | - | - | DOW 1.3.10 |
| | See Mercury section of this fact sheet. | | | | | | | | | | | | | | |
| Coliform, Fecal | #/100 ml | 30d Geo Mean | 200 | 115.6 | 49/8 | **200** | TOGS 1.3.3 | - | Narrative: The monthly geometric mean, from a minimum of five examinations, shall not exceed 200. | | | | 703.4 | - | TBEL |
| | | 7d Geo Mean | 400 | 198.4 | 50/8 | **400** | TOGS 1.3.3 | - | | | | | | | |
| | Consistent with TOGS 1.3.3, effluent disinfection is required seasonally from May 1st - October 31st, due to the class of the receiving waterbody. Fecal coliform limits equal to the TBEL are specified. | | | | | | | | | | | | | | |
| Total Residual Chlorine (TRC) | mg/L | Daily Max | **0.16** | ND | - | 2.0 | TOGS 1.3.3 | - | - | 0.005 | A(C) | No Reasonable Potential | 703.5 | - | Antibacksliding |
| | Effluent disinfection is currently required year-round and will remain a permit requirement. The WWTP has changed their disinfection process to UV Disinfection. The facility occasionally uses chlorine in other operations; therefore it will remain in the permit. | | | | | | | | | | | | | | |
| Oil and Grease | mg/L | Daily Max | - | 4.4 | 3/0 | 15 | TOGS 1.2.1 | - | Narrative: No residue attributable to sewage, industrial wastes, or other wastes, nor visible oil film nor globules of grease. | | | | 703.2 | - | No Limitation |
| | 3 samples for Oil and Grease were collected as part of the NY-2A application. The EEQ does not have reasonable potential to violate the WQS or TBEL so no limitation will be applied. | | | | | | | | | | | | | | |
| **Additional Pollutants Detected** | | | | | | | | | | | | | | | |
| Nitrite (as N) | mg/L | Daily Max | - | 0.05 | 3/0 | - | - | - | - | - | - | - | - | - | No Limitation |
| | 3 samples for nitrite were collected as part of the NY-2A application. There is no WQS for nitrite in Class C waters, so no limitation will be applied. The Callicoon Creek confluence with the Delaware River (Class A) is 0.3 miles downstream. Existing Effluent Quality was compared to the Class A WQS and showed no reasonable potential to violate the WQS. | | | | | | | | | | | | | | |
| Nitrate (as N) | mg/L | Daily Max | - | 11 | 3/0 | - | - | - | - | - | - | - | - | | No Limitation |
| | 3 samples for nitrate were collected as part of the NY-2A application. There is no WQS for nitrate in Class C waters, so no limitation will be applied. The Callicoon Creek confluence with the Delaware River (Class A) 0.3 miles downstream. EEQ was compared to the Class A WQS and showed no reasonable potential to violate the WQS. | | | | | | | | | | | | | | |
| Total Dissolved Solids (TDS) | mg/L | Daily Max | - | 226 | 3/0 | **Monitor** | DRBC | - | Narrative: Shall be kept as low as practicable to maintain the best usage of waters but in no case shall it exceed 500 mg/L. | | | | 703.3 | - | Monitor |
| | 3 samples for Total Dissolved Solids were collected as part of the NY-2A application. The EEQ does not have reasonable potential to violate the WQS, so no limitation will be applied. | | | | | | | | | | | | | | |

| **Outfall #** | 001 | **Description of Wastewater:** Treated Sanitary Sewage | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **Type of Treatment:** Screening, Flocculation, Secondary Clarifiers, UV Disinfection and Post Aeration | | | | | | | | | | | | | |
| Effluent Parameter | Units | Averaging Period | Existing Discharge Data | | | TBELs | | Water Quality Data & WQBELs | | | | | | ML | Basis for Permit Requirement |
| | | | 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 for WQBEL | | |
| Nitrate + Nitrite (as N) | mg/L | Daily Max | - | 11 | 3/0 | **Monitor** | DRBC | - | - | - | - | - | - | - | Monitor |
| | 3 samples for Nitrate, and 3 samples for Nitrite were collected as part of the NY-2A application. There is no WQS for Nitrate + Nitrite in Class C waters. Monitoring is required by the Delaware River Basin Commission. | | | | | | | | | | | | | | |

Emerging Contaminants Outfall 001

| | | | Existing Discharge Data | | | | TBELs | | Water Quality Data and WQBELS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Effluent Parameter | Units | Averaging Period | Current Permit Limit | Existing Effluent Quality | # Detects | # Nondetects | Limit | Basis | Ambient Background Conc. | Projected Instream Conc. | WQ Std. or GV | WQ Type | Calc. WQBEL | Basis for WQBEL | ML | Permit Limit | Basis for Permit Requirement |
| Perfluoro-butanoic Acid (PFBA) | ng/L | DAILY MX | - | 197 | 3 | 0 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-pentanoic Acid (PFPeA) | ng/L | DAILY MX | - | 16 | 3 | 0 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-hexanoic Acid (PFHxA) | ng/L | DAILY MX | - | 16 | 3 | 0 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-heptanoic Acid (PFHpA) | ng/L | DAILY MX | - | 1.3 | 3 | 0 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-octanoic Acid (PFOA) | ng/L | DAILY MX | - | 3.2 | 3 | 0 | - | - | - | - | 6.7 | H(WS) | - | TOGS 1.1.1 | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-nonanoic Acid (PFNA) | ng/L | DAILY MX | - | 0.77 | 3 | 0 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-decanoic Acid (PFDA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-undecanoic Acid (PFUnA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-dodecanoic Acid (PFDoA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-tridecanoic Acid (PFTriA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |

Emerging Contaminants Outfall 001

| | | | Existing Discharge Data | | | | TBELs | | Water Quality Data and WQBELS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Effluent Parameter | Units | Averaging Period | Current Permit Limit | Existing Effluent Quality | # Detects | # Nondetects | Limit | Basis | Ambient Background Conc. | Projected Instream Conc. | WQ Std. or GV | WQ Type | Calc. WQBEL | Basis for WQBEL | ML | Permit Limit | Basis for Permit Requirement |
| Perfluoro-butanesulfonic Acid (PFBS) | ng/L | DAILY MX | - | 1.4 | 3 | 0 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-pentanesulfonic Acid (PFPeS) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-hexanesulfonic Acid (PFHxS) | ng/L | DAILY MX | - | 0.64 | 3 | 0 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-heptanesulfonic Acid (PFHpS) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-octanesulfonic Acid (PFOS) | ng/L | DAILY MX | - | 2.2 | 3 | 0 | - | - | - | - | 2.7 | H(WS) | - | TOGS 1.1.1 | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-nonanesulfonic Acid (PFNS) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-decanesulfonic Acid (PFDS) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-dodecane-sulfonic Acid (PFDoS) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-octane-sulfonamide (FOSA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| N-methyl Perfluoro-octanesulfon-amidoacetic Acid (NMeFOSAA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |

Emerging Contaminants Outfall 001

| | | | Existing Discharge Data | | | | TBELs | | Water Quality Data and WQBELS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Effluent Parameter | Units | Averaging Period | Current Permit Limit | Existing Effluent Quality | # Detects | # Nondetects | Limit | Basis | Ambient Background Conc. | Projected Instream Conc. | WQ Std. or GV | WQ Type | Calc. WQBEL | Basis for WQBEL | ML | Permit Limit | Basis for Permit Requirement |
| N-ethyl Perfluoro-octanesulfon-amidoacetic Acid (NEtFOSAA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| 4:2 Fluorotelomer Sulfonic Acid (FTS) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| 6:2 Fluorotelomer Sulfonic Acid (FTS) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| 8:2 Fluorotelomer Sulfonic Acid (FTS) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| N-ethyl Perfluoro-octanesulfon-amide (NEtFOSA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| N-methyl Perfluoro-octanesulfon-amide (NMeFOSA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| N-methyl Perfluoro-octanesulfon-amidoethanol (NMeFOSE) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| 9-Chlorohexadeca-fluoro-3-oxanonane-1-sulfonic Acid (9Cl-PF3ONS) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |

Emerging Contaminants Outfall 001

| | | | Existing Discharge Data | | | | TBELs | | Water Quality Data and WQBELS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Effluent Parameter | Units | Averaging Period | Current Permit Limit | Existing Effluent Quality | # Detects | # Nondetects | Limit | Basis | Ambient Background Conc. | Projected Instream Conc. | WQ Std. or GV | WQ Type | Calc. WQBEL | Basis for WQBEL | ML | Permit Limit | Basis for Permit Requirement |
| Hexafluoro-propylene Oxide Dimer Acid (HFPO-DA or GenX) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid (11Cl-PF3OUdS) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| 4,8-Dioxa-3H-perfluorononanoic Acid (ADONA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| 3-Perfluoropropyl Propanoic Acid (3:3 FTCA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| 2H,2H,3H,3H-Perfluoro-octanoic Acid (5:3 FTCA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| 3-Perfluoroheptyl Propanoic Acid (7:3 FTCA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-4-methoxy-butanoic Acid (PFMBA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro-3-methoxy-propanoic Acid (PFMPA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| Perfluoro(2-ethoxyethane)sulfonic Acid (PFEESA) | ng/L | DAILY MX | - | ND | 0 | 3 | - | - | - | - | - | - | - | - | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |
| 1,4-Dioxane | µg/L | DAILY MX | - | 0.3 | 3 | 0 | - | - | - | - | 0.35 | H(WS) | - | TOGS 1.1.1 | - | - | No limitation |
| Based on available data, no additional monitoring is required at this time. | | | | | | | | | | | | | | | | | |

# 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

### 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 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 to

determine the existing capabilities of the wastewater treatment plants and to assure that wasteload allocations (WLAs) are allocated equitably.

### Interstate Water Pollution Control Agencies

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

### Existing Effluent Quality

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$^{th}$ (monthly average) and 99$^{th}$ (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, and/or in response to updated regulatory requirements. Pollutant monitoring data is also reviewed to determine the presence of additional contaminants that should be included in the permit based on a reasonable potential analysis to cause or contribute to a water quality standards violation.

### Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*l*) 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[8] and USEPA interpretation[9] 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)

## Antidegradation Policy

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

## Effluent Limitations

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

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

CWA sections 301(b)(1)(B) and 304(d)(1), 40 CFR 133.102, ECL section 17-0509, and 6 NYCRR 750-1.11 require technology-based controls, known as secondary treatment. These and other requirements are summarized in TOGS 1.3.3. 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 Department 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 Department 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:

"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 Department;

2) identify water quality criteria applicable to these pollutants;

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

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

The Department uses modeling tools to estimate the expected concentrations of the pollutant in the receiving water and develop WQBELs. These tools were developed in part using the methodology referenced above. If the estimated concentration of the pollutant in the receiving water is expected to exceed the ambient water quality standard or guidance value (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 Department uses a model which incorporates the Streeter-Phelps equation. The equation relates the decomposition of inorganic and organic materials along with oxygen reaeration rates to compute the downstream dissolved oxygen concentration for comparison to water quality standards.

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.

### *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.

## Other Conditions

### Mercury

The multiple discharge variance (MDV) for mercury was developed in accordance with 6 NYCRR 702.17(h) "to address widespread standard or guidance value attainment issues including the presence of a ubiquitous pollutant or naturally high levels of a pollutant in a watershed." The first MDV was issued in October 2010, and subsequently revised and reissued in 2015; each subsequent iteration of the MDV is designed to build off the previous version, to make reasonable progress towards the water quality standard (WQS) of 0.7 ng/L dissolved mercury. The MDV is necessary because human-caused conditions or sources of mercury prevent attainment of the WQS and cannot be remedied (i.e., mercury is ubiquitous in New York waters at levels above the WQS and compliance with a water quality based effluent limitation (WQBEL) for mercury cannot be achieved with

demonstrated effluent treatment technologies). The Department has determined that the MDV is consistent with the protection of public health, safety, and welfare. During the effective period of this MDV, any increased risks to human health are mitigated by fish consumption advisories issued periodically by the NYSDOH.

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

There have been a number of changes to DOW 1.3.10, December 2020 (e.g., the criteria for mercury sources, the MMP Decision tree, and the MMPs themselves) which could result in less stringent effluent limitations. There are now criteria to determine if a facility has sources of mercury. Additionally, the types of MMPs have been restructured. MMP Type IV is appropriate for facilities that are not sources of mercury. A similar MMP type was not included in the 2010 or 2015 versions of DOW 1.3.10. DOW 1.3.10, Figure 1, is a decision tree, which includes the criteria used to determine if a facility has source of mercury and which MMP is appropriate for a facility.

## Schedules of Compliance

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

## Schedule(s) of Additional Submittals

Schedules of Additional Submittals are used to summarize the deliverables required by the permit not identified in a separate Schedule of Compliance.