

Executive Director Jason Molino

Deputy Director Lauren Monaghan

Request for Qualifications Engineering Services for the Town of Springwater Wastewater Treatment Plant Improvements NYSEFC CWSRF Project # C8-6544-03-00

I. PROJECT HISTORY

The Town of Springwater owns the Town of Springwater Wastewater Treatment Plant (the "WWTP") which serves a sewer improvement district of approximately 200 customers within the Town. On May 22, 2015, the Town entered an Order on Consent (Case No. R8-20150120-45) (the "Consent Order") with the New York State Department of Environmental Conservation (the "DEC") due to the Town not meeting their regulatory State Pollutant Discharge Elimination Permit (the "SPDES") requirements, specifically effluent limits. The Town subsequently facilitated the design, bidding, and construction of improvements to the existing collection system and WWTP which have been operational since 2021.

Unfortunately, these improvements to the WWTP have not provided adequate treatment, and the discharge has frequently exceeded SPDES permit effluent. Additional Notice of Violations were issued by the DEC on September 7, 2022, and September 27, 2023, and the Town entered into a second Order on Consent (Case No. R8-20240108-1) (the "2nd Consent Order") in May 2024. Both Orders on Consent and Notice of Violations can be found in Exhibit A.

In August 2023, the Town and Livingston County Water and Sewer Authority (the "Authority") entered into an Intermunicipal Municipal Corporation agreement (the "IMA") for the Authority to assist the Town with project management and assistance as needed to meet the required Schedule of Compliance activities outlined in both Consent Orders.

As part of Schedule of Compliance for the Consent Order, the Town issued an "Evaluation and Corrective Measures Report" (the "Report") by Hunt Engineers dated December 2023 for the Town WWTP. In addition, the Town received a Peer Review of the Report by GHD in February 2024. Both documents can be found in Exhibit B.

On January 17, 2025, the Town and Authority entered into a long-term lease agreement in which the Authority assumed operational and maintenance responsibility over the Town sewer collection system and WWTP. In addition, the long-term lease agreement identifies the Authority as the Project Manager for Project No.: C8-6544-03-00 on behalf of the Town.

II. PROJECT DESCRIPTION

The proposed improvements include the addition of a preliminary clarifier (possibly two), sludge holding tank, possible second stage Orenco biological system, miscellaneous plant improvements (HVAC

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Deputy Director Lauren Monaghan

improvements, influent manhole rehabilitation, and lighting) and minor collection system improvements (the "Project").

The Town will select one consulting engineering firm to design, bid, inspect, administer and close-out the Project. This will include assisting the Town/Authority, in finalizing the scope of work for Project improvements. Upon finalizing the scope of work, the selected firm will be responsible for completing an engineering amendment for submission to EFC and DEC for review and approval, prior to beginning engineering design of the project. This may also include assisting the Town with completing a supplement SEQRA review for the Project and final scope of work.

The current funding sources for this Project, are included below.

- New York State Water Infrastructure Improvement Act (WIIA) grant \$1,170,215
- New York State Environmental Facilities Corporation SRF Hardship Loan \$1,170,215

As the Project is being funded through State Revolving Fund (SRF) assistance, interested firms should be familiar with the Mandatory State Revolving Fund Terms and Conditions for Non-Construction contract requirements. The selected firm will be required to submit the necessary forms, reports, utilization plans, etc. prior to the execution of an Engineering Agreement with the Town. The selected firm will also be required to submit the necessary forms, reports, utilization plans, etc. during the term of the contract, on a monthly, quarterly, etc. basis, per the program requirements.

It should be noted that the Town will be applying for a Water Quality Improvement Act (WQIP) and Community Development Block Grant (CDBG) funding in 2025, however completion of the Project is not dependent on additional grant funds being received. The selected engineering firm will be required to comply with all funding (*i.e.*, grant and financing) program requirements. This includes but is not limited to programs administered by NYS EFC (*i.e.*, CWSRF, WIIA) and WQIP and CDBG (if received).

Various additional water and sewer system improvements are anticipated within the Town of Springwater in the future. If adequate funding is secured for future projects, the Town/Authority may consider utilizing the selected firm for additional water and wastewater tasks/projects on an as needed basis.

III. CONSULTANT EVALUATION AND SELECTION PROCESS

All proposals will be evaluated by a committee made up of Town and Authority personnel familiar with the proposed Project. Interviews and/or presentations of the proposals may be requested if needed. The committee will evaluate proposals utilizing the following criteria:

| - | Firm Qualifications | (15%) |
|---|---|-------|
| - | Relevant Experience of Project Team | (30%) |
| - | Project Understanding/Approach | (30%) |
| - | Value Engineering | (15%) |
| - | Experience with NYS EFC Funded Projects | (10%) |
| | | |

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Deputy Director Lauren Monaghan

This RFQ will serve as the Town's compliance with the NYS EFC Certification for A/E Services Procurement for Federally Funded Projects.

After an initial review of the submittals, a short list of firms will be developed for further consideration. The best qualified firm will be selected based on its demonstrated competence and qualification for the services required for the Project. A more detailed scope of work and fee schedule will be negotiated with the best qualified firm. If negotiations are not successful with the selected firm, the Town will terminate negotiations with that firm and initiate negotiations with the next best-qualified firm. When a fair and reasonable fee is established, a contract award recommendation will be made to the Town Board for its consideration.

Engineering Firm Insurance Requirements

The firm must meet the following insurance requirements:

- 1. Proof of Workers Compensation insurance coverage.
- 2. General Liability \$1,000,000 per occurrence/\$2,000,000 aggregate. The Town and Authority must be listed as additional insured and endorsement required.
- 3. Auto Liability Insurance \$1,000,000 per occurrence combined single limits applicable to claims due to bodily injury and/or property damage. The Town and Authority must be listed as additional insured and endorsement required.
- 4. Professional Liability not less than \$2,000,000 per loss.

IV. PROJECT SCHEDULE

| DESCRIPTION | DATE |
|--------------------------------------|---------------------------|
| Request for Qualifications Release | April 30, 2025 |
| Request for Qualifications Due | May 23, 2025 |
| Consultant Selection and Award | June 9, 2025 |
| Design/Permitting | July – December 2025 |
| Bid & Award Project | January/February 2025 |
| Notice to Proceed & Submittal Review | March 2025 – June 2026 |
| Construction | July 2026 – December 2026 |
| Close Out | January/February 2026 |

V. SUBMISSION OF PROPOSALS

A site visit and tour of Springwater WWTP will be held for any firm interested at the Town of Springwater Wastewater Treatment Facility, Kellogg Road, Springwater, NY, 14560 on **Monday, May 12, 2025** (2) **10am.** The site visit and tour are optional but encouraged for any firm interested in submitting a proposal. Any firm planning on attending the site visit should email the Designated Contact emails identified below with the name and title of any employees attending the site visit.

Livingston County Water & Sewer Authority PO Box 396, 1997 D'Angelo Drive, Lakeville, NY 14480 (585) 346-3523 www.lcwsa.us



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All questions regarding this RFQ shall be directed to the Designated Contact emails identified below. If there are items contained in the RFQ that require clarifying, these clarifications will be issued in writing (via email) to interested firms no later than end of business day **Friday**, **May 16**, **2025** @ **4pm**.

Responding firms must submit one (1) signed original Proposal, four (4) hard copies of the Proposal, and one electronic copy of the Proposal in PDF format on a USB flash drive or emailed to the Designated Contract.

Deadline for submission of proposals is: Friday, May 23, 2025 @ 4:00 pm.

Proposals should be clearly marked as "Request for Engineering Services for the Town of Springwater Wastewater Treatment Plant Project." An officer of the firm authorized to bind the firm to its provisions must sign its proposal and associated forms.

Proposals shall be mailed to the following Designated Contact:

Jason Molino, Executive Director Livingston County Water and Sewer Authority 1997 D'Angelo Drive P.O. Box 396 Lakeville, NY 14480

Phone: (585) 346-3523 Email: jmolino@lcwsa.us swright@lcwsa.us

Late submittals will not be considered.

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EXHIBIT A

| STATE OF NEW YORK: DEPARTMENT OF ENVIRONMEN | |
|---|----------------|
| In the Matter of Violations of Article 17 of the New York | CONSENT ORDER |
| State Environmental Conservation Law, Title 6 of the | CONSENT ORDER |
| Official Compilation of Codes, Rules and Regulations | |
| of the State of New York and State Pollutant Discharge | CASE NO. |
| Elimination System Permit No. NY-0246450 by | R8-20150120-45 |

TOWN OF SPRINGWATER (LIVINGSTON COUNTY)

Respondent.

WHEREAS:

FIRST. The New York State Department of Environmental Conservation (the "Department" or "DEC") is and at all times mentioned herein has been a Department of the State of New York (the "State") with jurisdiction over the environmental policy and programs of the State pursuant to the provisions of the New York State Environmental Conservation Law ("ECL"), and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York ("6 NYCRR" or the "regulations").

SECOND. The Department is charged with the responsibility and authority to promote and coordinate the management of the water, land, fish, wildlife and air resources of the state to assure their protection, enhancement, provisions, allocation and balanced utilization, pursuant to ECL § 3-0301.

THIRD. The Department is charged with jurisdiction over the maintenance of the quality of the waters of the State, and over the management of the State Pollutant Discharge Elimination System ("SPDES") program and permits issued thereunder, pursuant to Article 17 of the ECL and regulations promulgated pursuant thereto.

FOURTH. The Department is authorized to seek penalties and other

appropriate sanctions for any violations of Article 17 of the ECL, the regulations promulgated and permits issued pursuant thereto.

FIFTH. The Town of Springwater ("Respondent") is a municipal corporation formed pursuant to the laws of the State.

SIXTH. Respondent owns and operates a wastewater collection system (the "Collection System") and a wastewater treatment facility, commonly known as the Town of Springfield Waste Water Treatment Plant (the "Facility"), located in the Town of Springwater, Livingston County, from which pollutants are discharged to the waters of the State from an outlet or point source, as that activity is defined by ECL Article 17 and 6 NYCRR Part 750 *et seq.*

SEVENTH. Respondent discharges pollutants from the Facility to the waters of the State under the authority and subject to the terms and conditions stated in SPDES Permit No. NY-0246450 (the "Permit").

EIGHTH. The expiration date in the Permit is June 30, 2016 and has been in effect at all times hereinafter mentioned.

NINTH. The Permit, *inter alia*, contains effluent limitations or other restrictions relative to biochemical oxygen demand (BOD, 5-day), flow, and nitrogen, ammonia (as NH3), among others.

TENTH. From June 2010 to October 2014, from time to time, Respondent discharged pollutants to the waters of the State that exceeded the effluent limitations contained in the Permit, namely BOD5, (30-day average and 7-day average), Flow

and Nitrogen, ammonia (as NH3)(daily average), as is more fully listed in attached Schedule A.

ELEVENTH. By discharging pollutants to the waters of the State other than in a manner prescribed by the Permit, Respondent has violated the Permit and ECL §§ 17-0803 and 17-0807(4).

TWELFTH. Each violation is subject to the sanctions authorized by ECL Article 71, Title 19. Each effluent limitation excursion listed in Schedule A is a separate and distinct violation.

THIRTEENTH. It is stated by Respondent, and accepted by the Department for purposes of this Consent Order, that due to the small number of households served by the Collection System and Facility, timely compliance with the requirements of this Consent Order will be dependent upon applying for and receiving public funds necessary to perform the studies and to make the improvements to the Facility and Collection System required in this Consent Order.

FOURTEENTH. Representatives of Respondent and the Department have conferred and have agreed to execute this Consent Order in full settlement of Respondent's civil liability for the violations described and identified herein.

FIFTEENTH. Respondent consents to the issuance of this Consent Order and agrees to be bound by its provisions, terms, and conditions.

NOW, being duly advised and having considered the matter, IT IS ORDERED THAT:

I. OBJECTIVE

It is the objective of this Consent Order for Respondent to obtain consistent compliance with the terms of the Permit, including meeting the effluent limitations stated therein, and to reduce flows to the Facility. Towards those ends, Respondent shall perform the compliance requirements hereinafter stated in this Consent Order and take such other and further steps necessary to attain the objectives of this Consent Order.

II. COMPLIANCE REQUIREMENTS

A. Respondent shall submit to the Department for its review and approval an Engineering Report that provides the following:

1. Plans to reduce excessive flows to the Facility (Inflow and Infiltration);

2. Plans to upgrade the Facility to include nitrification;

3. Plans to upgrade the Facility to include adequate disinfection; and

4. Schedules for implementing each of the above Plans.

B. The Engineering Report shall be submitted no later than August 1, 2015.

C. The Engineering Report shall include, but not be limited to, the

compliance actions listed in attached Schedule B.

D. Once the Engineering Report is approved by the Department, Respondent shall implement each of the Plans according to the Schedules approved in the Engineering Report, except as Schedules may be amended pursuant to paragraph

III, below.

E. No later than June 1, 2015, Respondent shall file a report with the Department that details the steps that Respondent has taken to procure funds necessary to fulfill the requirements of this Consent Order (see paragraph III. A below), and an estimate of when such funds are expected to become available to Respondent; until such funds become available to Respondent, this report shall be updated no less frequently than every three months.

III. AMENDING SCHEDULES OF COMPLIANCE

A. The Department accepts Respondent's statements that timely submission of the Engineering Report and compliance with the Schedules approved by the Department will be dependent upon Respondent applying for and receiving adequate public funding from USDA Rural Development (RD), Community Development Block Grant Program (CDBG), NYS Water Quality Improvement Project Program (WQIP), NYS Clean Water State Revolving Fund (CWSRF) and/or others as they may be made known and for which the Town may be determined eligible.

B. Respondent may request from the Department, and the Department in its sole discretion may approve, an extension of one or more of the Schedules contained in the approved Engineering Report, or the deadline for submitting the Engineering Report ("the Extension Request").

C. When applying for the Extension Request, Respondent shall provide the following: (1) a detailed explanation and documentation of the steps Respondent has

taken to apply for and receive public funds necessary to perform the compliance requirements contained in this Consent Order; (2) an estimate of when such funds are expected to be available for use by Respondent; and (3) a new schedule for compliance requirements that have not been completed.

D. If the Extension Request is not related to the application for and awarding of public funds, then Respondent shall explain why the approved Schedule(s) or deadline for the submission of the Engineering Report cannot be met.

E. Any Extension Request shall not request an extension of more than one year of any required activity in an approved Schedule(s) or the Engineering Report submission deadline and shall be made as soon as Respondent determines that one is necessary, but in no case shall an Extension Request be made fewer than 20 calendar days before an approved Schedule deadline or the Engineering Report submission deadline.

IV. SPECIAL MONITORING REQUIREMENTS AND SPECIAL INTERIM EFFLUENT LIMITATIONS

A. Respondent shall monitor Nitrogen, Ammonia (as NH3), mg/l, as described in attached Schedule D, and said monitoring shall continue unless terminated or amended by the Department.

B. Respondent shall also comply with the "Monitor Only" Special Interim Effluent Limits, which are described in attached Schedule C unless terminated or amended by the Department.

C. Respondent shall report the special monitoring results on the monthly operating log submitted with the Facility's discharge monitoring report ("DMR").

D. All other conditions in the Permit are unchanged. Except insofar as special monitoring requirements and special interim effluent limitations are hereby established, the terms and conditions of the Permit remain in full force and effect, and are binding upon Respondent.

V. GENERAL CONDITIONS APPLICABLE TO SUBMISSIONS REQUIRED UNDER THIS ORDER

The following conditions apply to the submissions required by this Consent Order:

A. Should Respondent fail to make any submission in a timely fashion, or should the submission otherwise fail to comply with the requirements of this Consent Order, the Department may declare Respondent to be in violation of this Consent Order and pursue any other remedy against Respondent provided by law;

B. All submissions must be prepared by a professional engineer licensed in the state unless the Department specifies otherwise;

C. All submissions required under this Consent Order shall be made to the Regional Water Engineer in the Department's Region 8 office in Avon, NY;

D. Respondent shall diligently reply to all questions, comments and issues raised by the Department in its review of any submission; and

E. The terms and conditions of the Department's approval of any submission, including any schedule established thereby, constitute and become

material parts of this Consent Order and are enforceable as such without further modification of this Consent Order.

VI. CIVIL PENALTY ASSESSED UNDER CONSENT ORDER

Respondent is assessed a civil penalty in the amount of Thirty-Five Thousand Eight Hundred Dollars (\$35,800) for the violations stated in this Consent Order, all of which is suspended, and shall not be payable provided that Respondent fully complies with the requirements of this Consent Order in a timely fashion. In the event that Respondent fails to fully comply with the requirements of this Consent Order in a timely fashion, all or some of the suspended portion of the penalty shall become due and payable upon written notice to Respondent by the Department (the amount becoming due and payable specified in the Department's notice) without prejudicing the Department from seeking further appropriate penalties from Respondent for violations of this Consent Order.

VII. EFFECT OF PAYMENT OF PENALTY

Notice and payment of any civil penalty imposed under this Consent Order shall not in any way alter Respondent's obligation to satisfactorily perform any action required by the Consent Order or by any approval issued by the Department in response to submissions required under this Consent Order.

8

IX. EFFECTIVE DATE OF THIS CONSENT ORDER

The effective date of this Consent Order is the date it is signed by a representative of the Commissioner of the Department. The Consent Order will remain in effect until Respondent has fulfilled all of the compliance requirements contained in the Consent Order and has paid any penalties assessed hereby.

X. STANDARD PROVISIONS

Respondent shall further comply with the Standard Provisions recited on the attached blue cover, which constitute material and integral terms and conditions of this Consent Order and are hereby incorporated into this Consent Order by reference.

DATED

61.01

JOE MARTENS, Commissioner New York State Department of Environmental Conservation

PAUL J. D'AMATO Regional Director

CONSENT BY RESPONDENT

Respondent hereby consents to the issuance of the foregoing order, waives its right to a hearing herein, and agrees to be bound by the terms, provisions, and conditions contained herein.

TOWN OF SPRINGWATER BY TITLE DATE STATE OF New York COUNTY OF Uningstra iss .: On this 4th day of May . 2015. Deborah) before me personally came , to me known, who being by me duly sworn aid depose and say that (s)he resides in that (s)he is the Twin Superins or of The Town of Springwaller , the corporation described in, and which executed the foregoing instrument, and acknowledged that (s)he signed his/her name thereto by order of the of said corporation.

NOTARY IBI JADE MARIE PERKINS NOTARY PUBLIC-STATE OF NEW YORK

NOIARY Public-Giving 60243 No. 01PE6260243 Qualified in Livingston County My Commission Expires April 23, 2016

Schedule A

Town of Springwater

Summary of Effluent Limit Exceedances

Parameter Exceeded

Month of Violation

BOD5 - 30-day Average; mg/l

BOD5 - 7-day Average; mg/l

BOD5 - Percent Removal; %

Flow - 30-Average; MGD

Nitrogen, ammonia (as NH3) Daily Average

Total Suspended Solids – 30-day Average; mg/l

Total Suspended Solids – 7-day Average; mg/l

2/2010, 6/2010, 1/2012

2/2010, 1/2012, 3/2013, 3/2014

2/2010

3/2011, 4/2011, 5/2011, 4/2012, 5/2012, 6/2012, 7/2012, 9/2012, 10/2012, 5/2013, 6/2013, 7/2013, 10/2013, 12/2013, 5/2014, 6/2014, 8/2014

10/2009, 6/2010, 7/2010, 8/2010, 9/2010, 6/2011, 7/2011, 8/2011, 9/2011, 6/2012, 7/2012, 8/2012, 9/2012, 10/2012, 6/2013, 8/2013, 9/2013, 6/2014, 7/2014

12/2009

12/2009

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Schedule B

Town of Springwater

Compliance Actions

Compliance Action

Submit a Final Engineering Report and plans to reduce excessive flows to the facility (Inflow/Infiltration), and upgrade the facility to include Nitrification and Disinfection to the facility.

Submit Quarterly Progress reports pertaining to Wastewater Treatment Plant (WWTP) Upgrade.

Submit Annual Progress reports pertaining to Collection System Improvements.

Issue bid notices to contractors for work to be done according to the approved plans and provide a copy to the Department.

Award construction contracts according to the approval plans and specifications and Notify DEC of the contract awards.

Commence construction of upgrades and improvements to the facility and the collection system according to the approved plans and specifications.

Finalize easements to access the Town owned septic tanks.

Enact a Sewer Use Law that follows the DEC Model Sewer Use Law.

Complete construction according to the approved plans and specifications.

Submit Certification of Completion for WWTP Upgrade.



Schedule C

Town of Springwater

Special Interim Effluent Limitations

Outfall No. 001

Limitations Apply: All year, except where otherwise specified

| Parameter | Special Interim Effluent Limitation |
|--|-------------------------------------|
| Nitrogen, Ammonia (as NH ₃), Daily Average, mg/l | Monitor Only |
| Flow, 30-day Avg; MGD | Monitor Only |

Schedule D

Town of Springwater

Special Monitoring Requirements

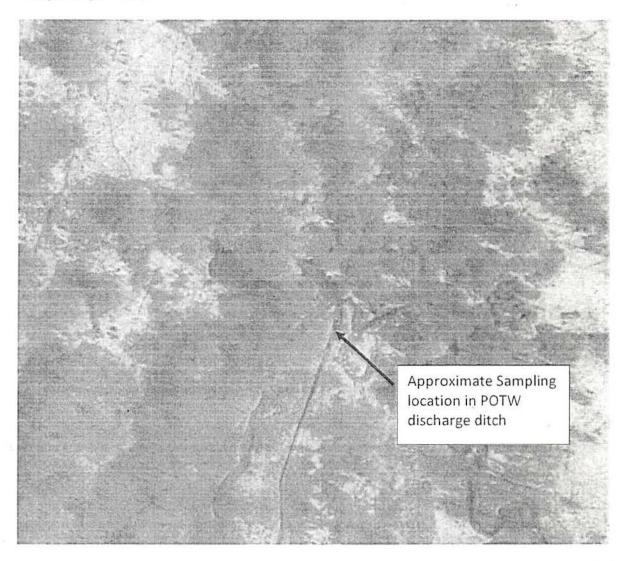
Location: Discharge Ditch 10 feet prior to flowing into the confluence of Springwater Creek and Limekiln Creek.

Monitoring Season: June 1 - October 31

Parameter: Nitrogen, Ammonia (as NH3), mg/l

Sampling Frequency: 1 time per month

Sample Type: Grab



1/6/2015



STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of Violations of Articles 17 and 71 of the New York State Environmental Conservation Law and Part 750 of Title 6 of the Official New York State Code of Rules and Regulations

- by -

ORDER R8-20240108-1

Town of Springwater 8022 South Main Street Springwater, NY 14560,

Respondent.

WHEREAS:

Jurisdiction

- 1. The New York State (State) Department of Environmental Conservation ("Department") is an agency of the State charged with jurisdiction over stormwater discharges pursuant to Article 17 of the Environmental Conservation Law and the rules and the regulations promulgated thereunder at 6 New York Code of Rules and Regulations (NYCRR) Part 750.
- 2. The Department is charged with the responsibility and authority to promote and coordinate the management of the water, land, fish, wildlife, and air resources of the state to assure their protection, enhancement, provisions, allocation, and balanced utilization consistent with the environmental policy of the state. See ECL §3-0301.
- 3. "New York State has a State program that has been approved by the United States Environmental Protection Agency for the control of wastewater and storm water discharges in accordance with the act. Under New York State law the program is known as the State Pollutant Discharge Elimination System (SPDES) and is broader in scope than that required by the act in that it controls point source discharges to groundwaters as well as surface waters." 6 NYCRR Part 750-1.1(a).

Respondent

- 4. Respondent Town of Springwater (Respondent) is a municipality formed pursuant to the laws of the State located in Livingston County, New York.
- 5. Respondent owns and operates a wastewater collection system and a wastewater treatment facility known as the Town of Springwater Wastewater Treatment Plant (the Facility), located at 7737 Kellogg Road, Town of Springwater, NY 14560 (Livingston County) (Tax ID No. 151.-1-43.122), from which pollutants are discharged to the waters of the State from an outlet or point source, as that activity is defined by ECL Article 17 and 6 NYCRR Part 750 *et seg*.

1|Page

6. Respondent discharges pollutants from the Facility to the waters of the State under the authority and subject to the terms and conditions stated in SPDES Permit No. NY0246450 (Permit). The Permit was initially issued effective July 1, 2006 and has been continuously renewed through its most recent renewal on September 1, 2019 which expires on August 31, 2024.

Applicable Rules and Regulations

- 7. ECL §17-0803 states that "Except as provided by subdivision five of section 17-0701 of this article, it shall be unlawful to discharge pollutants to the waters of the state from any outlet or point source without a SPDES permit issued pursuant hereto or in a manner other than as prescribed by such permit."
- 8. ECL §17-0807(4) states that "The following discharges into the waters of the state are hereby prohibited. . . . [A]ny discharge not permitted by the provisions of this article, rules and regulations adopted or applicable pursuant hereto, the Act, 2 or provisions of a permit issued hereunder."
- 9. 6 NYCRR Part 750-2.1(e) states "The permittee must comply with all terms and conditions of the permit. Any permit noncompliance constitutes a violation of the Environmental Conservation Law and the Clean Water Act and is grounds for: enforcement action; for permit suspension, revocation or modification; and for denial of a permit renewal application."

2015 Order on Consent

- 10. Respondent entered into an Order on Consent (Case No. R8-20150120-45), effective May 22, 2015, for violations of the Permit, ECL §§17-0803 and 17-0807(4) associated with the discharge of pollutants to waters of the State that exceeded the effluent limitations contained in the Permit (2015 Order).
- 11. The 2015 Order states that its objective is "for Respondent to obtain consistent compliance with the terms of the Permit, including meeting the effluent limitations stated therein, and to reduce flows to the Facility. Towards those ends, Respondent shall perform the compliance requirements hereinafter stated in this Consent Order and take such other and further steps necessary to attain the objectives of this Consent Order." 2015 Order at Section I, page 4.
- 12. The 2015 Order states that "[t]he Consent Order will remain in effect until Respondent has fulfilled all of the compliance requirements contained in the Consent Order and has paid any penalties assessed hereby." 2015 Order at IX, page 9.

First Violation

- 13. The 2015 Order, Compliance Actions, required Respondent to "Finalize easements to access the Town owned septic tanks".
- 14. The Permit states that by March 1, 2020, Respondent was to "[s]ubmit documentation for finalized easements that authorize Sanitary Collection System

2|Page

staff access to the Town owned grinder pumps, laterals, and pump stations". Permit at Compliance Action, Easements, page 7.

- 15. Respondent failed to finalize the easements to access the Respondent owned septic tanks and failed to "[s]ubmit documentation for finalized easements that authorize Sanitary Collection System staff access to the Town owned grinder pumps, laterals, and pump stations" to the Department by March 1, 2020.
- 16. Respondent's failure to finalize the easements to access the Respondent owned septic tanks and failure to submit to the Department, by March 1, 2020, documentation for finalized easements that authorize Sanitary Collection System staff access to the Town owned grinder pumps, laterals, and pump stations is a violation of the Permit, the 2015 Order.

Second Violation

- 17. The Permit provides effluent Limitations for Outfall 001.
- 18. Respondent exceeded the Permit effluent limitations as is detailed in Exhibit 1.
- 19. Respondent's exceedances of the effluent limitations set forth in the Permit are violations of the Permit, ECL §17-0803, and 6 NYCRR Part 750-2.1(e).

Third Violation

- 20. 6 NYCRR Part 750-2.5(a)(1) states that "The permittee shall comply with all recording, reporting, monitoring and sampling requirements specified in the permit."
- 21. The Permit provides Effluent Limitations and Monitoring Requirements for Outfall 001.
- 22. The Permit contains an effluent limitation for CBOD₅ and requires monitoring of CBOD₅ two times a month by grab sample.
- 23. Respondent failed to conduct the required monitoring of CBOD₅ for the period of September 29, 2015 to December 31, 2023.
- 24. Respondent's failure to conduct the required monitoring of CBOD₅ for the period of September 29, 2015 to December 31, 2023 is a violation of 6 NYCRR Part 750-2.5(a)(1) and the Permit.

Fourth Violation

- 25. The Permit states that "[t]he permittee shall submit an Engineering Report to demonstrate the performance of the facility as constructed can comply with the [*sic*] all final permit limits" by May 1, 2020. Permit at Compliance Action, Evaluate Treatment Plant, page 8.
- 26. The May 1, 2020 deadline was extended by agreement until October 1, 2023. 3 | P age

- 27. Respondent failed to submit to the Department, by October 1, 2023, an Engineering Report to demonstrate the performance of the facility as constructed can comply with all final permit limits.
- 28. Respondent's failure to submit to the Department by October 1, 2023 an Engineering Report to demonstrate the performance of the facility as constructed can comply with all final permit limits is a violation of the Permit and 6 NYCRR Part 750-2.1(e).

Civil Penalty

- 29. The 2015 Order states "Respondent is assessed a civil penalty in the amount of Thirty-Five Thousand Eight Hundred Dollars (\$35,800) for the violations stated in this Consent Order, all of which is suspended, and shall not be payable provided that Respondent fully complies with the requirements of this Consent Order in a timely fashion. In the event that Respondent fails to fully comply with the requirements of this Consent Order in a timely fashion. In the event Order in a timely fashion, all or some of the suspended portion of the penalty shall become due and payable upon written notice to Respondent by the Department (the amount becoming due and payable specified in the Department's notice) without prejudicing the Department from seeking further appropriate penalties from Respondent for violations of this Consent Order." 2015 Order at VI, page 8.
- 30. ECL Section 71-1929 states "A person who violates any of the provisions of, or who fails to perform any duty imposed by titles 1 through 11 inclusive and title 19 of article 17, or the rules, regulations, orders or determinations of the commissioner promulgated thereto or the terms of any permit issued thereunder, shall be liable to a penalty of not to exceed thirty-seven thousand five hundred dollars per day for each violation, and, in addition thereto, such person may be enjoined from continuing such violation as hereinafter provided."
- 31. Respondent affirmatively waived its right to notice and hearing in the manner provided by law, consented to the issuing and entering of this Order, and agrees to be bound by the terms, provisions and conditions contained herein.

NOW THEREFORE, having considered this matter and having been duly advised, IT IS ORDERED THAT:

- I. Civil Penalties.
 - a. With respect to the violations identified in this Order, Respondent is hereby assessed a civil penalty in the amount of Sixty-Thousand Dollars (\$60,000). This civil penalty is suspended conditioned on Respondent's compliance with this Order, including the Schedule of Compliance. The \$60,000 suspended penalty is due within 30 days of Department's written notice of violation of this Order.

b. With respect to the 2015 Order's suspended penalty in the amount of Thirty-Five Thousand Eight Hundred Dollars (\$35,800), this civil penalty is suspended

4 Page

conditioned on Respondent's compliance with this Order, including the Schedule of Compliance. The \$35,800 suspended penalty is due within 30 days of Department's written notice of violation of this Order.

- c. Payment of the above penalties shall not in any way alter Respondent's obligation to complete performance under the terms of this Order. Payment of the suspended penalty shall not limit the Department's ability to seek further civil penalties or commence any other actions for violations of the Order.
- d. Address to send signed and notarized order on consent. The Order on Consent, along with any applicable submissions, and a copy of the payment check or proof of the electronic payment, shall be sent to:

New York State Department of Environmental Conservation Office of General Counsel – Region 8 6274 East Avon-Lima Road Avon, New York 14414

- e. Civil Penalty Payment Methods. The civil penalty shall be paid by one of the two methods stated below at the time this Order on Consent is placed in the mail or delivered to the New York State Department of Environmental Conservation's Office of General Counsel Region 8:
 - i. by check sent to the following address, made payable to the "New York State Department of Environmental Conservation," with the enclosed invoice and the Case Number of this Order on Consent written in the memo section of the check:

New York State Department of Environmental Conservation Division of Management and Budget Services 625 Broadway, 10th Floor Albany, NY 12233-4900

- ii. by electronic payment at http://www.dec.ny.gov/about/61016.html. Please have your customer and invoice number available. If you have any questions regarding paying your invoice electronically, please contact the Revenue Fee Unit at 518-402-9343 or revenue@dec.ny.gov.
- II. Effect of Payment of Penalty. Assessment and payment of any civil penalty imposed under this Order shall not in any way alter Respondent's obligation to satisfactorily perform any action required by this Order or by any approval issued by the Department under this Order.
- III. Schedule of Compliance. Respondent shall comply with the terms and conditions of this Order, including the Schedule of Compliance. The attached Schedule of Compliance and any plans approved thereunder are incorporated into the Order and are enforceable thereunder. Any records submitted to the Department shall have the owner's name, facility name and address, and contact and phone number.

5 Page

- IV. **Summary Abatement.** This Order shall not be construed to prohibit the Commissioner or his duly authorized representatives from exercising any summary abatement powers, either at common law or as granted pursuant to statute or regulation.
- V. Scope. Except as specifically provided in this Order, nothing contained in this Order shall be construed as barring, diminishing, adjudicating or in any way affecting:

A. Any legal or equitable rights or claims, actions, proceedings, suits, causes of action or demands whatsoever that the State or Department may have against Respondent for any violations not cited in this Order on Consent.

B. Any legal or equitable rights or claims, actions, proceedings, suits, causes of action or demands whatsoever that the State or Department may have against anyone other than Respondent, its officers, directors, agents, servants, employees, successors and assigns;

C. The Department's right to enforce this Order against Respondent, its officers, directors, servants, and employees in the event that Respondent shall fail to fulfill any of the terms or provisions hereof;

D. Whatever right the Department has to bring any action or proceeding against Respondent and/or any of Respondent's directors, officers, employees, servants, agents, successors, and assigns with respect to claims for natural resource damages; and

E. Respondent's right to assert all available defenses to any claims, actions, proceedings, suits, causes of actions or demands made or commenced by the State or the Department provided, however, that Respondent waives all legal or equitable rights claims, actions, proceedings, appeals, suits, causes of action, defenses or demands whatsoever that it may have to a judicial review of the validity and binding effect of this Order and whether or not this Order has been entered into voluntarily by Respondent.

VI. Communications.

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A. This paragraph does not apply to payment of the penalty or submission of the Order on Consent, which are instead addressed at Paragraph I, "Civil Penalty", above.

B. All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, by hand delivery, or by electronic mail.

C. Communications shall be sent to:

. .

For the Department:

. .

6|Page

Dusty Renee Tinsley New York State Department of Environmental Conservation – Region 8 6274 East Avon – Lima Road Avon, NY 14414

For Respondent:

James W. Campbell, Jr. Kruk & Campbell, P.C. 7312 East Main Street P.O. Box 30-A Lima, New York 14485

and

Deborah Babbitt-Henry, Supervisor Town of Springwater 8022 South Main Street Springwater, NY 14560

VII. **Standard Provisions**. Respondent must further comply with the Standard Provisions attached to this Order, which constitute material and integral terms and conditions of this Order and are hereby incorporated into this Order by reference.

DATED:

<u>30</u>, 2024 New York

ngadisangana aré na sa ara satusanosa nisina ni én ses mentené

Sean Mahar Interim Commissioner New York State Department of Environmental Conservation

Turot BY

Timothy P. Walsh, MPA, PE Regional Director - Region 8

7|Page

CONSENT BY RESPONDENT

R8-20240108-1

Respondent, Town of Springwater hereby consents to the issuance of the foregoing order without further notice, waives its right to a hearing herein, and agrees to be bound by the terms, provisions, and conditions contained herein.

Date: Email:

Acknowledgment STATE OF NEW YORK)) ss: COUNTY OF LIVINGSTON)

On the 28^{+h} day of <u>May</u>, in the year <u>2024</u>, before me, the undersigned, personally appeared <u>Debrah BubbitHenry</u>, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the <u>ADE MARIE PERKINS</u>

instrument. Netary Public

NOTARY PUBLIC-STATE OF NEW YORK No. 01PE0016202 Qualified in Stauban County My Commission Expires 11-12-2027

If you are unable to secure notarization, you must sign the statement below. In signing this document, I acknowledge under penalty of perjury that I understand the contents and purpose of this document; the signature above is my own and I signed willingly. I have also submitted state-issued identification verifying my identity. I am aware that any false statement made herein is punishable as a class A misdemeanor pursuant to section 210.45 of the Penal Law of the State of New York.

Signature

Printed name

8 Page

Standard Provisions

Access. For the purpose of monitoring or determining compliance with this Order, employees and agents of the Department shall be provided access to any facility, site, or records owned, operated, controlled or maintained by Respondent, in order to inspect and/or perform such tests as the Department may deem appropriate, to copy such records, or to perform any other lawful duty or responsibility.

Binding Effect. The provisions, terms, and conditions of this Order shall be deemed to bind Respondent, its heirs, its employees, servants, agents, successors and assigns, and all persons, firms, and corporations acting subordinate thereto.

<u>Communications.</u> Except as otherwise specified in this Order, any reports, submissions, and notices herein required shall be made to the Regional Director of the Region 8 office of the Department, located at 6274 East Avon-Lima Road, Avon, New York 14414.

Default of Payment. The penalty assessed in the Order on Consent constitutes a debt owed to the State of New York. Failure to pay the assessed penalty, or any part thereof, in accordance with the schedule contained in the Order on Consent, may result in referral to the New York State Attorney General for collection of the entire amount owed (including the assessment of interest, and a charge to cover the cost of collecting the debt), or referral to the New York State Department of Taxation and Finance, which may offset by the penalty amount any tax refund or other monies that may be owed to you by the State of New York. Any suspended and/or stipulated penalty provided for in this Order on Consent will constitute a debt owed to the State of New York when and if such penalty becomes due.

Effective Period of this Order and Termination. This Order shall take effect when it is signed by the Commissioner of the Department or the Commissioner's designee and shall expire when all the requirements imposed by the Order are completed to the Department's satisfaction.

Entirety of Order. The provisions of this Order constitute the complete and entire Order issued to the Respondent, concerning resolution of the violations identified in this Order. Terms, conditions, understandings or agreements purporting to modify or vary any term hereof shall not be binding unless made in writing and subscribed by the party to be bound, pursuant to the "Modifications" provision. No informal oral or written advice, guidance, suggestion or comment by the Department regarding any report, proposal, plan, specification, schedule, comment or statement made or submitted by the Respondent shall be construed as relieving the Respondent of his/her obligations to obtain such formal approvals as may be required by this Order.

Failure, Default, and Violation of Order. The failure of Respondent to comply with any provision of this Order shall constitute a default and a failure to perform an obligation under this Order and shall be deemed to be a violation of both this Order and the ECL. In addition, Respondent's failure to comply fully and in timely fashion with any provision, term, or condition of this Order shall constitute a default and a failure to perform an obligation under this Order and under the ECL and shall constitute sufficient grounds for revocation of any permit, license, certification, or approval issued to the Respondent by the Department.

<u>Force Majoure.</u> If Respondent cannot comply with a deadline or requirement of this Order on Consent, because of natural disaster, federal or state declared national or state emergency based on an epidemic or pandemic, war, terrorist attack, strike, riot, judicial injunction, or other, similar unforeseeable event which was not caused by the negligence or willful misconduct of Respondent and which could not have been avoided by the Respondent through the exercise of due care, Respondent shall apply in writing to the Department within a reasonable time after obtaining knowledge of such fact and request an extension or modification of the deadline or requirement. Respondent shall include in such application the measures taken by Respondent to prevent and/or minimize any delays. Failure to give such notice constitutes a waiver of any claim that a delay is not subject to penalties. Respondent shall have the burden of proving that an event is a defense to a claim of non-compliance with this Order on Consent pursuant to this subparagraph.

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9|Page

indemnification. Respondent shall indemnify and hold the Department, the State of New York, and their representatives, employees, agents and contractors harmless for all claims, suits, actions, damages and costs of every nature and description arising out of or resulting from the fulfillment or attempted fulfillment of this order by the Respondent, its employees, servants, agents, successors (including successors in title) and assigns.

<u>Modifications.</u> No change or modification to this Order will become effective except as specifically set forth In writing and approved by the Commissioner or a duly authorized representative. All modification requests shall be submitted in writing to the Commissioner, or his/her designee. All modification requests shall include the case number, the named Respondent, and an explanation for the request. Any requests to modify a milestone date must be submitted to the Department prior to the milestone date and include a justification for the requested extended timeframe.

<u>Multiple Respondents.</u> If more than one Respondent is a signatory to this Order, use of the term "Respondent" in these Standard Provisions shall be deemed to refer to each Respondent identified in the Order.

Not a Permit or Permit Modification. This Order on Consent is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Unless otherwise allowed by statute or regulation, Respondent is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits. Respondent's compliance with this Order on Consent shall be no defense to any action commenced pursuant to any laws, regulations, or permits, except as set forth herein.

Reservation of Rights. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating or in any way affecting any right of the Department to seek natural resource damages from Respondent or others; or to directly perform, to engage others to perform on its behalf, or to direct others including Respondent to perform, any additional measures that are authorized by law to protect human health, safety or the environment, including the summary abatement powers of the Department, either at common law or as granted pursuant to statute or regulation.

<u>Scope of Settlement and Violations Addressed.</u> This Order shall be in full settlement of all claims for civil and administrative penalties that have been or could be asserted by the Department against Respondent, their trustees, officers, employees, successors and assigns for the above-referenced violations. This Order shall not be construed as being in settlement of events regarding which the Department lacks knowledge or which occur after the effective date of this Order.

Service. If Respondent is represented by an attorney with respect to the execution of this Order, service of a duly executed copy of this Order upon Respondent's attorney by ordinary mail or email shall be deemed good and sufficient service.

10 Page

SCHEDULE OF COMPLIANCE

- Within 30 days from the effective date of the Order, Respondent must submit to the Department an engineering report for the addition of the new heating and air circulation units for the Orenco system.
- 2. Within 60 days from the effective date of the Order, Respondent must submit to the Department, for the Department's review and approval, an engineering report that:
 - a. demonstrates that the performance of the facility as constructed can comply with all final Permit limits and/or, where it is unable to comply with final Permit limits, detail all corrective actions to be taken so that the facility will comply with all final Permit limits and requirements;
 - b. includes an implementation schedule of the corrective actions to be taken so that the facility will comply with all final Permit limits and requirements;
 - includes plans for the construction of an effluent sampling building at the manhole adjacent to Kellogg Road to allow for year-round effluent sampling at this location; and
 - d. includes an implementation schedule of the plans for the construction of an effluent sampling building at the manhole adjacent to Kellogg Road to allow for year-round effluent sampling at this location.
- 3. Within 60 days from the effective date of the Order, Respondent must submit to the Department:
 - a. documentation demonstrating that it has obtained all necessary easements between the Town and property owners that authorize Sanitary Collection System staff access to the Town owned grinder pumps, laterals, pump stations, and Town owned septic tanks; or
 - b. where Respondent is unable to secure a necessary easement, provide documentation to the Department, for the Department's review, demonstrating the efforts made by the Respondent to secure a necessary easement. The Department, at its sole discretion, will notify Respondent in writing as to what, if any, further actions must be taken in attempting to secure a necessary easement; and
 - c. where Respondent is unable to secure a necessary easement, a written plan as to the actions Respondent will take to obtain the necessary easement as the properties where easements have not been obtained are transferred to new owners.

11 | Page

EXHIBIT 1

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| Summary of Violations | | |
|--|-------------------------------|--|
| Parameter (Enforcement Limit) | Period Month (Reported Value) | |
| CBOD5 % Removal (85%) | July 2023 – 74% | |
| CBOD5 7-Day Load (12.7 lb./day) | April 2023 – 79.23 | |
| | July 2023 – 43.79 | |
| CBOD5 30-Day Load (8.3 lb./day) | September 2022 – 22.00 | |
| | April 2023 – 66.30 | |
| | July 2023 – 23.90 | |
| CBOD5 7-Day Concentration (38 mg/L) | February 2023- 41.00 | |
| | July 2023 – 210.00 | |
| CBOD5 30-Day Concentration (25mg/L) | July 2022- 28.50 | |
| | November 2022 – 30.00 | |
| | December 2022 – 30.50 | |
| | January 2023 – 27.00 | |
| | February 2023 - 35.50 | |
| | April 2023 – 33.50 | |
| | June 2023 - 34.00 | |
| | July 2023 – 115.00 | |
| Fecal Coliform 7- Day Geometric Mean (400/ | July 2022 – 220,000 | |
| 100ml) | August 2022 – 330,000 | |
| | September 2022 - 4,500 | |
| | October 2022 – 68,000 | |
| | December 2022 – 1,560 | |
| | January 2023 – 1,200 | |
| | February 2023 – 1,200 | |
| | March 2023 – 5,500 | |
| | April 2023 – 450,000 | |
| | May 2023 – 290,000 | |
| | June 2023 – 260,000 | |
| | July 2023 – 540,000 | |
| Fecal Coliform 30 - Day Geometric Mean (200/ | July 2022 – 121,500 | |
| 100ml) | August 2022 – 167,350 | |
| | September 2022 – 2,300 | |
| | October 2022 – 37,500 | |
| | November 2022 - 215 | |
| | December 2022 – 940 | |
| | January 2023 – 33,100 | |
| | February 2023 – 940 | |
| | March 2023 – 4,100 | |
| | April 2023 – 375,000 | |
| | May 2023 – 155,000 | |
| | June 2023 – 195,000 | |
| | July 2023 – 315,000 | |

| Nitrogen, Ammonia Total (5.0 mg/l) | June 2023 – 26.00 |
|---|----------------------|
| | July 2023 – 14.50 |
| Total Suspended Solids (TSS) 7 - Day | July 2022 – 65.00 |
| Concentration (45 mg/l) | |
| Total Suspended Solids (TSS) 30 - Day | July 2022 – 52.00 |
| Concentration (30 mg/l) | January 2023 - 34.00 |
| | April 2023 – 34.00 |
| | May 2023 – 52.00 |
| | June 2023 - 35.50 |
| Total Suspended Solids (TSS) Percent | July 2022 – 74.00 |
| Removal (85%) | January 2023 – 83.00 |
| | April 2023 – 83.00 |
| | May 2023 – 82.00 |
| | June 2023 - 84.20 |
| Total Suspended Solids (TSS) Effluent Gross | July 2022 – 65.00 |
| 7 Day Average (45 mg/L) | |
| Total Suspended Solids (TSS) Effluent Gross | July 2022 – 52.00 |
| 30 Day Average (30 mg/L) | January 2023 – 34.00 |
| | April 2023 – 34.00 |
| | May 2023 – 52.00 |
| | June 2023 – 35.50 |

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EXHIBIT B



Technical Memorandum

February 16, 2024

| То | Jason Molino | Contact No. | (585) 346-3523 | |
|--------------|-------------------------|-------------|------------------|--|
| Copy to | Jason Greene, GHD | Email | jMolino@lcwsa.us | |
| From | Stephen Waldvogel | Project No. | 12632136 | |
| Project Name | Springwater Peer Review | | | |
| Subject | Peer Review Findings | | | |

1. Introduction

GHD is pleased to present LCWSA with this technical memorandum which summarizes the findings of GHD's Peer Review of the Draft Evaluation and Corrective Measures Report prepared by Hunt Engineers for the Town of Springwater WWTF in December 2023.

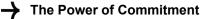
1.1 Scope and limitations

GHD's peer review is focused on identifying aspects and items presented within the draft report and other documentation that may warrant additional consideration, as indicated in GHD's proposal to the Livingston County Water and Sewer Authority (LCWSA), dated January 15, 2024. The documents provided to GHD by LCWSA for the peer review included:

 Draft Evaluation and Corrective Measures Repot for the WWTF prepared by Hunt Engineers, December 2023.

The findings summarized herein are provided for discussion purposes only and are not engineering recommendations. This technical memorandum was prepared by GHD for Livingston County Water & Sewer Authority. It is not prepared as, and is not represented to be, a deliverable suitable for reliance by any person for any purpose. It is not intended for circulation or incorporation into other documents. The matters discussed in this memorandum are limited to those specifically detailed in the memorandum and are subject to any limitations or assumptions specially set out.

This Technical Memorandum is provided as an interim output under our agreement with Livingston County Water & Sewer Authority. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.



2. Background

The Town of Springwater (the Town) Wastewater Treatment Facility (WWTF) was most recently designed and upgraded by Hunt Engineers in 2021. The existing wastewater collection system and the WWTF are owned and maintained by the Town. The WWTF has experienced operational issues since coming online and has had challenges meeting its SPDES permit effluent limits for BOD, TSS, fecal coliforms, and ammonia.

In August 2023 an Intermunicipal Cooperation Agreement (IMA) was executed by the Town and Livingston County Water Sewer Authority (LCWSA), for LCWSA to assist with management of capital improvement projects which are intended to help the Town of Springwater WWTF achieve compliance with their SPDES Permit. The Town, LCWSA, Hunt Engineers, and NYSDEC staff met on site to review the compliance schedule and path forward. In late September 2023 the DEC issued a Notice of Violation with Order on Consent R8-20150120-45 to the Town.

Following the execution of the IMA several improvements were made to the collection system and WWTF following the Town's receipt of the NOV, including:

- Adoption of a New Sewer Use Law
- Improvement of 11 collection system manhole risers
- Installation of new filter-tank ventilation system consisting of heaters and blowers

In December 2023 the Town and LCWSA submitted an updated WWTF operations and maintenance (O&M) plan to NYSDEC, along with a letter from Town Code Enforcement that all grease traps in the Town were properly installed, and a copy of the Draft Evaluation and Corrective Measures Report for the WWTF prepared by Hunt Engineers. The major recommendations of the draft report include the following:

- Install preliminary treatment clarifier and sludge holding tank to address accumulated scum, decrease ammonia and allow suspended solids to settle and repair a faulty manhole at the entrance chamber to the facility.
- Install a second stage to the existing Orenco biological treatment system to meet ammonia limits and solids filtering.
- Reconnect the existing wetland cells for additional nitrification polishing.
- Install approximately 3,200 linear feet of small diameter forcemain to limit retention time in the collection system.
- Estimated cost of implementing recommended improvements to be \$2,050,000.

In January 2024, LCWSA requested that GHD perform a peer review of the Draft Evaluation and Corrective Measures report prepared by Hunt Engineers prior to finalization of the Report and submission to NYSDEC. The findings of the peer review are presented in Section 3.

3. Peer Review Findings

GHD has developed the following summary of findings based on the peer review:

- Consider implementing an intensified sampling program to better characterize the wastewater characteristics and treatment performance at the WWTF.
 - Based on review of the draft report contents, stated conclusions, recommendations, and associated capital and increased operating costs, there would be value in obtaining a stronger understanding of the influent and effluent flows and loads, as well as at other intermediate locations within the treatment process (e.g. primary tank effluent) to define removal efficiencies.

This Technical Memorandum is provided as an interim output under our agreement with Livingston County Water & Sewer Authority. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

- Consider providing more documentation within the report regarding the timeline of events for the additional grease/FOG removal efforts within the collection system (missing grease traps, installation certifications, sewer use ordinance implementation, etc.) and their relative impact on the corresponding influent wastewater characteristics and effluent performance at the treatment plant.
 - Does influent and effluent plant data indicate any change or improvement in plant performance resulting from these efforts to reduce FOG?
- Consider providing a unit process basis of design and anticipated treatment performance for each new unit process as well as the existing unit processes that would be directly impacted by the installation of the new treatment units.
 - What is the anticipated performance of the proposed new preliminary clarifier?
 - What is the basis for the safety factor which was applied to the preliminary clarifier sizing and how is this sizing anticipated to impact the performance as compared to conventional sizing approach?
 - How will the performance of the preliminary clarifier impact downstream processes and their resulting performance?
 - Primary Treatment Tanks
 - Secondary Treatment System (AdvanTex System)
 - What is the anticipated performance of the proposed expansion of the secondary treatment (AdvanTex System), including the upstream impact of the new preliminary clarifier?
 - Based on the draft report, the proposed sizing of the secondary treatment expansion is based on current plant effluent performance, including the current operational and performance issues, and does not appear to take into account any potential treatment performance improvements associated with the preliminary clarifier or any corresponding improvements in other existing treatment processes.
 - What is the anticipated performance of the wetland system if reactivated? How will it vary seasonally considering the seasonal nature of these types of treatment systems?
- If the proposed new preliminary clarifier provides the intended improvement in FOG, TSS, and BOD removal upstream of the existing treatment processes, was consideration given to the need for the proposed secondary treatment process expansion (additional AdvanTex secondary treatment tanks)?
- Was consideration given to providing two new preliminary clarifier units for process redundancy?
- Consider clarifying series versus parallel operation of the existing Orenco AdvanTex biological treatment units, as this can impact media loading rates and performance. The report does not indicate what Orenco's original design intent was for the operational configuration of this system and what, if any, changes are recommended based on current/future anticipated operating conditions.
- The report recommends replacement of a portion of forcemain (approx. 3,000 feet) within the collection system identified as being oversized, resulting in anaerobic conditions. The report also indicates that the existing primary treatment tanks are intended to operate as septic tanks with the BOD removal mechanism occurring under anaerobic conditions. Is this forcemain replacement necessary given the presence of anaerobic conditions in the primary treatment tanks and the forcemain discharging to it?

Regards

Stephen Waldvogel, PE Technical Director

This Technical Memorandum is provided as an interim output under our agreement with Livingston County Water & Sewer Authority. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

HUNT_{ENGINEERS | ARCHITECTS | SURVEYORS}

EVALUATION AND CORRECTIVE MEASURES REPORT

for

TOWN OF SPRINGWATER WASTEWATER TREATMENT FACILITY LIVINGSTON COUNTY, NEW YORK

December 2023 Revised May 2024

HUNT 2629-019

251 NEW KARNER ROAD ALBANY, NY 12205 TELE: 607-798-8081

1 ELIZABETH STREET SUITE 12 TOWANDA, PA 18848 TELE: 570.265.4868

100 HUNT CENTER HORSEHEADS, NY 14845 TELE: 607.358.1000

4 COMMERCIAL STREET SUITE 300 ROCHESTER, NY 14614 TELE: 585.327.7950

143 COURT STREET BINGHAMTON, NY 13901 TELE: 607.798.8081

TABLE OF CONTENTS

| 4 5 5 .10 .10 .12 .17 .17 |
|--|
| 5 5 .10 .12 .17 .17 |
| 5 .10 .10 .12 .17 .17 |
| 5 .10 .10 .12 .17 .17 |
| .10 .10 .12 .17 .17 |
| .10 .12 .17 .17 |
| .12 .17 .17 |
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| .22 |
| .22 |
| .23 |
| .23 |
| .24 |
| .28 |
| .28 |
| .28 |
| .30 |
| .30 |
| .31 |
| .31 |
| |
| |

TABLES

| Table 1: WWTP Average Influent Data (Grab Samples) | 5 |
|--|---|
| Table 2: Permit Conditions and Effluent Discharge Limits | |
| Table 3: WWTP Process Unit Capacities | |
| Table 4: WWTP 2022-2023 Lab Data Summary (Grab Sample) | |
| Table 5: WWTP 2024 Lab Data Summary (Grab Sample) | |
| Table 6: BODR Previous WWTP Influent Data 2011-2017 | |

Town of Springwater HUNT 2629-019

| Table 7: | BODR WWTP Influent Design Data | 14 |
|----------|--------------------------------|----|
| | Recent Sampling Ammonia Data | |
| | Selected Project Summary | |

FIGURES

| Figure 1: WWTF Location | 4 |
|--|---|
| Figure 2: Plant Flow Data | |
| Figure 3: Plant cBOD5 Data | |
| Figure 4: Plant TSS Data | |
| Figure 5: Plant Ammonia-N Data | |
| Figure 6: Springwater WWTP Process Flow – Single Stage | |

<u>APPENDICES</u>

| Appendix A: | Project Location Map |
|-------------|---|
| Appendix B: | Regulatory Information |
| Appendix C: | Plant Data |
| Appendix D: | Proposed Conceptual Figures, Historical Data, & Costing |
| Appendix E: | Orenco Stage II Calculations |
| Appendix F: | Engineering Report Certification |
| | |

I. Background

A. Purpose

The purpose of this Corrective Measures Report is to provide information to the New York State Department of Environmental Conservation (NYSDEC) for their technical review and approval of the evaluation and recommended measures proposed to bring the existing wastewater treatment facility (WWTF) into compliance with the SPDES permit NY0246450 effluent limits. *Refer to Project Location Mapping in Appendix A*. The existing WWTF infrastructure is owned and maintained by the Town of Springwater and was issued a Notice of Violation (NOV) Letter with Order on Consent R8-20150120-45 on 09/27/2023 for effluent violations. The Order and the SPDES permit are in Appendix B.

This report will provide the following:

- Current sewerage flows and influent and effluent wastewater quality characteristics.
- Wastewater treatment facility design parameters and sizes.
- Findings and recommendations.

B. Project Location and History

The Town of Springwater WWTF is located on Kellogg Road between North Main Street (SR 15A) and Mill Street as shown in the following aerial map. The facility was constructed in 2020/2021 and has been operational and accepting sewer flows. *See Project Location Map in Appendix A*.



Figure 1: WWTF Location

II. Current Wastewater Flows and Loadings

Historical MORs and raw data were reviewed to assess trends and quantify averages and maximum wastewater constituents. The table below illustrates summaries of these influent values for the period shown. These can be found in **Appendix C**.

A. Design Flows and Waste Loads (Feb. 2022-July 2023)

Table 1: WWTP Average Influent Data (Grab Samples)

| Influent Condition | Value |
|-------------------------|-------------|
| Average Daily Flow | 0.023 MGD |
| Max. Average Month Flow | 0.027 MGD |
| BOD5 | 335 mg/L* |
| Suspended Solids | 211 mg/L |
| NH3-N | 50.4 mg/L** |
| Alkalinity | N/A |
| pН | N/A |

*Four daily values over 440 mg/L; maximum values of 560 mg/L (July 2022), 640 mg/l (Nov. 2022), 760 mg/L (Dec. 2022)

**Maximum grab sample values of 130 mg/L (Apr. 2023) and 79 mg/L (July 2023)

B. Existing Flows and Waste Loads

Existing influent flow rates are monitored with an inline magnetic flow meter on the EQ tank force main and are summarized by the graph below for the period shown. The average daily flow rate was 0.023 MGD from Feb.-2022 to July-2023. The highest average month flow was 0.027 MGD in April 2023. The averages are well within the monthly permit limit of 0.04 MGD. Applying a peaking factor of 3.55 based on population and using Figure 1 in Ten States Standards page 10-6, we developed the peak hour flow (PHF) in the chart below.



Figure 2: Plant Flow Data

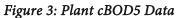
Historical WWTP Performance:

WWTP performance can be determined by comparing effluent loadings (lbs/day) and concentrations to the limits outlined within the Town's SPDES permit. To determine the loading rates, the following equation was utilized for each parameter:

Effluent Loading rate (lbs/day) = Flow Rate (MGD) x Concentration (mg/L) x 8.34

cBOD₅ and TSS:

The plant permit has monthly effluent loading (mg/L & lbs/day) limits for cBOD5 and TSS to Springwater Creek. For cBOD5 it is 25 mg/L (8.3 lbs/day) with a TSS limit of 30 mg/L (10 lbs/day) all year. cBOD5 effluent limit for 25 mg/L was exceeded 12 times within the study period while the 8.3 lbs/day limit was exceeded 4 times. TSS effluent limit for 10 mg/L was exceeded 8 times during the study period while the 10 lbs/day limit was not exceeded. See the graphs below and monthly operating reports (MOR) data in Appendix C.



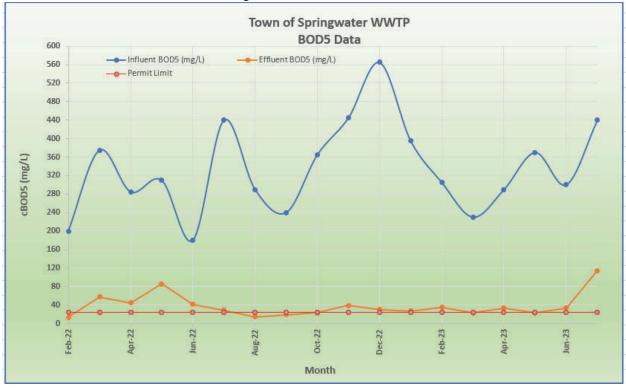


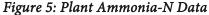
Figure 4: Plant TSS Data



Phosphorus and Nitrogen:

The facility's permit has only monitoring requirements for total phosphorus (TP) and has seasonal effluent limits for ammonia-nitrogen (NH3-N). For the study period, the 5.0 mg/L Summer TP and 8.0 Winter was exceeded on numerous occasions while NH3-N exceeded the entire period. See the graphs below and MOR data in Appendix C.





*

Table 2: Permit Conditions and Effluent Discharge Limits

PERMIT LIMITS, LEVELS AND MONITORING

| OUTFALL | LIMITATIONS APPLY | | | RECEIVING WATER | | EFFECTIVE | EXPIRING | | G | |
|-----------------------------|-----------------------|------------------------|-------------------|-----------------|-----------------------|------------|---------------|------|---------------|---------|
| 001 Year Round | | | Springwater Creek | | | 03/01/2021 | 08/31/2024 | | | |
| | [| EFFLUENT LIMITATION | | | | MONITO | RING REQUIR | EMEN | TS | ſ |
| PARAMETER | Туре | Limit | Limit Units | | Limit Units Frequency | | y Type Inf. E | | ation Eff. | FN |
| Flow | Monthly Avera | age 0.04 | MGD | | | Continuous | Recorder | x | | |
| рН | Range | 6.5 - 8.5 | SU | | | Daily | Grab | | x | 13 N |
| Temperature | Monitor | | Deg C | | | Daily | Grab | | x | |
| CBOD ₅ | Monthly Avera | age 25 | mg/L | 8.3 | lbs/d | 2X/month | Grab | x | x | 1 |
| CBOD ₅ | 7-Day Avera | ge 38 | mg/L | 12.7 | lbs/d | 2X/month | Grab | x | x | No. No. |
| Total Suspended So (TSS) | ids Monthly Avera | age 30 | mg/L | 10 | lbs/d | 2X/month | Grab | x | x | 1 |
| Total Suspended So (TSS) | lids 7-Day Avera | ge 45 | mg/L | 15 | lbs/d | 2X/month | Grab | x | x | 2 |
| Settleable Solids | Daily Maximu | um 0.1 | mL/L | | | Daily | Grab | | x | |
| Ammonia (as N) | Monthly Avera | age 5.0 (S) 8.0 (W) | mg/L | | | 2X/month | Grab | | x | 2,4 |
| Total Phosphorus | Monthly Avera | age Monitor | mg/l | | | 2X/month | Grab | | x | |
| Effluent Disinfection | Required All Year | | | | 1.01 | | | | | |
| Coliform, Fecal | 30-Day Geometric M | ean 200 | No./ 100 ml | | | 2X/month | Grab | | x | 2 |
| Coliform, Fecal | 7 Day Geometric M | ean 400 | No./ 100 ml | | | 2X/month | Grab | 38 3 | x | 2 |
| Chlorine, Total Resid | lual Daily Maxim | um 0.03 | mg/L | | | 1/day | Grab | | x | 2,3 |

FOOTNOTES:

1. Effluent shall not exceed 15 % and 15 % of influent concentration values for BOD₅ & TSS respectively.

2. This is a final effluent limitation. See Schedule of Compliance for interim effluent limitation.

3. Effluent limitation for Total Residual Chlorine is only applicable if chlorine is used for disinfection or other treatment processes.

4. These are seasonal limits in which Summer or (S) is from June 1 through October 31 and Winter or (W) is from November 1 through May 31.

III. Current Design and Data

A. Description of Existing Treatment Process Train (Single Stage)

The Springwater WWTF was designed and constructed as a series: a multi-media, fixedfilm process with recirculation and aerated biological treatment system. The buried primary treatment and EQ/Anoxic tanks (Orenco Advantex) provide nitrification of ammonia as is required by the SPDES permit.

It is important to note that the original design and bid included a second stage Orenco treatment system; however, due to funding constraints this was not installed, leaving the burden on secondary treatment solely on the first stage. This shortfall clearly has affected the treatment level in meeting the effluent limits.

Secondary treatment consists of five (5) multi-media tanks in parallel with spray distribution nozzles to evenly distribute the waste stream over the hanging synthetic media. This consists of one (1) recirculation-blend tank (AX-MAX 100-28) that houses the distribution and recirculation pumps, as well as providing media for further filtration. Recirculation from the first stage is pumped through the supplemental alkalinity-feed system inside the building then out to the EQ/Anoxic tank. Currently, the raw sewage has sufficient alkalinity, whereas the supplemental chemical feed is not required; and the recirculation bypasses the system.

Each of the tanks is equipped with an air-intake and heating unit that provides consistent air exchange and keeps the interior of the tanks greater than 20°C during the colder months. The heating units are shut off during the warmer months, while the air-exchange unit continues to operate year-round. Figure 6 shows the general process flow, and Table 3 lists the process equipment as designed.

Main process components include:

- 1. Influent Flow Meter
- 2. Influent and Effluent Sampling Stations
- 3. Two (2) Buried Primary Treatment Tanks
- 4. Preanoxic/EQ Tank
- 5. Orenco AX-MAX Biological Treatment Recirc/Blend Reactors (3 total) in series
- 6. Orenco AX-MAX Biological Treatment Filtration/Discharge Units (3 total)
- 7. Dry Chemical Alkalinity Feed System (not in use)
- 8. UV Disinfection
- 9. Cascade Post Aeration

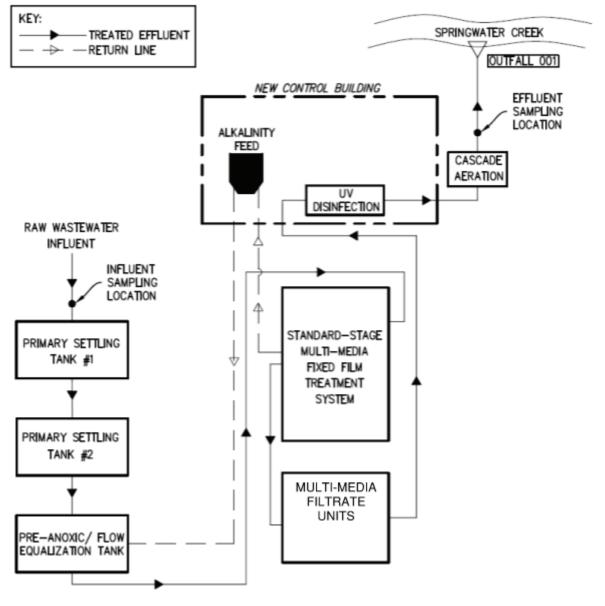


Figure 6: Springwater WWTP Process Flow – Single Stage

| Process | Quantity | Capacity | | | | |
|--------------------------|--|-----------------------------|--|--|--|--|
| Plant Design | - | 40,000 gpd | | | | |
| | | (28 gpm +/-) | | | | |
| Flow Meter | 1 | 3-inch Magnetic Meter | | | | |
| Buried Primary Treatment | 2 series | 40,000 gal nom/ea | | | | |
| Tanks | 12 ft diam x 54 ft L | 15" diam. Effluent filter, | | | | |
| | | 1/8" mesh 1st stage, 1/16" | | | | |
| | | mesh 2nd stage | | | | |
| Pre-Anoxic/EQ Tank | 1 | 25,000 gal nom | | | | |
| | | 15 hrs +/- detention | | | | |
| -pumps | 2 lead/lag | 75 gpm/ea | | | | |
| 1st Stage Orenco AX-MAX | 3 Recirc-blend tanks | 19,000 gal/ea (25 gpd/SF) | | | | |
| Inparallel | 42 ft L x 7.5 ft W x 8 ft H | 12,600 gal | | | | |
| 2nd Stage Orenco AX-MAX | 3 tanks | | | | | |
| In parallel | 2 Filtrate tank-42 ft L x 7.5 ft W x 8 | 15,700 gal/ea (62.5 gpd/SF) | | | | |
| | ft H | 12,600 gal | | | | |
| | 1-Filtrate/Pump tank 28 ft L x 7.5 | | | | | |
| | ft W x 8 ft H | | | | | |
| Post Aeration | 1 tank,11ft height w/ 7 steps | Effluent D.O, 7 mg/L | | | | |
| -cascade | | | | | | |
| UV Disinfection | 2 parallel | 75 gpm/ea | | | | |
| | | | | | | |
| Sampling Manhole | 1 Effluent | N/A | | | | |

 Table 3:
 WWTP Process Unit Capacities

B. Recent Data and Sampling

The Orenco facility became fully online in February 2021 and was designed and approved by the NYSDEC based on the NY design guidelines. The Advantex system should be fully capable of reaching the effluent limits of 25 mg/L cBOD and 30 mg/L TSS, but it has had trouble meeting these levels and has not met the 5.0 mg/L (S) and 8.0 mg/L (W) NH3-N limits based on the lab data from 2022-2023. See table below for summaries. The noncompliance in the case of the Town of Springwater facility has been attributed to several factors. Orenco staff traveled multiple times to Springwater to aid in trying to correct these factors and offer assistance. Orenco staff have also been onsite numerous times since the plant has been in operation helping to address issues as they have arisen. Additionally, the Town has followed every recommendation to clean the Max units and have completed cleaning multiple times. They have been very diligent with their operation and maintenance (O&M) program and have been proactive in putting forth effort above the manufacturer standard operating procedures (SOP).

| Influent Condition | 2022 Influent Value | 2022 Effluent Value | 2023 Influent Value | 2023 Effluent Value |
|--------------------------|------------------------|------------------------|------------------------|------------------------|
| Min. BOD ₅ | 170 mg/L | 11 mg/L | 170 mg/L | 20 mg/L |
| Average BOD ₅ | 343 mg/L | 38 mg/L | 341 mg/L | 43 mg/L |
| Max. BOD ₅ | 760 mg/L | 120 mg/L | 550 mg/L | 210 mg/L |
| Min. TSS | 64 mg/L | 6 mg/L | 99 mg/L | 14 mg/L |
| Average TSS | 198 mg/L | 26 mg/L | 183 mg/L | 29 mg/L |
| Max. TSS | 430 mg/L | 65 mg/L | 270 mg/L | 52 mg/L |
| Min. NH3 | 25 mg/L | 1.8 mg/L* | 20 mg/L | 9 mg/L |
| Average NH3 | 46 mg/L | 17 mg/L | 54 mg/L | 24 mg/L |
| Max. NH3 | 76 mg/L | 35 mg/L | 130 mg/L | 39 mg/L |

Table 4: WWTP 2022-2023 Lab Data Summary (Grab Sample)

*Believed to be a sampling/testing error; therefore, the average shown is skewed.

| Influent Condition* | 2024 Influent | 2024 Effluent |
|---------------------------|---------------|---------------|
| | Value | Value |
| Min. cBOD ₅ | 113 mg/L | 37 mg/L |
| Average cBOD ₅ | 351 mg/L | 63 mg/L |
| Max. cBOD ₅ | 1,290 mg/L | 86 mg/L |
| Min. TSS | 92 mg/L | 25 mg/L |
| Average TSS | 362 mg/L | 30 mg/L |
| Max. TSS | 1,810 mg/L | 37 mg/L |
| Min. NH3 | 21.5 mg/L | 17 mg/L |
| Average NH3 | 41 mg/L | 23 mg/L |
| Max. NH3 | 59 mg/L | 26 mg/L |

 Table 5:
 WWTP 2024 Lab Data Summary (Grab Sample)

*Data from 12/27/23-4/16/24; cBOD5 testing was initiated; previous data was BOD5.

Based on this recent data, we can conclude that the average influent values for BOD and TSS are in-line with what was presented in the Basis of Design Report (BODR) and used for design (shown below), with the exception of NH3-N for some sampling results. It is noted that per USEPA document "*Wastewater Technology Fact Sheet Sewers Pressure*". BOD and TSS values of 350 mg/L should be used for design due to the diminished I&I from pressure sewer systems. As is shown below in **Table 6**, the design values used were 400 mg/L BOD and 350 mg/L TSS, as well as 45 mg/L NH3-N.

Some of the maximum values for each constituent can, however, be construed as much higher than would be expected or reasonable. These higher values can create process issues within the buried primary treatment tanks and inhibit or restrict the biological process of removing BOD, TSS, and ammonia. Based on the history, it is likely that initial higher influent BOD and ammonia, which were never adequately corrected, has compounded over time, along with continued high values shown in Table 4.

| Parameter | Avg. | Min. | Max. |
|---------------------------|-------|-------|-------|
| BOD_5^* (mg/L) | 140.2 | 12.8 | 465.0 |
| Suspended Solids (mg/L) | 55.4 | 8.3 | 160.0 |
| NH ₃ -N (mg/L) | 57.1 | 36.0 | 92.7 |
| Flow (MGD) | 0.036 | 0.027 | 0.056 |

 Table 6: BODR Previous WWTP Influent Data 2011-2017

As was noted in the BODR, the historical ammonia is on the higher end of the range that would be expected. This is likely due to the long hydraulic retention time in the septic tanks which allows for near complete ammonification of the organic-N and was not used for the original WWTP design. However, the component of organic nitrogen would be very small. If TKN is elevated, it is usually caused by a source other than normal residential wastewater.

| Parameter | Influent Concentration | Influent Loading (lb/day) | |
|---------------------------|---------------------------|---------------------------------|--|
| BOD ₅ (mg/l) | 400 | 133 | |
| TSS (mg/l) | 350 | 117 | |
| NH ₃ -N (mg/l) | 45 | 15 | |

Table 7: BODR WWTP Influent Design Data

Grab sampling was done on the influent and effluent, and some were taken after the EQ tank to gauge the level of treatment in the buried primary treatment tanks. In 2022, the average BOD and TSS removal from influent to effluent was 88% and 83% respectively, and NH3 average removal was 62%. Similarly for 2023, the average BOD and TSS removal from influent to effluent was 87% and 83% respectively, and NH3 average removal dropped to 52%. Based on the permit limits and the average influent data, percent removals should be 93% BOD, 85% TSS, and 90% ammonia (based on summer limit). Clearly ammonia removal is lacking.

EQ tank data from the four (4) sampling dates in 2022, demonstrates average BOD and TSS removal from influent to EQ effluent was 65% and 77% respectively, and NH3 average removal was 18%. The 2023 data had a full EQ sampling, with the average BOD and TSS removal from influent to EQ effluent of 41% and 69% respectively, and NH3 average removal of 8%. Note in 2023, there are four (4) negative NH3 values for removal, i.e. the effluent concentration was greater than influent concentration. This could be attributed to an upset in the primary tanks or ammonia-nitrogen being released back into the waste stream within the process potential related to septic/anoxic conditions within the tankage. If we remove these data points, the NH3 removal is then 18%.

In 2022, of the 24 sampling dates there were 14 effluent BOD exceedances, 10 effluent TSS exceedances, and the ammonia limit was exceeded every date. In 2023, of the 19 sampling dates, there were 13 effluent BOD exceedances, 9 effluent TSS exceedances, and the ammonia limit was exceeded every date. BOD will compete with nitrifiers for available oxygen. BOD must be reduced before nitrification from ammonia to nitrate can occur. Typically, the target for BOD should be < 10 mg/L to assure nitrification.

Typical design removal efficiencies in an Orenco AdvanTex, buried-primary-treatment - tank process range from 60-70% for BOD and 80-90% for TSS, and should result in a BOD/TSS effluent ranges of 101-135 mg/L for BOD and 19-38 mg/L for TSS (based on the average values shown in Table 4 above). For the 2022 sampling period, the average EQ tank effluent was 179 mg/L BOD and 50 mg/L TSS. Additional Bod and TSS removal will be required to achieve the desired primary-tankage effluent ranges of < 135 mg/L for BOD and < 38 mg/L TSS.

In January 2022, a composite sampler was placed at the plant to measure influent data, EQ Tank effluent data, and plant outfall data. This shows removal efficiencies of 70%/73%/27% respectively for BOD/TSS/NH3-N within the buried primary treatment system and EQ tank. Effluent data from the EQ Tank shows BOD/TSS/NH3-N of 98/44/46 mg/L during this period.

While the current data suggests that the waste stream from the EQ tank is in line with the original design parameters, previous treatment issues within the secondary system seem to have created a situation in meeting the effluent limits.

In October of 2023, sampling was conducted at various locations throughout the plant from the influent manhole to the effluent manhole. Table 7 shows the results of this effort. Influent ammonia values are higher than expected, and the design value of 45 mg/L. In many cases, ammonia increased from process unit to process unit.

| | Proccess Control Sampling - Ammonia Level mg/L | | | | | | | |
|------------|--|------|------|-------|-------|-------|---------|-------------|
| Date | Inf Manhole | T2 | EQ | Max 3 | Max 6 | Max 4 | Cascade | Eff Manhole |
| 10/2/2023 | 62 | 52 | 50 | 33 | 30 | 26 | 25 | 28 |
| 10/3/2023 | 57 | 57 | 44.5 | 38.5 | 26 | 24 | 24 | 24 |
| 10/5/2023 | 49 | 65 | 51 | 34 | 23 | 59 | 26 | 26 |
| 10/11/2023 | 65 | 64 | 55 | 42 | 24 | 29 | 20 | 20.5 |
| 10/12/2023 | 76 | 70 | 62 | 45 | 25 | 30 | 21.5 | 22 |
| 10/13/2023 | 50 | 69 | 58 | 43 | 22 | 30 | 21.5 | 22 |
| 10/20/2023 | 67 | 69 | 61 | 47 | 27 | 31 | 24 | 24 |
| 10/27/2023 | 58 | 61 | 53 | 41 | 21 | 27 | 21.5 | 21 |
| | | | | | | | | |
| MIN | 49.0 | 52.0 | 44.5 | 33.0 | 21.0 | 24.0 | 20.0 | 20.5 |
| AVG | 60.5 | 63.4 | 54.3 | 40.4 | 24.8 | 32.0 | 22.9 | 23.4 |
| MAX | 76.0 | 70.0 | 62.0 | 47.0 | 30.0 | 59.0 | 26.0 | 28.0 |

Table 8: Recent Sampling Ammonia Data

Items to note on the above sampling:

- 1. These are grab samples. Composite sampling would be recommended.
- 2. These samples were not taken at the same time of day each day.
- 3. Reduced treatment can occur in a specific unit due to blinding of the sheets, improper spray pattern, air flow to the unit, etc. However, provided that the large majority of the units are working well, they should all blend to produce the desired effluent quality.
- 4. If the flow EQ pumps had just turned on, and then recirc pumps turned on, and that water was being distributed over one of the units that might account for a slightly higher number in MAX 6 or MAX 4 or vice versa.
- 5. It is prudent to check the one way valve in Max 4 transfer line to make sure it is not leaking recirc into discharge.
- 6. We also suggest the DO levels in these tanks we recorded. It should be noted that Nitrogen is not generated or produced in the MAX units. Nitrogen, or TKN, in the raw sewage is comprised of organically bound nitrogen and inorganic ammonia. These are the only forms of nitrogen that are entering the plant.

Organically bound nitrogen usually settles out with TSS, but in the septic tank, it is possible to have ammonification (process of organic nitrogen convert to NH3) occur in the long term in the anaerobic conditions in the septic tank. This could be the reason some slight increase in NH3 from the raw influent through the septic tank effluent. In this sensitive system, this, along with making sure retention times in the septic tanks are held, is why keeping the septic tanks cleaned from solids is important.

Neither the volume of solids nor the retention time of the solids in the Orenco MAX units is significant enough to produce noticeable amounts of ammonification. This is the only way that ammonia would be showing up that hadn't been accounted for previously. Therefore, it is recommended to monitor and pump the MAX tanks as needed.

To reiterate, retention time in an aerated system is the exact way that nitrification will occur and longer aeration/retention times in the system will not build up ammonia, but rather help the problem.

IV. Findings and Observations

Treatment is impacted by the macerated nature of the blended waste stream causing elevated biological loading and lighter solids, thus resulting in bulking and problematic operation of the preliminary tankage and elevated BOD and solids loading to the Orenco AdvanTex fixed-film system. These identified shortcomings coupled with various collection system and WWTP operational issues has further amplified the treatment efficiency.

Some of these shortcomings are highlighted in the following collection and WWTP sections:

A. Collection System

The following are potential causes for increased FOGs and/or scum accumulating on the surface in the buried primary treatment tanks, as well as possible inherent grinder system disadvantages:

- 1. Household detergents and sanitizer/disinfectants have an adverse impact on septictank, BOD-treatment performance and can lead to deactivation of microbes. It would be difficult to monitor this for each property but is offered as a potential adverse effect. Septic tanks can recover quickly when household chemical disposal stops.
- 2. Based on Table C-3 in the New York State Design Standards (March 5, 2014), grinder systems typically have high FOG levels (mg/L) compared to other collection systems.
- 3. It is suspected that there could be some illegal dumping of problematic wastes that would cause toxicity and/or higher FOG concentrations. Illegal chemicals in the system cause toxicity that would kill the microbial environment thus decreasing BOD removal, which inherently affect ammonia removal.
- 4. The grinder-system wastewater tends to be more septic/anaerobic when it arrives at the treatment facility. This would make it more difficult for BOD removal.
- 5. The inherent nature of grinder pumps to macerate the wastes creates a mixture of dense yet light influent sewage that will agglomerate and float rather than settle. This, in combination with FOGs, create a thick dense layer.
- 6. There are some long stretches in the force-main system that are prone to velocities lower than the required minimum 2.0 fps for cleaning, as well as high retention times

that could lead to solids deposition and anaerobic conditions. While 2.0 fps is the normal minimum velocity recommended to prevent settling in the system, a cleansing velocity of 3-3.5 fps is typically recommended to flush out any sewage that collects in the system during low flow times of the day. There is one stretch of over 2,000 feet of 6-inch piping with an estimated velocity of 1.47 fps, another 670 feet section with 1.34 fps, and another 300 feet section less than 1.0 fps.

- 7. There are also sections of the collection system that have excessive retention times of seven (7) or more hours.
- 8. Inflow issues exist within the plant and collection system; however, most of the risers in the collection system have been rectified. They were fixed on the seam between the chimney and tank with an approved epoxy caulk supplied by the supplier of the tank and chimney. A hydraulic mortar was applied over that, and a final form around the chimney was filled with type S mortar. Additionally, all the pipe penetrations of the rubber gromets were not installed correctly, so they needed to be installed correctly. Then the electrical conduit was repaired with the same epoxy.
- 9. During a site visit, some textile mats were removed and found to have worms and their castings on them. Worms and bugs enter through the collection system in places where there are openings such as the grinder stations vents. Both the collection system and primary tanks have had I&I problems. The worms are the type typically used in vermicomposting and vermifiltration systems, which can typically enhance treatment. The issue is their casting that can become excessive, causing bridging of the media and impeding air flow if left unattended. It appears that the most effective solution would involve physically removing them. A common method for removal includes using peracetic acid (PAA) to treat areas of the sheets that exhibit signs of worm presence. Orenco has employed this method in the past with positive results. The recommended procedure involves diluting 1 liter of 15% PAA in 10 liters of water per 1,600 square feet of textile area and evenly spraying it across the surface of the media using a pump sprayer.
- 10. As the worms live on the textile, they will continue to leave their castings and will restrict airflow. Cleaning will be necessary to remove them. Unless a treatment can be found, it will be necessary to do this periodically as they don't typically go away once they are there.

B. WWTP

1. Operational/Miscellaneous Issues

In September 2022, the Town provided the NYSDEC with an update to the Notice of Violation (NOV) that was issued for the plant (*See letter in Appendix B*). The update addressed 1) removal of sludge and scum in the buried primary treatment tanks; 2) cleaning of the secondary treatment sprayer nozzles and lateral piping, cleaning of pumps and screens; 3) removal of solids from the media mats; 4) several properties in the collection system did not have the required grease traps/interceptors; and, 5) effluent sampling was incorrectly taken at the UV unit.

In 2021, the WWTP experienced problems originating from improperly installed electrical components that allowed sewer gases and moisture into electrical connections. This resulted in failed EQ tank pumping systems and lack of controls, as well as excessive pumping from the EQ tank and damaging of the AdvanTex aeration systems. This issue was remedied by the original electrical contractor and plant staff.

Influent manhole bench improperly formed, and there is a propensity for settling of sewage and corrosion was noted.

The EQ Tank-pump force main has a drainback style discharge that was initially installed to eliminate freezing of the discharge piping during colder weather. This existing discharge piping does not have a check valve, thus resulting in a portion of the sewage liquid to flow back to the EQ tank during non-pumping events. However, adequate cover was achieved during the initial installation, and the level of pumping frequency is such that freezing is not an issue/concern. Therefore, placement of a check valve on the EQ pump discharge piping could reduce the pumping cycles and increase overall equipment life.

2. Enzyme Usage

While the use of enzymes to emulsify FOG is beneficial in certain cases, emulsified FOGs will get conveyed through the system, agglomerate on the filter mats in the Orenco system and clog the mats and spray nozzles. This would deter the biological process of removing BOD and ammonia.

3. Aeration Issues

The secondary treatment tanks flooded and overflowed disabling the ventilation and heating systems around October 2021. This required a new system with blowers to be implemented by the Town. This "failure" created a situation whereupon the secondary treatment system has had difficulties recovering and providing sufficient BOD removal.

The heating/air system installed by the Town may not be providing enough air for biological treatment and denitrification. Orenco has replaced (completed November 2023) the existing heating/air system with three (3) custom blower/heater assemblies that should provide better dissolved oxygen supply. Photos of the units are below. Continued aeration issues resulting in poor air supply and oxygen transfer for BOD/NH3-N conversion. Insufficient air/dissolved oxygen subsequently hinders the nitrification process and ammonia removal.



New Blower/Heater Assembly (Typical)

New Blower/Heater Assembly (Typical)



4. Primary Tanks Issues

Possible leaking primary tank access risers causing excessive inflow. This has been an ongoing problem and was thought to have been resolved until the risers from the buried primary treatment tanks were found leaking late last year. One in particular shows visible signs of poor sealing at the tank penetration.

It was exposed recently and found to have gaps in the sealant bead around the perimeter attachment. The water infiltrating into the primary treatment tanks, estimated to be approximately 20 gpm, however, the risers have been repaired and no longer have inflow issues.

The lack of BOD5 reduction in the primary tanks is attributed to a lack of settling, reduction of the solids profile, and ultimate reduction of tank treatment capacity. Heavy/thick agglomeration of what appears to be a combination of macerated solids/scum/FOGs and floatables on the top level of the buried primary treatment tanks does not allow settling and further breakdown of accumulated solids.

During solids removal efforts, the buried primary treatment tanks were not completely dewatered and cleaned of all solids and grease; however, the floating scum/grease layer was removed to the extent of the riser locations. Therefore, removal of the floatables prior to the buried tankage would retain tank capacity and increase treatment effectiveness.

The primary treatment tanks detention time is designed longer to allow settling of primary sludge, however, can allow FOGs/Scum excessive time to dry into the solid layer on surface. It is believed that peak instantaneous flows from the system (much higher than the design average flow) can possibly hydraulically overload the tanks which decreases hydraulic/treatment detention time, and thus settling time.

While the floating solids have been tested for FOG concentrations, said solids have not been tested for any other chemicals that may inhibit settling such as chlorines, etc. FOG concentrations, as expected were elevated for the floating solids and chlorides that may be attributable to other types of non-residential wastewater or widespread usage of water softeners is not anticipated subsequent to interviews of the water/wastewater operators. As such it is not believed that other inhibitors are currently contributory.

Based on the above information, observations, and findings here are the main issues identified and to be addressed under Recommendations:

- 1. Sections of the collection system have long retention times, which can cause anaerobic conditions, hydrogen sulfide gases, and older sludge age. Older sludge age could result in light, less settleable solids that contribute to sludge bulking in addition to the presence of FOG. This would adversely affect the treatment effectiveness in the primary tanks, wherein the influx of lighter ground-up solids from the grinder pumps would float and agglomerate with FOGs through the inability to settle solids, reduce the solids profile, and consume tank capacity.
- 2. A thick/dense blanket on the water surface in the primary tanks is caused by lighter density fats, oils, and greases from households in conjunction with the floatable noted above. This is evident by simple visual inspection.

- 3. The inherent nature of the grinder pumps to macerate all raw solids into small particles would cause ground up inert objects to settle out in the primary tanks, as opposed to being collected on a screen or prevented from entering the collection system.
- 4. The Orenco treatment system was originally designed as a two-stage system based on the anticipated influent BOD/TSS/Ammonia loadings (shown in the earlier section) and the level of treatment that was needed to meet the effluent limits. The ammonia limits were further reduced during the latter stages of design and monetary constraints precluded installation of the second-stage treatment train, which would have provided a higher level of treatment and potentially prevented the historical issues.

V. Alternatives Analysis

A. Treatment Option No.1

This option proposes installing more primary tank volume with a separate tank for FOG overflow collection, a preaeration tank ahead of the biological system, and a pair of secondary clarifiers. The goal was to 1) allow scum collection outside the primary tanks and offer a wider treatment zone upstream, 2) preaerate for better BOD removal thus allowing the secondary system to have sufficient dissolved oxygen for ammonia conversion/reduction, and 3) allow better solids removal through traditional clarification thus decreasing TSS downstream.

Upon further review and many discussions with Orenco and JA Lange (Mfr. design & Rep) as well as internal review, we felt this would not meet the requirements to treat the varied/unexpected influent raw sewage and sufficiently reduce the concentration levels to meet the permit; ammonia specifically.

B. Treatment Option No. 2

This option proposes installing a circular primary clarifier upstream of the primary tanks with an aerated sludge collection tank, installing the 2nd Stage Orenco biological system (original plant Alternate), and reconnecting the wetlands for treatment polishing during summer months. The goal was to 1) allow separate scum and preliminary sludge collection ahead of the primary tanks, 2) install the second stage AX-MAX units for more aeration and ammonia removal enhancement, and 3) allow the existing wetlands asset to further "polish" TSS/BOD/NH3 effluent.

This alternative was progressed further below.

C. Water and Energy Efficiency Requirements

Such things as high efficiency motors/equipment, variable speed drives, LED lighting, etc. will be used as much as possible in the project. These improvements will not require additional water demand.

VI. Recommendations

A. Recommendations for operations

While WWTP process improvements are recommended in the subsequent sections, various operational improvements are recommended or otherwise already in process:

- 1. Due to intermittent variable and elevated influent concentrations of ammonia and BOD obtained through grab samples, regular characterization of the influent waste stream and post-EQ through composite sampling at the influent sewer manhole and EQ tank is desirable and should be completed as part of daily and normal operations. One possible alternative is to run composite sampling at key locations throughout the collection system to home in on where the sewage has higher BOD and/or ammonia levels and assess why this may be happening. However, to clearly identify a specific property or properties would be very time-consuming so the benefit-cost may be suspect.
- 2. Verify customers are adhering to the grease trap rules and are not disposing FOGs, flushable wipes, plastics, food, or other harmful constituents, such as detergents or sanitizers that may upset the treatment system. The Town of Springwater has recently implemented a Sewer-Use Ordinance for this purpose. It includes a FOG Best Management Practices Plan. Additional education distributed as part of sewer bills or on the Town's website can aid in improved housekeeping measures and eliminate undesirable constituents in the waste stream.
- 3. Continue to clean the media mats on a regular basis according to the previously developed O&M procedure developed and followed by the WWTP operators. Future improvements to the WWTP preliminary treatment will lessen the cleaning frequency of the media.
- 4. Remove currently accumulated sludge, scum, and FOG from the primary treatment tanks, equalization tank and AX-MAX tanks. Influent flows can be diverted around tanks being cleaned in the interim. It is assumed that all volume and accumulated scum/solids will be removed from each tank. Floating scum on the first primary tank will have to be mechanically or hydraulically broken apart for removal via septic waste hauling vehicle, while all other solids would be removed normally by a septic waste hauling vehicle/VAC truck. Tank contents of the second primary and equalization tanks, including solids, shall be pumped and removed from the site.

The AX-MAX media shall be cleaned using the methods provided by the manufacturer, media temporarily removed as needed to allow for produced solids collected in the bottom of AX-MAX tanks and pumping of solids out of said tanks. Tank sidewalls can be power washed as needed for cleaning. Costs to remove and dispose of the solids and liquid shall be based upon the total operating volume within the various primary, equalization, and AX-MAX tanks.

- 5. Remove accumulated sludge and clean the media mats in the secondary biological stage in a stepwise procedure. The plant has been very diligent about cleaning as part of routine maintenance; however, it is uncertain whether all of the excess sludge has been removed to provide a "fresh start" moving forward.
- 6. There is one possible cleaning procedure for AdvanTex textiles to remove worm castings. This procedure involves removing the sheets, thoroughly cleaning both their exterior and interior surfaces. If cleaning the interior is not possible at this time, you can use the wand provided by Orenco to clean the exterior of the sheets. This will ensure proper airflow to the surface of the textiles for efficient organic removal and nitrification, while also preventing the short-circuiting of dosed wastewater that may occur due to possible media bridging caused by worm castings.

Additionally, you may consider using peracetic acid (PAA) to treat areas of the sheets that still exhibit signs of worm presence. Orenco has employed this method in the past with positive results. The recommended procedure involves diluting 1 liter of 15% PAA in 10 liters of water and evenly spraying it across the surface of the media using a pump sprayer.

B. Process Additions

1. Additional Preliminary Tankage

As previously indicated, the initial Orenco AdvanTex design estimated that suitable BOD and TSS removal would be completed in the initial preliminary tankage such that primary effluent BOD and TSS concentrations were effluent less than 135 mg/L and 38 mg/L respectively. Given the average preliminary treatment tank BOD and TSS effluent was 179 mg/L and 50 mg/L respectively, additional primary treatment is required.

As indicated, it is practical to intercept FOG and floating scum (from solids bulking) be completed in an open-air preliminary treatment tank, ahead of the buried primary treatment tanks. This will prevent it from accumulating in the buried primary treatment tank(s) and free up tank capacity. It is recommended that an open-air preliminary/primary clarifier be utilized to allow primary sludge, grit, and/or scum/FOGs to be captured and removed continuously and more efficiently. This should lower BOD/TSS loading downstream and remove FOGs thus enhancing secondary treatment. Collected waste would be conveyed to an aerated holding tank for offsite hauling. Providing air prevents the sludge/FOG etc. from agglomerating into a thick unpumpable product and maintains an aerobic condition to reduce odors.

As a result, the addition of an open-air preliminary treatment tankage is recommended to alleviate the thick layer of accumulated scum/FOGs on the surface of the primary settling tanks that has occurred and is likely to continue; intercept lighter solids that may contribute to solids bulking resulting from longer solid age from the grinder collection system than originally thought, and intercept higher macerated solids/loadings that have continued and exacerbated the initial treatment. This would be accompanied by the modification to the WWTP plant influent piping, replacement and repair of influent manholes, as well as installation of an aerated-sludge-holding tank along with associated aeration system/blowers as outlined below and shown on the improvement schematic provided in Appendix D.

- a. Install a new manhole at the location of the new preliminary-treatment tank to allow sewage flow to be diverted to said tank or bypassed around the new tank if maintenance required.
- b. Repair the influent manhole (MH-5) benching. Influent flows will need to be bypassed (bypass pumping) directly to Primary Tank #1 or #2. It is recommended to review the piping alignment through the MH as part of the benching rework and adjust accordingly for a smooth transition.
- c. Install a buried open top preliminary tank/primary clarifier for initial sludge and scum/FOG collection. Flows from Manhole #4 will be diverted to this tank for preliminary sludge settling and collection of floatables/FOGs/scum.

Preliminary treatment tanks/primary clarifiers are typically designed based on TR-16 guidelines with maximum surface overflow rates of 600 gpd/SF for average flow (40,000 gpd) and/or 1,200 gpd/SF (PHF of 121 gpm, 174,000 gpd based on potential peak flow from the grinder system per E-One analysis). If the 600 gpd/SF was implemented with 40,000 gpd, this results in a 9 ft diameter clarifier which is infeasible based on standard Mfr. equipment. Likewise, using the 1,200 gpd/SF peak rate at 174,000 gpd PHF results in a 14 ft diameter, again outside Mfr. minimum sizing. Due to the nature of the influent wastewater constituents and the propensity for lighter floating sludge, an overflow rate safety factor of 0.5 is applied to allow more detention/settling time in the tank since only one tank is provided. Additionally, since redundancy requirements are not specified for a small plant like this, the larger unit makes up for the lack of a redundant unit. Preliminary sizing is therefore based on providing an overflow rate of 300 gpd/SF nominal at the peak flow of 121 gpm is shown in the calculations below. The 121 gpm influent flow rates is obtained utilizing a 5-10% diversity factor for the simultaneous operation of various grinder-pump stations within the system.

Surface Area Required:

121 gpm x 60 mins/hr X 24 hrs/day / 300 gpd/SF = 580 +/- square feet of surface area.

Liquid Depth Required & Resulting Volume:

A minimum liquid depth of 10 feet per TR-16 provides a design guideline for an effective volume of 43,400 gallons. This increased volume will add an additional 54% of preliminary treatment tank storage. Assuming a similar reduction ration of BOD and TSS realized by the existing 80,000-gallon preliminary storage tank volume, an additional BOD and TSS reduction of 44 mg/L and 12 mg/L is achievable.

Tank Configuration:

Recommended standards suggest utilizing a circular primary clarifier design in lieu of rectangular design. Given the space available and the overflow rate of 300 gpd/SF, a 27-foot diameter tank is suggested. Having the aforementioned liquid depth of 10 ft liquid depth and a providing freeboard and tank walls to reach existing grade an approximate tank height of 14 feet. Full surface mechanical scum collection will be provided, and the design will follow the requirements in TR-16 and/or 10 States Standards

The influent into the clarifier would be peripheral feed, as suggested by plant staff, and effluent from the preliminary treatment tank would pass over a weir, collect in the center circular weir trough for conveyance downgradient to the existing below grade, preliminary tankage for continued settlement and BOD removal.

Scum and settled sludge will be skimmed and scraped utilizing flights/scrapers/scum skimmers. The accumulated solids will be conveyed to a hopper at the end of the tank where solids handling pumps can remove accumulated solids and discharge them to a solids handling/holding tank.

d. Install a 5,000 gallon, aerated-sludge holding tank (10 ft x 10 ft x 7 ft liquid depth) near the existing driveway for ease of access. This should allow 50-60 days of storage before hauling in a typical 5,000 gallon tanker truck is needed. The sludge consistency and characteristics, typical to primary sludge, should enable it to be hauled to a local WWTP (such as the Town of Danville) or septage hauling station. There is no solids processing (dewatering/thickening) in this facility and regular sludge removal is part of the O&M. Two (2) exterior blowers (duty/standby) on concrete pads are proposed with manifolded valving and weather enclosures. Blowers are sized for 30 cfm/1000 gallons or 150 cfm nominal, with a coarse, bubble-diffused-aeration array on the tank bottom. A haul-out suction pipe with valve and camlock fitting would be provided for the hauler to connect to. To further enable sludge thickening, a means to decant this tank by turning off the aeration system and allowing time for settling through a valved-decant pipe to the influent manhole is also proposed.

2. Ammonia Removal

As a result of the elevated influent ammonia, it is ultimately recommended that the previously proposed Second Stage Orenco AX-MAX system be installed for continued BOD reduction as well as to provide extended time for nitrification and ammonia removal. This stage is meant to operate in series with the original system for polishing the effluent. Providing additional process tanks and media-surface area will aid with ammonia removal and TSS filtering ahead of the UV system and outfall. Adding additional units for increased aeration contact time will also improve BOD removal which in turn improves ammonia Reduction. The flow regime will actually match to what was originally designed by Orenco with the 2nd Stage online and recirculation flows throughout the various tanks allow the media to remain wet.

Revised calculations were developed based on effluent data from Daily Monitoring Reports (DMRs) from 02/22-07/23 showing average effluent BOD/TSS/Ammonia values of 38/27/20 mg/L. Orenco calculations for second stage treatment are located in Appendix D. To err on the side of caution, we do not assume any BOD/TSS/Ammonia removal in the proposed primary clarifier, although we expect to achieve typical TSS/BOD reduction in this unit of roughly 40-70% TSS and 25-35% BOD (TR-16). Refer to Appendix E for calculations for Stage II sizing.

3. Utilization of Existing Created Wetland for Tertiary Treatment

There are two (2) abandoned, vegetated, submerged-bed-constructed, wetland trains that originally served as the secondary biological treatment process for the waste stream. Each train consisted of two (2) wetland cells operating in series (for a total of four wetland cells). Each cell is 200-feet wide by 100-feet long with a stone media depth ranging from approximately 2.25-feet to 2.75-feet in depth. These units were abandoned in place after the current mechanical WWTP was installed. The original wetland sizing calculations based on 40,000 gpd, 167 mg/L BOD and 100 mg/L TSS (ammonia was not considered) are in Appendix D.

It is believed the wetlands historical use is lower than what is was designed for and the remaining useful life is estimated at 75%-90%. These constructed natural processes are meant to treat raw wastewater influent loadings much higher than they will experience for this bypass mode. Typical maintenance requirements include surface landscaping to eliminate/remove any invasive species and plant appropriate species that will. Loading will be much less than the original design thus prolonging the typical life further.

It is recommended to reconnect these wetlands as a polishing step in the nitrification process. This would only be useful during summer months (June-October +/-) although it would also provide some BOD/TSS polishing. The cascade aerator would be bypassed during summer months since there are no dissolved oxygen requirements and effluent from the UV unit can be piped directly to the original abandoned 6-inch

diameter header pipping to Cells 1 and 3 to each train. Valving would be provided in the cascade aerator (with access in the yard) such that flow can resume in normal flow regime from Nov-May. This is done by closing the valve to the wetlands and opening the valve to the aerator to flow through the newer sanitary line to the outfall.

In bypass wetland mode, flow then moves through the stone media to the existing 6inch diameter perforated collector pipe at the end of the wetland cells then goes into the 6-inch diameter header pipe at the head of the second wetland Cells 2/4 within each train. Similarly, the wastewater flows through the media and into a collector pipe, where it is discharged to the MH near the road where it flows to the outfall. During this time, the effluent sampling would need to be done at this MH, as was done in the old plant.

4. Add Composite Samplers

As the current sampling program is grab sampling, we recommended adding composite sampling on the influent and effluent ends of the process to get a better snapshot of the raw sewage characteristics and the effluent data. This will capture a more representative matrix to evaluate the processes.

VII. Operation and Maintenance Costs

There are some additional O&M costs associated with this project. Items such as increased electrical demand, maintenance of equipment, and equipment repairs or replacement. Personnel salary, chemical costs, sludge treatment and removal shall be unaffected.

VIII. Summary of Proposed System

A. Modifications Details

It is recommended that additional preliminary tankage and sludge-holding tank be installed to 1) alleviate the thick layer of accumulated scum/FOGs on the surface of the primary settling tanks that has occurred and is likely to continue (this is due to possibly higher flows from the grinder system than originally thought and higher macerated solids/loadings that have continued and exacerbated the initial treatment); 2) bring ammonia reduction to acceptable levels as originally intended and allow further suspended solids filtering prior to UV disinfection; and, 3) repair the faulty manhole.

Install a preliminary treatment clarifier with a downstream, aerated-holding tank to alleviate the BOD/sludge/FOG burden on the existing primary treatment tanks and decrease the loadings downstream. This allows an easier method of collection objectionable influent components as well improved performance for downstream processes.

Install the second stage Orenco AX-MAX system as designed originally to meet the stringent ammonia effluent limits and solids filtering. The current effluent pumping from the smaller 1st-stage unit will now be conveyed to the 2nd stage via a new 2-inch, force main for further treatment and the 2nd stage pumping will be connected to the existing 2-inch force main in the yard to the UV unit.

Reconnect the existing wetland cells as a "nitrification polishing" bypass mode from June through October +/-. This will include 4"/6" PVC piping and valves.

Install composite samplers at the influent and effluent ends of the treatment process.

These new process units will have some additional annual operation & maintenance (O&M) costs associated, estimated at roughly \$4,300 for powering motors and pumps and \$9,000 in equipment replacement parts. Although some additional labor is involved also, it is not expected to increase manpower. The new processes are expected to add about nine (9) horsepower between motors/pumps, but the amperage draw will need to be determined to verify the current electric panel/generator is sized properly.

Approximately 100 gpd of sludge/FOG/scum from the new clarifier will be converted to the solids holding tank, which is sized for a 50-day holding time (100 gpd x 50 days = 5,000 gals). This is not newly created sludge, but sludge that would already be in the system and whose removal is within the \$15,000 hauling budget. The cost to remove 5,000 gallons of sludge is estimated at \$2,000. Utilizing 1000 gpd, would require the tank to be emptied approximately 7.3 times per year for a total of \$14,600, which is less than the budgeted amount. Therefore, no additional costs are associated with this process.

The total estimated improvements cost for the WWTP project, including collection system pipe changes, is approximately \$2,340,430 and has a 30% contingency associated. Refer to Appendix D for the detailed cost estimate.

| Parameter | Option No.2 | | | |
|----------------------------------|---------------|--|--|--|
| | (Recommended) | | | |
| Est. Project Cost | \$2,340,430 | | | |
| Annual Debt Service (30-yr 4.5%) | \$143,682.61 | | | |
| Annual O&M | \$13,300 | | | |
| Number of EDUs | 233 | | | |
| Total Annual Cost/EDU | \$673.87 | | | |
| Monthly Cost/EDU | \$56.16 | | | |

Table 9: Selected Project Summary

*EDU count from original 2017 PER

B. Draft Sequence of Construction

The 2nd Stage Orenco system can be constructed while the existing plant is operational; however, the connection of site piping (2-inch force mains) will require an interim plant shutdown and will need to be coordinated with plant operations during lower flow periods. The majority of the piping can be installed while the plant is running but the main connection points will need a complete shutdown; all pumping will need to cease.

The primary clarifier, sludge holding tank and appurtenances with piping stubs can be constructed without a plant shutdown. The piping connections will require a few days of bypass pumping directly to the existing primary treatment tanks from the upstream manhole. This is also when existing MH-5 rehabilitation work can be done. Once MH-5 is complete, final influent/effluent piping from the clarifier and decant line from sludge holding can be connected. There may be some final bypass pumping required to make these connections.

The connection of the effluent from the UV to the wetlands would require the flow to be ceased to add the buried valving and TEE fitting on the existing 4-inch pipe to the cascade aerator. The remainder of the site piping to the wetlands can be completed without any bypass pumping or plant shutdown.

In order to clean all the accumulated sludge/scum/FOG in Primary Treatment Tank 1, flow from the clarifier can be plugged to Tank 1 and diverted to Tank 2 using the existing bypass piping/valving in the yard.

C. Project Schedule

The anticipated project schedule is as follows:

- Preliminary Engineering Report Approval– June 2024
- SEQR Neg Declaration May 2024
- Bond Res, Municipal/Bond Council, Auth. Res. May 2024
- IUP Listing June 2024
- NYSEFC WIIA Grant & CWSRF Application Filed July 2024
- NYSDEC WQIP Application July 2024
- SHPO No Effect Finding July 2024
- Engineering Selection October-November 2024
- USDA Rd Application November 2024
- Engineering Plans, Specifications, and BODR to agency January June 2025
- Regulatory comments/responses June-Oct 2025
- CDBG funding application (if prequals. are met) July 2025
- Advertising of Bids January 2026
- Begin Construction April 2026
- Substantially Complete Construction December 2026
- Funding Close Out & Operation Spring 2027

D. Next Steps

The community will continue to discuss the project and funding procurement with the public at regular board meetings and continue to gain local public and private support. SEQR has been completed.

Anticipated procurement methods and plan of contracts (e.g., design/bid/build, energy performance contract, Project Labor Agreement, Wicks, design/build, etc.) will be adhered to as well.

E. Funding Sources

Securing funding from the potential sources identified below can help achieve an actionable project. The following information identifies funding opportunities that have been offered by State and Federal sources in the recent past. The status of the funding programs and application periods is discussed below.

1. USDA Rural Development (RD) Water and Waste Disposal Loan & Grant Program

The Town of Springwater may be eligible for federal USDA RD funding based on the population being less than 10,000. The program offers long-term low-interest loans, and grants may be combined if funds are available. The loan rate is based on the useful life of the facilities to be financed, the need of the project, and the median household income. The 2021 ACS 5 – Year Estimate Median Household Income for Springwater is \$76,445, which is higher than the \$45,506 threshold and therefore it is anticipated that the project would not qualify for the poverty rate loan. The current market rate for 4th Quarter FY 2022 is 3.500%. The application period for USDA loan and grant program is open year round, the first step is to contact the local Rural Development office to discuss the project and begin the electronic application.

2. NYS EFC Clean Water Infrastructure Improvement Act

NYSEFC provides grant funding to assist municipalities in funding water quality infrastructure. A clean water project may be eligible for a WIIA grant of up to the lesser of 25% of total eligible costs after deducting other grant funds awarded for the project, or \$25 million. To enable application for the WIIA grant the sewer district formation must be complete, SEQR process must be complete, SHPO determination complete, bond financing resolution be complete, and resolution approving application and authorization to execute the contract be complete. The grant application period typically closes in September each year.

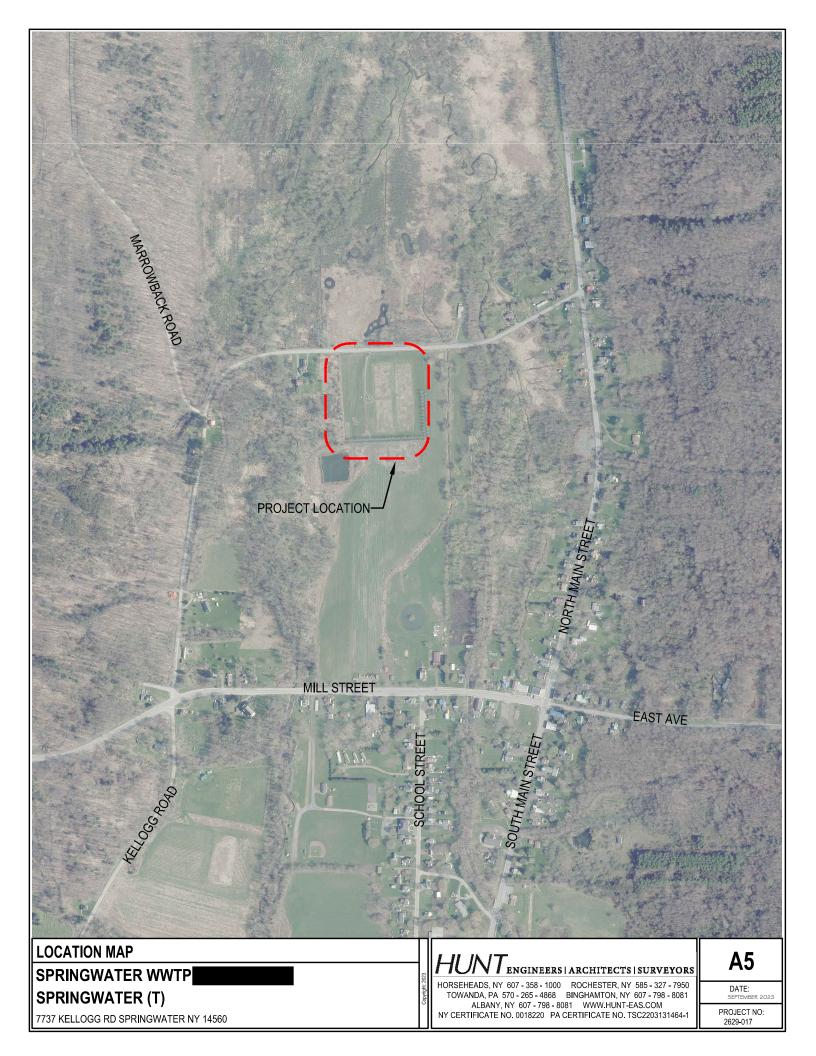
3. NYS EFC Clean Water State Revolving Fund Loan

The Clean Water State Revolving fund provides interest-free or low-interest rate financing for wastewater and water quality improvement projects to municipalities throughout New York State. EFC provides both short and long-term financing at zero or low interest. Applications are received on a continuous basis; however, the annual allocation of funds is driven by the presence of the project on the Intended Use Plan (IUP). It is recommended that the submittal of the project be made for publication in the 2024 IUP. The ranking on the IUP will demonstrate eligibility for hardship or subsidized financing.

F. Engineering Report Certification

Engineering Report Certification can be found in Appendix F.

APPENDIX A PROJECT LOCATION MAPPING



APPENDIX B REGULATORY INFORMATION

NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation

State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT - MUNICIPAL

| SIC Code: 4952 | NAICS Code: 221320 | SPDES Number: | NY0246450 |
|---------------------------|---------------------|----------------------------|-------------------------------------|
| Discharge Class (CL): | 07 | DEC Number: | 8-2448-00057/00001 |
| Toxic Class (TX): | Ν | Effective Date (EDP): | 09/01/2019 |
| Major-Sub Drainage Basin: | 04 - 02 | Expiration Date (ExDP): | 08/31/2024 |
| Water Index Number: | Ont 117-27-34-P44-7 | Modification Dates: (EDPM) | 12/01/2019 Correction 03/01/2021 |
| Compact Area: | IJC | | |

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

| PERMITTEE NAME AND ADDRESS | | | | | | | |
|----------------------------|----------------------------|------------|-----------------------------|-----------|-------|--|--|
| Name: | Town of Springwater | Attention: | Deborah Babbitt-Henry, Town | | | | |
| Street: | 8022 South Main Street | | Supervisor | | | | |
| City: | Springwater | State: | NY | Zip Code: | 14560 | | |
| Email: | springwatersuper@yahoo.com | Phone: | (585)-669-2545 | | | | |

is authorized to discharge from the facility described below:

| FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL | | | | | | | | | | | | | | | | |
|---|---|--|----|---|----|---|-------|--------|--------------|--------|----|----|-----|----|----|-----|
| Name: | Town of | own of Springwater Wastewater Treatment Facility | | | | | | | | | | | | | | |
| Address / Location: | Kellogg I | Kellogg Road County: Livingston | | | | | | | | | | | | | | |
| City: | Springwa | ater | | | | | | State: | NY | Zip Co | bd | e: | 145 | 60 | | |
| Facility Location: | | Latitude: | 42 | 0 | 38 | , | 34 | " N | & Longitude: | 77 | 0 | 36 | 6 | , | 00 | " W |
| Primary Outfall No.: | 001 | Latitude: | 42 | 0 | 38 | , | 53 | " N | & Longitude: | 77 | 0 | 35 | 5 | , | 56 | " W |
| Outfall Description: | Treated Sanitary Receiving Water: Springwater Creek | | | | | C | lass: | | С | | | | | | | |

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

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.

| <u>DISTRIBUTION:</u> CO BWP - Permit Coordinator | Permit Administrator: | Kimberly A. Merchant | | | | | |
|---|-----------------------|---|-------|------------|--|--|--|
| CO BWC - SCIS RWE | Address: | 6274 East Avon-Lima Road, Avon, NY, 14414 | | | | | |
| RPA EPA Region II NYSEFC | Signature: | Kimberly merchant | Date: | 02/26/2021 | | | |

Contents

| DEFINITIONS FOR PERMIT LIMITS, LEVELS AND MONITORING TERMS | 3 |
|---|-----|
| PERMIT LIMITS, LEVELS AND MONITORING | 4 |
| MERCURY MINIMIZATION PROGRAM - Low Priority POTWs | 5 |
| DISCHARGE NOTIFICATION REQUIREMENTS | 6 |
| SCHEDULE OF COMPLIANCE | 7 |
| MONITORING LOCATIONS | .10 |
| GENERAL REQUIREMENTS | .11 |
| RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS | .13 |
| F. Schedule of Additional Submittals: | .13 |

DEFINITIONS FOR PERMIT LIMITS, LEVELS AND MONITORING TERMS

| TERM | DEFINITION |
|--|--|
| 7-Day Geometric Mean | The highest allowable geometric mean of daily discharges over a calendar week. |
| 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 12. |
| 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 monitoring and department review to determine if numerical effluent limitations should be imposed. |
| Compliance Level / Minimum Level | A compliance level is an effluent limitation. A compliance level is given when the water quality evaluation specifies a Water Quality Based Effluent Limit (WQBEL) below the Minimum Level. The compliance level shall be set at the Minimum Level (ML) for the most sensitive analytical method as given in 40 CFR Part 136, or otherwise accepted by the Department. |
| 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 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 | Year Round | Springwater Creek | 03/01/2021 | 08/31/2024 |

| | EFF | LUENT L | | ON | | MONITORING REQUIREMENTS | | | | |
|---------------------------------|--------------------------|--------------------|----------------|-------|-------|-------------------------|----------------|------|-------|-----|
| PARAMETER | | | | | | | | Loca | ation | FN |
| | Туре | Limit | Units | Limit | Units | Sample Frequency | Sample Type | Inf. | Eff. | |
| Flow | Monthly Average | 0.04 | MGD | | | Continuous | Recorder | х | | |
| рН | Range | 6.5 - 8.5 | SU | | | Daily | Grab | | х | |
| Temperature | Monitor | | De <u>g C</u> | | | Daily | Grab | | х | |
| CBOD₅ | Monthly Average | 25 | mg/L | 8.3 | lbs/d | 2X/month | Grab | Х | х | 1 |
| CBOD₅ | 7-Day Average | 38 | mg/L | 12.7 | lbs/d | 2X/month | Grab | х | х | |
| Total Suspended Solids (TSS) | Monthly Average | 30 | mg/L | 10 | lbs/d | 2X/month | Grab | х | x | 1 |
| Total Suspended Solids (TSS) | 7-Day Average | 45 | mg/L | 15 | lbs/d | 2X/month | Grab | x | х | |
| Settleable Solids | Daily Maximum | 0.1 | mL/L | | | Daily | Grab | | х | |
| Ammonia (as N) | Monthly Average | 5.0 (S) 8.0 (W) | mg/L | | | 2X/month | Grab | | x | 2,4 |
| Total Phosphorus | Monthly Average | Monitor | mg/l | | | 2X/month | Grab | | х | |
| Effluent Disinfection Require | d All Year | | | | | | | | | |
| Coliform, Fecal | 30-Day Geometric Mean | 200 | No./ 100 ml | | | 2X/month Grab | | | x | 2 |
| Coliform, Fecal | 7 Day Geometric Mean | 400 | No./ 100 ml | | | 2X/month Grab | | | x | 2 |
| Chlorine, Total Residual | Daily Maximum | 0.03 | mg/L | | | 1/day | Grab | | х | 2,3 |

FOOTNOTES:

1. Effluent shall not exceed <u>15</u> % and <u>15</u> % of influent concentration values for BOD₅ & TSS respectively.

2. This is a final effluent limitation. See Schedule of Compliance for interim effluent limitation.

3. Effluent limitation for Total Residual Chlorine is only applicable if chlorine is used for disinfection or other treatment processes.

4. These are seasonal limits in which Summer or (S) is from June 1 through October 31 and Winter or (W) is from November 1 through May 31.

MERCURY MINIMIZATION PROGRAM - Low Priority POTWs

The permittee shall inspect each tributary dental facility at least once every five years to verify compliance with the wastewater treatment operation, maintenance, and notification elements of 6NYCRR Part 374.4. In lieu of an inspection, the permittee can accept a certification from the dental facility owner that the treatment system was properly installed and the facility complies with the wastewater treatment operation, maintenance, and notification elements of 6NYCRR Part 374.4. Prior to acceptance of new or increased tributary discharges that are industrial in nature, including hauled wastes, sample data shall be provided to the permittee for mercury content. Discharges which may exceed 500 ng/L, must receive approval from the Department prior to acceptance. A file shall be maintained containing inspection results, certifications, and other information submitted by dental offices and all other potential dischargers of mercury. This file shall be available for review by NYSDEC representatives and copies shall be provided upon request.

Note: The mercury-related requirements in this permit conform to the mercury Multiple Discharge Variance specified in NYSDEC policy *DOW 1.3.10*.

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 discharge.
- (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.
- (g) If the permittee believes that any outfall which discharges wastewater from the permitted facility meets any of the DNA waiver criteria, notification must be made to the Department's Bureau of Water Permits. Provided there is no objection by the Department, a sign for the involved outfall(s) are not required. This notification must include the facility's name, address, telephone number, contact, permit number, outfall number(s), and reason why such outfall(s) is waived from the requirements of discharge notification. The Department may evaluate the applicability of a waiver at any time and take appropriate measures to assure that the ECL and associated regulations are complied with.

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

| Outfall(s) | Compliance Action | Due Date |
|------------|--|--|
| 001 | DRAFT SEWER USE LAW Permittee shall submit for NYSDEC approval a draft local Sewer Use Law equivalent to the <u>DEC Model Sewer Use Law</u> . | EDP+4 months |
| | <u>ADOPTED SEWER USE LAW</u> Permittee shall adopt the NYSDEC approved draft into Law and submit a copy of the enacted Law accompanied by proof of enactment. | NYSDEC Approval + 4 Months |
| 001 | <u>LOW-LEVEL MERCURY SAMPLING</u> The permittee shall submit Low-Level Mercury analytical results from one (1) final effluent sample. The sample shall be collected in accordance with EPA Method 1669, and the analysis in accordance with EPA Method 1631. | EDP + 6 months |
| 001 | EASEMENTS Submit documentation for finalized easements that authorizes Sanitary Collection System staff access to the Town owned grinder pumps, laterals, and pump stations. | 3/1/2020 |
| 001 | ENGINEERING REPORT The permittee shall submit an approvable engineering report, prepared by a Professional Engineer licensed to practice engineering in New York State, detailing the designs that will be used to improve collection system to reduce inflow and infiltration and to upgrade the POTW to comply with the final water quality based effluent limitations for Ammonia (as N), fecal coliforms, and Total Residual Chlorine. | Submitted 11/2/2018 |
| | <u>ENGINEERING PLANS / SPECIFICATIONS / SCHEDULE</u> The permittee shall submit approvable Engineering Plans, Specifications, as well as a schedule of construction for the improvement works described in the approved Engineering Report. The schedule of construction shall not exceed more than 12 months. The schedule of construction contained in the approved report shall, by reference, be made an enforceable part of the permit. | Submitted 5/13/2019 |
| | PROJECT BIDDING AND AWARD Issue bid notices to contractors for work to be done according to the approved plans and provide copy to the Department. | DEC Approval of Plans/Specs +3 months |
| | BEGIN CONSTRUCTION The permittee shall begin construction of the upgrades and the improvements to the facility and collection system described in the approved report, plans, and specifications in accordance with the Department approved schedule of construction. | DEC Approval of Plans/Specs +3 months |
| | WWTP UPGRADES AND COLLECTION SYSTEM IMPROVEMENTS PROGRESS REPORTING Submit Quarterly Progress reports pertaining to WWTP Upgrade & Collection System Improvements. | EDP + 12 Months through Construction Completion |
| | construction. WWTP UPGRADES AND COLLECTION SYSTEM IMPROVEMENTS PROGRESS REPORTING Submit Quarterly Progress reports pertaining to WWTP Upgrade & Collection | |

| | | Faye 0 01 14 |
|----------------------------|--|--------------|
| The pe | LETE CONSTRUCTION (PHASE 1) & COMMENCE OPERATION rmittee shall complete construction of Stage 1 of the WWTP and place all icted portions of the facility into full operation. | 10/31/2020 |
| The pe | JATE TREATMENT PLANT rmittee shall submit an Engineering Report to demonstrate the nance of the facility as constructed can comply with the all final permit | 5/1/2022 |
| Pendin second system | LETE CONSTRUCTION (PHASE 2) & COMMENCE OPERATION g the outcome of the performance report, the permittee shall construct the I stage of the approved designed facility, commence operation of the full h, have completed all remaining above compliance actions, and comply e final limits for Ammonia (as N), fecal coliforms, and Total Residual he. | 6/1/2023 |
| Submit | Certification of Completion for WWTP Upgrade. | 7/1/2023 |

The above compliance actions are one-time requirements. The permittee shall comply with the above compliance actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submission(s) noted above. The above due dates are independent from the effective date of the permit stated in the "SPDES NOTICE/RENEWAL APPLICATION/PERMIT" letter.

INTERIM EFFLUENT LIMITS FOR PARAMETERS SUBJECT TO THIS SCHEDULE OF COMPLIANCE

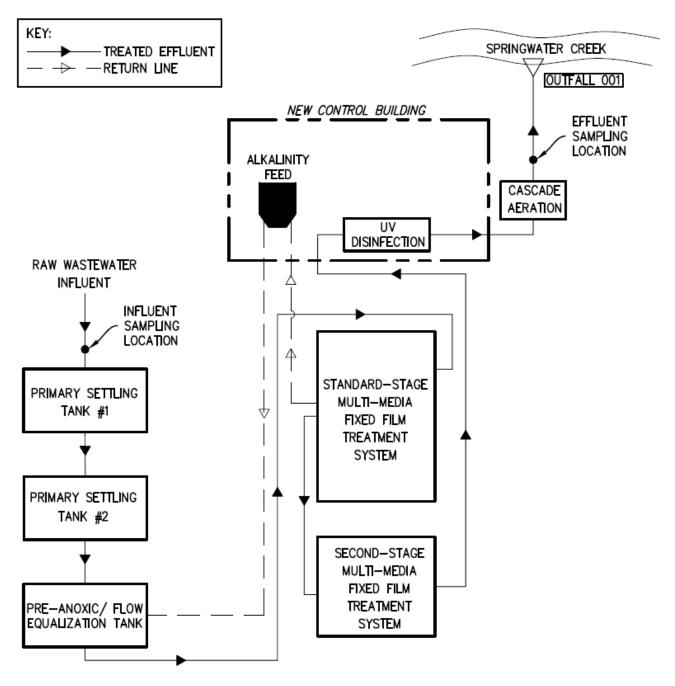
| | | Interim E | Effluent L | .imit | | | | | | |
|---|--|-----------------------------|------------------|---------------|-------------------------|-------|-----------------------|--|--|--|
| Outfall | Parameter(s) Affected | Туре | Limit | Units | Limits Apply | Notes | Interim Limits Expire | | | |
| 001 | Ammonia (as N) | Daily Average | Monitor Only | mg/L | June 1 to October 31 | | 6/1/2023 | | | |
| 001 | Ammonia (as N) | Daily Average | Monitor Only | mg/L | November 1 to May 31 | | 6/1/2023 | | | |
| 001 | Fecal Coliform | 30-Day Geometric Mean | Monitor Only | No./ 100mL | Year- Round | | 1/1/2021 | | | |
| 001 | Fecal Coliform | 7-Day Geometric Mean | Monitory Only | No./ 100mL | Year-Round | | 1/1/2021 | | | |
| Discharge Ditch at confluence of Springwater Creek and Limekiln Creek. | Ammonia (as N) | Daily Average | Monitor Only | mg/L | June 1 to October 31 | 1 | 5/31/2023 | | | |
| Notes: | 1. Sampling location is at the discharge ditch 10 feet prior to flowing into the confluence of | | | | | | | | | |

b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of <u>non-compliance</u> shall include the following information:

- 1. A short description of the non-compliance;
- 2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
- 3. Any details which tend to explain or mitigate an instance of non-compliance; and
- 4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.
- c) The permittee shall submit copies of any document required by the above schedule of compliance to the NYSDEC Regional Water Engineer and to the Bureau of Water Permits.

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:



TOWN OF SPRINGWATER WASTEWATER TREATMENT FACILITY

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:

| В. | General Conditions | | | | |
|----|--------------------|---|---|--|--|
| | 1. | Duty to comply | 6NYCRR 750-2.1(e) & 2.4 | | |
| | 2. | | 6NYCRR 750-1.16(a) | | |
| | 3. | Need to halt or reduce activity not a defense | 6NYCRR 750-2.1(g) | | |
| | 4. | Duty to mitigate | 6NYCRR 750-2.7(f) | | |
| | 5. | Permit actions | 6NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h) | | |
| | 6. | | 6NYCRR 750-2.2(b) | | |
| | 7. | | 6NYCRR 750-2.1(i) | | |
| | 8. | Inspection and entry | 6NYCRR 750-2.1(a) & 2.3 | | |
| | • | | | | |
| C. | Ope | eration and Maintenance | | | |
| | 1. | Proper Operation & Maintenance | 6NYCRR 750-2.8 | | |
| | 2. | | 6NYCRR 750-1.2(a)(17), 2.8(b) & 2.7 | | |
| | 3. | | 6NYCRR 750-1.2(a)(94) & 2.8(c) | | |
| _ | | | | | |
| D. | | nitoring and Records | | | |
| | 1. | Monitoring and records | 6NYCRR 750-2.5(a)(2), 2.5(a)(6), 2.5(c)(1), 2.5(c)(2), & 2.5(d) | | |
| | 2. | Signatory requirements | 6NYCRR 750-1.8 & 2.5(b) | | |
| E. | Rer | porting Requirements | | | |
| | 1. | | 6NYCRR 750-2.5, 2.7 & 1.17 | | |
| | 2. | Anticipated noncompliance | 6NYCRR 750-2.7(a) | | |
| | 3. | Transfers | 6NYCRR 750-1.17 | | |
| | 4. | Monitoring reports | 6NYCRR 750-2.5(e) | | |
| | 5. | Compliance schedules | 6NYCRR 750-1.14(d) | | |
| | 6. | 24-hour reporting | 6NYCRR 750-2.7(c) & (d) | | |
| | 7. | Other noncompliance | 6NYCRR 750-2.7(e) | | |
| | 8. | • | 6NYCRR 750-2.1(f) | | |
| | 9. | Additional conditions applicable to a POTW | 6NYCRR 750-2.9 | | |

- F. Planned Changes
 - 1. The permittee shall give notice to the Department 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 Department, 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 Department, 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 Department review and authorization. At a minimum, the permittee must notify the Department in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The Department 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 Department. 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 Department.
- 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 Department's website at: http://www.dec.ny.gov/permits/93245.html

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- A. The monitoring information required by this permit shall be retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent.
- B. <u>Discharge Monitoring Reports (DMRs)</u>: Completed DMR forms shall be submitted for each 1 month reporting period in accordance with the DMR Manual available on Department's website.

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by NYSDEC. Instructions on the use of NetDMR are available in the DMR Manual. Hardcopy paper DMRs will only be received at the address listed below for the Bureau of Water Permits, 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. In addition, submit a hard copy of the "Wastewater Facility Operator Report" and any attachments to the Regional Water Engineer at the address noted below in Item C.

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. The monitoring information required by this permit shall be summarized and reported to the RWE and Bureau of Water Permits at the following addresses:

Department of Environmental ConservationDivision of Water, Bureau of Water Permits625 Broadway, Albany, New York 12233-3505Phone: (518) 402-8111

Department of Environmental Conservation Regional Water Engineer, Region 8 6274 E. Avon-Lima Road, Avon, New York, 14414-9519 Phone: (585) 226-5450

- D. <u>Bypass and Sewage Pollutant Right to Know Reporting</u>: In accordance with the Sewage Pollutant Right to Know Act (ECL § 17-0826-a), Publicly Owned Treatment Works (POTWs) are required to notify DEC and Department of Health within two hours of discovery of an untreated or partially treated sewage discharge and to notify the public and adjoining municipalities within four hours of discovery. Information regarding reporting and other requirements of this program may be found on the Department'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 as a hardcopy 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 | | | | |
| Discharge Ditch at confluence of Springwater Creek and Limekiln Creek | The permittee shall provide the sampling results generated from sampling the discharge ditch 10 feet prior to flowing into the confluence of Springwater Creek and Limekiln Creek. The sampling frequency shall be 1 time per month and the sample type shall be a grab sample. The sampling results shall be provided to the Department with the DMR forms for each 1 month reporting period during the June 1 to October 31 monitoring season. | Monthly, until POTW upgrades are complete per compliance schedule | | | | |

Unless noted otherwise, the above actions are one-time requirements. The permittee shall submit the results of the above actions to the satisfaction of the Department. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT", the permittee is not required to repeat the above submittal(s), unless noted otherwise. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."

- 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.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water, Region 8 6274 East Avon-Lima Road, Avon, NY 14414-9516 P: (585) 226-5450 I F: (585) 226-9485 www.dec.ny.gov

September 27, 2023

Ms. Deborah Babbitt-Henry Town of Springwater 8022 South Main Street Springwater, NY 14560

RE: **NOTICE OF VIOLATION:** Chronic Noncompliance Springwater Wastewater Treatment Plant (WWTP) SPEDES Permit NY- 0246450, Consent Order R8-20150120-45 Springwater (T), Livingston (C)

Dear Ms. Babbitt-Henry,

This letter serves to provide you with a Notice of Violation (NOV) setting forth the specific actions, based on New York State Department of Environmental Conservation (DEC) records, that constitute violations of Article 17 of the Environmental Conservation Law (ECL), 6 NYCRR 750 regarding the State Pollutant Discharge Elimination System (SPDES) Permit and Consent Order # R8-20150120-45 issued to the Town of Springwater WWTP.

On September 13, 2023, the Department met with representatives from the Town of Springwater and the Livingston County Water and Sewer Authority (LCWSA) to conduct a site visit at the Town of Springwater WWTP. The following items were noted during the visit:

- The influent manhole has approximately 3-5 inches of standing water with no bench. It is assumed the standing wastewater is releasing hydrogen sulfide gas which is causing the concrete interior of the manhole to spald after only a couple of years in service.
- The first primary septic tank contained a floating scum layer that was approximately 3 feet in depth. The scum appeared dry and solid. The facility operator stated that the 16,000-gallons was pumped from the two months prior and another 16,000-gallons was scheduled to be pumped again soon. The second septic tank showed an excessive amount of solids buildup in the tank though didn't have the solid scum layer. The equalization tank also showed signs of excessive solids in the tank.
- The Orenco AdvanTex® Ax-Max treatment system (six filter tanks) showed signs of anaerobic conditions, infestation of filter flies, and excessive sludge residue on the filter media which was observed throughout the Ax-Max units. On the September 21, 2023 site visit, worms were observed in the filter media.
- Process control sampling and locations were discussed during the visit. Process control sampling is currently not being conducted at the plant. Process control sampling throughout the treatment system is imperative to assess the operation of the treatment plant and necessary to attain compliance with the SPDES permit.



Department of Environmental Conservation

- It appeared that the high level of suspended solids in effluent is rendering the UV disinfection units ineffective as fecal coliform limits are continually violated.
- During discussions with plant staff and LCWSA, it was highlighted that continuing operator training opportunities with the county would be beneficial to plant staff.
- It was stated that there is an intermunicipal agreement in place between the Town and LCWSA for working to resolve issues at the Springwater WWTP and with SPDES compliance. LCWSA is also helping the Town draft the Sewer Use Law (SUL).
- The Chief Operator obtained Grade 1 Wastewater Treatment Plant Operator Certificate on August 8, 2023.
- It was stated that the South End Dinner has installed a grease trap.

Consent Order/SPDES Compliance Schedule Items Which Require Attention:

- 1. The draft Sewer Use Law (SUL) was due January 1, 2023 in accordance with the compliance schedule in the SPDES permit. To date, no draft SUL was submitted, this is a violation of 6 NYCRR 750-2.1(e), Article 17-0803 of the ECL, and the SPDES permit.
- 2. Documentation showing the easements to Town owned grinder pumps, lateral, and pump stations was due March 1, 2020_in accordance with the compliance schedule in the SPDES permit. To date, no documentation has been received. This is a violation of 6 NYCRR 750-2.1(e), Article 17-0803 of the ECL, and the SPDES permit.
- 3. An engineering report, evaluating treatment plant performance, prepared by a NYS professional engineer was due May 1, 2022 in accordance with the SPDES permit. To date, no evaluation has been submitted. The September 7, 2022 NOV extended the report deadline to October 1, 2023.
- 4. A review of the monthly Discharge Monitoring Reports (DMRs) submitted for the period of July 1, 2022, through July 31, 2023, indicates the facility has exceeded the SPDES permitted effluent limitations 60 times. The violations for Outfall 001 can be seen in Table 1. These violations, as well as the violations listed in the September 7, 2022 NOV, are violations of 6 NYCRR 750-2.1(e), Article 17-0803 of the ECL, and the SPDES permit.

TO ADDRESS THE ABOVE ISSUES, THE FOLLOWING ACTIONS SHALL BE TAKEN:

- 1. On of Before **November 1, 2023**: Provide a copy of the intermunicipal agreement between the Town and LCWSA.
- On or Before <u>December 15, 2023</u>: Provide a status report of all the efforts made at the WWTP to-date to get into compliance with the SPDES permit. The report should also address how the WWTP plant is planning to address the high strength loadings

contributing to the on-going SPDES permit violations. An implementation schedule for any planned changes should be included as well.

- On or Before <u>December 15, 2023</u>: Provide an updated operation and maintenance plan describing the routine tasks and maintenance schedules necessary for maintaining all critical equipment at the WWTP.
- 4. On or Before <u>December 15, 2023</u>: Provide documentation that all required grease traps have been installed for the collection system.
- 5. On or Before <u>February 2, 2024</u>: The Town of Springwater is to submit a copy of their draft Sewer Use Law (SUL). The SUL shall be equivalent to the DEC model SUL. If the Town of Springwater chooses to use another approved SUL, that document must be updated to include the Town of Springwater's information and approved by the town.
- On or Before <u>April 1, 2024</u>: Provide a copy of the documentation showing the easements to Town owned grinder pumps, lateral, and pump stations for the distribution system.

PLEASE TAKE FURTHER NOTICE:

The Department is reviewing its options regarding the appropriate enforcement actions, including assessment of penalties, fines and injunctive relief for the violations which have already occurred. You must take immediate action to ensure that all ongoing violations are addressed as described above. Failure to comply with this notice could result in a larger penalty that would otherwise be assessed, should you be adjudged in violation of the law.

ECL Article 71-1929 provides that any person who violates Article 17, or any rule or regulation promulgated thereto, or any permit issued thereunder, shall be liable for a civil penalty not to exceed \$37,500 per day for each violation, plus an additional penalty not to exceed \$37,500 for each day that the violation continues, and that such person may be enjoined from continuing the violation.

Should you have any questions, please contact Chris Cicora at (607) 622-8266, or at <u>christopher.cicora@dec.ny.gov</u>.

Sincerely,

Todd M Caffoe, P.E. Deputy Regional Water Engineer

Attachment

Ecc:

Dave Sliker – Chief Operator Jason Molina – Executive Director LCWSA Tara Blum, P.E. – Regional Water Engineer Chris Cicora – DOW Abigail Johnson - DOW Dudley Loew – Regional Attorney Tim Steed, PE – Hunt Engineers Josh Lin - DOW

| Table 1 Summary of Violations since September 7, 2022 NOV | | |
|---|---|--|
| Parameter (Enforcement Limit) | Period Month (Reported Value) | |
| CBOD5 % Removal (85%) | July 2023 – 74% | |
| CBOD5 7-Day Load (12.7 lb./day) | April 2023 – 79.23 | |
| | July 2023 – 43.79 | |
| CBOD5 30-Day Load (8.3 lb./day) | September 2022 – 22.00 | |
| | April 2023 – 66.30 | |
| | July 2023 – 23.90 | |
| CBOD5 7-Day Concentration (38 mg/L) | February 2023- 41.00 | |
| | July 2023 – 210.00 | |
| CBOD5 30-Day Concentration (25mg/L) | July 2022- 28.50 | |
| | November 2022 – 30.00 | |
| | December 2022 – 30.50 | |
| | January 2023 – 27.00 | |
| | February 2023 - 35.50 | |
| | April 2023 – 33.50 | |
| | June 2023 - 34.00 | |
| Facel Caliform 7, Day Coomatria Maan (400) | July 2023 – 115.00 | |
| Fecal Coliform 7- Day Geometric Mean (400/ | July 2022 – 220,000 | |
| 100ml) | August 2022 – 330,000 | |
| | September 2022 - 4,500 October 2022 – 68,000 | |
| | December 2022 – 68,000 December 2022 – 1,560 | |
| | January 2023 – 1,200 | |
| | February 2023 – 1,200 | |
| | March 2023 – 5,500 | |
| | April 2023 – 450,000 | |
| | May 2023 – 290,000 | |
| | June 2023 – 260,000 | |
| | July 2023 – 540,000 | |
| Fecal Coliform 30 - Day Geometric Mean | July 2022 – 121,500 | |
| (200/ 100ml) | August 2022 – 167,350 | |
| | September 2022 – 2,300 | |
| | October 2022 – 37,500 | |
| | November 2022 - 215 | |
| | December 2022 – 940 | |
| | January 2023 – 33,100 | |
| | February 2023 – 940 | |
| | March 2023 – 4,100 | |
| | April 2023 – 375,000 | |
| | May 2023 – 155,000 | |
| | June 2023 – 195,000 | |
| | July 2023 – 315,000 | |

| Table 1 Summary of Violations since September 7, 2022 NOV | | | | |
|---|--|--|--|--|
| Nitrogen, Ammonia Total (5.0 mg/l) | June 2023 – 26.00 July 2023 – 14.50 | | | |
| Total Suspended Solids (TSS) 7 - Day Concentration (45 mg/l) | July 2022 – 65.00 | | | |
| Total Suspended Solids (TSS) 30 - Day Concentration (30 mg/l) | July 2022 – 52.00 January 2023 - 34.00 April 2023 – 34.00 May 2023 – 52.00 June 2023 - 35.50 | | | |
| Total Suspended Solids (TSS) Percent Removal (85%) | July 2022 – 74.00 January 2023 – 83.00 April 2023 – 83.00 May 2023 – 82.00 June 2023 - 84.20 | | | |
| Total Suspended Solids (TSS) Effluent Gross 7 Day Average (45 mg/L) | July 2022 – 65.00 | | | |
| Total Suspended Solids (TSS) Effluent Gross 30 Day Average (30 mg/L) | July 2022 – 52.00 January 2023 – 34.00 April 2023 – 34.00 May 2023 – 52.00 June 2023 – 35.50 | | | |



Orenco Systems®

Incorporated 814 Airway Ave. Sutherlin, OR 97479

Telephone: 541-459-4449 800-348-9843

Fax 541-459-2884

05/20/2022

Springwater WWTP David Sliker 8022 S Main St. Springwater, NY 14560

Subject: Springwater AdvanTex® AX-Max Treatment System

Mr. Sliker,

Orenco Systems[®] has reviewed the reviewed the operating data that we have been able to retrieve since the plant was commissioned. It is our opinion that treatment appears to have been impacted by excessive biological loading that has exceeded the design parameters for the plant. We believe that the primary tanks have been impacted by an operational issue, likely the introduction of high strength waste or some other nonresidential waste source into the collection system.

We do offer our technical assistance to the extent possible in correcting any wastewater treatment problems that are being experienced. Orenco would be willing to send one of our operators to supervise and provide guidance if the town would be willing to provide personnel and equipment to do the cleaning. Contact Stephen Boring @ (865) 333-6266 to schedule. Once the excessive growth has been eliminated and if the influent to the AdvanTex is reduced to anticipated levels, we should see effluent levels restore to anticipated treatment levels.

Please review the following pages that outlines why/how we arrived at what we believe are causing the issues and our recommendations.

The AdvanTex AX-Max Treatment system was designed for the following influent parameters after primary treatment:

- Biological Oxygen Demand (BOD₅): 150 mg/L or 50 lbs/day maximum average daily loading
- Total Suspended Solids (TSS): 40 mg/L or 13lbs/day maximum daily average
- Average Daily Flow: 40,000 gpd maximum daily average
- Ammonia (NH3-N): 45 mg/L or 15lbs/day

Permit required effluent limits are 15 mg/L BOD₅, 15 mg/L TSS and 5 mg/L NH3-N

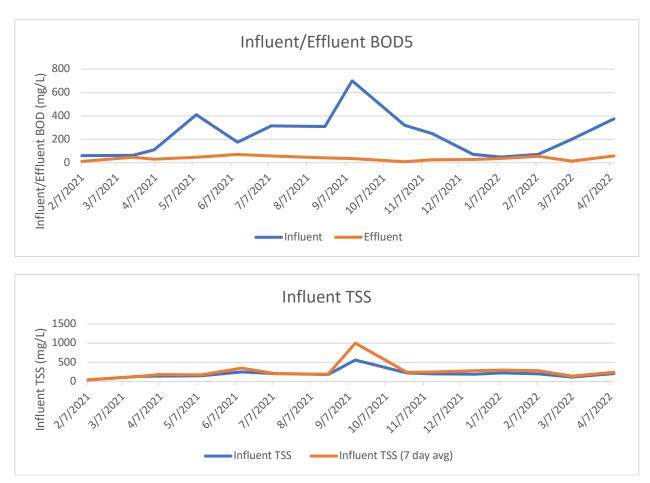
The maximum design daily average influent concentration loading of 150 mg/L or 50 lbs/day is a critical parameter in assuring that the effluent permit limits are achieved. Please note that these loading rates are required after the primary tank from the EQ tank, not at the manhole. While data is limited from the EQ tank, the limited data appears to show that the influent from the EQ tank has had extended exceedances of

loading criteria for the AdvanTex system. Additionally, it is showed that minimal BOD₅ removal is occurring within the primary tanks. The primary tanks are adequately sized, and we should expect approximately 60% BOD₅ removal and 75% TSS removal in the primary tanks. The following graph shows the measured BOD₅ loading relative to the maximum average loading required.

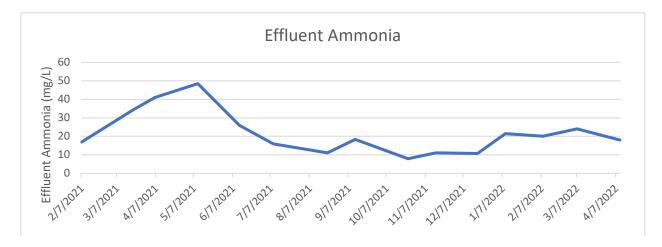


The broader data appears to show a discernable elevation in influent BOD₅ and influent TSS occurring coincidently April 1st and June 7th and again between August 21st and October 24th of 2021. At their worst, influent BOD₅ spiked to a monthly average of more than 600 mg/L and a TSS 7-day average spiked to more than 1000mg/L. Graphs of influent BOD₅ and influent TSS are shown below:





Excessive BOD₅ loading will decrease the oxygen necessary to nitrify influent ammonia to nitrite and then nitrate. Accordingly, excessive BOD₅ will also result in excessive effluent ammonia. It also appears that temperature may be impacting nitrification.



The lack of BOD₅ reduction in the primary tanks would likely be attributed to a lack of settling. This would normally be caused by one of the following:

- 1. Hydraulic overload which decreases hydraulic detention time
- 2. Sludge buildup which caused decreased tank volume

- 3. Highly concentrated waste streams, possibly from high strength waste dumped into the system
- 4. Something in the wastewater that is inhibiting settlement, such as chlorides or other chemicals
- 5. System bypass by incorrect valving

We believe that the most likely cause would be the discharge of high strength or chemical waste into the existing collection system.

Our recommendation would be to monitor the primary tank influent and effluent (EQ Tank) regularly to see what BOD₅ removal is occurring. If numbers do not trend to normalization and or do not stabilize, corrective action such as pumping the primary tanks should be considered. We would also suggest that the settleability of the influent be measured prior to the primary tanks.

Under heavy organic loading the AdvanTex media can become bound with organics. For the better part of a year or more, the system had been receiving, at times, an organic load double its design capacity. The latest photos of sheets from the plant indicate excessive growth covering the sheets. In addition to inhibiting nitrification, sheets with excessive growth will prevent the effluent from getting to sheets, thus preventing the microorganisms from receiving their food.

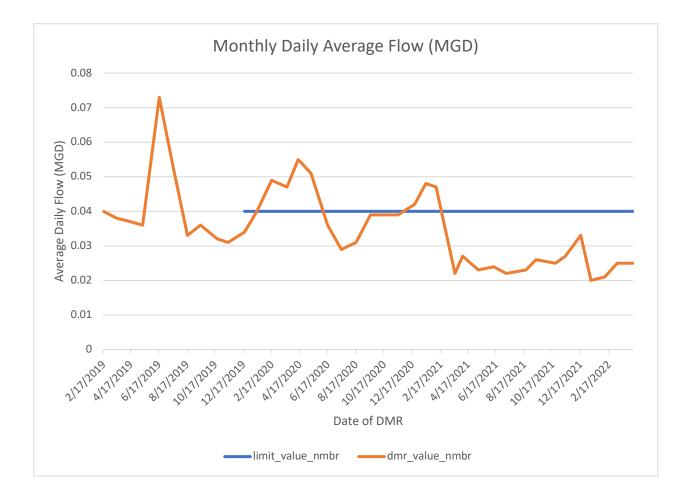
If excessive growth is noted, we would recommend that they be cleaned immediately. Cleaning instructions are included in the O&M manual, and a cleaning wand has been provided as part of the O&M tools.

Finally, it is critical to have air flow through all pods and through all media. Air flow should be confirmed not only through the pods but through the media. It is possible that excessive biological growth on the media will impede air flow. Again, media cleaning should correct this.

If Orenco can be of assistance, please don't hesitate to contact Bill Snyder at (518) 469-5462.

Sincerely

Michael L. Saunders National Sales Manager Commercial and Municipal Systems



Page 6



TOWN OF SPRINGWATER

8022 SOUTH MAIN STREET SPRINGWATER, NEW YORK 14560 585-669-2545 585-669-2002 Fax

September 12, 2022

To: NYS DEC Re: NOV September, 22nd update,

In reference to the 'Provide an update and firm implementation schedule in response June 30, 2022 Hunt Engineers email and accompanying vendor recommendations regarding (1) removal of solids from the septic tanks; (2) cleaning the units; (3) monitoring of the primary tank influent and effluent (EQ Tank) regularly to determine what BOD5 removal is occurring. Additionally, the schedule must address evaluation of the collection system and the WWTP tanks to determine and correct the causes of the high strength loadings contributing to the ongoing SPDES permit violations.'

(1) Prior to the June 28th meeting and June 30th letter, WWTP employees had been aware of the excess solid deposits in the Primary Settling Tank. The purpose of the June 28th meeting was to discuss the solids issue, the treatment problems of the AdvanTex system and the necessary steps needed to resolve these issues.

(1) Removal of solids from the septic tanks:

9/10/2021 Primary Sludge log – normal accumulation per Chris Hayward (Orenco)
11/21/2021 Primary Sludge log - normal accumulation per Chris Hayward (Orenco) Chris told us that according to these numbers we should expect to have our primary tank pumped after 5 to 10 years of operation and to take sludge readings again in 6 months.
6/8/2022 Primary Sludge log – showing approximately 30% of tank is sludge at bottom 30% of tank is scum at the top leaving 40% water. Findings were reported to HUNT Engineering as well as J. A. Lange as Chris Hayward was no longer with Orenco. Arrangements were made with O'briens Septic service (Dansville, NY) to begin pumping solids from the Primary Tank.

6/27/2022 - O'briens septic pumped 3,500 gallons of top scum & water from the Primary tank and took to the Mt. Morris treatment plant. The owner of O'briens called that night to inform us that they would not haul any more of our top scum as the wastewater facility would not accept it again.

6/28/2022 – After an inspection and meeting with representatives from HUNT Engineering, J. A. Lange and Orenco, a plan to correct the issues at the WWTP was discussed. It was decided that first, we would need to find a facility that will take our solids and follow through with any analytical testing requirements. Second, we would need to find a company willing to haul our waste. After removal of solids from our tanks, we would then continue routine pumping of both top and bottom layers of deposits on a monthly basis, then quarterly or twice a year depending on how quickly accumulation continues.

7/20/2022 – After several failed attempts to find a dumping site for our waste, Don Cardinal



TOWN OF SPRINGWATER

8022 SOUTH MAIN STREET SPRINGWATER, NEW YORK 14560 585-669-2545 585-669-2002 Fax

(NYS DEC) recommended we contact Michael Miles (Solid waste engineer NYS DEC). After discussing our situation and needs, Mr. Miles recommended that the Springwater WWTP take their solid waste (minimum of 20% solid) to a landfill willing to accept such waste.

8/3/2022 – Steuben County Landfill agreed to accept our septic solids pending analytical test results. A phone conversation was followed up with emails regarding testing requirements. 8/4/2022 – A testing program was set up and the required sample bottles requested from Life Science Laboratories (Wayland, NY).

8/10/2022 – Samples taken and delivered to the Lab

8/25/2022 – Wolfer's Septic Service (Dansville, NY) removed 4,000 gallons of water/sludge accumulation from the EQ tank (much more than we asked to be removed and it appears they did not remove the sludge, may not use this company again)

9/12/2022 – Primary Sludge Log shows that the tank is 80-90% solid. Primary tank has been bypassed awaiting to be completely pumped.

NOTE: The rapid accumulation of solids was anticipated due to the AdvanTex tank cleaning. Solids removed from the filter media in the Units was pumped directly into the Primary Settling Tank to await removal from the Facility.

9/12/2022 – Barefoot Septic Service (Canisteo, NY) has agreed to pump our Primary tank, scheduled to begin 9/19/2022.

9/19/2022 – Barefoot Septic Service completed a full pumping of the Primary settling tank. 9/20/2022 – Primary tank put back in to operation as normal.

STEP COMPLETE

9/20/2022 – Contacted Barefoot Septic to begin monthly maintenance pumping of Settling tanks. We will routinely Sludge Judge the tanks and alter pumping schedule as needed.

(2) Representatives from Orenco, the manufacturer of the AdvanTex system, inspected the Plant on 6/28/22. We were told that they have never had to have one of their plants cleaned before in 30 years and that Springwater is in a unique situation. A cleaning plan was put together and started that same day under supervision of Steven Boring from Orenco.

The cleaning process included the routine maintenance of cleaning spinner nozzles and lateral pipes, as well as spraying and scraping solid material from the media mats. After solids have been scraped off, they then were to be removed from the tanks and pumped into the Primary tank, ultimately to be pumped by a septic service and removed from the property.

(2) Cleaning the Units

6/28/2022 – Cleaning plan developed. Cleaning of the AdvanTex units begun.
8/2/2022 – All pump screens cleaned.
8/3/2022 – Cleaning of the Units Completed
STEP COMPLETE
8/3/2022 – Present – Routine maintenance of Units continued as normal
8/25/2022 – Pumped the chamber and area around the pumps in Tanks 3 & 4
9/15/2022 - Pumped the chamber and area around the pumps in Tanks 3 & 4 and cleaned all 11 pump screens.

9/16/2022 – All eleven pumps were pulled, cleaned and screens were cleared of debris.



TOWN OF SPRINGWATER

8022 SOUTH MAIN STREET SPRINGWATER, NEW YORK 14560 585-669-2545 585-669-2002 Fax

(3) Tim Steed (HUNT Engineering) suggested that composite sampling of the Influent, EQ and Effluent should be routine quarterly for the next year. Additionally, EQ samples were added to the 2x/month testing schedule to further monitor the BOD, TSS and Ammonia removal at the Settling Tank stage. The schedule for the new monitoring was to begin when cleaning of <u>BOTH</u> the Primary settling tank and the AdvanTex units had been completed.

(3) Monitoring of the primary tank influent an effluent (EQ Tank) regularly to determine what BOD5 removal is occurring.

6/28/2022 – A plan to monitor Influent, EQ and Effluent tanks put together.
9/8/2022 – Sampling pump is finished being serviced and all parts necessary to begin a composite program are on site.
9/13/2022 – Life Science Laboratories will begin adding EQ samples to 2x/month program,

the first sample should be taken on 9/14/2022 and continue indefinitely. 9/13/2022 – Life Science Laboratories notified of upcoming quarterly composite program planned to begin 10/3/2022.

(4?) WWTP employees have found that three properties within the Sewer District that have the capacity to serve the public do NOT have grease traps/interceptors. The South End Diner, Fire Hall and American Legion all serve the public and are required by law (enacted in 2014) to have a grease collection system installed.

Additionally, it was found that under DEC direction WWTP employees had been taking Effluent samples from a location other than the SPDES design location. Samples have been taken from the UV Weir box, which is before the final Cascade Aeration treatment step. This likely has led to elevated effluent numbers. Starting 9/15/22 sampling will be routine at the SPDES design locations only.

(4?) Additionally, the schedule must address evaluation of the collection system and the WWTP tanks to determine and correct the causes of the high strength loadings contributing to the ongoing SPDES permit violations.

6/28/2022 – A plan to enforce the existing 'Grease Trap Law' discussed.

6/30/2022 – The owner of the Diner property/American Legion representative and the Springwater Fire Chief were notified of the Grease Trap enforcement and assistance was offered to assist getting the properties into compliance.

9/13/2022 – Representatives contacted for updates:

Diner – Waiting on letter from Town.

Fire Hall – Fire Chief was advised to wait for the Town to provide information on the specs and technical information and is still waiting on a letter.

Legion – Waiting on letter from Town



Deputy Director Lauren Monaghan

November 17, 2023

Mr. Todd Caffoe, P.E. Mr. Chris Cicora Division of Water, Region 8 6274 East Avon-Lima Road Avon, NY 14414-9516

RE: NOTICE OF VIOLATION: Springwater Wastewater Treatment Plant ("WWTP") SPDES Permit NY – 0246450, Consent Order R8-20150120-45

Dear Mr. Caffoe and Mr. Cicora,

This letter is written on behalf of the Town of Springwater, NY. This letter is intended to provide an update on recent actions the Town of Springwater ("Town") has taken, with the support of HUNT Engineering ("HUNT") and the Livingston County Water and Sewer Authority ("Authority"), regarding Consent Order R8-20150120-45 ("Consent Order") issued to the Town WWTP.

As referenced in our prior communication, the Town has been working closely with the Authority and HUNT to address chronic infiltration and inflow ("I&I") that has been identified at the holding tank risers at the WWTP. To date, all eleven (11) risers have been improved/repaired and upon inspection, appear to be preventing I&I from entering the risers and holding tanks. The Town staff will continue to monitor the risers during wet weather events and seasonal changes.

Attached please find the Town of Springwater Local Law No. 4 adopted on November 13, 2023. Local Law No. 4 establishes the new Sewer Use Law for the Town of Springwater.

Should you have any questions, please contact David Sliker at (585) 519-182 or <u>springwaterdpw@gmail.com</u>, or myself at (585) 346-3523, or <u>jmolino@lcwsa.us</u>.

Sincerely,

Jacon Molino

Jason Molino Executive Director

Attachments:

1. Local Law No. 4, Sewer Use Law

Livingston County Water & Sewer Authority PO Box 396, 1997 D'Angelo Drive, Lakeville, NY 14480 (585) 346-3523 www.lcwsa.us



Executive Director Jason Molino

Deputy Director Lauren Monaghan

Ecc:

Dave Sliker – Chief Operator Tara Blum, P.E. – Regional Water Engineer Abigail Johnson – NYS DEC Deborah Babbit-Henry – Town Supervisor Dudley Loew – Regional Attorney Tim Steed, P.E. – HUNT Engineering Josh Lin – NYS DEC Jim Campbell – Town Attorney

Local Law Filing

(Use this form to file a local law with the Secretary of State.)

Text of law should be given as amended. Do not include matter being eliminated and do not use italics or underlining to indicate new matter.

| (Select one:) of SPRINGWAT | 'ER | |
|----------------------------|---------------------|--|
| Local Law No. | LOCAL LAW NO. 4 | of the year 20 ²³ |
| | | ND ESTABLISH A NEW SEWER USE LAW OF THE TOWN |
| (Insei | t Title) | |
| OF | SPRINGWATER, LIVING | STON COUNTY, NEW YORK |
| OF | SPRINGWATER, LIVING | STON COUNTY, NEW YORK |
| OF | SPRINGWATER, LIVING | STON COUNTY, NEW YORK |
| OF Be it enacted by | | GWATER TOWN BOARD of th |
| Be it enacted by | / the SPRING | WATER TOWN BOARD of th |

PLEASE SEE ATTACHED.

(If additional space is needed, attach pages the same size as this sheet, and number each.)

(Complete the certification in the paragraph that applies to the filing of this local law and strike out that which is not applicable.)

| 1. (Final adoption by local legislative body on | dv.) | | | | |
|--|-------------------------|----------------|---------------|-------------|--------------------|
| I hereby certify that the local law annexed hereto, o | | w No. <u>4</u> | | c | of 20 <u>23</u> of |
| the (Qaskata)(Control (Willage) of SPRIN | IGWATER | | , | was dulv p | assed by the |
| SPRINGWATER TOWN BOARD | on <u>NOVEME</u> | BER 13 20 23 | _, in accord | ance with t | he applicable |
| (Name of Legislative Body) provisions of law. | | | | | |
| | | | | | |
| (Passage by local legislative body with app Chief Executive Officer*.) I hereby certify that the local law annexed hereto, of | | | e after disap | | |
| the (County)(City)(Town)(Village) of | | | | | f 20 of |
| | | 20 | and was | vas uury pa | Vnot approvo |
| (Name of Legislative Body) | 011 | 20 | , and was | (approved | |
| (repassed after disapproval) by the(<i>Elective Chief E</i> | | | and wa | s deemed | duly adopted |
| (Elective Chief E | xecutive Officer*) | | | | |
| on 20 , in accordance wi | ith the applicable prov | isions of law. | | | |
| the (County)(City)(Town)(Village) of | | | | | - |
| (Name of Legislative Body) | | | | | |
| (repassed after disapproval) by the(Elective Chief E. | xecutive Officer*) | | on | 2 | 20 |
| Such local law was submitted to the people by reaso vote of a majority of the qualified electors voting the | | | | | |
| 20, in accordance with the applicable provisio | ons of law. | | | | |
| (Subject to permissive referendum and final I hereby certify that the local law annexed hereto, de | esignated as local law | No | | _of 20 | of |
| the (County)(City)(Town)(Village) of | | | v | vas duly pa | assed by the |
| | on | | | | |
| (ivame of Legislative Body) | | | | provod)(ii | |
| (repassed after disapproval) by the | aguitius Officer* | on _ | | _ 20 | . Such local |
| (Elective Unier Exe | | | . | _ | |
| law was subject to permissive referendum and no va | | such referendu | um was filed | as of | |
| 20, in accordance with the applicable provision | ons of law. | | | | |

* Elective Chief Executive Officer means or includes the chief executive officer of a county elected on a county-wide basis or, if there be none, the chairperson of the county legislative body, the mayor of a city or village, or the supervisor of a town where such officer is vested with the power to approve or veto local laws or ordinances.

5. (City local law concerning Charter revision proposed by petition.)

I hereby certify that the local law annexed hereto, designated as local law No._ _ of 20_ of the City of ____ having been submitted to referendum pursuant to the provisions of section (36)(37) of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of such city voting thereon at the (special)(general) election held on _____ 20____, became operative.

6. (County local law concerning adoption of Charter.)

I hereby certify that the local law annexed hereto, designated as local law No..... ___ of 20 ____ of the County of _____ _____State of New York, having been submitted to the electors at the General Election of ____ 20____, pursuant to subdivisions 5 and 7 of section 33 of the Municipal Home Rule Law, and having November ____ received the affirmative vote of a majority of the qualified electors of the cities of said county as a unit and a majority of the qualified electors of the towns of said county considered as a unit voting at said general election, became operative.

(If any other authorized form of final adoption has been followed, please provide an appropriate certification.) I further certify that I have compared the preceding local law with the original on file in this office and that the same is a correct transcript therefrom and of the whole of such original local law, and was finally adopted in/the manner indicated in paragraph _____ above.

Clerk of the county legislative body, City, Town or Village Clerk or officer designated by local legislative body

MUMBER 13, 2023

(Seal)

Date:

LOCAL LAW NO. 4 OF THE YEAR 2023

OF THE TOWN OF SPRINGWATER

A local law to adopt a new Sewer Use Law of the Town of Springwater, Livingston County, New York.

Be it enacted by the Town Board of the Town of Springwater as follows:

SECTION 1. <u>TITLE AND SCOPE</u>

This local law shall be known as "A LOCAL LAW TO ADOPT AND ESTABLISH A NEW SEWER USE LAW OF THE TOWN OF SPRINGWATER, LIVINGSTON COUNTY, NEW YORK."

SECTION 2. <u>AUTHORITY AND GENERAL PURPOSE</u>.

A. Authority. This Local Law is adopted pursuant to the New York State Town Law §198 1. (g) and Articles 2 and 3 of the Municipal Home Rule Law, to protect and promote public health, safety, convenience, order, aesthetics, prosperity and general welfare of the Town of Springwater. This Local Law regulates the discharge of sanitary sewage and other types of wastes into any public sewer collection or treatment system within the Town of Springwater.

B. To these ends, this local law and the Chapter that it creates is designed to:

- 1. Enhance the orderly growth, development and redevelopment of the Town in accordance with a well-considered plan;
- 2. Properly regulate the discharge of sanitary sewage and other types of wastes into any public sewer collection or treatment system benefitting the Town, in order to protect the health, safety and welfare of the residents of the Town and to protect the various public benefit infrastructure that collects and treats sanitary sewage and other types of wastes within and/or for the benefit of the Town; and
- 3. Provide for efficient and effective enforcement of rules and regulations ensuring proper use of and discharge into the public sanitary sewer/waste water collection and treatment system.

SECTION 3. SPECIFIC PURPOSE.

The specific purposes of this Local Law are the following:

A. To prevent the introduction of substances into the publicly owned sanitary sewer system that will:

- (1) interfere with the publicly owned sanitary sewer system in any way;
- (2) pass through the publicly owned sanitary sewer system to the State's Waters and cause contravention of standards for those waters or cause violation of the publicly owned sanitary sewer system 's SPDES Permit;
- (3) increase the cost or otherwise hamper the disposal of publicly owned sanitary sewer system sludge and/or residuals;
- (4) endanger the Town of Springwater or any municipal employees;
- (5) cause air pollution, or groundwater pollution, directly or indirectly; and
- (6) cause, directly or indirectly, any public nuisance condition.
- B. To prevent new sources of Infiltration and Inflow as much as possible and eliminate existing sources of Infiltration and Inflow.
- C. To assure that new sewers and connections are properly constructed.
- D. To provide for equitable distribution amongst all users of the POTW of all costs, associated with Sewage transmission, treatment, and residuals disposal, and to provide for the collection of such costs.
- E. To provide enforcement mechanisms to ensure proper usage of the POTW to further the above purposes.

SECTION 4. ADOPTION OF NEW SEWER USE LAW.

A. The Town of Springwater hereby adopts the following as its Sewer Use Law, which shall supersede and replace any and all prior versions of the same and such Sewer Use Law shall read as follows: See attached TOWN OF SPRINGWATER SEWER USE LAW

SECTION 5. REPEAL OF PRIOR SEWER USE LAW(S).

A. Any and all prior adopted sewer use laws and/or regulations are hereby repealed and replaced by the adoption of this new Town of Springwater Sewer Use Law.

SECTION 6. EFFECTIVE DATE.

This local law shall be effective thirty (30) days after its filing with the Office of the Secretary of State.

Resolution moved by: Councilmember Canute

Seconded by: Deputy Supervisor Gnau

Roll Call: Councilmember Thomas Canute: AyeCouncilmember Kyle Mason: AyeCouncilmember Patricia Willsea: AbsentDeputy Supervisor Gnau: AyeSupervisor Babbitt-Henry: Aye

Dated: November 13th, 2023

Huston

Christi C. Johnson Town Clerk

TOWN OF SPRINGWATER SEWER USE LAW Table of Contents

11

| Article 1 - Short Title and Purpose | |
|--|--------|
| Section 100 - Short Title | 1 |
| Section 101 - Authority | |
| Section 102 - General Purpose | 1 |
| Section 103 - Specific Purposes | |
| Section 104 - Replacement of Previous Sewer Use Law | |
| Article 2 - Definitions | |
| Section 201 - Defined Terms | 2 |
| Section 202 - Abbreviations | 13 |
| Section 203 - Undefined Terms | 14 |
| Article 3 - Use of Public Sewers Required | 14 |
| Section 301 - Waste Disposal Unlawful | |
| Section 302 - Connecting Private Sewage System to Storm Sewer Unlawful | 14 |
| Section 303 - Discharge of Sewage into Well Prohibited | |
| Section 304 - Wastewater Discharge Unlawful | 14 |
| Section 305 - Building Permit Allowed Only When Approved Wastewater Dis | sposal |
| Available | 14 |
| Section 306 - Private Wastewater Disposal | 15 |
| Section 307 - Connection to Public Sewer Required | 15 |
| Section 308 - Limitation on Use of Public Sewers | |
| Section 309 - Wastewater from Outside the POTW Service Area - Inter-mun | icipal |
| Agreements | |
| Section 310 - Moratorium | 15 |
| Section 311 - Basis of Sewer Use Requirement | 15 |
| Article 4 - Private Wastewater Disposal | 16 |
| Section 401 - Public Sewer Unavailable - Private Wastewater Disposal Required | |
| Section 402 - Connection of Two Buildings to the Same Septic Tank Prohibited | |
| Section 403 - Construction Permit Application | 16 |
| Section 404 - Construction Permit | 16 |
| Section 405 - Preventing Nuisances - Rehabilitation Required | |
| Section 406 - Sanitary Operation Required | |
| Section 407 - Septage Removal | 17 |
| Section 408 - Direct Connection to New Public Sewers Required | |
| Section 409 - Additional Requirements | 17 |
| Article 5 - New Sewers or Sewer Extensions | |
| Section 501 - Proper Design | |
| Section 502A - New Sewers Subject to Approval, Fees, Inspection, Testing, and Repo | orting |
| | 18 |
| Section 502B - Plans, Specification, and Pipe Test Results | 18 |
| Section 503 A - Sewer Pipe | 19 |
| Section 503 B - Safety and Load Factors | 19 |

| | Section 503 C - Sewer Pipe Installation | 20 |
|---------|---|-----------|
| | Section 503 D - Cleanout Installation | |
| | Section 504 - Manholes and Manhole Installation | |
| | Section 505 A - Infiltration/Exfiltration Testing | |
| | Section 505 B - Test Section | .25 |
| | Section 505 C - Test Period | |
| | Section 505 D - Pipe Lamping | 25 |
| | Section 505 E - Deflection Testing. | 25 |
| · . | Section 505 F - Low Pressure Air Testing Alternative. | |
| | Section 505 G - Vacuum Testing Alternative. | |
| | Section 506A - Force Mains | |
| | Section 506B - Force Main Testing | |
| | Section 507 - Final Acceptance and Warranty/Surety | 28 |
| | Section 508 - Liability Insurance Coverage During Construction Period | |
| Article | e 6 – Building Laterals, Street Laterals Connections, and Fees | |
| | Section 601 A - Permit Required for Sewer Connections. | |
| | Section 601 B - Inflow/Infiltration Prohibited | .29 |
| | Section 602 - Sewer Lateral Permits | .29 20 |
| | Section 602 - Sector Editing Laterals | |
| | Section 603 B -Laterals Serving Several Buildings | |
| | Section 603 C - Laterals Serving Complexes | |
| | Section 603 D - Dry Sewers | |
| | Section 604 - Using Existing Building Laterals | 20 |
| | Section 605 - Lateral Pipe Materials | 20 |
| | Section 606 A - Street Lateral to Public Sewer Connection | |
| | Section 606 B - Future Connection Locations; As-Built Drawings | |
| | Section 606 C - Special Manhole Requirements | |
| | Section 607 - Laterals At and Near Buildings | 27 |
| | Section 608 - Sewage Lifting | |
| | Section 609 - Lateral Pipe Installation | |
| | Section 609 - Dateral Tipe Instantation Section 610 A - Watertight Joints | |
| | Section 610 B - PVC Push Joints | |
| | Section 611 A - Building Lateral/Street Lateral Connection | |
| | Section 611 B - Cleanout Repair/Replacement | |
| | Section 611 C - Street Lateral Replacement; Ownership | |
| | Section 612 Testing | 34 24 |
| | Section 612 - Testing Section 613 A - Connection Inspection | 34 24 |
| | Section 613 B - Trench Inspections | |
| | · | |
| | Section 614 - Public Safety Provisions Required; Restoration of Disturbed Areas | |
| | | |
| Antiala | Section 616 - Costs Borne by Owner | |
| Autore | 7 – Inflow Section 701 – New Inflow Sources Prohibited | 33 25 |
| | | |
| | Section 702 - Existing Inflow Sources Disconnected | |
| | Section 703 - Existing Inflow Sources Disconnected When Property Sold | 33 25 |
| | Section 704 - No Re-connection of Inflow Source Allowed | 35 |

1

- ----

| Section 705 - Charges for Inflow | 36 |
|--|----------------|
| Article 8 – Trucked or Hauled Waste | 36 |
| Section 801- Licenses and Application | 36 |
| Section 802 - Concurrent Requirements | 36 |
| Section 803 – Dumping Location and Timing | 36 |
| Section 804 - Notification of Dumping | |
| Article 9 – Discharge Restrictions | 37 |
| Section 901 - Pretreatment Standards | 37 |
| Section 902 - General Prohibitions | |
| Section 903 - Concentration Based Limitations | |
| Section 904 - Mass Discharge Based Limitations | |
| Section 905 - Modification of Limitations | 41 |
| Section 906 - Access to User's Records | 41 |
| Section 907 – Dilution | 41 |
| Section 908 - Grease, Oil, and Sand Interceptors | 41 |
| Section 909 - Solid Waste Grinders | |
| Section 910 - Rejection of Wastewater | |
| Article 10 - Discharge Permits and Pretreatment Requirements | |
| Section 1001 - Wastewater Discharge Reports | |
| Section 1002 - Notification to Industrial Users | .42 |
| Section 1003 A - Wastewater Discharges | |
| Section 1003 B - Wastewater Discharge Permits Required For Significant Industrial Us | |
| | |
| Section 1003 C - Other Industrial Users | .43 |
| Section 1003 D - Discharge Permits to Storm Sewers Not Authorized | |
| Section 1004 A - Application for Wastewater Discharge Permits | .43 |
| Section 1004 B - Permit Modifications | .44 |
| Section 1004 C - Permit Conditions | |
| Section 1004 D - Permit Duration | .45 |
| Section 1004 E - Permit Reissuance | .45 |
| Section 1004 F - Permit Transfer | .45 |
| Section 1004 G - Permit Revocation | .46 |
| Section 1004 H - Public Notification | |
| Section 1005 - Reporting Requirements for Permittee | |
| Section 1006 - Flow Equalization | 47 |
| Section 1007 - Monitoring Stations (Control Manholes) | 48 |
| Section 1008 - Proper Design and Maintenance of Facilities and Monitoring Stations | 48 |
| Section 1009 - Vandalism, Tampering with Measuring Devices | |
| Section 1010 - Sampling and Analysis | 48 |
| Section 1011 - Accidental Discharges; SPCC Plan | 49 |
| Section 1012 - Posting Notices | 50 |
| Section 1013 - Sample Splitting | 50 |
| Section 1014 - Public Access to Information Maintained by the Operator | 50 |
| | 50 |
| Section 1015 A - Access to Property and Records | 50 50 |
| | 50 50 51 |

| Section 1016 - Special Agreements | 51 |
|---|-------|
| Article 11 – Enforcement and Penalties | |
| Section 1101 – Enforcement Response Plan | |
| Section 1102 – Notification of Violation | |
| Section 1103 - Consent Orders | 52 |
| Section 1104 - Administrative or Compliance Orders | |
| Section 1105 - Administrative Fines | |
| Section 1106 – Administrative Order to Cease and Desist | |
| Section 1107 - Termination of Permit | 54 |
| Section 1108 A - Water Supply Severance | 54 |
| Section 1108 B - Emergency Suspension of Discharge/Abatement | 56 |
| Section 1109 - Show Cause Hearing | |
| Section 1110 - Failure of User to Petition the Operator | 56 |
| Section 1111 – Notice | |
| Section 1112 - Right to Choose Multiple Remedies | 57 |
| Section 1113 A - Civil Actions For Penalties for Non-Industrial Users | |
| Section 1113 B - Civil Actions For Penalties for Industrial Users and Significant Indus | |
| Users | |
| Section 1114 - Court Orders | |
| Section 1115 A - Criminal Penalties/Fines for Non-Industrial Users | 59 |
| Section 1115 A - Criminal Penalties/Fines for Industrial Users and Significant Indus | trial |
| Users | |
| Section 1116 - Additional Injunctive Relief | 59 |
| Section 1117 - Delinquent Payments | 60 |
| Section 1118 - Performance Bonds | |
| Section 1119 - Liability Insurance | 60 |
| Section 1120 - Informant Rewards | 60 |
| Section 1121 - Public Notification | 61 |
| Section 1122 - Contractor Listings | 61 |
| Article 12 – Charges | 61 |
| Section 1201 – Normal Sewage Service Charges | 61 |
| Section 1202 - Surcharge for Abnormal Sewage | |
| Section 1203 - Total Sewer Service Charge | 61 |
| Section 1204 - Segmenting the POTW | 62 |
| Section 1205 - Measurement of Flow | 62 |
| Section 1206 - Billing Period | 63 |
| Section 1207 - Pretreatment Program Costs | 63 |
| Section 1208 - Charges for Trucked and Hauled Wastes | .63 |
| Section 1209 - Capital Recovery | |
| Section 1210 - Collection of Charges | .64 |
| Section 1211 - Fiscal Year for System | .64 |
| Section 1212 - Impact Fees | |
| Section 1213 - Use of Revenues | |
| Section 1214 - Records and Accounts | |
| Article 13 – Public Disclosure of POTW Operations | .65 |
| Section 1301 – POTW Operations Open to the Public | |

| | | Section 1302- Procedural Requirements Available | |
|-----|--------|--|--|
| | | Section 1303- Validity Through Public Inspection | |
| | Articl | e 14 - Conflicts, Severability, Effective Date And Applicability | |
| | | Section 1401- Conflicts Section 1402- Severability | |
| | | Section 1403- Effective Date | |
| | | | |
| • • | | | |
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Article 1 - Short Title and Purpose

Section 100 - Short Title

For brevity and ease of communication, this Sewer Use Law may be cited as the Town of Springwater Sewer Use Law (hereafter "Sewer Use Law").

Section 101 - Authority

The Town of Springwater (hereafter "Town") has the power to adopt this Sewer Use Law pursuant to New York State Municipal Home Rule Law §20 and New York State Town Law §198.

Section 102 - General Purpose

The general purpose of this Sewer Use Law is the following:

To provide for efficient, economic, environmentally safe, and legal operation of the Town of Springwater Publicly Owned Treatment Works (hereafter "POTW" and as subsequently defined herein).

Section 103 - Specific Purposes

The specific purposes of this Sewer Use Law are the following:

- (1) To prevent the introduction of substances into the POTW that will:
 - 1. interfere with the POTW in any way;
 - 2. pass through the POTW to the State's Waters and cause contravention of standards for those waters or cause violation of the POTW's SPDES Permit;
 - 3. increase the cost or otherwise hamper the disposal of POTW sludge and/or residuals,
 - 4. endanger Authority or any municipal employees;
 - 5. cause air pollution, or groundwater pollution, directly or indirectly; and
 - 6. cause, directly or indirectly, any public Nuisance condition.
- (2) To prevent new sources of Infiltration and Inflow as much as possible and eliminate existing sources of Infiltration and Inflow.
- (3) To assure that new Sewers and connections are properly constructed.
- (4) To provide for equitable distribution amongst all Users of the POTW of all costs, associated with Sewage transmission, treatment, and residuals disposal, and to provide for the collection of such costs.
- (5) To provide enforcement mechanisms to ensure proper usage of the POTW to further the above purposes.

Section 104 - Replacement of Previous Sewer Use Law

The provisions of all prior sewer use rules, regulations and/or local laws in the Town of Springwater are hereby superseded in their entirety and said provisions are wholly replaced by the herein set forth Articles 1 through 14 inclusive, which are intended to govern all Users of the Town of Springwater POTW.

Article 2 - Definitions

Section 201 - Defined Terms

Unless otherwise stated in the section where the term is used in this Sewer Use Law, the meaning of terms used in this Sewer Use Law shall be as stated below. When not inconsistent with the context, the present tense shall include the future, and words used in the plural shall include the singular and vice versa. Furthermore, a masculine pronoun shall include the feminine. Shall is mandatory; may is permissive.

Abnormal Sewage - Sewage whose concentration of one or more characteristics of Normal Sewage exceeds the maximum concentrations of the characteristics of Normal Sewage. See Normal Sewage.

Act or "THE ACT" - The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251, et seq., as may be amended.

Administrator - The Regional Administrator of the U. S. Environmental Protection Agency (USEPA), Region 2.

Ammonia - The result obtained, using an approved laboratory procedure, to determine the quantity of Ammonia in a sample, expressed as milligrams of Nitrogen per liter.

Applicant - That Person or legal entity who makes application for any Permit. The Applicant may be an owner, new or old, or his agent.

Approval Authority - The USEPA, or the New York State Department of Environmental Conservation (NYSDEC), in the event the NYSDEC is delegated approval authority responsibility by the USEPA.

Approved Laboratory Procedure - The procedures defined as 'Standard Methods' in this Article, or other procedures approved by the Operator, for flow measurement or determination of the concentration of Pollutants or their surrogates in waters, Wastewaters, and/or sludges.

ASTM, denoting American Society for Testing and Materials - The latest edition of any ASTM specification, when stipulated in this Sewer Use Law.

Authorized Representative of the Industrial User - An authorized representative of the Industrial User may be:

(a) An executive officer of at least the level of vice-president, if the Industrial User is a corporation;

- (b) A general partner or proprietor, if the Industrial User is a partnership or proprietorship, respectively;
- (c) A duly authorized representative of the individual designated above, if such representative is responsible for the overall operation of the facilities from which the indirect discharge originates.

BOD, denoting Biochemical Oxygen Demand - The result obtained when using an approved laboratory procedure to determine the quantity of Oxygen utilized in the aerobic biochemical oxidation of organic matter or in a sample, expressed in milligrams per liter.

Builder - Any Person or legal entity who undertakes to construct a building or any part of a building, either under contract or for resale.

Building Drain - That part of the lowest horizontal piping of a building drainage system which receives the discharge from soil, waste, and other drainage pipes inside the building walls, and conveys it to the Building Lateral, which begins five (5) feet outside the inner face of the building wall.

Chlorine Demand - The result obtained when using an approved laboratory procedure to determine the difference between the amount of Chlorine added to a sample and the amount of chlorine remaining in the sample at the end of a specified contact time at room temperature, expressed in milligrams per liter.

COD, denoting Chemical Oxygen Demand - The result obtained when using an approved laboratory procedure to measure the Oxygen requirement of that portion of matter, in a sample, that is susceptible to oxidation, by a specific chemical oxidant, expressed in milligrams per liter.

Color - The optical density at the visual wave length of maximum absorption, relative to distilled water. One hundred percent (100%) transmittance is equivalent to zero (0.0) optical density.

Composite Sample - The sample resulting from the combination of individual samples of Wastewater taken at selected intervals, for a specified time period. The individual samples may have equal volumes or the individual volumes may be proportioned to the flow at the time of sampling.

Connection - Attachment of one user to a Sewer. (See Extension)

Connection Charge (Tap Fee) - The one-time application fee (to be set from time to time by the Springwater Town Board) to offset expenses to process an application for a connection of a Building/Street Lateral to the Public Sewer. The fee also covers plan review, Permit issuance, street repair cost, and inspection costs. The fee may be scaled to the amount of work involved, or to the size of the Public Sewer involved.

Control Authority - The term shall refer to "Approval Authority", or to the Town Supervisor when the Town of Springwater has an approved pretreatment program under the provisions of 40 CFR 403.11.

Control Manhole - A manhole accessible to the Control Authority in or upstream of the Street Lateral, such that samples collected from the manhole represent the discharge to the POTW.

Conventional Pollutant - A Pollutant that the POTW Treatment Plant was designed to treat, defined in accordance with the Act.

Cooling Water - The water discharged from any system of condensation, air conditioning, refrigeration, or other sources. It shall contain no polluting substances which would produce COD or suspended solids in excess of five (5) milligrams per liter, or toxic substances, as limited elsewhere in this Sewer Use Law.

County - Livingston County, New York, in which the Town of Springwater is located.

Developer - Any Person or legal entity who subdivides land or uses existing parcels of land for the purpose of constructing, or causing to be constructed, buildings or structures for which Wastewater disposal facilities are required.

Direct Discharge - The discharge of treated or untreated Wastewater directly to the Waters of the State of New York. (For reference, see Indirect Discharge.)

Domestic Wastes - see Sewage, Domestic.

Dry Sewers - The Sanitary Sewer installed in anticipation of future connection to a POTW but which is not used, in the meantime, for transport of Storm or Sanitary Sewage.

End of Pipe - For the purpose of determining compliance with limitations prescribed by Article 9, End of Pipe shall mean the Control Manhole, provided the samples collected from the Control Manhole are representative of the discharge to the POTW.

End of Pipe Concentration - The concentration of a substance in a sample of Wastewater at the End of Pipe.

End of Process Concentration - see National Categorical Pretreatment Standard.

Easement - An acquired legal right for the specific use of land owned by others.

EPA, USEPA, or U.S. Environmental Protection Agency - The agency of the federal government charged with the administration and enforcement of federal environmental laws, rules, and Sewer Use Law. Also may be used as a designation for the Administrator or other duly authorized official of this Agency.

Extension - Attachment of a Sewer line, with more than one User, to an existing Sewer line.

Facility - All buildings, other structures, grounds and contiguous property at any locations related to or connected with a User at the User's location.

Floatable Oil - Oil, grease, or fat in a physical state such that it will separate by gravity from Wastewater by treatment in a Wastewater treatment facility.

Flow Rate - The quantity of liquid or waste that flows in a certain period of time.

Garbage - The solid wastes from the preparation, cooking, and dispensing of food, from the handling, storage, and sale of produce, and from the packaging and canning of food.

Grab Sample - A single sample of Wastewater representing the physical, chemical, and biological characteristics of the Wastewater at one point and time.

ICS Form - The form used by the NYSDEC to survey industries to perform and update the Industrial Chemical Survey.

Indirect Discharge - The introduction of Wastewater into a POTW for treatment and ultimate discharge of the treated effluent to the State's Waters. (For reference, see Direct Discharge).

Industrial - Meaning or pertaining to industry, manufacturing, commerce, trade, business, or institution, and is distinguished from domestic or residential.

Industrial Chemical Survey (ICS) - The survey of industries in New York State, initiated by the NYSDEC, to determine chemical usage and storage by those industries.

Industrial User - See User, Industrial.

Industrial Wastes - The liquid or liquid-carried solid, liquid and/or gaseous wastes from industrial manufacturing processes, trade, service, utility, or business, as distinct from Sanitary Sewage.

Infiltration - Water, other than Wastewater, that enters a Sewer System (excluding building drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, Inflow. Infiltration is inadvertent, that is, not purposely designed or built into the Sewer or drain.

Inflow - Water, other than Wastewater, that enters a Sewer System (including building drains) from sources such as, but not limited to, roof leaders, cellar drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between Storm Sewers and Sanitary Sewers, catch basins, cooling towers, storm waters, foundation drains, swimming pools, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, Infiltration. Inflow is purposely designed and/or built into the Sewer or drain (not necessarily with consent or permission).

Interference - A discharge which, alone or in conjunction with discharges by other sources:

(a) inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and

- (b) therefore is a cause of a violation of any requirement of the Town of Springwater POT-W's SPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of Sewage sludge use or disposal by the POTW in accordance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations):
 - i. Section 405 of the Clean Water Act,
 - ii. the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act - RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D or the SWDA),
 - iii. Clean Air Act,
 - iv. Toxic Substance Control Act, and/or
 - v. Marine Protection Research and Sanctuaries Act.

Lateral, Building - The Sewer extension from a building drain to a Street Lateral or other place of Wastewater disposal.

Lateral, Street - The sewer extension from a Public Sewer to a property line.

National Categorical Pretreatment Standard, or Categorical Standard - Any regulation containing Pollutant discharge limits promulgated by the EPA in accordance with Section 307 (B) and (C) of the Act (22 U.S.C. 1347), which applies to a specific category of Industrial Users. These standards apply at the end of the categorical process ("end of process").

National Pollutant Discharge Elimination System (NPDES) Permit - A permit issued pursuant to Section 402 of the Act (33 U.S.C. 1342).

National Prohibitive Discharge Standard, or Prohibitive Discharge Standard - Any regulation developed under the authority of Section 307 (B) of the Act, and 40 CFR, Section 403.5.

Natural Outlet - Any outlet, including Storm Sewers and combined Sewer overflows, to State's Waters.

New Owner - That Person or entity who acquired legal title to property within the Service Area of the Town of Springwater Sewer District after the effective date of this Sewer Use Law.

New Source - Any source, the construction of which is commenced after the publication of the proposed regulation prescribing a Section 307 (C) (33 U.S.C 1317) Categorical Pretreatment Standard which will be applicable to such source, if such standard is thereafter promulgated.

New User - A discharger to the POTW who commences discharge after the effective date of this Sewer Use Law.

Normal Sewage - see Sewage, Normal.

Nuisance - The use or lack of use of the POTW in such a manner so as to endanger life or health, give offense to the senses, or obstruct or otherwise interfere with the reasonable use or maintenance of the POTW.

Oil and Grease - The result obtained when using an approved laboratory procedure to determine the quantity of fats, wax, grease, and oil, in a sample, expressed in milligrams per liter.

Old Owner - That Person or entity who owns or owned a property, within the Service Area of the POTW, acquired prior to the effective date of this Sewer Use Law, who owned or inherited the property at any time and intends to sell the property, or has transferred the property to a New Owner, also the agent of the Old Owner.

Operator – That individual appointed by the Springwater Town Board to oversee the day-to-day operation, maintenance and regulatory compliance of the POTW. This definition shall also include his/her authorized deputy, agent, or representative.

Other Wastes - Garbage (shredded or unshredded), refuse, wood, egg shells, coffee grounds, sawdust, shavings, bark, sand, lime, ashes, and all other discarded matter not normally present in Sewage or Industrial Wastes. Also, the discarded matter not normally present in Sewage or Industrial Waste.

Pass Through - The discharge which exits the Town of Springwater POTW into Waters of the State in quantities, which, alone or in conjunction with discharges from other sources, is a cause of a violation of any requirement of the POTW's SPDES permit (including an increase in the magnitude or duration of a violation).

Permit - A temporary, revocable written document allowing use of the POTW for specified wastes over a limited period of time, containing sampling locations and reporting frequencies, and requiring other actions as authorized by this Sewer Use Law.

Person - Any individual, public or private corporation, political subdivision, Federal, State, or local agency or entity, association, trust, estate or any other legal entity whatsoever.

pH - The logarithm (base 10) of the reciprocal of the weight of hydrogen ions, in gram moles per liter of solution. A pH value of 7.0, the pH scale midpoint, represents neutrality. Values above 7.0 represent alkaline conditions. Values below 7.0 represent acid conditions.

Phosphorus, total - See total phosphorus.

Pollutant - Any material placed into or onto the State's Waters, lands and/or airs, which interferes with the beneficial use of that water, land and/or air by any living thing at any time.

Pollution - The man-made or man-induced alteration of the chemical, physical, biological, and/or radiological integrity of the State's Waters, lands and/or airs resulting from the introduction of a Pollutant into these media.

Pretreatment (Treatment) - The reduction of the amount of Pollutants, the elimination of Pollutants, or the alteration of the nature of Pollutant properties in Wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such Pollutants into a POTW. The reduction or alteration can be achieved by physical, chemical, or biological process, process changes, or by other means, except as prohibited by 40 CFR, Section 403.6 (D).

Pretreatment Requirements - Any substantive or procedural requirement related to Pretreatment, other than a National Pretreatment Standard imposed on an Industrial User.

Pretreatment Standard or National Pretreatment Standard - Any Categorical Standard or Prohibitive Discharge Standard.

Priority Pollutants - The most recently revised or updated list, developed by the EPA, in accordance with the Act.

Prohibitive Discharge Standard - see National Prohibitive Discharge Standard.

Properly Shredded Garbage - The wastes from the preparation, cooking, and dispensing of food that have been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in Public Sewers, and with no particle having a dimension greater than one-half (1/2) inch in any dimension.

POTW Treatment Plant - That portion of the POTW designed to provide treatment to Wastewater, and to treat sludge and residuals derived from such treatment.

Publicly Owned Treatment Works (POTW) - A treatment works, as defined by Section 212 of the Act, (33 U.S.C 1292), which is owned, in this instance, by the Authority. This definition includes any Sewers and appurtenances that transport Wastewater to the POTW Treatment Plant, but does not include pipes, Sewers, or other conveyances not connected directly or indirectly to a facility providing treatment.

Receiving Waters - A natural water course or body of water (usually Waters of the State) into which treated or untreated Sewage is discharged.

Records - Shall include, but not be limited to, any printed, typewritten, handwritten or otherwise recorded matter of whatever character (including paper or electronic media), including but not limited to, letters, files, memoranda, directives, notes and notebooks, correspondence, descriptions, telephone call slips, photographs, permits, applications, reports, compilations, films, graphs and inspection reports. For the purposes of this Sewer Use Law, records shall mean records of and relating to waste generation, reuse and disposal, and shall include records of usage of raw materials.

Roof Drain - A drain installed to receive water collecting on the surface of a roof for disposal.

Septage - All liquids and solids in and removed from Septic Tanks, holding tanks, cesspools, or approved type of chemical toilets, including but not limited to those serving private residences.

commercial establishments, institutions, and industries. Also sludge from small Sewage Treatment Plants. Septage shall not have been contaminated with substances of concern or priority pollutants.

Septic Tank - A private domestic Sewage treatment system consisting of an underground tank (with suitable baffling), constructed in accordance with any and/or all local and State requirements.

Service Area of the POTW - The legally defined bounds of real property within the Town of Springwater Sewer District from which Wastewater may be discharged into the POTW. The bounds shall be established, altered, changed, modified, reduced, enlarged, combined, or consolidated by action of the Springwater Town Board.

Sewage - A combination of the water-carried wastes from residences, business buildings, institutions, and Industrial establishments, and such ground, surface, and Storm Water as may be inadvertently present. The admixture of Sewage, as defined above, with Industrial Wastes and other wastes shall also be considered "Sewage", within the meaning of this definition.

Sewage, Domestic (Domestic Wastes) - Liquid wastes from the non-commercial preparation, cooking, and handling of food, liquid wastes containing human excrement and similar matter from the sanitary conveniences in dwellings, commercial buildings, Industrial buildings, and institutions, or liquid wastes from clothes washing and/or floor/wall washing. Therefore, domestic Sewage includes both black water and grey water. (See Sewage, Sanitary.)

Sewage, Normal - Sewage, industrial wastes, or other wastes, which show, by analysis, the following characteristics:

- B.O.D. (Five Day) 2090 lbs. per million gallons (250 milligrams per liter), or less.
- Suspended Solids 2500 lbs. per million gallons (300 milligrams per liter), or less.
- Phosphorus 125 lbs. per million gallons (15 milligrams per liter), or less
- Ammonia 250 lbs. per million gallons (30 milligrams per liter), or less.
- Total Kjeldahl Nitrogen 417 lbs. per million (50 milligrams per liter), or less.
- Chlorine Demand 209 lbs. per million gallons (25 milligrams per liter), or less.
- Chemical Oxygen Demand 2920 lbs. per million gallons (350 milligrams per liter), or less.
- Oil and Grease 100 milligrams per liter, or less

In spite of satisfying one or more of these characteristics, if the Sewage also contains substances of concern, it may not be considered Normal Sewage.

Sewage, Sanitary - Liquid wastes from the sanitary conveniences of dwellings (including apartment houses and hotels), office buildings, factories, or institutions, and free from storm water, surface water, Industrial, and other wastes. (See Domestic Wastes.)

Sewage Treatment Plant (Water Pollution Control Plant) - see POTW Treatment Plant.

Sewage, Unusual Strength or Character - Sewage which has characteristics greater than those of Normal Sewage and /or which contains Substances of Concern.

Sewer - A pipe or conduit for carrying or transporting Sewage.

Sewer, Combined - A Sewer designed to receive and transport both surface runoff and Sewage.

Sewer, Public - A Sewer in which all abutting property owners have equal rights, and the use of which is controlled by the Town of Springwater Sewer District.

Sewer, Sanitary - A Sewer which carries Sewage, and to which storm, surface, and groundwaters are not intentionally admitted.

Sewer, Storm (Storm Drain) - A Sewer which carries storm and surface waters and drainage, but excludes Sewage and Industrial Wastes, other than cooling waters and other unpolluted waters.

Sewer System (also POTW) - All facilities for collecting, regulating, pumping, and transporting Wastewater to and away from the POTW Treatment Plant.

Sewerage Surcharge - The demand payment for the use of a Public Sewer and/or Sewage Treatment Plant for the handling of any Sewage, Industrial Wastes, or other wastes accepted for admission thereto in which the characteristics thereof exceed the maximum values of such characteristics in Normal Sewage. (See Volume Charge.)

Significant Industrial User - see User, Significant Industrial.

Significant Non-Compliance (SNC) - A User is in significant non-compliance if its violation(s) meet(s) one or more of the following criteria:

- Chronic violations of Wastewater discharge limits, defined here as those, in sixty-six (66) percent or more of all of the measurements taken during a six-month period, which exceed (by any magnitude) the daily maximum limit or average limit for the same Pollutant parameter;
- Technical Review Criteria (TRC) violations, defined here as those, in which thirty-three (33) percent or more of all of the measurements for each Pollutant parameter taken during a six-month period, which equal or exceed the product of the daily maximum limits multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oil and grease; TRC = 1.2 for all other pollutants);
 - Any other violation of a Pretreatment effluent limit (daily maximum or long-term average) that the POTW Operator determines has caused, alone or in combination with other discharges, Interference or Pass Through (including endangering the health of POTW personnel or the general public);
 - Any discharge of a Pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the Town Supervisor's exercise of its emergency authority under Article 11 of this Sewer Use Law;

- Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;
- Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;
- Failure to report accurately any non-compliance;
- Any other violation which the Operator determines will adversely affect the implementation or operation of the local pretreatment program.

Slug - A substantial deviation from normal rates of discharge or constituent concentration (see Normal Sewage) sufficient to cause Interference. In any event, a discharge which, in concentration of any constituent or in quantity of flow, that exceeds, for any period of duration longer than fifteen (15) minutes, more than five (5) times the average twenty-four (24) hour concentration or flow during normal user operations, shall constitute a Slug.

Standard Industrial Classification (SIC) - A classification pursuant to the Standard Industrial Classification Manual issued by the Executive Office of the President, Office of Management and Budget, 1972, and subsequent revisions.

Standard Methods - Procedures contained in the latest edition of "Standard Methods for the Examination of Water and Wastewater", published by the American Public Health Association, procedures established by the Administrator, pursuant to Section 304 (G) of the Act and contained in 40 CFR, Part 136, and amendments thereto. (If 40 CFR, Part 136 does not include a sampling or analytical technique for the pollutant in question, then procedures set forth in EPA publication, "Sampling and Analysis Procedures for Screening of Industrial Effluents for Priority Pollutants", April 1977, and amendments thereto, shall be used), any other procedure approved by the Administrator, or any other procedure approved by the Operator, whichever is the most conservative.

State - State of New York.

State's Waters - See Waters of the State.

Storm Water - Any flow occurring during or following any form of natural precipitation; also the flow resulting therefrom.

Substances of Concern - Those compounds which the New York State Department of Environmental Conservation has determined may be harmful to man or the environment.

Sump Pump - A mechanism used for removing water from a sump or wet well.

Suspended Solids - The result obtained, using an approved laboratory procedure, to determine the dry weight of solids, in a sample, that either float on the surface of, or are in suspension, or are settleable, and can be removed from the sample by filtration, expressed in milligrams per liter. **Total Kjeldahl Nitrogen (TKN)** - The result obtained, using an approved laboratory procedure, to determine the quantity of ammonia in a sample and released during the acid digestion of organic nitrogen compounds, expressed as milligrams of nitrogen per liter.

Total Phosphorus - The result obtained, using an approved laboratory procedure, to determine the total quantity of orthophosphate, in a sample of Wastewater, following the hydrolysis of phosphorus compounds, expressed as milligrams of phosphorus per liter of sample.

Toxic Substances - Any substance, whether gaseous, liquid, or solid, that when discharged to a Public Sewer in sufficient quantities may be hazardous to POTW operation and maintenance personnel, tend to interfere with any biological Sewage treatment process, or to constitute a hazard to recreation in the receiving waters, due to the effluent from a Sewage Treatment Plant or overflow point. Any Pollutant or combination of Pollutants listed as toxic in regulations promulgated by the EPA under provisions of CWA 307 (A), or other Acts.

User - Any Person who contributes, causes, or permits the contribution of Wastewater into the POTW.

User, Existing - A discharger to the POTW who is discharging on or before the effective date of this Sewer Use Law.

User, Industrial - A discharger to the POTW who discharges non-domestic Wastewaters.

User, New - A discharger to the POTW who initiates discharge after the effective date of this Sewer Use Law.

User, Significant Industrial (SIU) - An Industrial User of the POTW who is:

- Subject to National Categorical Pretreatment Standards promulgated by the EPA,
- Having substantial impact, either singly or in combination with other industries, on the operation of the treatment works,
- Using, on an annual basis, more than 10,000 lbs. or 1,000 gallons of raw material containing priority Pollutants and/or substances of concern and discharging a measurable quantity of these Pollutants to the sewer system,
- Discharging more than five percent (5%) of the flow or load of conventional Pollutants received by the POTW Treatment Plant.

Note, a User discharging a measurable quantity of a Pollutant may be classified as non-significant if, at the influent to the POTW, the pollutant is not detectable.

Volume Charge (User Charge) - The demand Sewer use charge which is based, in part or wholly, on the volume of Normal Sewage discharged into the POTW (there may be surcharges, as provided for in Article 12). The volume charge shall be based on a specific cost per 100 cubic feet or per 1,000 gallons. The specific charge shall be subject to approval by the Springwater Town Board and may be changed from time to time at its discretion. The moneys so obtained shall be used for current operation and maintenance, for retirement of bonded indebtedness, and for funding of capital projects, of the POTW. The basis of volume charge calculations shall be

made available to the public, on demand, as provided in Article 13. The volume charge shall be recalculated annually, as well as the surcharge rates.

Wastewater - The liquid and water-carried industrial or domestic Wastewaters from dwellings, commercial establishments, Industrial Facilities, and institutions, together with any groundwater, surface water, and Storm Water that may be present, whether treated or untreated, which is contributed into or permitted to enter the POTW.

Wastewater Discharge Permit - A permit as set forth in Article 10 of this Sewer Use Law.

Wastewater, Unusual Strength or Character - see Sewage, Unusual Strength or Character.

Waters of the State (State's Waters) - All streams, lakes, ponds, marshes, water courses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the State or any portion thereof.

Section 202 - Abbreviations

The following abbreviations shall have the designated meanings:

| ANSI | American National Standards Institute |
|--------|---|
| ASTM | American Society for Testing and Materials |
| AWWA | American Water Works Association |
| BOD | Biochemical Oxygen Demand |
| CFR | Code of Federal Sewer Use Law |
| CPLR | Code of Public Law and Rules |
| COD | Chemical Oxygen Demand |
| EPA | Environmental Protection Agency |
| L | Liter |
| Mg | Milligram |
| Mg/l | Milligrams per liter |
| NCPI | National Clay Pipe Institute |
| NPDES | National Pollutant Discharge Elimination System |
| NYSDEC | New York State Department of Environmental Conservation |
| NYSDOH | New York State Department of Health |
| NYSDOT | New York State Department of Transportation |
| Р | Total Phosphorus |
| PSI | Pounds per Square Inch |
| POTW | Publicly Owned Treatment Works |
| PPM | Parts per Million, weight basis |
| SIC | Standard Industrial Classification |
| SPDES | State Pollutant Discharge Elimination System |
| SWDA | Solid Waste Disposal Act, 42 U.S.C. 690 L, et seq. |
| U.S.C. | United State Code of Laws |
| | |

USEPA United State Environmental Protection Agency TSS Total Suspended Solids

Section 203 - Undefined Terms

Terms not defined in this Article, or terms found to be ambiguous or improperly defined in this Article, shall be defined by the Act, or regulations, pursuant thereto.

Article 3 - Use of Public Sewers Required

Section 301 - Waste Disposal Unlawful

It shall be unlawful and a violation of this Sewer Use Law for any Person to place, deposit, or permit to be deposited, in any unsanitary manner, on public or private property, within the service area of the Town of Springwater Sewer District, any human or animal excrement, Garbage, or objectionable waste. Also, no Person shall discharge domestic Sewage onto the surface of the ground or discharge it in a way that permits it to come to the surface of the ground.

Section 302 - Connecting Private Sewage System to Storm Sewer Unlawful

No Person shall connect a private Sewage System so that Sewage flows into a Storm Sewer or into a drain intended exclusively for Storm Water.

Section 303 - Discharge of Sewage into Well Prohibited

No Person shall discharge Sewage into a well.

Section 304 - Wastewater Discharge Unlawful

It shall be unlawful and a violation of this Sewer Use Law to discharge to any natural outlet, within the Town of Springwater Sewer District service area, any Wastewater or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this Sewer Use Law and after obtaining a SPDES Permit from the NYSDEC.

Section 305 - Building Permit Allowed Only When Approved Wastewater Disposal Available

No property owner, Builder, or Developer shall be issued a building permit for a new dwelling or structure requiring sanitary facilities unless a suitable and approved method of wastewater disposal, conforming to this Sewer Use Law, is available. All housing construction or building development which takes place after this Sewer Use Law is enacted shall provide for an approved system of Sanitary Sewers.

Section 306 - Private Wastewater Disposal

Except as hereinafter provided, it shall be unlawful to construct or maintain any privy, privy vault or cesspool intended or used for disposal of Wastewater.

The owner(s) of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, situated outside the Service Area of the Town of Springwater Sewer District, shall be permitted to install a private onsite Wastewater treatment system provided they obtain approval from the Town of Springwater and the Livingston County Department of Health for systems less than 1,000 gallons per day and the NYSDEC for systems 1,000 gallons per day and larger.

Section 307 - Connection to Public Sewer Required

The owner(s) of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, situated within the Town of Springwater Sewer District is hereby required, at the owner's expense to install suitable sanitary Facilities therein, and to connect such Facilities directly with the POTW, in accordance with the provisions of this Sewer Use Law, within ninety (90) days after official notice to do so.

Section 308 - Limitation on Use of Public Sewers

The use of the Town of Springwater Sewer District Public Sewers shall be strictly limited and restricted, except as provided in Section 307, to receive and accept the discharge of Sewage and other wastes, including Industrial Wastes generated on or discharged from real property within the bounds of the Service Area of the POTW.

Section 309 - Moratorium

Upon the determination by the Operator, that:

- one or more segments of the POTW is exceeding its hydraulic capacity at any time; or
- any specific purpose of this Sewer Use Law is being violated.

The Town of Springwater, on behalf of the Twon of Springwater Sewer District, shall have the authority to limit or deny new connections to the POTW until the conditions leading to the moratorium are corrected. Such correction may be by:

- construction of new Facilities;
- enlarging existing Facilities;
- correction of Inflow and Infiltration; and/or
- cleaning and repairing of existing Facilities

Section 310 - Basis of Sewer Use Requirement

All requirements, directives, and orders calling for mandatory use of Sewers within the Service Area of the POTW, for the proper discharge of Sewage and other wastes, including Industrial

Wastes, shall be established and given by the Town of Springwater, NYSDEC, USEPA, and/or other such State or Federal agencies, which have enforcement powers.

Article 4 - Private Wastewater Disposal

Section 401 - Public Sewer Unavailable - Private Wastewater Disposal Required

Where a Public Sewer is not available the Building Lateral shall be connected to a private wastewater treatment system complying with the provisions of the Rules and Sewer Use Law of the NYSDOH and/or the Livingston County Department of Health for systems less than 1,000 gallons per day, and the NYSDEC for systems 1,000 gallons per day and larger.

Section 402 - Connection of Two Buildings to the Same Septic Tank Prohibited

No two separate permanent buildings, where the intended use for either is for a distinct and separate business or a dwelling place for a private family or families, shall be connected to the same individual Septic Tank and tile absorption field.

Section 403 - Construction Permit Application

A completed application form, containing results of percolation tests, computations, and a plot plan, including the design and cross-section of the Wastewater disposal system, in relation to lot lines, adjacent and on-site well or water supply, and buildings, shall be submitted to the Town of Springwater. A fee, established by the Springwater Town Board, shall accompany the application. The Wastewater disposal system shall be designed by a professional engineer, licensed surveyor, or architect, and shall be in accordance with the NYSDOH - "Standards for Waste Treatment Works", or NYSDEC "Standards for Commercial and Institutional Facilities", as appropriate.

Section 404 - Construction Permit

A written construction permit shall be obtained from the Code Enforcement Officer/Building Inspector of the Town of Springwater, in coordination with the Livingston County Department of Health and/or NYSDEC before construction commencement. The Code Enforcement Officer/ Building Inspector, or his/her designated representative, shall be permitted to inspect the construction work at any stage, without prior notice.

Section 405 - Preventing Nuisances - Rehabilitation Required

When the liquid or liquid-borne effluent from a private Wastewater disposal system enters any watercourse, ditch, Storm Sewer, or water supply system, located within the Town of Spring-water, or within the Service Area of the Town of Springwater Sewer District, in such a manner, volume, and concentration so as to create a hazardous, offensive, or objectionable condition, in the opinion of the Code Enforcement Officer/Building Inspector, the Operator, the Livingston

County Health Department, or the NYSDEC, the owner of the premises upon which such Wastewater disposal system is located, upon receiving written notice from the Code Enforcement Officer/ Building Inspector, Operator, Livingston County Department of Health or NYSDEC, shall, within ninety (90) days, after receipt of such notice, repair, rebuild, or relocate such Wastewater disposal system for the purpose of eliminating such hazardous, offensive, or objectionable conditions. The repair, rebuilding, or relocation of the system shall be accomplished in accordance with the rules and regulations of the NYSDOH, Livingston County Health Department and/or NYSDEC, at the owner's expense.

Section 406 - Sanitary Operation Required

The owner shall operate and maintain the private Wastewater disposal system in a satisfactory manner at all times, at the owner's expense.

Section 407 - Septage Removal

Where a private Wastewater disposal system utilizes a Septic Tank, Septage shall be removed from the Septic Tank by a licensed hauler of trucked and hauled wastes, at three year intervals or more frequently.

Section 408 - Direct Connection to New Public Sewers Required

At such time that a Public Sewer becomes available to a property and within ninety (90) days thereof, a direct connection shall be made to the Public Sewer, in compliance with this Sewer Use Law, and any cesspool, Septic Tank, and similar Wastewater disposal Facilities shall be cleaned of Septage by a licensed Septage hauler and either filled with clean sand, bank-run gravel, or dirt, or removed and properly disposed. When the connection is made to the Public Sewer, the connection to the private Wastewater disposal Facility shall be broken and both ends of the break shall be plugged, as appropriate. Alternatively, and with the written consent of the Code Enforcement Officer/Building Inspector (or Operator if within the Service Area of the Town of Springwater Sewer District), the Septic Tank effluent may be piped or pumped to the Sewer; the owner shall provide an Easement (at no cost) to the Septic Tank for Septage removal, said Easement to be in a form acceptable to the Town of Springwater.

Section 409 - Additional Requirements

No statement in this Article shall be construed to prevent, or interfere with, any additional requirements that may be deemed necessary by the Code Enforcement Officer/Building Inspector, the Operator, the Livingston County Health Department, or the NYSDEC to protect public health and public welfare.

Article 5 - New Sewers or Sewer Extensions

Section 501 - Proper Design

New Sanitary Sewers and all extensions to Sanitary Sewers owned and operated by the Town of Springwater Sewer District shall be designed, by a professional licensed to practice Sewer design in the State of New York, in accordance with the Recommended Standards for Sewage Works, as adopted by the Great Lakes - Upper Mississippi River Board of State Sanitary Engineers ("Ten State Standards"), and in strict conformance with all requirements of the NYSDEC. Plans and specifications shall be submitted to, and written approval shall be obtained from the Operator, the Livingston County Health Department, and the NYSDEC before initiating any construction. The design shall anticipate and allow for flows from all possible future extensions or developments within the immediate drainage area, to the extent practical.

If, however, there is inadequate capacity in any Sewer which would convey the Wastewater or if there is insufficient capacity in the POTW Treatment Plant to treat the Wastewater properly, the application shall be denied.

Section 502A - New Sewers Subject to Approval, Fees, Inspection, Testing, and Reporting

When a property owner, Builder, or Developer proposes to construct Sanitary Sewers or extensions to Sanitary Sewers in an area proposed for subdivision or development, the plans, specifications, and method of installation shall be subject to the approval of the Operator, and the Livingston County Health Department, in accordance with Section 501. Said property owner, Builder, or Developer shall pay for the entire installation, including a proportionate share of the Treatment Plant, intercepting or trunk Sewers, pumping stations, force mains, and all other expenses incidental thereto including but not limited to review by the Town's engineer and legal counsel. Each Street Lateral shall be installed and inspected pursuant to Article 6, and inspection fees shall be paid by the Applicant prior to initiating construction. Design and installation of Sewers shall be as specified in Section 503, and in conformance with Paragraphs 3 through 6 of ASTM Specification C-12. The installation of the Sewer shall be subject to periodic inspection by the Operator, without prior notice. The Operator shall determine whether the work is proceeding in accordance with the approved plans and specifications, and whether the completed work will conform with the approved plans and specifications. The Sewer, as constructed, must pass the Infiltration test (or the exfiltration test, with prior approval), required in Section 505, before any Building Lateral is connected thereto. The Operator shall be notified 30 days in advance of the start of any construction actions so that such inspection frequencies and procedures as may be necessary or required, may be established. No new Sanitary Sewers will be accepted by the Town until such construction inspections have been made so as to assure to the Town, compliance with this Sewer Use Law and any amendments or additions thereto. The Operator has the authority to require such excavation as necessary to inspect any installed Facilities if the Facilities were covered or otherwise backfilled before they were inspected so as to permit inspection of the construction.

Section 502B - Plans, Specification, and Pipe Test Results

Required Plans, specifications, and methods of installation shall conform to the requirements of this Article. Components and materials of Wastewater facilities not covered in this Sewer Use Law, such as pumping stations, lift stations, or force mains shall be designed in accordance with Section 501, and shall be clearly shown and detailed on the plans and specifications submitted

for approval. Force main details are covered in Section 506. When requested, the Applicant shall submit, to the Operator and to the Livingston County Health Department, all design calculations and other pertinent data to supplement review of the plans and specifications. Results of manufacturer's tests on each lot of pipe delivered to the job site shall also be furnished, upon request.

Section 503 A - Sewer Pipe

Sewer pipe material shall be:

- Polyvinyl Chloride (PVC) Pipe Heavy Wall
 - Pipe shall be made from Class 12454-B materials or better in accordance with ANSI/ASTM Specification D-1784.
 - Pipe and accessories shall conform to the requirements of the following, with a minimum pipe stiffness of 46.
 - PSI at a maximum deflection of five percent (5%).
 - ANSI/ASTM D 3034 (4" 15")
 - ASTM F 679 Type I (18" 27")
- Other pipe materials
 - Use of other pipe materials require prior written approval of the Operator before being installed, which said approval may be withheld at the Operator's sole discretion.
 - the minimum internal pipe diameter shall be eight (8) inches for gravity Sewers and one (1) inch for low pressure Sewers.
 - Joints for the selected pipe shall be designed and manufactured such that "O" ring gaskets of the "snap-on" type are used.
 - Gaskets shall be continuous, solid, natural or synthetic rubber, and shall provide a
 positive compression seal in the assembled joint, such that the requirements of
 Section 505 are met.
 - Joint preparation and assembly shall be in accordance with the manufacturer's recommendations.
 - Wye branch fittings, as approved by the Operator, shall be installed, for connection of Street Laterals, in accordance with Section 606.

Section 503 B - Safety and Load Factors

Selection of pipe class shall be predicated on the following criteria:

- Safety factor 1.5
- Load factor 1.7
- Weight of soil 120 lbs./cu. ft.
- Wheel loading 16,000 lbs.

Utilizing the foregoing information, design shall be made as outlined in Chapter IX of the Water Pollution Control Federation Manual of Practice No. 9, latest edition, "Design and Construction of Sanitary and Storm Sewers", and the pipe shall have sufficient structural strength to support all loads to be placed on the pipe, with a safety factor as specified above. PVC pipe shall not be encased in concrete due to their different coefficients of linear thermal expansion.

Section 503 C - Sewer Pipe Installation

- (1) Local utilities shall be contacted to verify construction plans and to make arrangements to disconnect all utility services, where required to undertake the construction work. The utility services shall later be reconnected. The work shall be scheduled so that there is minimum inconvenience to local residents. Residents shall be provided proper and timely notice regarding disconnection of utilities.
- (2) The construction right-of-way shall be cleared only to the extent needed for construction. Clearing consists of removal of trees which interfere with construction, removal of underbrush, logs, and stumps, and other organic matter, removal of refuse, Garbage, and trash, removal of ice and snow, and removal of telephone and power poles, and posts. Any tree which will not hinder construction shall not be removed, and shall be protected from damage by any construction equipment. Debris shall not be burned, but hauled for disposal in an approved manner.
- (3) The public shall be protected from personal and property damage as a result of the construction work.
- (4) Traffic shall be maintained at all times in accordance with applicable highway permits. Where no highway permits are required, at least 1/2 of a street shall be kept open for traffic flow.
- (5) Erosion control shall be performed throughout the project to minimize the erosion of soils onto lands or into waters adjacent to or affected by the work. Erosion control can be effected by limiting the amount of clearing and grubbing prior to trenching, proper scheduling of the pipe installation work, minimizing time of open trench, prompt grading and seeding, and filtration of drainage.
- (6) The trench shall be excavated only wide enough for proper installation of the sewer pipe, manhole, and appurtenances. Allowances may be made for sheeting, de-watering, and other similar actions to complete the work. Roads, sidewalks, and curbs shall be cut, by sawing or by other methods as approved by the Operator, before trench excavation is initiated.
- (7) Under ordinary conditions, excavation shall be by open cut from the ground surface. However, tunneling or boring under structures other than buildings may be permitted at the discretion of the Operator. Such structures include crosswalks, curbs, gutters, pavements, trees, driveways, and railroad tracks.
- (8) Open trenches shall be protected at all hours of the day with barricades, as required.

- (9) Trenches shall not be open for more than 30 feet in advance of pipe installation nor left unfilled for more than 30 feet in the rear of the installed pipe, when the work is in progress, without permission of the Operator. When work is not in progress, including overnight, weekends, and holidays, the trench shall be backfilled to ground surface.
- (10) The trench shall be excavated approximately six (6) inches deeper than the final pipe grade. When unsuitable soils are encountered, these shall be excavated to a maximum depth of 2-1/2 feet below the final pipe invert grade and replaced with select materials.
- (11) Ledge rock, boulders, and large stones shall be removed from the trench sides and bottom. The trench shall be over-excavated at least 12 inches for five (5) feet, at the transition from rock bottom to earth bottom, centered on the transition.
- (12) Maintenance of grade, elevation, and alignment shall be done by some suitable method or combination of methods.
- (13) No structure shall be undercut unless specifically approved by the Operator.
- (14) Proper devices shall be provided, and maintained operational at all times, to remove all water from the trench as it enters. At no time shall the Sewer line be used for removal of water from the trench.
- (15) To protect workers and to prevent caving, shoring and sheeting shall be used, as needed. Caving shall not be used to backfill the trench. Sheeting shall not be removed but cut off no lower than one foot above the pipe crown nor no higher than one foot below final grade, and left in the trench, during backfill operations.
- (16) The pipe barrel shall be supported, along its entire length, on a minimum of six (6) inches of crusher run max. 1/2 inch stone or concrete sand free of organic material. This foundation shall be firmly tamped in the excavation.
- (17) Bell holes shall be hand excavated, as appropriate.
- (18) Pipe shall be laid from low elevation to high elevation. The pipe bell shall be up-gradient; the pipe spigot shall be down-gradient.
- (19) Joint preparation and assembly shall be in accordance with the manufacturer's written instructions.
- (20) The grade and alignment shall be checked and made correct. The pipe shall be in straight alignment. Any negotiation of curves shall be at manholes, except when site conditions require alternative pipe laying procedures. These alternative procedures, including bending the pipe barrel, deflecting the joint, and using special fittings, shall require prior written approval of the plans and also written confirmation approval of need by the Operator after examination of the site conditions.

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- (21) When a smaller Sewer joins a larger one, the invert of the larger Sewer shall be lowered sufficiently to maintain the same hydraulic gradient. An approximate method which may be used for securing this result is to place the 0.8 depth of both Sewers at the same elevation.
- (22) Crushed stone or concrete sand shall be placed over the laid pipe to a depth of at least six (6) inches. The embedment of thermoplastic pipe shall be in accordance with ASTM D2321 using class 1A or 1B backfill materials. Care shall be exercised so that stone is packed under the pipe haunches. Care shall be exercised so that the pipe is not moved during placement of the crushed stone.
- (23) The migration of fines from surrounding backfill or native soils shall be restricted by gradation of embedment materials or by use of suitable filter fabric.
- (24) The remaining portion of the trench above the pipe embedment shall be backfilled in foot lifts which shall be firmly compacted. Compaction near/under roadways, driveways, sidewalks, and other structures shall be to 95 % of the maximum moisture-density relationship, as determined by ASTM Specification D 698, Method D. Ice, snow, or frozen material shall not be used for backfill.

Section 503 D - Cleanout Installation

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- (1) Cleanouts for low pressure Sewers shall be placed at intervals of approximately 400 to 500 feet, at major changes of direction, where one collection main joins another main and at the upstream end of each main branch.
- (2) The design of the cleanouts shall be as approved by the Operator.

Section 504 - Manholes and Manhole Installation

- (1) Design of all manholes shall be submitted to the Operator and shall receive approval prior to placement.
- (2) Manholes shall be placed where there is a change in slope or alignment, and at intervals not exceeding 400 linear feet except as authorized by the Operator.
- (3) Manhole bases shall be constructed or placed on a minimum of six (6) inches of crusher run max. 1/2 inch stone free of organic materials.
- (4) Manhole bases shall be constructed of 4,000 psi (28 day) concrete 8 inches thick, or shall be precast bases properly bedded in the excavation. Field constructed bases shall be monolithic, properly reinforced, and extend at least 6 inches beyond the outside walls of lower manhole sections. Precast manhole bases shall extend at least 6 inches beyond the outside walls of lower manhole sections.

(5) Manholes shall be constructed using precast minimum 4 foot diameter concrete manhole barrel sections, and an eccentric top section, conforming to ASTM Specification C-478, with the following exceptions on wall thickness:

| Manhole Diameter (Feet) | Wall Thickness (Inches) |
|----------------------------|-------------------------|
| 4 | 5 |
| 5 | 6 |
| 6 | 7 |
| 6.5 | 7.5 |
| 7 | 8 |
| 8 | 9 |

All sections shall be cast solid, without lifting holes.

Flat top slabs shall be a minimum of 8 inches thick and shall be capable of supporting an H-20 loading.

- (6) All joints between sections shall be sealed with an "O" ring rubber gasket, meeting the same specifications as pipe joint gaskets, or butyl joint sealant completely filling the joint.
- (7) All joints shall be sealed against Infiltration. All metal parts shall be thickly coated with bitumastic or elastomeric compound to prevent corrosion.
- (8) No steps or ladder rungs shall be installed in the inside or outside manhole walls at any time.
- (9) No holes shall be cut into the manhole sections closer than 6 inches from joint surfaces.
- (10) Manholes which extend above grade shall not have an eccentric top section. The top plate shall be large enough to accommodate the cover lifting device and the cover.
- (11) The elevation of the top section shall be such that the cover frame top elevation is 0.5 foot above the 100-year flood elevation (in a field), 0.5 foot above a lawn elevation, or at finished road or sidewalk grade.
- (12) When located in a travelled area (road or sidewalk), the manhole frame and cover shall be heavy duty cast iron. When located in a lawn or in a field, the manhole frame and cover may be light duty cast iron. The cover shall be 36 inches, minimum, in diameter. The minimum combined weight of the heavy duty frame and 36 inch cover shall be 735 +/- 5% lbs. The minimum combined weight of the light duty frame and 36 inch cover shall be 420 +/- 5% lbs. The mating surfaces shall be machined, and painted with tar pitch varnish. The cover shall not rock in the frame. Infiltration between the cover and frame shall be prevented by proper design and painting. Covers shall have "Sanitary Sewer" cast into

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them. Covers shall have lifting holes suitable for any lifting/jacking device. The lifting holes shall be designed so that Infiltration is prevented.

- (13) A drop of at least 0.1 foot shall be provided between incoming and outgoing Sewers on all junction manholes and on manholes with bends greater than 45 degrees.
- (14) Inverts and shelves/benches shall be placed after testing the manholes and Sewers.
- (15) Benches shall be level and slope to the flow channel at about 1 inch per foot.
- (16) The minimum depth of the flow channel shall be the nominal diameter of the smaller pipe. The channel shall have a steel trowel finish. The flow channel shall have a smooth curvature from inlet to outlet.
- (17) Manhole frames, installed at grade, shall be set in a full bed of mortar with no less than two nor more than four courses of brick underneath to allow for later elevation adjustment. In lieu of brick, grade rings may be used for elevation adjustment. Grade rings shall not exceed 6 inches in depth. The total number of grade rings shall not exceed 12 inches in height, however, in no event shall more than 3 grade rings be used.
- (18) Manholes which extend above grade, shall have the frames cast into the manhole top plate. The top plate shall be securely anchored to the manhole barrel, by a minimum of six 1/2 inch corrosion resistant anchor bolts, to prevent overturning when the cover is removed. The anchor bolts shall be electrically isolated from the manhole frame and cover.
- (19) Internal drop pipes and fittings shall be PVC plastic sewer pipe in compliance with ASTM D2241. Corrosion resistant anchors shall be used to attach the drop pipe to the inside surface of the manhole barrel.

Section 505 A - Infiltration/Exfiltration Testing

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All Sanitary Sewers or extensions to Sanitary Sewers, including manholes, shall satisfy requirements of a final Infiltration test before they will be approved and Wastewater flow permitted by the Town of Springwater. The Infiltration rate shall not exceed 25 gallons per 24 hours per mile per nominal diameter in inches. An exfiltration test may be substituted for the Infiltration test; the same rate shall not be exceeded. The exfiltration test shall be performed by the Applicant, under the supervision of the Operator, who shall have the responsibility for making proper and accurate measurements required. The exfiltration test consists of filling the pipe with water to provide a head of at least 5 feet above the top of the pipe or 5 feet above groundwater, whichever is higher, at the highest point under test, and then measuring the loss of water, from the pipe section under test, by the amount of water which must be added to maintain the original level. However, under no circumstances shall the head at the downstream manhole exceed ten (10) feet or fill to within six (6) inches of the top of the downstream manhole. Should this condition prevail, the testing methods in Sections 504 F and/or 504 G shall be utilized. In this test, the test section must remain filled with water for at least 24 hours prior to taking any measurements. Exfiltration shall be measured by the drop of water level in a standpipe with a closed bottom end, or

Town of Springwater Sewer Use Law -24-

in one of the Sewer manholes serving the test section. When a standpipe and plug arrangement is used in the upper manhole in the test section, there shall be some positive method for releasing entrapped air prior to taking any measurements.

Section 505 B - Test Section

The test section shall be as ordered or as approved, but in no event longer than 1,000 feet. In the case of Sewers laid on steep grades, the test length may be limited by the maximum allowable internal pressure on the pipe and joints at the lower end of the test section. For purposes of determining the leakage rate of the test section, manholes shall be considered as sections of 48-inch diameter pipe, 5 feet long. The maximum allowable leakage rate for such a section is 1.1 gallons per 24 hours. If leakage exceeds the allowable rate, then necessary repairs or replacements shall be made, and the section retested.

Section 505 C - Test Period

The test period, during which the test measurements are taken, shall not be less than two (2) hours.

Section 505 D - Pipe Televising

Prior to testing, the section shall be cleaned and televised with the video being submitted to Operator for approval.

Section 505 E - Deflection Testing

Also prior to testing, all plastic pipe, in the test section, shall be tested for deflection. Deflection testing shall involve the pulling of a rigid ball or mandrel, whose diameter is 95 percent of the pipe inside diameter, through the pipe. Any length of pipe with a deflection greater than 5 percent shall be replaced. The test section shall be flushed just prior to deflection testing. The test shall not be performed with a mechanical pulling device.

Section 505 F - Low Pressure Air Testing Alternative

In lieu of hydrostatic testing (exfiltration or Infiltration), low pressure air testing may be employed. Low pressure air tests shall conform to ASTM Specification C 828. All sections to be tested shall be cleaned and flushed, and shall have been backfilled, prior to testing. Air shall be added until the internal pressure of the test section is raised to approximately 4.0 PSIG. The air pressure test shall be based on the time, measured in seconds, for the air pressure to drop from 3.5 PSIG to 2.5 PSIG.

Acceptance is based on limits tabulated in the "Specification Time Required for a 1.0 PSIG Pressure Drop" in the Uni-Bell PVC Pipe Association "Recommended Practice For Low-Pressure Air Testing of Installed Sewer Pipe".

Before pressure is applied to the line all connections shall be firmly plugged. Before the test period starts, the air shall be given sufficient time to cool to ambient temperature in the test section.

If the test section is below groundwater, the test pressure shall be increased by an amount sufficient to compensate for groundwater hydrostatic pressure, however, the test pressure shall not exceed 10 PSI, or a lower pressure as required by the Operator.

The pressure test gauge shall have been recently calibrated, and a copy of the calibration results shall be made available to the Operator prior to testing.

Section 505 G - Vacuum Testing Alternative

In lieu of hydrostatic testing (exfiltration or Infiltration), vacuum testing may be employed for testing of Sewer lines and manholes. Sewer lines and manholes shall be tested separately. All Sewer lines to be tested shall be cleaned and flushed, and shall have been backfilled, prior to testing. The vacuum test shall be based on the time, measured in seconds, for the vacuum to decrease from 10 inches of mercury to 9 inches of mercury for manholes, and from 7 inches of mercury to 6 inches of mercury for Sewers.

Acceptance of manholes is based on the following:

| Manhole Depth | Manhole Diameter | Time to Drop 1-Inch Hg |
|----------------|------------------|------------------------|
| 10 ft or less | 4 ft | 120 seconds |
| 10 ft to 15 ft | 4 ft | 150 seconds |
| 15 ft to 25 ft | 4 ft | 180 seconds |

For 5 ft diameter manholes, add 30 seconds to the times above.

For 6 ft diameter manholes, add 60 seconds to the times above.

If the test on the manhole fails (the time is less than that tabulated above), necessary repairs shall be made and the vacuum test repeated, until the manhole passes the test.

Acceptance of Sewers (7" Hg to 6" Hg) is based on the time tabulated in the "Specification Time Required for a 0.5 PSIG Pressure Drop" in the Uni-Bell PVC Pipe Association "Recommended Practice For Low-Pressure Air Testing of Installed Sewer Pipe".

The vacuum test gauge shall have been recently calibrated, and a copy of the calibration results shall be made available to the Operator prior to testing.

Section 506A - Force Mains

Force mains serving Sewage lifting devices, such as grinder pumps and pump stations, shall be designed in accordance with Section 501. Additional design requirements are:

(1) Force main pipe material shall be:(a) Polyvinyl Chloride (PVC) Plastic Pipe

Pipe shall conform to ASTM D2241. Materials used in the manufacture of PVC pipe shall meet ASTM c1784. The minimum wall thickness shall be SDR-21. Fittings shall conform to ASTM D2241. Joints and gaskets shall conform to ASTM D2241, D1869, and F477.

(b) Other pipe materials

Other pipe materials require prior written approval of the Operator before being installed.

- (2) Trenching, bedding, and backfilling shall be in accordance with Section 503 C.
- (3) Joint preparation and assembly shall be in accordance with the manufacturer's written instructions.
- (4) Anchorages, concrete blocking, and/or mechanical restraint shall be provided when there is a change of direction of 7-1/2 degrees or greater.
- (5) Drain valves shall be placed at low points.
- (6) Automatic air relief valves shall be placed at high points and at 400 ft intervals, on level force main runs.
- (7) Air relief and drain valves shall be suitably protected from freezing.
- (8) When the daily average design detention time, in the force main, exceeds 20 minutes, the manhole and Sewer line receiving the force main discharge or the Sewage shall be treated so that corrosion of the manhole and the exiting line are prevented. The corrosion is caused by sulfuric acid biochemically produced from hydrogen sulfide anaerobically produced in the force main.
- (9) The force main shall terminate, in the receiving manhole, at a PVC plastic Sewer pipe "T". The vertical arms of the "T" shall be twice the diameter of the force main. The upper arm shall be at least 4 feet long; the lower arm shall terminate in a PVC plastic Sewer pipe 90 degree elbow in a flow channel directed to the manhole exit pipe. The "T" and its arms shall be securely fastened to the inside surface of the manhole wall using corrosion resistant anchors.

Section 506B - Force Main Testing

All force mains shall be subjected to hydrostatic pressure of 150 percent of the normal operating pressure. The duration of the test, at pressure, shall be at least 2 hours. Before conducting the test, the pipe shall be filled with water and all air shall be expelled. During the test, water shall be added, as needed, to maintain the test pressure. The amount of water added shall be recorded so as to calculate leakage. Leakage shall not exceed 25 gallons per day per mile per inch nominal

pipe diameter. During the test, the owner and the Operator (or his/her representative) shall walk the route of the force main and examine the exposed pipe and the ground covering any backfilled pipe to discover leaks. Leakage in excess of that specified above shall be corrected with new material at the owner's expense and the test repeated. Any observed leaks shall be repaired at the owner's expense. Each test section length shall be as approved by the Operator, but in no event longer than one thousand (1,000) feet.

Section 507 - Final Acceptance and Warranty/Surety

All Sanitary Sewers and extensions to Sanitary Sewers constructed at the Applicant's expense, after final approval and acceptance by the Operator, and concurrence by the Springwater Town Board, shall become the property of the Town of Springwater, and shall thereafter be operated and maintained by the Town of Springwater. No Sanitary Sewer shall be accepted by the Town of Springwater until two (2) copies of as-built drawings have been so filed with the Operator and the Operator has approved the submitted drawings. Said Sewers, after their acceptance by the Town of Springwater, shall be guaranteed against defects in materials or workmanship for one (1) year, by the Applicant. The guarantee shall be in such form and contain such provision as deemed necessary by the Town of Springwater, secured by a surety bond or such other security as the Town may approve.

Section 508 - Liability Insurance Coverage During Construction Period

- (1) All contractors engaged in connecting Building Laterals with Sanitary Sewers, who perform any work within the Right of Way of any highway, shall file a bond in the amount of Five Thousand Dollars (\$5,000.00) with the Town of Springwater to indemnify the Town against loss, cost, damage or expense sustained or recovered on account of any negligence, omission or act of the Applicant for such a permit, or any of his, or their agents arising or resulting directly or indirectly by reason of such permit or consent, or of any act, construction or excavation done, made or permitted under authority of such permit or consent. All bonds shall contain a clause that permits given by the Town of Springwater may be revoked at any time for just cause.
- (2) Before commencing work, the above contractor shall file insurance certificates with the Town of Springwater for the following:
 - (a) Workman's Compensation and Employer's Liability Insurance as required by the laws of the State covering the contractor;
 - (b) Personal Injury Liability having limits of not less than \$1,000,000 each occurrence and \$1,000,000 aggregate (completed operations/products, personal injury);
 - (c) Property Damage Liability having limits of not less than \$1,000,000 for all damages arising during the life of the contract; and shall include, but not be limited to, the following designated hazards:
 - i. Premises and operations;
 - ii. Independent contractors;
 - iii. Completed operations and products;
 - iv. Property damage; and
 - v. Explosions, collapse and underground;

- (d) Comprehensive automobile liability (including non-owned and hired automobiles) having limits of not less than:
 - i. Bodily injury each person, \$300,000 each occurrence, \$500,000
 - ii. Property damage each occurrence, \$500,000
- (e) Business Excess Liability Insurance in the amount of \$2,000,000.
- (f) All insurance policies must provide for five (5) business days' notice to the Town of Springwater before cancellation and must cover all liabilities of the Town and be in a form approved by the Town and its attorney.
- (g) The minimum insurance limits stated above shall be subject to periodic review by the Town of Springwater and adjustments made, by resolution, as appropriate.
- (3) Where it is necessary to enter upon or excavate any highway or cut any pavement, sidewalk or curbing, permission must be obtained from the Superintendent of Highways of the Town, if a Town road, from the Livingston County Highway Department if a County Highway is involved, and/or the New York State Department of Transportation if a State Highway is involved.
- (4) The minimum insurance limits above shall be as established by the Town of Springwater and shall be subject to periodic review and adjustment, as appropriate, by the Town at its sole discretion.

Article 6 – Building Laterals, Street Laterals Connections, and Fees

Section 601 A - Permit Required for Sewer Connections

No unauthorized person shall uncover, make any connection with or opening into, use, alter, or disturb any Public Sewer or appurtenance thereof without first obtaining a written Permit from the Operator.

Section 601 B - Inflow/Infiltration Prohibited

No Person or entity shall discharge or cause to be discharged any Storm, Cooling Water, or unpolluted Industrial waters to any Sanitary Sewer. Swimming pool drains shall not be connected to any Sanitary Sewer.

Section 602 - Sewer Lateral Permits

A Permit application shall be submitted to the Town of Springwater for any proposed connection to the Public Sewer. The Permit application shall be supplemented by any plans, specifications, or other information considered pertinent, in the judgement of the Operator. A fee for residential, commercial, institutional and Industrial Users, as established by the Springwater Town Board (and as may be modified from time to time) shall accompany the application.

Connections to existing manholes shall be made as directed by the Operator.

Section 603 A - New Building Laterals

A separate and independent Building Lateral shall be provided for every building requiring sanitary Facilities. When, however, there is a building behind a front building, the second building may use the front building's Building Lateral, if there is no other way to provide sanitary service to the back building and such Building Lateral.

New Street Laterals and/or Building Laterals shall not go under building basements. In like fashion, a building shall not be constructed over an existing lateral; the lateral shall be relocated after the Operator has approved plans showing the relocation. If relocation is not physically possible then the lateral shall be:

- (1) exposed and totally encapsulated in not less than three inches of concrete, or
- (2) exposed and walled and the building rooms above positively ventilated outdoors.

All existing manholes in or under the basement shall be sealed air-tight in a manner acceptable to the Operator. No new manholes shall be constructed on the portion of the lateral under the building.

Section 603 B -Laterals Serving Several Buildings

When Building Laterals are to serve multiple dwelling structures, the Building Lateral shall be sized in accordance with the metered water use and with sound professional engineering judgement.

Section 603 C - Laterals Serving Complexes

Where a lateral Sewer is to serve a complex of Industrial, commercial, institutional, or dwelling structures, special design of the Building Lateral system shall be required. Such lateral Sewer shall be connected to the Public Sewer through a manhole. The Operator shall determine if and where this connection to the Public Sewer is required. If required, a new manhole shall be installed in the Public Sewer pursuant to Section 503 D and 1007 and the lateral connection made and tested as directed by the Operator. Plans and specifications shall be prepared and submitted for approval pursuant to this Sewer Use Law.

Section 603 D - Dry Sewers

Dry Sewers shall be designed and installed in accordance to this Sewer Use Law.

Section 604 - Using Existing Building Laterals

Existing Building Laterals may be used in connection with new buildings only when they are found, on examination by the Operator, to meet all requirements of this Sewer Use Law.

Section 605 - Lateral Pipe Materials

Building and Street Lateral pipe materials shall be one of the following:

(1) Polyvinyl chloride (PVC) pipe and fittings conforming to ASTM Specification D-3034-73, "SDR-35 Polyvinyl Chloride (PVC) Sewer Pipe and Fittings". All pipe shall be suitable for gravity Sewer service. Provisions shall be made for contraction and expansion at each joint with a rubber ring. The bell shall consist of an integral wall section stiffened with two PVC retainer rings which securely lock the solid cross-section ring into position. Minimum "Pipe Stiffness" (F/Y) at five percent (5%) deflection shall be 46 PSI when tested in accordance with ASTM Specification D-2412.

The distance between consecutive joints, as measured along the centerline of the installed pipe, shall not be less than ten (10) feet, except under abnormal circumstances, in which case this dimension may be diminished, if approved by the Operator. The size and slope of Building and Street Laterals shall be subject to approval by the Operator, but in no event shall the internal pipe diameter be less than 4 inches, nor shall the pipe slope be less than 1/4 inch per foot.

The Street Lateral shall include a full port curb stop with flow-through diameter equal to that of the lateral. A curb box shall be installed.

Section 606 A - Street Lateral to Public Sewer Connection

At the point of connection of a Street Lateral to a Sewer main, a standard wye fitting and sufficient one-eighth (45 degree) bend fittings shall be used. The wye fittings shall be installed so that flow in the "arm" shall transition smoothly into the flow in the Public Sewer. No lateral connection shall be made to the Public Sewer which permits the flow into the Public Sewer from the lateral to enter at right angles.

The inside diameter of the fittings shall be same diameter as the Street Lateral inside diameter.

Section 606 B - Future Connection Locations; As-Built Drawings

The Street Lateral, including the wye and eighth bend fittings, shall be connected to the Sewer main at the time of constructing the Sewer main, for each proposed lot for either immediate or future development. Laterals installed for future development shall be fitted a standard plug approved for use by the Operator. All Sewer connections shall be via a properly installed saddle on the main Sewer pipe. No portion of the lateral pipe shall protrude into the main Sewer pipe. The location of all lateral connections shall be field marked with a 2 inch by 6 inch corrosion and rot resistant board. The marker board shall extend from the depth of the lateral to a minimum of two (2) feet above grade. The location of all lateral connections shall be indicated on a drawing with a minimum of three (3) tie lines indicated. Two (2) copies of this drawing, showing the as-built location of these connections, shall be furnished to the Operator. A refundable deposit shall be placed with the Town of Springwater to assure receipt of these as-builts. The deposit shall be placed when application is made; the amount of the deposit shall be \$100 per sheet of plans showing locations of lateral connections. No Sanitary Sewer shall be accepted for dedication by the Town of Springwater until four (4) copies of this record drawing have been so filed with the Operator has approved the submitted drawings.

Section 606 C - Special Manhole Requirements

When any Street Lateral is to serve a school, hospital, or similar institution, or public housing, or is to serve a complex of Industrial or commercial buildings, or which, in the opinion of the Operator, will receive Wastewater or Industrial Wastes of such volume or character that frequent maintenance of said Building or Street Lateral is anticipated, then such Street Lateral shall be connected to the Public Sewer through a manhole. The Operator shall determine if and where this type of connection to the Public Sewer is required. Connections to existing manholes shall be made as directed by the Operator. If required, a new manhole shall be installed in the Public Sewer pursuant to Sections 504 and 1007, and the lateral connection made thereto as directed by the Operator.

Section 607 - Laterals At and Near Buildings

Building Laterals laid parallel to a bearing wall shall not be installed closer than three (3) feet to such wall. The Building Lateral shall enter the basement through the basement wall no less than twelve (12) inches above the basement floor. In no event shall any Building Lateral be placed below the basement floor, except with the expressed written approval of the Operator.

The Building Lateral shall be laid at uniform grade and in straight alignment insofar as possible. Changes in direction shall be made only with properly curved pipe and fittings. Changes of direction of 90 degrees or greater shall be made with a cleanout which extends to grade, terminating in a terminal box set in concrete. In Building Laterals, said cleanouts shall be provided such that the maximum distance between cleanouts is 75 feet. The ends of all Building or Street Laterals, which are not connected to the interior plumbing of the building, for any reason, shall be sealed against Infiltration by a suitable stopper, plug, or by other approved means.

Section 608 - Sewage Lifting

In all buildings in which any building drain is too low to permit gravity flow to the Public Sewer, Wastewater carried by such drain shall be lifted by mechanical means and discharged to the Building Lateral, on approval of the Operator.

Section 609 - Lateral Pipe Installation

All excavations required for the installation of a Building or Street Lateral shall be open trench work unless otherwise approved by the Operator. Pipe laying and backfilling, regardless of pipe material used, shall be performed in general accordance with paragraphs 3 through 6 of ASTM Specification C-12, except that trench width, measured at the top of the installed pipe, shall not exceed the outside pipe diameter plus 14 inches and, except that no backfill shall be placed until the work has been inspected. The depth of cover over the pipe shall be sufficient to afford protection from frost, but not in any case shall such depth be less than four (4) feet. Where it is physically impossible to provide cover of four (4) feet, the depth may be reduced to a minimum of two (2) feet and the pipe shall be insulated, as approved by the Operator.

Section 610 A - Watertight Joints

All joints and connections shall be made watertight.

Section 610 B - PVC Push Joints

Joints for PVC Sewer pipe shall follow the manufacturer's recommendations, using properly designed couplings and rubber gaskets pursuant to the published information relating thereto, and conforming to the applicable ASTM specification identified in Section 605.

Section 611 A - Building Lateral/Street Lateral Connection

- (1) The connection of the Building Lateral to an existing Street Lateral shall be made at the property line. Except as provided under Section 502, if a Street Lateral has not previously been provided, the Street Lateral will be constructed from the existing Public Sewer to the property line, by a licensed plumber, at the owner's expense. The Street Lateral shall be installed with a properly sealed and covered clean-out to grade located at the property line. The clean-out shall terminate in a metal box imbedded in concrete.
- (2) The cost of constructing the Street Lateral from the existing Public Sewer to the property line shall be at the property owner's expense; all subsequent costs and expense incidental to the installation and connection of the Building Lateral shall also be borne by the owner.
- (3) The property owner shall indemnify the Town of Springwater from any loss or damage that may directly or indirectly be occasioned by the installation of the Building Lateral.
- (4) It shall be the responsibility of the property owner to maintain, repair, or replace the Building Lateral, as needed.
- (5) The method of connection of the Building Lateral to the Street Lateral will be dependent upon the type of Sewer pipe material, and, in all cases, shall be approved by the Operator. After installation of the Street Lateral has been approved by the Operator, the new Street Lateral shall become the property of the Town of Springwater. Any subsequent repairs to the new Street Laterals shall be made by the Town of Springwater at the Town's expense.

Section 611 B - Cleanout Repair/Replacement

If, in the judgement of the Operator in his/her sole discretion, it is determined that a Building Lateral without a property line clean-out, needs repair or replacement, the Town of Springwater may install a clean-out at the property line, at the property owner's expense, such that the Street Lateral can be maintained independently of the Building Lateral. Said expense shall be reimbursed to the Town of Springwater within thirty (30) days of being invoiced. Unpaid charges may be added on to the Sewer bill for the subject property and relevied if not paid.

Section 611 C - Street Lateral Replacement; Ownership

Any existing Street Lateral which, upon examination by the Operator, is determined to be in need of replacement will be replaced with a new Street Lateral with a property line clean-out. The replacement Street Lateral shall be constructed by a licensed plumber. The cost of constructing the replacement Street Lateral and clean-out shall be at the property owner's expense. Once the replacement Street Lateral and clean-out have been constructed and approved by the Operator, the new Street Lateral shall become the property of the Town of Springwater. Any subsequent repairs to new Street Laterals shall be made by the Town of Springwater at the Town's expense.

Section 612 - Testing

The Street Lateral, Building Lateral, or the combined lateral shall be tested for Infiltration /exfiltration by:

- (a) any full pipe method described in Section 505, or
- (b) by a suitable joint method, with the prior written approval of the Operator.

Section 613 A - Connection Inspection

The Applicant for the Building Lateral permit shall notify the Operator when the Building Lateral is ready for inspection and connection is to be made to the Street Lateral. The connection shall be made under the supervision of the Operator.

The Applicant for the Street Lateral permit shall notify the Operator when the Street Lateral is ready for inspection and connection is to be made to the Sewer main. The connection shall be made under the supervision of the Operator.

Section 613 B - Trench Inspections

When trenches are excavated for the laying of Building Lateral pipes or for laying of Street Lateral pipes, such trenches shall be inspected by the Operator. Before the trenches are backfilled, the person performing such work shall notify the Operator when the laying of the Building Lateral is completed, and no backfilling of trenches shall begin until approval is obtained from the Operator.

Section 614 - Public Safety Provisions Required; Restoration of Disturbed Areas

All excavations for constructing Building Laterals shall be adequately protected with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways, and other public property disturbed, in the course of the work, shall be restored in a manner satisfactory to the Operator. When installation requires disturbance of paved public roads and shoulders, restoration shall involve backfilling to road grade, complete road and shoulder restoration to the satisfaction of the Town of Springwater, Livingston County Highway Department or New York State Department of Transportation.

Section 615 - Interior Clean-Out

An interior clean-out fitting shall be provided for each Building Lateral at a readily accessible location, preferably just inside the basement wall. The fitting shall contain a 45-degree branch with removable plug or test tee, and so positioned that Sewer cleaning equipment can be inserted therein to clean the Building Lateral. The cleanout diameter shall be no less than the Building Lateral diameter.

Section 616 - Costs Borne by Owner

All costs associated with the provisions of this Article shall be borne by the property owner unless specifically stated in writing or agreed in writing to be a cost borne by the Town of Springwater. The property owner shall indemnify the Town of Springwater from any loss or damage that may be directly or indirectly occasioned by the installation of the Building and Street Laterals, and connections and appurtenances.

Article 7 – Inflow

Section 701 – New Inflow Sources Prohibited

No connections shall be made to a Sanitary or to a Combined Sewer which connections are intended to discharge Inflow. Such prohibited connections include, but are not limited to, footing drains, roof leaders, roof drains, cellar drains, Sump Pumps, catch basins, uncontaminated Cooling Water discharges, or other sources of Inflow.

Section 702 – Existing Inflow Sources Disconnected

For properties where separate Storm Sewers are available within 100 feet of the property line or where, in the judgement of the Operator, sufficient natural drainage is available, connections which contribute Inflow to the Sanitary Sewers must be permanently disconnected in a fashion approved by the Operator, prior to the sale of the property.

Section 703 - Existing Inflow Sources Disconnected When Property Sold

Upon notice from the Tax Assessor, the Operator shall inspect any newly sold property within the Service Area for the purpose of determining if Storm Sewers or natural drainage is available, and, if so, if all connections which contribute Inflow have been disconnected.

Section 704 - No Re-connection of Inflow Source Allowed

It shall be a willful violation of this Sewer Use Law for any person to reconnect any Inflow source which has been disconnected pursuant to this Article.

Section 705 - Charges for Inflow

The Operator is enabled to take whatever action is necessary to determine the amount of Inflow including the requirement for installation of a Control Manhole. The property from which the Inflow originated shall be billed for Inflow according to Article 12, however, the Town of Springwater may cause a surcharge at a rate not to exceed five (5) times that for Normal Sewage volume charge.

Article 8 – Trucked or Hauled Waste

Section 801- Licenses and Application

The discharge of trucked or hauled wastes into the Town of Springwater Sewer System and Public Sewers tributary thereto will be permitted only with the written approval (license) of the Operator, which such approval may be denied at the sole discretion of the Operator. Applicants for such license shall apply on a form provided by the Operator. These forms may require information such as vehicle specifications, vehicle license number, vehicle color, NYSDEC permits issued under 6 NYCRR Part 364, approximate annual Septage volume expected, Service Area, and any other information that Operator may require, to determine whether the trucked or hauled wastes could adversely impact the POTW. The application shall be accompanied by an application fee prescribed by the Operator, not to exceed \$300.

The licensee of trucked or hauled wastes will also be charged a fee for each dumping, in accordance with Article 12. The dumping fee shall be paid prior to dumping.

Section 802 – Concurrent Requirements

The Applicant for a license to truck or haul wastes shall be the owner of the vehicle or vehicles to be used for such discharge. Any false or misleading statement, in any license application, shall be grounds for invalidating the license. All licenses, issued by the Operator, for this purpose, shall be for one (1) year and shall automatically expire thereafter. The licensee shall also be duly permitted by the NYSDEC under 6 NYCRR Part 364 ("364 permit"). If, for any reason, the 364 permit is revoked, the 364 permit lapses or becomes invalid, then the license issued under this Article shall become void immediately without any notice requirements. All acts performed in connection with the license shall be subject to the inspection and regulations, as established by the Operator, the terms and conditions of the license and all local and general laws, ordinances, and regulations which are now or may come into effect, and such license may be suspended or revoked, at any time, by the Operator for willful, continued, or persistent violation thereof, or if the Operator determines that the POTW no longer has adequate capacity to accept such Septage.

Section 803 – Dumping Location and Timing

The Operator may require discharging at only certain locations within the POTW, and only at certain times, and on only certain days of the week, or seasons of the year as shall be stated on

said license or as may be relocated by the Operator, after appropriate notice. The time and conditions for permissible discharge shall be as set forth on the license, or as may be revised from time to time by the Operator, after appropriate notice.

Section 804 - Notification of Dumping

Each discharge of trucked or hauled wastes shall be made only with the approval of the Operator. The Operator may require inspection, sampling, and analysis of each load prior to the discharge of a load. Any extra costs associated with such inspection, sampling, and analysis shall be paid by the licensee and failure to promptly provide reimbursement for such costs will be grounds to terminate such license.

Article 9 – Discharge Restrictions

Section 901 - Pretreatment Standards

All Users of the Town of Springwater POTW will comply with all standards and requirements of the Act and standards and requirements promulgated pursuant to the Act, including but not limited to 40 CFR Parts 406 - 471.

Section 902 - General Prohibitions

No User shall contribute or cause to be contributed, in any manner or fashion, directly or indirectly, any Pollutant or Wastewater which will interfere with the operation or performance of the POTW. These general prohibitions apply to all such Users of a POTW whether or not the User is subject to National Categorical Pretreatment Standards, or any other National, State, or Local Pretreatment Standards or Requirements.

Without limiting the generality of the foregoing, a User may not contribute the following substances to the POTW:

- (1) Any solids, liquids, or gases which, by reason of their nature or quantity, are or may be sufficient, either alone or by interaction with other substances, to cause a fire or an explosion or be injurious, in any way, to the POTW, or to the operation of the POTW. At no time shall both of two successive readings on a flame type explosion hazard meter, at the point of discharge into the system (or at any other point in the system) be more than 25 % nor any single reading be more than 40 % of the lower explosive limit (LEL) of the meter. Unless explicitly allowable by a written Permit, prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, carbides, hydrides, and sulfides, and any other substance which the Town of Springwater, the State, or the EPA has determined to be a fire hazard, or hazard to the POTW.
- (2) Solid or viscous substances which may cause obstruction to the flow in a Sewer or otherwise interfere with the operation of the Wastewater treatment facilities. Unless explicitly allowable by a written Permit, such substances include, but are not limited to, grease, Garbage with particles greater than one-half (1/2) inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers,

ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastics, gas, tar asphalt residues, residues from refining or processing fuel or lubricating oil, mud, or glass or stone grinding or polishing wastes.

- (3) Any Wastewater having a pH less than 6.5 or greater than 8.5, unless the POTW was specifically designed to manage such Wastewater, or Wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment, and/or POTW personnel.
- (4) Any Wastewater containing Toxic Substances or Pollutants in sufficient quantity, either singly or by interaction with other Pollutants (including heat), to injure or interfere with any Wastewater treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving waters of the POTW, or to exceed the limitation set forth in a Categorical Pretreatment Standard.

A Toxic Substance shall include, but not be limited to, any toxic Pollutant identified pursuant to Section 307(A) of the Act.

- (5) Any noxious or malodorous solids, liquids, or gases which either singly or by interaction with other wastes are sufficient to create a public Nuisance or a hazard to life or are sufficient to prevent entry into the Sewers for their maintenance or repair.
- (6) Oils and grease Any commercial, institutional, or Industrial Wastes containing fats, waxes, grease, or oils which become visible solids when the Wastes are cooled to ten (10) degrees centigrade (50 degrees Fahrenheit); any petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin, in excess of 100 mg/l or in amounts that will cause Interference or Pass Through.
- (7) Any Wastewater which will cause Interference or Pass Through.
- (8) Any Wastewater with objectionable Color which is not removed in the treatment process, such as, but not limited to, dye wastes, and vegetable tanning solutions.
- (9) Any solid, liquid, vapor, or gas having a temperature higher than 65 degrees C (150 degrees F); however, such materials shall not cause the POTW Treatment Plant influent temperature to be greater than 40 degrees C (104 degrees F). The Operator reserves the right, in certain instances, to prohibit or limit the discharge of Wastes whose maximum temperatures are lower than 65 degrees C.
- (10) Unusual Flow Rate or concentration of Wastes, constituting Slugs, except by Industrial Wastewater Permit.
- (11) Any Wastewater containing any radioactive Wastes except as approved by the Operator, and in compliance with applicable State and Federal Regulations.

- (12) Any Wastewater which causes a hazard to human life or which creates a public Nuisance, either by itself or in combination, in any way, with other Wastes.
- (13) Any Wastewater with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR Part 261.21.
- (14) Any Pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health and safety problems.

Section 903 - Concentration Based Limitations

No Person shall discharge, directly or indirectly, into the POTW, Wastewater containing any of the following substances in concentrations exceeding those specified below on either a daily or an instantaneous basis, except by Permit or as provided for in Section 904. Concentration limits are applicable to Wastewater effluents at the point just prior to discharge into the POTW (End of Pipe Concentrations).

| Substance (1) | Allowable | Allowable Maximum Instantaneous (3) |
|-------------------|-------------------|--|
| | Average Daily (2) | |
| Aluminum | 0.20 | 0.20 |
| Antimony | 0.006 | 0.006 |
| Arsenic | 0.065 | 0.065 |
| Barium | 4.08 | 4.08 |
| Beryllium | 0.10 | 0.10 |
| Cadmium | 0.070 | 0.070 |
| Chlorides | 96.6 | 96.6 |
| Chromium (hex) | 0.01 | 0.01 |
| Chromium (tot) | 0.01 | 0.01 |
| Cobalt | 0.013 | 0.013 |
| Copper | 0.109 | 0.109 |
| Cyanide (complex) | 0.247 | 0.247 |
| Cyanide (free) | 0.247 | 0.247 |
| Fluorides | 4.37 | 4.37 |
| Gold | None | None |
| Iodine | 10 | 10 |
| Iron | 0.989 | 0.989 |
| Lead | 0.116 | 0.116 |
| Manganese | 0.462 | 0.462 |
| Mercury | 0.0005 | 0.0005 |
| Molybdenum | 0.010 | 0.010 |
| Nickel | 0.104 | 0.104 |
| Phenols, total | 0.016 | 0.016 |
| Selenium | 0.023 | 0.023 |
| Silver | 0.133 | 0.133 |
| Sulfates | None | None |

Effluent Concentration Limit - mg/l

| Sulfides | 25 | 25 |
|----------|-------|-------|
| Tin | None | None |
| Titanium | None | None |
| Vanadium | 0.039 | 0.039 |
| Zinc | 0.212 | 0.212 |

- (1) Except for chromium (hex), all concentrations listed for metallic substances shall be as "total metal", which shall be defined as the value measured in a sample acidified to a pH value of 2 or less, without prior filtration.
- (2) As determined on a composite sample taken from the User's daily discharge over a typical operational and/or production day.
- (3) As determined on a Grab Sample taken from the User's discharge at any time during the daily operational and/or production period.
- (4) Other substances which may be limited are:
 - alkanes, alkenes and alkynes
 - aliphatic and aromatic alcohols and acids
 - aliphatic and aromatic aldehydes and ketones
 - aliphatic and aromatic esters
 - aliphatic and aromatic halogenated compounds
 - aliphatic and aromatic nitro, cyano and amino compounds
 - antibiotics
 - benzene derivatives
 - chemical compounds which, upon acidification, alkalinization, oxidation or reduction, in the discharge or after admixture with Wastewater and its components in the POTW, produce toxic, flammable, or explosive compounds
 - pesticides, including algicides, fungicides, herbicides, insecticides, rodenticides phthalates
 - polyaromatic and polynuclear hydrocarbons
 - total toxic organics, TTO, as defined in 40 CFR 433.11
 - toxic organic compounds regulated by Federal Pretreatment Standards
 - unsaturated aliphatics, including those with an aldehyde, ketone or nitrile functional group
 - viable pathogenic organisms from Industrial processes or hospital procedures

Section 904 - Mass Discharge Based Limitations

The Operator, in consultation with the Town Engineer, may impose mass discharge based limits on individual Users for specific Pollutants. Mass discharge-based limits may be imposed for Pollutants that may have negative impact on the employees, the POTW or the Receiving Water. The Operator shall issue Permits to Significant Industrial Users and may issue Permits to other Industrial Users or commercial Users limiting the discharge of these substances. Each Permit shall restrict the discharge from each Significant Industrial User (or Industrial User or commercial User as appropriate) to a portion of the total allowable influent loading.

Permits issued in accordance with this Section may allow for discharges in excess of concentration limitations set forth in this Sewer Use Law, if the concentrations and mass discharges do not interfere with the operation and performance of the POTW as recommended by the Operator.

Section 905 - Modification of Limitations

Limitations on Wastewater strength or mass discharge contained in this Sewer Use Law may be supplemented with more stringent limitations when, in the opinion of the Operator:

- (1) The limitations in this Sewer Use Law are not sufficient to protect the POTW,
- (2) The limitations in this Sewer Use Law are not sufficient to enable the POTW Treatment Plant to comply with applicable water quality standards or the effluent limitations specified in the POTW's SPDES Permit,
- (3) The POTW sludge will be rendered unacceptable for disposal or reuse as the Town of Springwater desires, as a result of discharge of Wastewaters at the above prescribed concentration limitations,
- (4) Town of Springwater employees or the public will be endangered, or
- (5) Air Pollution and/or groundwater Pollution will be caused.

The limitations on Wastewater strength or mass discharge shall be recalculated not less frequently than once every five (5) years. The results of these calculations shall be reported to the Springwater Town Board. This Sewer Use Law shall then be amended appropriately. Any issued Wastewater Discharge Permits for Significant Industrial Users, other Industrial Users or commercial Users, which have limitations, based directly on any limitations, which were changed, shall be revised and amended, as appropriate.

Section 906 - Access to User's Records

The Operator shall have the authority to copy any record related to Wastewater discharges to the POTW.

Section 907 – Dilution

Except where expressly authorized to do so by an applicable Pretreatment Standard, no User shall ever increase the use of process water or, in any other way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a Pretreatment Standard.

Dilution flow shall be considered to be Inflow.

Section 908 - Grease, Oil, and Sand Interceptors

Grease, oil, and sand interceptors shall be provided, when, in the opinion of the Operator, they are necessary for the proper handling of Wastewater containing excessive amounts of grease, flammable substances, sand, or other harmful substances; except that such interceptors shall not

be required for private living quarters or living units. All interceptors shall be of type and capacity approved by the Operator and shall be so located to be easily accessible for cleaning and inspection. Such interceptors shall be inspected, cleaned, and repaired regularly, as needed, by the owner, at his/her expense.

Section 909 - Solid Waste Grinders

Solid waste grinders at or serving commercial establishments, institutions or industries shall not discharge into the POTW if there is a combined Sewer overflow (CSO) on the Sewer lines conveying the Waste to the POTW Treatment Plant.

Section 910 - Rejection of Wastewater

The Springwater Town Board or Operator may reject a User's Wastewater when it is has been determined that the Wastewater contains substances or possesses characteristics which have a deleterious effect on the POTW and its processes, or on the Receiving Water, or which constitute a public Nuisance or hazard. See Section 1016.

Article 10 – Discharge Permits and Pretreatment Requirements

Section 1001 - Wastewater Discharge Reports

As a means of determining compliance with this Sewer Use Law, with applicable SPDES Permit conditions, and with applicable State and Federal law, each Industrial User shall be required to notify the Operator of any new or existing discharges to the POTW by submitting a completed Industrial Chemical Survey (ICS Form) to the Operator. The Operator may require any User discharging Wastewater into the POTW to file Wastewater discharge reports and to supplement such reports as the Operator deems necessary. All information shall be furnished by the User in complete cooperation with the Operator.

Section 1002 - Notification to Industrial Users

The Operator shall, from time to time, notify each Industrial User in writing of applicable Pretreatment Standards, and of other applicable requirements under Section 204(B) and Section 405 of the Clean Water Act, and Subtitles C and D of RCRA.

Section 1003 A - Wastewater Discharges

No Significant Industrial User shall discharge Wastewater to the POTW without having a valid Wastewater Discharge Permit, issued by the Operator. Significant Industrial Users shall comply fully with the terms and conditions of such Permits in addition to the provisions of this Sewer Use Law. Violation of a Permit term or condition is deemed a violation of this Sewer Use Law.

Section 1003 B - Wastewater Discharge Permits Required For Significant Industrial Users

All Significant Industrial Users proposing to connect to or to discharge to the POTW shall obtain

a Wastewater Discharge Permit before connecting to or discharging to the POTW. Existing Significant Industrial Users shall make application for a Wastewater Discharge Permit within 30 days after the effective date of this Sewer Use Law, and shall obtain such a Permit within 90 days after making application.

Section 1003 C - Other Industrial Users

The Operator may issue Wastewater Discharge Permits to other Industrial Users of the POTW.

Section 1003 D - Discharge Permits to Storm Sewers Not Authorized

The Operator does not have the authority to issue Permits for the discharge of any Wastewater to a Storm Sewer. This authority rests with the NYSDEC.

Section 1004 A - Application for Wastewater Discharge Permits

Industrial Users required to obtain a Wastewater Discharge Permit shall complete and file with the Operator an application in the form prescribed by the Operator. The application shall be accompanied by a fee, as set forth in Section 1203. In support of any application, the Industrial User shall submit, in units and terms appropriate for evaluation, the following information:

- (1) Name, address, and location (if different from the address),
- (2) SIC code of both the industry and any categorical processes,
- (3) Wastewater constituents and characteristics including but not limited to those mentioned in Article 10 of this Sewer Use Law and which are limited in the appropriate Categorical Standard, as determined by a reliable analytical laboratory approved by the NYSDOH. Sampling and analysis shall be performed in accordance with Standard Methods,
- (4) Time and duration of the discharge,
- (5) Average daily peak Wastewater flow rates, including daily, monthly, and seasonal variations, if any,
- (6) Site plans, floor plans, mechanical and plumbing plans, and details to show all Sewers, Sewer connections, and appurtenances,
- (7) Description of activities, Facilities, and plant processes on the premises, including all materials which are or could be discharged to the POTW,
- (8) Each product produced by type, amount, process or processes, and rate of production,
- (9) Type and amount of raw materials processed (average and maximum per day),
- (10) Number and type of employees, and hours of operation, and proposed or actual hours of operation of the Pretreatment system,
- (11) The nature and concentration of any Pollutants in the discharge which are limited by any County, State, or Federal Standards, and a statement whether or not the standards are being met on a consistent basis and if not whether additional Operation and Maintenance (O&M) and/or additional Pretreatment is required for the User to meet all applicable Standards,
- (12) If additional Pretreatment and/or O&M will be required to meet the Standards, then the Industrial User shall provide the shortest schedule to accomplish such additional treatment and/or O&M. The completion date in this schedule shall not be longer than the

compliance date established for the applicable Pretreatment Standard. The following conditions shall apply to this schedule:

- (a) The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional Pretreatment required for the User to meet the applicable Pretreatment Standards (such events include hiring an engineer, completing preliminary plans, completing final plans, executing contracts for major components, commencing construction, completing construction, beginning operation, and beginning routine operation).
- (b) No increment referred to in (a) above shall exceed 9 months, nor shall the total compliance period exceed 18 months.
- (c) No later than 14 calendar days following each date in the schedule and the final date for compliance, the User shall submit a progress report to the Operator including, as a minimum, whether or not it complied with the increment of progress to be met on such date and, if not, the date on which it expects to comply with this increment of progress, the reason for delay, and the steps being taken by the User to return to the established schedule. In no event shall more than 9 months elapse between such progress reports to the Operator.
- (13) Any other information as may be deemed by the Operator to be necessary to evaluate the Permit application.

The Operator will evaluate the data furnished by the Industrial User and may require additional information. After evaluation and acceptance of the data furnished, the Town of Springwater may issue a Wastewater Discharge Permit subject to terms and conditions provided herein.

Section 1004 B - Permit Modifications

Wastewater Discharge Permits may be modified by the Operator, upon 30 days written notice to the permittee, for just cause. Just cause shall include, but not be limited to:

- (1) Promulgation of an applicable National Categorical Pretreatment Standard,
- (2) Revision of or a grant of a variance from such categorical standards pursuant to 40 CFR 403.13,
- (3) Changes in general discharge prohibitions and local limits as per Section 903 of this Sewer Use Law,
- (4) Changes in processes used by the permittee, or changes in discharge volume or character,
- (5) Changes in design or capability of any part of the POTW,
- (6) Discovery that the permitted discharge causes or contributes to Pass Through or Interference, and
- (7) Changes in the nature and character of the Sewage in the POTW as a result of other permitted discharges.

Any changes or new conditions in the Permit shall include a reasonable time schedule for compliance as set forth in Section 1004 A (12)(a).

Section 1004 C - Permit Conditions

Wastewater Discharge Permits shall be expressly subject to all the provisions of this Sewer Use

Law, and all other applicable regulations, User charges and fees established by the Town of Springwater. Permits may contain the following:

- (1) Limits on the average and maximum rate and time of discharge, or requirements for flow regulation and equalization.
- (2) Limits on the average and maximum Wastewater constituents and characteristics, including concentration or mass discharge limits.
- (3) The unit charge or schedule of User charges and fees for the management of the Wastewater discharged to the POTW.
- (4) Requirements for installation and maintenance (in safe condition) of inspection and sampling facilities.
- (5) Specifications for monitoring programs which may include sampling locations, frequency of sampling, number, types, and standards for tests, and reporting schedules.
- (6) Compliance schedules.
- (7) Requirements for submission of technical reports or discharge reports.
- (8) Requirements for maintaining and retaining plant Records relating to Wastewater discharge, as specified by the Town of Springwater, and affording the Operator access thereto.
- (9) Requirements for notification of the Town of Springwater of any new introduction of Wastewater constituents or of any substantial change in the volume or character of the Wastewater constituents being introduced into the POTW.
- (10) Requirements for the notification of the Town of Springwater of any change in the manufacturing and/or Pretreatment process used by the permittee.
- (11) Requirements for notification of excessive, accidental, or Slug discharges.
- (12) Other conditions as deemed appropriate by the Town of Springwater to ensure compliance with this Sewer Use Law, and State and Federal laws, rules, and regulations.

Section 1004 D - Permit Duration

Permits shall be issued for a specified time period, not to exceed five (5) years. A Permit may be issued for a period less than five (5) years, at the sole discretion of the Operator.

Section 1004 E - Permit Reissuance

The User shall apply for Permit reissuance a minimum of 180 days prior to the expiration of the User's existing Permit. The terms and conditions of the Permit may be subject to modification, by the Operator, during the term of the Permit, as limitations or requirements, as identified in Section 1004 B, or other just cause exists. The User shall be informed in writing of any proposed changes in his Permit at least 30 days prior to the effective date of the change. Any changes or new conditions in the reissued Permit shall include a reasonable time schedule for compliance as established in Section 1004 A (12)(a).

Section 1004 F - Permit Transfer

Wastewater Discharge Permits are issued to a specific User for a specific operation, or discharge at a specific location. A Wastewater Discharge Permit shall not be reassigned, transferred, or sold to a New Owner, New User, different premises, or a new or changed operation.

Section 1004 G - Permit Revocation

Wastewater Discharge Permits may be revoked for the following reasons: falsifying self-monitoring reports, tampering with monitoring equipment, refusing to allow the Operator timely access to the Industrial premises, failure to meet effluent limitations, failure to pay fines, failure to pay User charges, failure to meet compliance schedules or failure to meet any other requirement of this Sewer Use Law.

Section 1004 H - Public Notification

The Town of Springwater will publish in its official newspaper(s), informal notice of intent to issue a Wastewater Discharge Permit, at least 14 days prior to issuance.

Section 1005 - Reporting Requirements for Permittee

The reports or documents required to be submitted or maintained under this Section shall be subject to:

- (a) The provisions of 18 USC Section 1001 relating to fraud and false statements;
- (b) The provisions of Sections 309(c)(4) of the Act, as amended, governing false statements, representation or certification; and
- (c) The provisions of Section (c)(6) of the Act, as amended, regarding corporate officers.
- (1) Baseline Monitoring Report

Within 180 days after promulgation of an applicable Federal Categorical Pretreatment Standard, a User subject to that Standard shall submit, to the Operator, the information required by paragraphs (8) and (9) of Section 1004 A.

(2) 90-Day Compliance Report

Within 90 days following the date for final compliance with applicable Pretreatment Standards, or, in the case of a New Source, following commencement of the introduction of Wastewater into the POTW, any User subject to Pretreatment Standards and Requirements shall submit, to the Operator, a report indicating the nature and concentration of all Pollutants in the discharge, from the regulated process, which are limited by Pretreatment Standards and Requirements, and the average and maximum daily flow for these process units in the User's Facility which are limited by such Pretreatment Standards and Requirements. The report shall state whether the applicable Pretreatment Standards and Requirements are being met on a consistent basis, and, if not, what additional O&M and/or Pretreatment is necessary to bring the User into compliance with the applicable Pretreatment Standards or Requirements. This statement shall be signed by an Authorized Representative of the Industrial User, and certified to by a qualified professional.

(3) Periodic Compliance Reports

- (a) Any User subject to a Pretreatment Standard, after the compliance date of such Pretreatment Standard, or, in the case of a New Source, after commencement of the discharge into the POTW, shall submit to the Operator, during the months of June and December, unless required more frequently in the Pretreatment Standard or by the Operator, a report indicating the nature and concentration of Pollutants in the effluent which are limited by such Pretreatment Standards. In addition, this report shall include a record of all daily flows which, during the reporting period, exceeded the average daily flow reported in Section 1004 A. At the discretion of the Operator, and in consideration of such factors as local high or low Flow Rates, holidays, budget cycles, etc., the Operator may agree to alter the months during which the above reports are to be submitted, however, no fewer than two reports shall be submitted per year.
- (b) The Operator may impose mass limitations on Users, which are using dilution to meet applicable Pretreatment Standards or Requirements, or, in other cases where the imposition of mass limitations are appropriate at the discretion of the Operator. In such cases, the report required by Section 1005 (3) (a) shall indicate the mass of Pollutants regulated by Pretreatment Standards in the effluent of the User. These reports shall contain the results of discharge sampling and analysis, including the flow, and the nature and concentration, or production and mass, where requested by the Operator, of Pollutants contained therein, which are limited by the applicable Pretreatment Standard. All analyses shall be performed in accordance with Standard Methods, by a laboratory certified by NYSDOH to perform the analyses.

(4) Violation Report

If sampling performed by the User indicates a violation of this Sewer Use Law and/or the User's discharge Permit, the User shall notify the Operator in writing within 24 hours of becoming aware of the violation. The User shall also repeat the sampling and analysis and submit the results of the repeat analysis to the Operator within 30 days after becoming aware of the violation. The User is not required to re-sample if the POTW performs monitoring of the User's discharge at least once a month for the parameter which was violated, or if the POTW performs sampling, for the parameter which was violated, between the User's initial sampling and when the User receives the results of this sampling. If POTW incurs any cost resulting from its sampling following a violation by a User, such cost shall be reimbursed to POTW by User.

(5) Other reports

The Operator may impose reporting requirements equivalent to the requirements imposed by Section 1005(3) for Users not subject to Pretreatment Standards.

Section 1006 - Flow Equalization

No Person shall cause the discharge of Slugs to the POTW. Each Person discharging, into the POTW, greater than five percent (5%) of the average daily flow in the POTW shall install and

maintain, on its property and at its own expense, a suitable storage and flow control Facility to insure equalization of flow to the satisfaction of the Operator.

Section 1007 - Monitoring Stations (Control Manholes)

- (a) All Significant Industrial Users, and other Industrial Users whose Industrial Waste discharge has caused or may cause Interference or Pass-Through shall install and maintain a suitable monitoring station, on their premises at their expense, to facilitate the observation, sampling, and measurement of their Industrial Wastewater discharge.
- (b) If there is more than one Street Lateral serving an Industrial User, the Operator may require the installation of a Control Manhole on each lateral.
- (c) The Operator may require that such monitoring station(s) include equipment for the continuous measurement and recording of Wastewater Flow Rate and for the sampling of the Wastewater. Such station(s) shall be accessibly and safely located, and the Industrial User shall allow immediate access, without prior notice, to the station by the Operator, or his/her designated representative.

Section 1008 - Proper Design and Maintenance of Facilities and Monitoring Stations

Preliminary treatment, and flow equalization Facilities, or monitoring stations, if provided for any Wastewater, shall be constructed and maintained continuously clean, safe, and continuously operational by the owner at its expense. Where an Industrial User has such treatment, equalization, or monitoring Facilities at the time this Sewer Use Law are enacted, the Operator may approve or disapprove the adequacy of such Facilities. Where the Operator disapproves of such Facilities and construction of new or upgraded Facilities for treatment, equalization, or monitoring is required, plans and specifications for such Facilities shall be prepared by a licensed professional engineer and submitted to the Operator. Construction of new or upgraded Facilities shall not commence until written approval of the Operator has been obtained.

Section 1009 - Vandalism, Tampering with Measuring Devices

No unauthorized Person shall negligently break, damage, destroy, uncover, deface, tamper with, prevent access, or render inaccurate, or cause or permit the negligent breaking, damaging, destroying, uncovering, defacing, tampering with, preventing access, or rendering inaccurate to:

- i. any structure, appurtenance, or equipment which is a part of the Town of Springwater POTW, or
- ii. any measuring, sampling, and/or testing device or mechanism installed pursuant to any requirement under this Sewer Use Law except as approved by the Executive Operator.

Section 1010 - Sampling and Analysis

Sampling shall be performed so that a representative portion of the Wastewater is obtained for analysis.

All measurements, tests, and analyses of the characteristics of waters and wastes required in any Section of this Sewer Use Law shall be carried out in accordance with Standard Methods, by a laboratory certified by NYSDOH to perform the analyses. Such samples shall be taken at the approved monitoring stations described in Section 1007, if such a station exists. If an approved monitoring station is not required, then samples shall be taken from another location on the Industrial Sewer lateral before discharge to the Public Sewer. Unless specifically requested otherwise, or unless specifically not allowed in Federal regulation, samples shall be gathered as flow proportioned (where feasible) Composite Samples made up of individual samples taken not less than once per hour for the period of time equal to the duration of Industrial Wastewater discharge during daily operations (including any cleanup shift). Composite Samples for either cyanides, or Oil and Grease are allowed. However, the samples must be collected and delivered to the laboratory as individual Grab Samples. The compositing of these samples must be completed at the laboratory by trained laboratory staff.

Section 1011 - Accidental Discharges; SPCC Plan

Each User shall provide for protection from accidental or Slug discharges of prohibited materials or discharges of materials in volume or concentration exceeding limitations of this Sewer Use Law or of an Industrial Wastewater Discharge Permit. Users shall immediately notify the Operator of the discharge of Wastes in violation of this Sewer Use Law or any Permit. Such discharges may result from:

- (1) Breakdown of Pretreatment equipment
- (2) Accidents caused by mechanical failure, or negligence and/or
- (3) Other causes.

Where possible, such immediate notification shall allow the Operator to initiate appropriate countermeasure action at the POTW. The User shall prepare a detailed written statement following any accidental or Slug discharge, which describes the causes of the discharge and the measures being taken to prevent future occurrences, within five (5) days of the occurrence, and the Operator shall receive a copy of such report no later than the fifth calendar day following the occurrence. Analytical results and their interpretation may be appended to the report at a date not exceeding 45 calendar days after the occurrence.

When required by the Operator, detailed written plans and procedures to prevent accidental or Slug discharges shall be submitted to the Operator, for approval. These plans and procedures shall be called a Spill Prevention, Control, and Countermeasure (SPCC) Plan. The plan shall address, at a minimum, the following:

- (a) Description of discharge practices, including non-routine batch discharges;
- (b) Description of stored chemicals;
- (c) Procedures for immediately notifying the POTW of any accidental or Slug discharge. Such notification must also be given for any discharge which would violate any provision of the Permit and any National Prohibitive Discharge Standard; and
- (d) Procedures to prevent adverse impact from any accidental or Slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage

areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic Pollutants (including solvents), and/or measures and equipment for emergency response.

Section 1012 - Posting Notices

In order inform the Industrial User's employees of the Town of Springwater requirements, a notice shall be permanently and conspicuously posted on appropriate bulletin boards within the User's Facility advising employees of the Town requirements and whom to call in case of an accidental discharge in violation of this Sewer Use Law.

Section 1013 - Sample Splitting

When so requested in advance by an Industrial User, and when taking a sample of Industrial Wastewater, the Town of Springwater representative(s) shall gather sufficient volume of sample so that the sample can be split into two nearly equal volumes, each of size adequate for the anticipated analytical protocols including any Quality Control (QC) procedures. One of the portions shall be given to the representative of the Industrial User whose Wastewater was sampled, and the other portion shall be retained by the Town of Springwater for its own analysis.

Section 1014 - Public Access to Information Maintained by the Operator

When requested, the Operator shall make available, to the public, for inspection and/or copying, information and data on Industrial Users obtained from reports, questionnaires, Permit applications, Permit and monitoring programs, and inspections, unless the Industrial User specifically requests, and is able to demonstrate to the satisfaction of the Operator, that such information, if made public, would divulge processes or methods of production entitled to protection as a trade secret or other intellectual property right of the User. Wastewater constituents and characteristics, and reports of accidental discharges shall not be recognized as confidential.

Confidential information shall not be made available for inspection and/or copying by the public but shall be disclosed, upon written request, to governmental agencies, for uses related to this Sewer Use Law (including the enforcement hereof), or the SPDES Permit, providing that the governmental agency making the request agrees to hold the information confidential, in accordance with State or Federal Laws, Rules and Regulations including but not limited with the NYS Freedom of Information Law. The Operator shall provide written notice to the Industrial User of any disclosure of confidential information to another governmental agency.

Section 1015 A - Access to Property and Records

The Operator and other authorized representatives of the Town of Springwater, representatives of EPA, NYSDEC, NYSDOH, and/or Livingston County Health Department, bearing proper credentials and identification, shall be permitted to enter upon all non-residential properties at all times for the purpose of inspection, observation, sampling, flow measurement, and testing to ascertain a User's compliance with applicable provisions of Federal and State law governing use of the Town of Springwater POTW, and with the provisions of this Sewer Use Law. Inspections of

residential properties shall be performed in proper observance of the resident's civil rights. Such representative(s) shall have the right to set up, on the User's property or property rented/leased by the User, such devices as are necessary to conduct sampling or flow measurement. Guard dogs shall be under proper control of the User while the representatives are on the User's property or property rented/leased by the User. Such representative(s) shall, additionally have access to and may copy any Records the User is required to maintain under this Sewer Use Law. Where a User has security measures in force which would require proper identification and clearance before entry into the premises, the User shall make necessary arrangements so that upon presentation of suitable identification, inspecting personnel will be permitted to enter, without delay, for the purpose of performing their specific responsibilities.

Section 1015 B - Access to Easements

The Operator, bearing proper credentials and identification, shall be permitted to enter all private premises through which the Town of Springwater holds an Easement for the purpose of inspection, observation, measurement, sampling, repair, and maintenance of any portion of the Town's Public Sewer system lying within the Easement. All entry and subsequent work on the Easement shall be done in accordance with the terms of the Easement pertaining to the private premises involved.

Section 1015 C - Liability of Property Owner

During the performance on private premises, of inspections, sampling, or other similar operations referred to in Sections 1014 A and 1014 B, the inspectors shall observe all applicable safety rules established by the owner or occupant of the premises. The owner and/or occupant shall be held harmless for personal injury or death of the inspector and the loss of or damage to the inspector's supplies and/or equipment; and the inspector shall indemnify the owner and/or occupant against loss or damage to property of the owner or occupant by the inspector and against liability claims asserted against the owner or occupant for personal injury or death of the inspector or for loss of or damage to the inspector's supplies or equipment arising from inspection and sampling operations, except as such may be caused by negligence or failure of the owner or occupant to maintain safe conditions.

Section 1016 - Special Agreements

Nothing in this Article shall be construed as preventing any special agreement or arrangement between the Town of Springwater and any User of the POTW whereby Wastewater of unusual strength or character is accepted into the POTW and specially treated, subject to any payments or User charges, as may be applicable. In entering into such a special agreement, the Springwater Town Board shall consider whether the Wastewater will:

- (1) Pass-Through or cause Interference,
- (2) endanger the public, Town of Springwater, or municipal employees,
- (3) cause violation of the SPDES Permit,
- (4) interfere with any Purpose stated in Section 102, and/or
- (5) prevent the equitable compensation to the Town of Springwater for Wastewater conveyance and treatment, and sludge management and disposal.

No discharge which violates the Federal Pretreatment Standards will be allowed under the terms of such special agreements.

No agreement shall be entered into without the User having been issued and presently having a Permit to discharge Wastes into the POTW for treatment and disposal. Additionally, the User shall be in compliance with all conditions in the Permit and shall not be in arrears in any charges due to the Town of Springwater before the agreement is entered into. The Town of Springwater may condition the agreement.

Article 11 – Enforcement and Penalties

Section 1101 – Enforcement Response Plan

The Town of Springwater is committed to proper monitoring of Users to ensure compliance with this Sewer Use Law. Improper discharge or other violations of this Sewer Use Law will result in prompt enforcement as required by State and Federal regulations.

Section 1102 – Notification of Violation

Whenever the Operator finds that any User has violated or is violating this Sewer Use Law, or any Wastewater Discharge Permit, order, prohibition, limitation, or requirement permitted by this Sewer Use Law, the Operator may serve upon such User (pursuant to Section 1111 below) a written notice stating the nature of the violation. Within ten (10) calendar days of the date the Operator serves such notice, an explanation of the violation and a written plan for the satisfactory correction and prevention thereof shall be submitted to the Operator by the User. The written correction and prevention plan shall include specific actions. Submission of this plan in no way relieves the User of liability for any violations caused by the User before or after receipt of the Notice of Violation.

Section 1103 - Consent Orders

The Operator or his/her designee is hereby empowered to enter into written Consent Orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the User responsible for noncompliance. Such documents shall include specific action to be taken by the User to correct the noncompliance within a time period also specified by the document. Consent Orders and similar documents shall have the same force and effect as Administrative or Compliance Orders pursuant to Section 1104 of this Sewer Use Law and shall be judicially enforceable. A Consent Order shall not be a bar against, or prerequisite for, taking any other action against a User.

Section 1104 - Administrative or Compliance Orders

When the Operator finds that a User has violated or continues to violate this Sewer Use Law or a

Permit or Administrative Order issued thereunder, he/she may issue a written Administrative Order to the User responsible for the discharge directing that, following a specified time period, Sewer service shall be discontinued, severed and abated unless the violation is corrected and that there is no reoccurrence of the violation. Administrative orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the installation of Pretreatment technology, additional self-monitoring, and/or management practices designed to minimize the amounts of Pollutants discharged to the Sewer. An Administrative or Compliance Order shall not be a bar against, or prerequisite for, taking any other action against a User.

The User may, within fifteen (15) calendar days of the date the Operator mails notification of the Administrative Order, petition in writing to modify or suspend the Order. Such petition shall be in written form and shall be transmitted to the Operator by registered mail. The Operator shall then:

- (1) reject any petitions as frivolous or unfounded,
- (2) modify or suspend the Administrative or Compliance Order, or
- (3) direct the petitioner to show cause in accordance with Section 1109 and may, as part of the show cause notice, require the User to supply additional information.

Section 1105 - Administrative Fines

Notwithstanding any other Section of this Sewer Use Law, any User who is found to have violated any provision of this Sewer Use Law, or a Wastewater Discharge Permit or Administrative or Compliance Order issued hereunder, shall be fined in an amount not to exceed One Thousand Dollars (\$1,000.00) per violation, unless such violation is by a Significant Industrial User or other User that is required to perform Pretreatment, in which case, all penalties shall be governed by 40 C.F.R. Part 403.8 (f)(1)(vi)(A). Each day of noncompliance shall be deemed a separate and distinct violation without the need to provide additional notice of such violations.

The User may, within fifteen (15) calendar days of the date the Operator mails notification of such fine, petition the Operator in writing to modify or suspend the Administrative or Compliance Order and/or resultant fine. Such petition shall be in written form and shall be transmitted to the Operator by registered mail. The Operator shall then:

- (1) reject any petitions as frivolous or unfounded,
- (2) modify or suspend the fine, or
- (3) direct the petitioner to show cause in accordance with Section 1109 and may as part of the show cause notice, require the User to supply additional information.

Section 1106 – Administrative Order to Cease and Desist

When the Operator finds that a User has violated or continues to violate this Sewer Use Law or any Permit or Administrative or Compliance Order issued hereunder, the Operator may issue an Administrative Order to Cease and Desist all such violations and direct those Persons in noncompliance to:

(1) comply forthwith, and

(2) take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations or terminating the discharge.

An Administrative Order to Cease and Desist shall not be a bar against, or prerequisite for, taking any other action against a User.

The User may, within fifteen (15) calendar days of the date the Operator mails notification of such Administrative Order to Cease and Desist, petition the Operator to modify or suspend the Order. Such petition shall be in written form and shall be transmitted to the Operator by registered mail. The Operator shall then:

- (1) reject any frivolous petitions,
- (2) modify or suspend the order, or
- (3) direct the petitioner to show cause in accordance with Section 1109 and may as part of the show cause notice request the User to supply additional information.

Section 1107 - Termination of Permit

Any User who violates the following conditions of this Sewer Use Law or any applicable or State and Federal law, is subject to Permit termination: (1) Violation of a Wastewater Discharge Permit or Permit conditions or conditions of an Administrative or Compliance Order, (2) Failure to accurately report the Wastewater constituents and characteristics of its discharge, (3) Failure to report significant changes in operations or Wastewater constituents and characteristics, (4) Refusal of reasonable access to the User's premises for the purpose of inspection, monitoring, or sampling, or (5) Failure to pay administrative fines, fees or user charges. Non-compliant Industrial Users will be notified, by registered mail, of the proposed termination of their Wastewater Discharge Permit. Termination of a Permit shall not be a bar against, or prerequisite for, taking any other action against a User.

The User may, within fifteen (15) calendar days of the date the Operator mails such notification, petition the Operator in writing to reinstate its Permit and allow continued use of the POTW by the User. Such petition shall be in written form and shall be transmitted to the Operator by registered mail.

The Operator shall then:

- (1) Reject any petitions as frivolous or unfounded or
- (2) Order the petitioner to show cause in accordance with Section 1109 and may as part of the show cause notice, request the User to supply additional information.

Section 1108 A - Water Supply Severance

Whenever a User has violated or continues to violate the provisions of this Sewer Use Law or an Administrative Order or Permit issued hereunder, water service to the User may be severed and service will only recommence, at the User's expense, after it has satisfactorily demonstrated its ability to comply with this Sewer Use Law.

The User may, within fifteen (15) calendar days of written notice of severance, petition the Operator to reconnect water supply service. Such petition shall be in written form and shall be transmitted to the Operator by registered mail. The Operator shall then:

- (1) reject any petitions as frivolous or unfounded,
- (2) reconnect the water supply, or
- (3) direct the petitioner to show cause in accordance with Section 1109 and may as part of the show cause notice require the User to supply additional information.

Water supply severance shall not be a bar against, or prerequisite for, taking any other action against a User.

Section 1108 B – Emergency Suspension of Discharge/ Summary Abatement

The Operator may immediately issue an Emergency Suspension Order to suspend a User's discharge, after informal notice to the User, whenever such suspension is necessary to stop an actual or threatened discharge, which reasonably appears to present, or cause an imminent or substantial endangerment to the health, safety or welfare of persons. The Operator may also, after written notice, immediately issue an Emergency Suspension Order to suspend a User's discharge that threatens to interfere with the operation of the POTW, or which presents, or may present, an endangerment to the environment.

Any User notified of an Emergency Suspension of its discharge shall immediately stop or eliminate its contribution. In the event of a User's failure to immediately comply voluntarily with the Suspension Order, the Operator may take such steps as deemed necessary, including immediate severance of the Sewer connection, to prevent or minimize damage to the POTW, its receiving stream, or endangerment to the health, safety or welfare of any individual. The Operator may allow the User to recommence its discharge when the User has demonstrated to the satisfaction of the Operator that the period of endangerment has passed, unless the termination proceedings pursuant to Section 1107 of this Sewer Use Law is initiated against the User.

A User that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful contribution and the measures taken to prevent any future occurrence, to the Operator prior to the date of any Show Cause Hearing under Section 1109 of this Sewer Use Law.

Nothing in this Section shall be interpreted as requiring a hearing prior to any Emergency Suspension pursuant to this Section.

The Operator, acting upon the belief that an emergency exists, shall be indemnified by the Town of Springwater against any personal liability that may arise in the performance of his/her duties to protect the public health, safety, or welfare, or to preserve the POTW or the environment.

Section 1109 - Show Cause Hearing

The Operator may order any User that petitions to modify or suspend any administrative remedies for violations of this Sewer Use Law to show cause, before the Springwater Town Board, why the enforcement action and/or administrative remedy initiated by the Operator should not be taken. A written notice shall be served (pursuant to Section 1111 below) on the User specifying the time and place of a hearing to be held by the Springwater Town Board regarding the violation. The notice shall further indicate the reasons why the action is to be taken, the proposed enforcement action and/or administrative remedy, and directing the User to show cause before the Springwater Town Board why the proposed enforcement action and/or administrative remedy should not be taken.

The Notice of the Hearing shall be served in accordance with Section 1111 of this Article and at least ten (10) calendar days before the hearing. Service shall be made on a User, any principal or executive officer of a User's establishment or to any partner in a User's establishment. The Springwater Town Board may itself conduct the hearing, or may designate any of its members or any officer, agent or employee of the Town to conduct the hearing and:

- (1) Issue, in the name of the Springwater Town Board, notices of hearings requesting the attendance and testimony of witnesses, and the production of evidence relevant to any matter involved in such hearings,
- (2) Take the evidence,
- (3) Take sworn testimony, and
- (4) Transmit a report of the evidence and hearing, including transcripts and other evidence, together with recommendations to the Springwater Town Board for action thereon.

After the Springwater Town Board has reviewed the evidence and testimony, it may order the User to comply with the Operator's administrative remedy (including order or fine), modify the Operator's administrative remedy, or vacate the Operator's administrative remedy.

All costs and expenses associated with the Show Cause Hearing, including but not limited to any attorney fees or other professional fees expended by the Town of Springwater shall be reimbursed to the Town by the User within thirty (30) days of a detailed invoice being sent to User for the same.

Section 1110 - Failure of User to Petition the Operator

In the event the Operator issues any Administrative or Compliance Order, terminates the User's Permit, or makes any fine as set forth in this Article, and the User fails, within the designated period of time set forth, to petition the Operator in writing, as provided in appropriate sections of this Article, the User shall be deemed in default and its rights to contest the Administrative or Compliance Order or fine shall be deemed waived.

Section 1111 – Notice

The notices, orders, petitions, or other notification which the User or Operator shall desire or be required to give pursuant to any sections of this Sewer Use Law shall be in writing and shall be served personally or sent by certified mail or registered mail, return receipt requested, postage prepaid; and the notice, order, petition, or other communication shall be deemed given upon its mailing as provided herein. Any notice, Administrative Order, or communication mailed to the User pursuant to this Section shall be mailed to the User where the User's effluent is discharged into transmission lines to the Town of Springwater's POTW. Any notice, petition, or other communication mailed to the Town of Springwater at:

Town of Springwater Attn: Supervisor 8022 South Main Street Springwater, New York 14560

Section 1112 - Right to Choose Multiple Remedies

The Operator shall have the right, within the Operator's sole discretion, to utilize any one or more administrative remedies (or to initiate criminal proceedings) set forth in this Article and no such remedy shall be deemed exclusive. The Operator may order one Show Cause Hearing combining more than one enforcement action or administrative remedy. Enforcement of Pretreatment violations or other violations of this Sewer Use Law will generally be in accordance with the Town's Enforcement Response Plan. However, the Operator may take other action against any User when the circumstances warrant.

Section 1113 A - Civil Actions For Penalties For Non-Industrial Users

Any Person or User who violates any of the provisions of or who fails to perform any duty imposed by this Sewer Use Law, or any Administrative or Compliance Order or other determination of the Operator made under this Sewer Use Law, or the terms of any Permit issued hereunder, shall be liable to the Town of Springwater for a civil penalty <u>not to exceed</u> One Thousand Dollars (\$1,000.00) per day for each violation, unless such violation is by a Significant Industrial User, Industrial User or other User that is required to perform Pre-Treatment, in which case, all penalties shall be governed by 40 C.F.R. Part 403.8 (f)(1)(vi)(A). Each violation shall be a separate and distinct violation, and in the case of a continuing violation, each day's continuance thereof shall be deemed a separate and distinct violation without requiring additional notice to be served.

At the request of the Operator, such penalty may be recovered in an action brought by the Town attorney (or his/her designated attorney), in any court of competent jurisdiction, giving preference to courts local to the Town of Springwater. In addition to the above described penalty, any Person or User who violates any provision of this Sewer Use Law, or who fails to perform any duties imposed by this Sewer Use Law (or any Administrative or Compliance Order or determination of the Operator promulgated under this Sewer Use Law), or the terms of any Permit issued hereunder, shall be responsible for all reasonable attorney's fees, costs and disbursements (including but not limited to filing fees, service of process and sampling and monitoring fees related to the underlying violation) incurred by the Town of Springwater in enforcing the provisions of this Sewer Use Law.

In determining the amount of civil penalty, the court shall take into account all relative circumstances, including, but not limited to the extent of harm caused by the violation, the magnitude and duration of the alleged violation, any economic benefit gained through the Person's or User's violation, corrective actions by the Person or User, the compliance history of the Person or User, and any other relative factors as justice may require. Such civil penalty may be released or compromised by the Operator before the matter has been referred to the Town attorney, and where such matter has been referred to the Town attorney, any such penalty may be released or compromised and any action commenced to recover the same may be settled and discontinued by the Town attorney, with the consent of the Operator.

Filing an action for Civil Penalties shall not be a bar against, or a prerequisite for taking any other action against a Person or User for violations of this Sewer Use Law.

Section 1113 B - Civil Actions For Penalties For Industrial Users and Significant Industrial Users

Any Industrial User or Significant Industrial User who violates any of the provisions of or who fails to perform any duty imposed by this Sewer Use Law, or any Administrative or Compliance Order or other determination of the Operator made under this Sewer Use Law, or the terms of any Permit issued hereunder, shall be liable to the Town of Springwater for a civil penalty of <u>not</u> less than One Thousand Dollars (\$1,000.00), per day for each violation pursuant to 40 C.F.R. Part 403.8 (f)(1)(vi)(A). Each violation shall be a separate and distinct violation, and in the case of a continuing violation, each day's continuance thereof shall be deemed a separate and distinct violation without requiring additional notice to be served.

At the request of the Operator, such penalty may be recovered in an action brought by the Town of Springwater attorney (or his/her designated attorney), in any court of competent jurisdiction, giving preference to courts local to the Town. In addition to the above described penalty, any Industrial User or Significant Industrial User who violates any provision of this Sewer Use Law, or who fails to perform any duties imposed by this Sewer Use Law (or any Administrative or Compliance Order or determination of the Operator promulgated under this Sewer Use Law), or the terms of any Permit issued hereunder, shall be responsible for all reasonable attorney's fees, costs and disbursements (including but not limited to filing fees, service of process and sampling and monitoring fees related to the underlying violation) incurred by the Town of Springwater in enforcing the provisions of this Sewer Use Law.

In determining the amount of civil penalty, the court shall take into account all relative circumstances, including, but not limited to the extent of harm caused by the violation, the magnitude and duration of the alleged violation, any economic benefit gained through the User's violation, corrective actions by the User, the compliance history of the User, and any other relative factors as justice may require.

Filing an action for Civil Penalties shall not be a bar against, or a prerequisite for taking any other action against a Person or User for violations of this Sewer Use Law.

Section 1114 - Court Orders

In addition to the power to seek the civil penalties set forth in this Article, the Town of Springwater attorney may seek an order from the Court enjoining the Industrial User or Significant Industrial User from continuing the violation as per Section 1116 below.

Section 1115 A - Criminal Penalties/Fines For Non-Industrial Users

Any Person or User who willfully violates any provision of this Sewer Use Law or any final determination or Administrative or Compliance Order of the Operator made in accordance with this Article shall be guilty of a Class A Misdemeanor, and upon conviction thereof, shall be punished by a fine of not less than Five Hundred Dollars (\$500.00) nor more than One Thousand Dollars (\$1,000.00), or imprisonment not to exceed one (1) year or both, unless such violation is by a Significant Industrial User or other User that is required to perform Pre-Treatment, in which case, all penalties shall be governed by 40 C.F.R. Part 403.8 (f)(1)(vi)(A). Each offense shall be a separate and distinct offense, and, in the case of a continuing offense, each day's continuance thereof shall be deemed a separate and distinct offense without requiring additional notice to be served.

Any Person or User who knowingly makes any false statements, representations, or certifications in any application, record, report, plan or other document filed or required to be maintained pursuant to this Sewer Use Law, or Wastewater Permit, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this Sewer Use Law shall be guilty of a Class A Misdemeanor and, upon conviction, shall be punished by a fine of not less than Five Hundred Dollars (\$500.00) nor more than One Thousand Dollars (\$1,000.00) per violation per day or imprisonment for not more than one (1) year or both.

Section 1115 B - Criminal Penalties/Fines For Industrial Users and Significant Industrial Users

Any Industrial User or Significant Industrial User who willfully violates any provision of this Sewer Use Law or any final determination or Administrative or Compliance Order of the Operator made in accordance with this Article shall be guilty of a Class A Misdemeanor, and upon conviction thereof, shall be punished by a fine of <u>not less than</u> One Thousand Dollars (\$1,000.00) per violation, per day as required by 40 C.F.R. Part 403.8 (f)(1)(vi)(A)., or imprisonment not to exceed one (1) year or both. Each offense shall be a separate and distinct offense, and, in the case of a continuing offense, each day's continuance thereof shall be deemed a separate and distinct offense without requiring additional notice to be served.

Any Industrial Use or Significant Industrial User who knowingly makes any false statements, representations, or certifications in any application, Record, report, plan or other document filed or required to be maintained pursuant to this Sewer Use Law, or Wastewater Permit, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this Sewer Use Law shall be guilty of a Class A Misdemeanor and, upon conviction, shall be punished by a fine of <u>not less than</u> One Thousand Dollars (\$1,000.00) per violation per day or imprisonment for not more than one (1) year or both.

Section 1116 - Additional Injunctive Relief

Whenever a User has violated or continues to violate the provisions of this Sewer Use Law or any Permit or Administrative or Compliance Order issued hereunder, the Operator, through the Town of Springwater Attorney may petition the Court, in the name of the Town, for the issuance of a preliminary or permanent injunction or both (as may be appropriate) which restrains the violation of, or compels the compliance with any provision of this Sewer Use Law, or any Administrative or Compliance Order or determination made hereunder by the Operator.

Section 1117 - Delinquent Payments

If there shall be any payments which are due to the Town of Springwater, pursuant to any Article or Section of this Sewer Use Law, which shall remain due and unpaid, in whole or in part, for a period of thirty (30) calendar days from the date of billing by the Town, the same shall constitute a default, and there shall be added to the entire amount of the original bill, a penalty equal to twenty-five percent (25%) of the original bill, and interest shall accrue on the unpaid balance, at the rate of two percent (2%) per month, retroactive to the date of the original billing.

Where payments or charges due the Town of Springwater are delinquent or unpaid by a User or other responsible party, the Town attorney is authorized to seek recovery of such payments or charges in a court of competent jurisdiction, including all costs, expenses and reasonable attorney fees associated with the collection of the same. Additionally, the Town of Springwater may make arrangements with the appropriate county where the User is located to add the amount of the Sewer assessment or other charges which shall be in default, plus penalty and interest, as provided for in this Sewer Use Law, to the real property taxes due to the County in the next ensuing year.

Section 1118 - Performance Bonds

The Operator may decline to reissue a Permit to any User which has failed to comply with the provisions of this Sewer Use Law or any Administrative or Compliance Order or previous Permit issued hereunder unless such User first files with the Town of Springwater a satisfactory bond, payable to the Town, in a sum not to exceed a value determined by the Operator to be necessary to achieve consistent compliance.

Section 1119 - Liability Insurance

The Operator may decline to reissue a Permit to any User which has failed to comply with the provisions of this Sewer Use Law or any Administrative or Compliance Order or previous Permit issued hereunder, unless the User first submits proof that it has obtained financial assurances in a form acceptable to the Operator sufficient to restore or repair POTW damage caused by its discharge.

Section 1120 - Informant Rewards

The Operator is authorized to pay up to \$500.00 for information leading to the discovery of noncompliance by a User. In the event that the information provided results in an administrative fine or civil penalty levied against the User, the Operator is authorized to disperse up to ten (10) percent of the collected fine or penalty to the informant. However, a single reward payment may not exceed \$10,000.00, including the discovery reward.

Section 1121 - Public Notification

The Operator shall provide public notification pursuant to 40 CFR 403.8 (f)(2)(viii) of Industrial Users or Significant Industrial Users that, at any time within the previous 12 months, were in significant non-compliance with local or Federal Pretreatment Standards or other requirements set forth in 40 CFR 403.8 (f)(2)(viii)(A-H). The frequency of such notices shall be at least once annually in a newspaper of general circulation which provides meaningful public notice within the operating area of the Town of Springwater.

Section 1122- Contractor Listings

- (1) Users which have not achieved consistent compliance with applicable Pretreatment Standards and requirements are not eligible to receive a contractual award for the sale of goods or services to the Town of Springwater.
- (2) Existing contracts for the sale of goods or services to the Springwater held by a User found to be in significant violation with Pretreatment Standards may be terminated at the discretion of the Springwater Town Board.

Article 12 – Charges

Section 1201 – Normal Sewage Service Charges

All Persons or Users discharging or depositing wastes into the Public Sewers shall pay a Sewer service charge proportional to the liquid volume of waste so deposited, which charge shall be collected as a Sewer rent.

Section 1202 - Surcharge for Abnormal Sewage

All Persons or Users discharging or depositing wastes with concentrations in excess of the Pollutant concentrations in Normal Sewage shall pay a surcharge that shall be set from time-to-time by the Springwater Town Board.

Section 1203 - Total Sewer Service Charge

The total Sewer service charge, (which shall be called the "User Charge"), is comprised of two parts, as follows:

UC(t) = UC(n) + UC(an)

Where:

UC(t) = total User Charge for POTW operation and maintenanceUC(n) = User Charge associated with Normal SewageUC(an) = User Charge associated with Abnormal SewageUC(n) = OM X (OQ/100) X (QIA/QA)

UC(an) = OM {[OB/100 X (BIA-Bn)/BA] + [OS/100 X (SIA-Sn)/SA] + [OP/100 X (PIA-Pn)/PA] + [ONH/100 X (NHIA-NHn)/NHA] + [OTK/100 X (TKIA-TKn)/TKA]}

Where:

OM = total annual POTW operation and maintenance costs

OQ = percentage of OM attributable to flow (Q)

OB = percentage of OM attributable to BOD5

OS = percentage of OM attributable to Suspended Solids

OP = percentage of OM attributable to Total Phosphorus

ONH = percentage of OM attributable to Ammonia

OTK = percentage of OM attributable to Total Kjeldahl Nitrogen

QIA = average daily Flow Rate (MGD) from discharger

BIA = average daily BOD5 loading (LB/DAY) from discharger

SIA = average daily Suspended Solids loading (LB/DAY) from discharger

PIA = average daily Total Phosphorus loading (LB/DAY) from discharger

NHIA = average daily Ammonia loading (LB N/DAY) from discharger

TKIA = average daily Total Kjeldahl Nitrogen loading (LB N/DAY) from discharger

QA = average daily Flow Rate (MGD) at the POTW Treatment Plant

BA = average daily BOD5 loading (LB/DAY) at the POTW Treatment Plant

SA = average daily Suspended Solids loading (LB/DAY) at the POTW Treatment Plant

PA = average daily Total Phosphorus loading (LB/DAY) at the POTW Treatment Plant

NHA = average daily total Ammonia loading (LB N/DAY) at the POTW Treatment Plant

TKA = average daily Total Kjeldahl Nitrogen loading (LB N/DAY) at the POTW Treatment Plant

Bn = BOD5 loading (LB/DAY) in discharge if it were Normal Sewage

Sn= Suspended Solids loading (LB/DAY) in discharge if it were Normal Sewage

Pn = Total Phosphorus loading (LB/DAY) in discharge if it were Normal Sewage

NHn = Ammonia loading (LB N/DAY) in discharge if it were Normal Sewage

TKn = Total Kjeldahl Nitrogen loading (LB N/DAY) in discharge if it were Normal Sewage

Note: if any difference terms in the equation above is negative, then that portion of the equation shall not be used, that is, the difference shall be set to zero when it is negative.

Note: all averages are arithmetic averages determined from available data during the billing period.

Section 1204 - Segmenting the POTW

The Service Area of the POTW may, at the discretion of the Springwater Town Board, be segmented to assist in a fair distribution of User charges, especially if there is a pump station serving a segment.

Section 1205 - Measurement of Flow

The volume of flow to be used in computing Sewer service charges and Abnormal Sewage surcharges shall be based upon metered water consumption as shown on the records of meter readings maintained by the Town f Springwater, or provided to the Town from local municipalities pursuant to an inter-municipal agreement, or based on a dedicated sewer flow meter. In the event that a Person or User discharging wastes into the POTW produces credible evidence, to the Operator, demonstrating that a substantial portion of the total amount of metered water does not reach the POTW, then the Operator shall either establish a percentage of the total metered water to be used as a basis for such computations, or direct the installation of appropriate flow measuring (and totalizing) devices to measure and record the actual amount of flow into the POTW. In the event that a Person or User discharging wastes into the POTW procures all or part of its water supply from un-metered sources, the Operator shall either direct the installation of water meters on the other sources of water supply, or direct the installation of appropriate flow measuring devices to measure and record the actual amount of flow into the POTW. Any water meters and/or flow measuring devices installed pursuant to this Section shall be of a type and design acceptable to the Operator and shall be installed, maintained, and periodically tested as required by the Operator, at the User's or owner's expense. All such meters and/or flow measuring devices shall be subject to periodic inspection, testing, and reading by the Operator. Any Person or User discharging wastes into the POTW may install a flow measuring device at its option, of the type, design, installation, and maintenance standards of the Operator, at the User's or owner's expense.

Section 1206 - Billing Period

The Billing Period shall be quarterly.

Section 1207 - Pretreatment Program Costs

The additional charges and fees associated with the operation of the Pretreatment program shall be assessed to the User, and include:

- (1) reimbursement of costs of setting up and operating the Pretreatment program,
- (2) issuing Permits,
- (3) monitoring, inspections, and surveillance procedures,
- (4) costs of equipment and supplies,
- (5) reviewing accidental discharge procedures,
- (6) construction inspections,
- (7) filing appeals,
- (8) application for consistent removal status as outlined in 40 CFR 403, and
- (9) other reasonable expenses to carry out the program to satisfy the requirements of this Sewer Use Law, the NYSDEC, and the Federal government

Section 1208 - Charges for Trucked and Hauled Wastes

The charge for treatment and disposal of trucked or hauled waste which has been introduced into the POTW shall be as established by the Springwater Town Board and may be modified from time-to-time. The manner of determining the volume dumped shall be at the discretion of the Operator.

Section 1209 - Capital Recovery

The Town of Springwater may institute an equitable procedure for recovering the costs of any capital improvements of those parts of the POTW which collect, pump, treat, and dispose of industrial Wastewaters from those Persons or Users discharging such Wastewaters into the POTW.

Section 1210 - Collection of Charges

Provisions of Article 11 of this Sewer Use Law relating to the collection of penalties shall apply to the collection of Sewer Service Charges and Abnormal Sewage Service Surcharges.

Section 1211 - Fiscal Year for System

The POTW shall be operated on the basis of a fiscal year commencing on the first day of January and ending on the thirty-first day of December.

Section 1212 - Impact Fees

The Springwater Town Board shall have the authority to impose impact fees on new development, which development may:

- (1) cause enlargement of the Service Area of the POTW, and/or
- (2) cause increased hydraulic and/or treatment demands on the POTW

Section 1213 - Use of Revenues

Revenues derived from User Charges and associated penalties, and impact fees, shall be credited to a special fund. Monies in this fund shall be used exclusively for the following functions:

- (a) For the payment of the operation and maintenance, including repair and replacement costs of the POTW,
- (b) For the discovery and correction of Inflow and Infiltration,
- (c) For the payment of interest on and the amortization of or payment of indebtedness which has been or shall be incurred for the construction or extension of the POTW, and/or
- (d) For the extension, enlargement, replacement of, and/or additions to the POTW, including any necessary appurtenances.

Section 1214 - Records and Accounts

The Town of Springwater shall maintain and keep proper books of Records and accounts for the POTW, separate from all other Records and accounts, in which shall be made full and correct entries of all transactions relating to the POTW. At its discretion, the Town of Springwater may cause an audit of such books of Record to be made by a recognized independent Certified Public Accountant, and will supply such audit report to authorized officials, and the public, on request.

There shall be an annual review of the Sewer charge system to determine if it is adequate to meet expenditures for all programs for the coming year.

Classification of old and new Industrial Users and Significant Industrial Users should also be reviewed annually.

The Town of Springwater shall maintain and carry insurance on all physical properties of the POTW, of the kinds and in the amounts normally carried by public utility companies and municipalities engaged in the operation of Sewage disposal systems. All moneys received for losses under any such insurance policies shall be applied solely to the replacement and restoration of the property damaged or destroyed.

Article 13 – Public Disclosure of POTW Operations

Section 1301 – POTW Operations Open to the Public

It shall be the policy of the Springwater Town Board to conduct all business with full disclosure to the public.

Section 1302- Procedural Requirements Available

The nature and requirements of all formal procedures for applying for a Permit and for requesting a Permit under this Sewer Use Law shall be formulated from time-to-time by the Town of Springwater and be made available to the public upon request.

Section 1303- Validity Through Public Inspection

The Town of Springwater shall formulate procedures to make available to the public for inspection such orders, statements of policy, and interpretations used by the Town in administration of this Sewer Use Law. No rule, regulation, or civil order shall be valid until it has been available for public inspection.

Article 14 - Conflicts, Severability, Effective Date And Applicability

Section 1401- Conflicts

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The provisions of any prior Town of Springwater Sewer Use Law or policies in conflict with any provision of this Sewer Use Law are hereby repealed.

Section 1402- Severability

Each provision of this Sewer Use Law is severable from the others, so that if any provision is held to be illegal or invalid for any reason whatsoever, such illegal or invalid provision shall be severed from this Sewer Use Law which shall nonetheless remain in full force and effect.

Section 1403- Effective Date

This Sewer Use Law shall take effect 30 days after its filing in the office of the Secretary of State.

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of Violations of Articles 17 and 71 of the New York State Environmental Conservation Law and Part 750 of Title 6 of the Official New York State Code of Rules and Regulations

- by -

ORDER R8-20240108-1

Town of Springwater 8022 South Main Street Springwater, NY 14560,

Respondent.

WHEREAS:

Jurisdiction

- 1. The New York State (State) Department of Environmental Conservation ("Department") is an agency of the State charged with jurisdiction over stormwater discharges pursuant to Article 17 of the Environmental Conservation Law and the rules and the regulations promulgated thereunder at 6 New York Code of Rules and Regulations (NYCRR) Part 750.
- 2. The Department is charged with the responsibility and authority to promote and coordinate the management of the water, land, fish, wildlife, and air resources of the state to assure their protection, enhancement, provisions, allocation, and balanced utilization consistent with the environmental policy of the state. See ECL §3-0301.
- 3. "New York State has a State program that has been approved by the United States Environmental Protection Agency for the control of wastewater and storm water discharges in accordance with the act. Under New York State law the program is known as the State Pollutant Discharge Elimination System (SPDES) and is broader in scope than that required by the act in that it controls point source discharges to groundwaters as well as surface waters." 6 NYCRR Part 750-1.1(a).

Respondent

- 4. Respondent Town of Springwater (Respondent) is a municipality formed pursuant to the laws of the State located in Livingston County, New York.
- 5. Respondent owns and operates a wastewater collection system and a wastewater treatment facility known as the Town of Springwater Wastewater Treatment Plant (the Facility), located at 7737 Kellogg Road, Town of Springwater, NY 14560 (Livingston County) (Tax ID No. 151.-1-43.122), from which pollutants are discharged to the waters of the State from an outlet or point source, as that activity is defined by ECL Article 17 and 6 NYCRR Part 750 *et seq*.

1 | Page

6. Respondent discharges pollutants from the Facility to the waters of the State under the authority and subject to the terms and conditions stated in SPDES Permit No. NY0246450 (Permit). The Permit was initially issued effective July 1, 2006 and has been continuously renewed through its most recent renewal on September 1, 2019 which expires on August 31, 2024.

Applicable Rules and Regulations

- 7. ECL §17-0803 states that "Except as provided by subdivision five of section 17-0701 of this article, it shall be unlawful to discharge pollutants to the waters of the state from any outlet or point source without a SPDES permit issued pursuant hereto or in a manner other than as prescribed by such permit."
- 8. ECL §17-0807(4) states that "The following discharges into the waters of the state are hereby prohibited. . . . [A]ny discharge not permitted by the provisions of this article, rules and regulations adopted or applicable pursuant hereto, the Act, 2 or provisions of a permit issued hereunder."
- 9. 6 NYCRR Part 750-2.1(e) states "The permittee must comply with all terms and conditions of the permit. Any permit noncompliance constitutes a violation of the Environmental Conservation Law and the Clean Water Act and is grounds for: enforcement action; for permit suspension, revocation or modification; and for denial of a permit renewal application."

2015 Order on Consent

- 10. Respondent entered into an Order on Consent (Case No. R8-20150120-45), effective May 22, 2015, for violations of the Permit, ECL §§17-0803 and 17-0807(4) associated with the discharge of pollutants to waters of the State that exceeded the effluent limitations contained in the Permit (2015 Order).
- 11. The 2015 Order states that its objective is "for Respondent to obtain consistent compliance with the terms of the Permit, including meeting the effluent limitations stated therein, and to reduce flows to the Facility. Towards those ends, Respondent shall perform the compliance requirements hereinafter stated in this Consent Order and take such other and further steps necessary to attain the objectives of this Consent Order." 2015 Order at Section I, page 4.
- 12. The 2015 Order states that "[t]he Consent Order will remain in effect until Respondent has fulfilled all of the compliance requirements contained in the Consent Order and has paid any penalties assessed hereby." 2015 Order at IX, page 9.

First Violation

- 13. The 2015 Order, Compliance Actions, required Respondent to "Finalize easements to access the Town owned septic tanks".
- 14. The Permit states that by March 1, 2020, Respondent was to "[s]ubmit documentation for finalized easements that authorize Sanitary Collection System

staff access to the Town owned grinder pumps, laterals, and pump stations". Permit at Compliance Action, Easements, page 7.

- 15. Respondent failed to finalize the easements to access the Respondent owned septic tanks and failed to "[s]ubmit documentation for finalized easements that authorize Sanitary Collection System staff access to the Town owned grinder pumps, laterals, and pump stations" to the Department by March 1, 2020.
- 16. Respondent's failure to finalize the easements to access the Respondent owned septic tanks and failure to submit to the Department, by March 1, 2020, documentation for finalized easements that authorize Sanitary Collection System staff access to the Town owned grinder pumps, laterals, and pump stations is a violation of the Permit, the 2015 Order.

Second Violation

- 17. The Permit provides effluent Limitations for Outfall 001.
- 18. Respondent exceeded the Permit effluent limitations as is detailed in Exhibit 1.
- 19. Respondent's exceedances of the effluent limitations set forth in the Permit are violations of the Permit, ECL §17-0803, and 6 NYCRR Part 750-2.1(e).

Third Violation

- 20. 6 NYCRR Part 750-2.5(a)(1) states that "The permittee shall comply with all recording, reporting, monitoring and sampling requirements specified in the permit."
- 21. The Permit provides Effluent Limitations and Monitoring Requirements for Outfall 001.
- 22. The Permit contains an effluent limitation for CBOD₅ and requires monitoring of CBOD₅ two times a month by grab sample.
- 23. Respondent failed to conduct the required monitoring of CBOD₅ for the period of September 29, 2015 to December 31, 2023.
- 24. Respondent's failure to conduct the required monitoring of CBOD₅ for the period of September 29, 2015 to December 31, 2023 is a violation of 6 NYCRR Part 750-2.5(a)(1) and the Permit.

Fourth Violation

- 25. The Permit states that "[t]he permittee shall submit an Engineering Report to demonstrate the performance of the facility as constructed can comply with the [*sic*] all final permit limits" by May 1, 2020. Permit at Compliance Action, Evaluate Treatment Plant, page 8.
- 26. The May 1, 2020 deadline was extended by agreement until October 1, 2023.

- 27. Respondent failed to submit to the Department, by October 1, 2023, an Engineering Report to demonstrate the performance of the facility as constructed can comply with all final permit limits.
- 28. Respondent's failure to submit to the Department by October 1, 2023 an Engineering Report to demonstrate the performance of the facility as constructed can comply with all final permit limits is a violation of the Permit and 6 NYCRR Part 750-2.1(e).

Civil Penalty

- 29. The 2015 Order states "Respondent is assessed a civil penalty in the amount of Thirty-Five Thousand Eight Hundred Dollars (\$35,800) for the violations stated in this Consent Order, all of which is suspended, and shall not be payable provided that Respondent fully complies with the requirements of this Consent Order in a timely fashion. In the event that Respondent fails to fully comply with the requirements of this Consent of the penalty shall become due and payable upon written notice to Respondent by the Department (the amount becoming due and payable specified in the Department's notice) without prejudicing the Department from seeking further appropriate penalties from Respondent for violations of this Consent Order at VI, page 8.
- 30. ECL Section 71-1929 states "A person who violates any of the provisions of, or who fails to perform any duty imposed by titles 1 through 11 inclusive and title 19 of article 17, or the rules, regulations, orders or determinations of the commissioner promulgated thereto or the terms of any permit issued thereunder, shall be liable to a penalty of not to exceed thirty-seven thousand five hundred dollars per day for each violation, and, in addition thereto, such person may be enjoined from continuing such violation as hereinafter provided."
- 31. Respondent affirmatively waived its right to notice and hearing in the manner provided by law, consented to the issuing and entering of this Order, and agrees to be bound by the terms, provisions and conditions contained herein.

NOW THEREFORE, having considered this matter and having been duly advised, IT IS ORDERED THAT:

1. Civil Penalties.

- a. With respect to the violations identified in this Order, Respondent is hereby assessed a civil penalty in the amount of Sixty-Thousand Dollars (\$60,000). This civil penalty is suspended conditioned on Respondent's compliance with this Order, including the Schedule of Compliance. The \$60,000 suspended penalty is due within 30 days of Department's written notice of violation of this Order.
- b. With respect to the 2015 Order's suspended penalty in the amount of Thirty-Five Thousand Eight Hundred Dollars (\$35,800), this civil penalty is suspended

conditioned on Respondent's compliance with this Order, including the Schedule of Compliance. The \$35,800 suspended penalty is due within 30 days of Department's written notice of violation of this Order.

- c. Payment of the above penalties shall not in any way alter Respondent's obligation to complete performance under the terms of this Order. Payment of the suspended penalty shall not limit the Department's ability to seek further civil penalties or commence any other actions for violations of the Order.
- d. **Tax Information and Statewide Offset Program Notice**. Respondent agrees to the terms contained in Exhibit A in consideration of paying a civil penalty in installments. Exhibit A is incorporated into this Order on Consent and is enforceable thereunder.

Respondent shall return to the Department, with the signed and notarized Order on Consent, a completed copy of the attached **Exhibit A**, the Tax Information and Statewide Offset Program Notice.

e. Address to send signed and notarized order on consent. The Order on Consent, along with any applicable submissions, and a copy of the payment check or proof of the electronic payment, shall be sent to:

New York State Department of Environmental Conservation Office of General Counsel – Region 8 6274 East Avon-Lima Road Avon, New York 14414

- f. **Civil Penalty Payment Methods**. The civil penalty shall be paid by one of the two methods stated below at the time this Order on Consent is placed in the mail or delivered to the New York State Department of Environmental Conservation's Office of General Counsel Region 8:
 - i. by check sent to the following address, made payable to the "New York State Department of Environmental Conservation," with the enclosed invoice and the Case Number of this Order on Consent written in the memo section of the check:

New York State Department of Environmental Conservation Division of Management and Budget Services 625 Broadway, 10th Floor Albany, NY 12233-4900

- ii. by electronic payment at http://www.dec.ny.gov/about/61016.html. Please have your customer and invoice number available. If you have any questions regarding paying your invoice electronically, please contact the Revenue Fee Unit at 518-402-9343 or revenue@dec.ny.gov.
- II. Effect of Payment of Penalty. Assessment and payment of any civil penalty imposed under this Order shall not in any way alter Respondent's obligation to

satisfactorily perform any action required by this Order or by any approval issued by the Department under this Order.

- III. Schedule of Compliance. Respondent shall comply with the terms and conditions of this Order, including the Schedule of Compliance. The attached Schedule of Compliance and any plans approved thereunder are incorporated into the Order and are enforceable thereunder. Any records submitted to the Department shall have the owner's name, facility name and address, and contact and phone number.
- IV. **Summary Abatement.** This Order shall not be construed to prohibit the Commissioner or his duly authorized representatives from exercising any summary abatement powers, either at common law or as granted pursuant to statute or regulation.
- V. **Scope.** Except as specifically provided in this Order, nothing contained in this Order shall be construed as barring, diminishing, adjudicating or in any way affecting:

A. Any legal or equitable rights or claims, actions, proceedings, suits, causes of action or demands whatsoever that the State or Department may have against Respondent for any violations not cited in this Order on Consent.

B. Any legal or equitable rights or claims, actions, proceedings, suits, causes of action or demands whatsoever that the State or Department may have against anyone other than Respondent, its officers, directors, agents, servants, employees, successors and assigns;

C. The Department's right to enforce this Order against Respondent, its officers, directors, servants, and employees in the event that Respondent shall fail to fulfill any of the terms or provisions hereof;

D. Whatever right the Department has to bring any action or proceeding against Respondent and/or any of Respondent's directors, officers, employees, servants, agents, successors, and assigns with respect to claims for natural resource damages; and

E. Respondent's right to assert all available defenses to any claims, actions, proceedings, suits, causes of actions or demands made or commenced by the State or the Department provided, however, that Respondent waives all legal or equitable rights claims, actions, proceedings, appeals, suits, causes of action, defenses or demands whatsoever that it may have to a judicial review of the validity and binding effect of this Order and whether or not this Order has been entered into voluntarily by Respondent.

VI. Communications.

A. This paragraph does not apply to payment of the penalty or submission of the Order on Consent, which are instead addressed at Paragraph I, "Civil Penalty", above.

B. All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, by hand delivery, or by electronic mail.

C. Communications shall be sent to:

For the Department:

Dusty Renee Tinsley New York State Department of Environmental Conservation – Region 8 6274 East Avon – Lima Road Avon, NY 14414

For Respondent:

James W. Campbell, Jr. Kruk & Campbell, P.C. 7312 East Main Street P.O. Box 30-A Lima, New York 14485

and

Deborah Babbitt-Henry, Supervisor Town of Springwater 8022 South Main Street Springwater, NY 14560

VII. **Standard Provisions**. Respondent must further comply with the Standard Provisions attached to this Order, which constitute material and integral terms and conditions of this Order and are hereby incorporated into this Order by reference.

DATED: _____, 2024

Avon, New York

Sean Mahar Acting Commissioner New York State Department of Environmental Conservation

BY:

Timothy P. Walsh, MPA, PE Regional Director - Region 8

CONSENT BY RESPONDENT

R8-20240108-1

Respondent, **Town of Springwater** hereby consents to the issuance of the foregoing order without further notice, waives its right to a hearing herein, and agrees to be bound by the terms, provisions, and conditions contained herein.

Town of Springwater

| By [Signature]: | |
|-----------------|--|
| Name [Print]: | |
| Title: | |
| Date: | |
| Email: | |

Acknowledgment STATE OF NEW YORK)) ss: COUNTY OF)

On the ______ day of ______, in the year _____, before me, the undersigned, personally appeared ______, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public

If you are unable to secure notarization, you must sign the statement below. In signing this document, I acknowledge under penalty of perjury that I understand the contents and purpose of this document; the signature above is my own and I signed willingly. I have also submitted state-issued identification verifying my identity. I am aware that any false statement made herein is punishable as a class A misdemeanor pursuant to section 210.45 of the Penal Law of the State of New York.

Signature

Printed name

Standard Provisions

Access. For the purpose of monitoring or determining compliance with this Order, employees and agents of the Department shall be provided access to any facility, site, or records owned, operated, controlled or maintained by Respondent, in order to inspect and/or perform such tests as the Department may deem appropriate, to copy such records, or to perform any other lawful duty or responsibility.

Binding Effect. The provisions, terms, and conditions of this Order shall be deemed to bind Respondent, its heirs, its employees, servants, agents, successors and assigns, and all persons, firms, and corporations acting subordinate thereto.

<u>Communications.</u> Except as otherwise specified in this Order, any reports, submissions, and notices herein required shall be made to the Regional Director of the Region 8 office of the Department, located at 6274 East Avon-Lima Road, Avon, New York 14414.

Default of Payment. The penalty assessed in the Order on Consent constitutes a debt owed to the State of New York. Failure to pay the assessed penalty, or any part thereof, in accordance with the schedule contained in the Order on Consent, may result in referral to the New York State Attorney General for collection of the entire amount owed (including the assessment of interest, and a charge to cover the cost of collecting the debt), or referral to the New York State Department of Taxation and Finance, which may offset by the penalty amount any tax refund or other monies that may be owed to you by the State of New York. Any suspended and/or stipulated penalty provided for in this Order on Consent will constitute a debt owed to the State of New York when and if such penalty becomes due.

Effective Period of this Order and Termination. This Order shall take effect when it is signed by the Commissioner of the Department or the Commissioner's designee and shall expire when all the requirements imposed by the Order are completed to the Department's satisfaction.

Entirety of Order. The provisions of this Order constitute the complete and entire Order issued to the Respondent, concerning resolution of the violations identified in this Order. Terms, conditions, understandings or agreements purporting to modify or vary any term hereof shall not be binding unless made in writing and subscribed by the party to be bound, pursuant to the "Modifications" provision. No informal oral or written advice, guidance, suggestion or comment by the Department regarding any report, proposal, plan, specification, schedule, comment or statement made or submitted by the Respondent shall be construed as relieving the Respondent of his/her obligations to obtain such formal approvals as may be required by this Order.

Failure, Default, and Violation of Order. The failure of Respondent to comply with any provision of this Order shall constitute a default and a failure to perform an obligation under this Order and shall be deemed to be a violation of both this Order and the ECL. In addition, Respondent's failure to comply fully and in timely fashion with any provision, term, or condition of this Order shall constitute a default and a failure to perform an obligation under the adefault and a failure to perform an obligation with any provision, term, or condition of this Order shall constitute a default and a failure to perform an obligation under this Order and under the ECL and shall constitute sufficient grounds for revocation of any permit, license, certification, or approval issued to the Respondent by the Department.

Force Majeure. If Respondent cannot comply with a deadline or requirement of this Order on Consent, because of natural disaster, federal or state declared national or state emergency based on an epidemic or pandemic, war, terrorist attack, strike, riot, judicial injunction, or other, similar unforeseeable event which was not caused by the negligence or willful misconduct of Respondent and which could not have been avoided by the Respondent through the exercise of due care, Respondent shall apply in writing to the Department within a reasonable time after obtaining knowledge of such fact and request an extension or modification of the deadline or requirement. Respondent shall include in such application the measures taken by Respondent to prevent and/or minimize any delays. Failure to give such notice constitutes a waiver of any claim that a delay is not subject to penalties. Respondent shall have the burden of proving that an event is a defense to a claim of non-compliance with this Order on Consent pursuant to this subparagraph.

Indemnification. Respondent shall indemnify and hold the Department, the State of New York, and their representatives, employees, agents and contractors harmless for all claims, suits, actions, damages and costs of every nature and description arising out of or resulting from the fulfillment or attempted fulfillment of this order by the Respondent, its employees, servants, agents, successors (including successors in title) and assigns.

Modifications. No change or modification to this Order will become effective except as specifically set forth in writing and approved by the Commissioner or a duly authorized representative. All modification requests shall be submitted in writing to the Commissioner, or his/her designee. All modification requests shall include the case number, the named Respondent, and an explanation for the request. Any requests to modify a milestone date must be submitted to the Department prior to the milestone date and include a justification for the requested extended timeframe.

<u>Multiple Respondents.</u> If more than one Respondent is a signatory to this Order, use of the term "Respondent" in these Standard Provisions shall be deemed to refer to each Respondent identified in the Order.

<u>Not a Permit or Permit Modification.</u> This Order on Consent is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Unless otherwise allowed by statute or regulation, Respondent is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits. Respondent's compliance with this Order on Consent shall be no defense to any action commenced pursuant to any laws, regulations, or permits, except as set forth herein.

Reservation of Rights. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating or in any way affecting any right of the Department to seek natural resource damages from Respondent or others; or to directly perform, to engage others to perform on its behalf, or to direct others including Respondent to perform, any additional measures that are authorized by law to protect human health, safety or the environment, including the summary abatement powers of the Department, either at common law or as granted pursuant to statute or regulation.

<u>Scope of Settlement and Violations Addressed.</u> This Order shall be in full settlement of all claims for civil and administrative penalties that have been or could be asserted by the Department against Respondent, their trustees, officers, employees, successors and assigns for the above-referenced violations. This Order shall not be construed as being in settlement of events regarding which the Department lacks knowledge or which occur after the effective date of this Order.

Service. If Respondent is represented by an attorney with respect to the execution of this Order, service of a duly executed copy of this Order upon Respondent's attorney by ordinary mail or email shall be deemed good and sufficient service.

SCHEDULE OF COMPLIANCE

- 1. Within 30 days from the effective date of the Order, Respondent must submit to the Department an engineering report for the addition of the new heating and air circulation units for the Orenco system.
- 2. Within 60 days from the effective date of the Order, Respondent must submit to the Department, for the Department's review and approval, an engineering report that:
 - a. demonstrates that the performance of the facility as constructed can comply with all final Permit limits and/or, where it is unable to comply with final Permit limits, detail all corrective actions to be taken so that the facility will comply with all final Permit limits and requirements;
 - b. includes an implementation schedule of the corrective actions to be taken so that the facility will comply with all final Permit limits and requirements;
 - c. includes plans for the construction of an effluent sampling building at the manhole adjacent to Kellogg Road to allow for year-round effluent sampling at this location; and
 - d. includes an implementation schedule of the plans for the construction of an effluent sampling building at the manhole adjacent to Kellogg Road to allow for year-round effluent sampling at this location.
- 3. Within 60 days from the effective date of the Order, Respondent must submit to the Department:
 - a. documentation demonstrating that it has obtained all necessary easements between the Town and property owners that authorize Sanitary Collection System staff access to the Town owned grinder pumps, laterals, pump stations, and Town owned septic tanks; or
 - b. where Respondent is unable to secure a necessary easement, provide documentation to the Department, for the Department's review, demonstrating the efforts made by the Respondent to secure a necessary easement. The Department, at its sole discretion, will notify Respondent in writing as to what, if any, further actions must be taken in attempting to secure a necessary easement; and
 - c. where Respondent is unable to secure a necessary easement, a written plan as to the actions Respondent will take to obtain the necessary easement as the properties where easements have not been obtained are transferred to new owners.

EXHIBIT A

EXHIBIT A

NYS Department of Environmental Conservation

Tax Information Form and Statewide Offset Program Notice

** FORM TO BE DESTROYED AFTER PAYMENT IS MADE **

In reference to the debt to the State of New York

- memorialized in document number
- signed by Respondent ______
- on this date ______
- in the amount of \$

State agencies may refer past-due accounts to a private collection agency or the New York State Attorney General's Office. Further, Section 171-f of the State Tax Law authorizes State agencies to certify a past-due legally enforceable debt to the New York State Department of Taxation and Finance, for collection by offset of tax overpayments or other payments due from the State. In addition, State agencies are authorized to charge a collection fee, up to 22 percent of the outstanding debt; on accounts that are more than 90 days past due.

This form serves to notify you that the above referenced debt may be certified to the Department of Taxation and Finance for offset if not timely paid. The Department of Taxation and Finance is authorized, by law to collect your past-due debt through the offset of certain State and tax Refunds and other State payments.

You have the right to present written evidence, or to appear at a conference with a representative of this agency to present oral or written evidence in support of a defense to this certification. However, you may not challenge the underlying debt at that time, nor reargue any issue which was, or could have been previously heard.

Defenses that would be acceptable include (1) the debt has been paid, (2) you are not the person identified as the debtor in this notice, (3) the total amount owed is incorrect, (4) a deferred payment agreement is in effect and payments have been paid as agreed, (5) the debt has been discharged in bankruptcy, or (6) the debt is currently in bankruptcy.

Tax Identification Number

Social Security Number _____ -- ____ -- ____ -- ____ ___ ___

Employer Identification Number _____ -- ____ ___ ___ ___ ____ ____

One copy to be retained by New York State Department of Environmental Conservation.

One copy to be retained by the above referenced Respondent.

APPENDIX C PLANT DATA

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| fl to Effl | NH3 | 56.6% | 60.5% | 45.0% | 25.7% | 48.8% | 69.6% | 60.5% | 51.2% | 60.0% | 45.5% | 63.8% | 92.8% | 58.5% | 74.5% | 84.7% | 88.7% | 81.0% | 67.4% | 78.6% | 74.1% | 7.9% | 71.7% | 58.8% | 54.5% | 7.9% | 61.7% | 92.8% |
| % Removal from Infl to Effl | TSS | 73.3% | 91.1% | 81.7% | 72.9% | 79.4% | 95.9% | 85.7% | 72.9% | 80.5% | 86.3% | 74.8% | 83.6% | -1.6% | 90.9% | 96.3% | 97.1% | 94.8% | 92.4% | 88.7% | 92.7% | 95.3% | 95.4% | 90.0% | 87.4% | -1.6% | 83.2% | 97.1% |
| % Remov | BOD | 65.7% | 92.5% | 92.9% | 93.7% | 86.1% | 83.6% | 78.8% | 88.8% | 74.4% | 67.9% | 80.6% | 91.8% | 94.1% | 93.2% | 95.2% | 95.1% | 92.9% | 90.0% | 94.8% | 92.5% | 89.6% | 94.8% | 90.8% | 96.4% | 65.7% | 88.2% | 96.4% |
| to Effl | NH3 | | | | | | | | | | | | | | | | | | 62.2% | | | -6.1% | 59.5% | | 46.8% | -6.1% | 40.6% | 62.2% |
| % Removal from EQ to Effl | TSS | | | | | | | | | | | | | | | | | | 69.0% | | | 83.7% | 69.7% | | 42.9% | 42.9% | 66.3% | 83.7% |
| % Remova | BOD | | | | | | | | | | | | | | | | | | 80.9% | | | 76.4% | 74.6% | | 84.1% | 74.6% | 79.0% | 84.1% |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | FECAL | 860,000 | 52,000 | 250,000 | 570,000 | 260,000 | 59,000 | 220,000 | 650,000 | 580,000 | 620,000 | 200,000 | 580,000 | 23,000 | 220,000 | 330,000 | 4,700 | 4,500 | 100 | 68,000 | 9,000 | 100 | 330 | 320 | 1,560 | 100 | 231775 | 860000 |
| | PHOS | | | | | | | | | | | | | | | | 9.3 | | 8.6 | 8.5 | 8.4 | 8.6 | L'L | 7 | 7.4 | 7.0 | 8.2 | 9.3 |
| Effluent | NH3 | 23 | 17 | 22 | 26 | 21 | 14 | 15 | 20 | 18 | 18 | 17 | 1.8 | 17 | 13 | 9.9 | 8.6 | 11 | 14 | 12 | 14 | 35 | 15 | 21 | 25 | 1.8 | 16.9 | 35.0 |
| | TSS | 32 | 25 | 17 | 38 | 35 | 9.8 | 33 | 46 | 41 | 26 | 53 | 23 | 65 | 39 | 6.7 | 12 | 12 | 13 | 34 | 11 | 5.7 | 8.8 | 13 | 24 | 5.7 | 26.0 | 65.0 |
| | BOD | 120 | 21 | 15 | 12 | 39 | 77 | 53 | 36 | 110 | 61 | 99 | 18 | 19 | 38 | 11 | 17 | 22 | 17 | 17 | 30 | 26 | 33 | 34 | 27 | 11.0 | 38.3 | 120.0 |
| anks | NH3 | | | | | | | | | | | | | | | | | | 14.0% | | | 13.2% | 30.2% | | 14.5% | 13.2% | 18.0% | 30.2% |
| ptic Ta | ~ | | | | | | | | | | | | | | | | | | 1 | | | 13 | | | | | | |
| % Removal in Septic Tanks | TSS | | | | | | | | | | | | | | | | | | 75.3% | | | 70.8% | 84.7% | | 77.9% | 70.8% | 77.2% | 84.7% |
| % Rem | BOD | | | | | | | | | | | | | | | | | | 47.6% | | | 56.0% | 79.7% | | 77.6% | 47.6% | 65.2% | 79.7% |
| | NH3 | | | | | | | | | | | | | | | | | | 37 | | | 33 | 37 | | 47 | 33.0 | 38.5 | 47.0 |
| EQ TANK | TSS | | - | | | | | | | | | | | | - | | | | 42 | | - | 35 | 29 | | 42 | 29.0 | 37.0 | 42.0 |
| | BOD | | - | | | | | | | | | | | | - | | | | 89 | | - | 110 | 130 | | 170 | 89.0 | 124.8 | 170.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NH3 | 53 | 43 | 40 | 35 | 41 | 46 | 38 | 41 | 45 | 33 | 47 | 25 | 41 | 51 | 43 | 76 | 58 | 43 | 56 | 54 | 38 | 53 | 51 | 55 | 25.0 | 46.1 | 76.0 |
| Influent | TSS | 120 | 280 | 93 | 140 | 170 | 240 | 230 | 170 | 210 | 190 | 210 | 140 | 64 | 430 | 180 | 410 | 230 | 170 | 300 | 150 | 120 | 190 | 130 | 190 | 64.0 | 198.2 | 430.0 |
| Infl | BOD | 350 | 280 | 210 | 190 | 280 | 470 | 250 | 320 | 430 | 190 | 340 | 220 | 320 | 560 | 230 | 350 | 310 | 170 | 330 | 400 | 250 | 640 | 370 | 260 | 170.0 | 342.5 | 760.0 |
| | | 1/3/2022 | 1/17/2022 | 2/1/2022 | 2/15/2022 | 3/1/2022 | 3/15/2022 | 4/4/2022 | 4/18/2022 | 5/2/2022 | 5/16/2022 | 6/1/2022 | 6/15/2022 | 7/5/2022 | 7/19/2022 | 8/1/2022 | 8/15/2022 | 9/1/2022 | 9/14/2022 | 10/3/2022 | 10/17/2022 | 11/1/2022 | 11/15/2022 | 12/5/2022 | 12/19/2022 | MIN | AVG | MAX |

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| o Effl | NH3 | 42.0% | 30.4% | 58.5% | 54.4% | 52.3% | 44.4% | -25.8% | 78.5% | 65.1% | 53.1% | 49.1% | 59.6% | 74.7% | 55.0% | 68.6% | 47.3% | 61.7% | 59.1% | 54.4% | -25.8% | 51.7% | 78.5% | |
|-----------------------------|-------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|-----------|----------|-------|---------|-------|
| % Removal from Infl to Effl | | | | | | | | _ | - | | _ | | | | | | | | | | | | | |
| noval fro | TSS | 80.6% | 78.0% | 93.0% | 75.0% | 92.2% | 76.4% | 83.0% | 77.3% | 60.0% | 89.1% | 80.9% | 87.7% | 93.3% | %6'06 | 81.8% | 75.9% | 86.1% | 86.7% | 88.1% | 60.0% | 82.9% | 93.3% | |
| % Ren | BOD | 93.8% | 92.7% | 89.3% | 87.6% | 87.9% | 91.2% | 81.8% | 90.5% | 94.1% | 93.5% | 89.7% | 87.7% | 53.3% | 95.3% | 84.8% | 72.2% | 87.5% | 94.2% | 90.2% | 53.3% | 87.2% | 95.3% | |
| Q to Effl | NH3 | 46.3% | 31.9% | 34.6% | 39.5% | 32.3% | 44.4% | -30.0% | 34.9% | 66.7% | 38.8% | 48.2% | 54.9% | | 76.9% | 63.6% | 43.1% | 53.8% | 52.6% | 50.0% | -30.0% | 43.5% | 76.9% | 47.8% |
| % Removal from EQ to Effl | TSS | -75.0% | 37.7% | 69.8% | 51.0% | 64.1% | 42.2% | 12.8% | -9.7% | 56.7% | 56.1% | 20.0% | 38.6% | | 51.2% | 65.4% | 16.3% | 34.7% | 55.6% | 31.1% | -75.0% | 34.4% | 69.8% | 44.0% |
| % Remov | BOD | 82.5% | 80.6% | 80.0% | 75.9% | 82.3% | 84.7% | 74.2% | | 91.9% | 88.6% | 88.9% | 82.7% | | 88.2% | 77.6% | 68.0% | 78.9% | 78.3% | 80.0% | 68.0% | 81.4% | 91.9% | |
| [| FECAL | 65,000 | 1,200 | 1,200 | 680 | 2,700 | 5,500 | 300,000 | 450,000 | 20,000 | 290,000 | 130,000 | 260,000 | 540,000 | 90,000 | 180,000 | 250,000 | 650,000 | 11,000 | 520,000 | | | | 1 |
| | SOHG | 7 (| 6.4 | 5.5 | 9 | 7.3 | 7.2 | 4.9 3 | 5.9 4 | 6.8 2 | 7.1 2 | 938 1 | 11 2 | 2.7 5 | 1.9 9 | 8.1 1 | 1.5 2 | 8 6 | 7.7 | 8.7 5 | | | | |
| Effluent | NH3 | 29 | 32 | 17 | 26 | 21 | 25 | 39 | 28 | 15 | 30 | 29 | 23 | 20 | 6 | 16 | 29 | 18 | 18 | 26 | 0.0 | 23.7 | 39.0 | |
| E | TSS | 35 | 33 | 16 | 25 | 14 | 26 | 34 | 34 | 52 | 25 | 44 | 27 | 18 | 20 | 18 | 41 | 32 | 16 | 31 | 14.0 | 28.5 | 52.0 | |
| | BOD | 21 | 33 | 30 | 41 | 23 | 23 | 31 | 36 | 22 | 24 | 30 | 38 | 210 | 20 | 47 | 64 | 40 | 26 | 54 | 20.0 | 42.8 | 210.0 | |
| nks | NH3 | -8.0% | -2.2% | 36.6% | 24.6% | 29.5% | 0.0% | 3.2% | 66.9% | -4.7% | 23.4% | 1.8% | 10.5% | | -95.0% | 13.7% | 7.3% | 17.0% | 13.6% | 8.8% | -95.0% | 8.2% | 66.9% | 18.4% |
| % Removal in Septic Tanks | TSS N | | | 77.0% 36 | _ | 78.3% 29 | 59.1% 0. | _ | 79.3% 66 | 7.7% -4 | 75.2% 23 | 76.1% 1. | | | 81.4% -95 | | 71.2% 7. | 78.7% 17 | _ | 82.7% 8. | 36- %2.7 | | | 18 |
| moval in | | 88.9% | 64.7% | | ه 49.0% | | | 6 80.5% | 79. | | | | %0.0% | | | 6 47.5% | | | %0.0% | _ | | 69.3% | % 88.9% | |
| % Re | BOD | 64.7% | 62.2% | 46.4% | 48.5% | 31.6% | 42.3% | 29.4% | | 27.0% | 43.2% | 6.9% | 29.0% | | 60.5% | 32.3% | 13.0% | 40.6% | 73.3% | 50.9% | 6.9% | 41.3% | 73.3% | |
| | NH3 | 54 | 47 | 26 | 43 | 31 | 45 | 30 | 43 | 45 | 49 | 56 | 51 | × | 39 | 44 | 51 | 39 | 38 | 52 | 26.0 | 43.5 | 56.0 | |
| EQ TANK | TSS | 20 | 53 | 53 | 51 | 39 | 45 | 39 | 31 | 120 | 57 | 55 | 44 | × | 41 | 52 | 49 | 49 | 36 | 45 | 20.0 | 48.8 | 120.0 | |
| | BOD | 120 | 170 | 150 | 170 | 130 | 150 | 120 | × | 270 | 210 | 270 | 220 | х | 170 | 210 | 200 | 190 | 120 | 270 | 120.0 | 184.7 | 270.0 | |
| | NH3 | 50 | 46 | 41 | 57 | 44 | 45 | 31 | 130 | 43 | 64 | 57 | 57 | 79 | 20 | 51 | 55 | 47 | 44 | 57 | 20.0 | 53.6 | 130.0 | |
| | TSS | 180 | 150 | 230 | 100 | 180 | 110 | 200 | 150 | 130 | 230 | 230 | 220 | 270 | 220 | 66 | 170 | 230 | 120 | 260 | 0.66 | 183.1 | 270.0 | |
| Influent | BOD | 340 | 450 | 280 | 330 | 190 | 260 | 170 | 380 | 370 | 370 | 290 | 310 | 450 | 430 | 310 | 230 | 320 | 450 | 550 | 170.0 | 341.1 | 550.0 | |
| | | 1/3/2023 | 1/17/2023 | 2/1/2023 | 2/15/2023 | 3/1/2023 | 3/15/2023 | 4/3/2023 | 4/17/2023 | 5/1/2023 | 5/16/2023 | 6/5/2023 | 6/19/2023 | 7/5/2023 | 7/19/2023 | 8/2/2023 | 8/16/2023 | 9/6/2023 | 9/20/2023 | 10/2/2023 | MIN | AVG | MAX | |

Maintenance Tasks Explained

<u>Visually Inspect Tank Levels</u> - Check the open ends of tanks 3 & 4, observe liquid levels, and ensure that the water is in between the middle two floats and that all floats can move freely.

<u>Check BioTube Effluent Filters; Clean as Required</u> - Remove the biotube filters at the ends of the primary and secondary tanks, place in the biotube wash basin. Clean with a hose if needed and record any unusual build-up, adjust cleaning schedule as needed.

<u>Record Elapsed Time Meters and Event Counters for All Pumps</u> - In the control panel, forward all monthly timer and event counter data to email. Fill out the Monthly Field Maintenance Report.

Inspect Spin Nozzles; Clean as Required - Visually inspect each spin nozzle while in operation, spray with garden hose to remove any solid build-up. If needed, remove nozzles, disassemble and wash (we use an ultrasonic cleaner)

<u>Sample Influent and Effluent Quality Parameters</u> - Pull influent and effluent samples at SPDES designated locations and drop off at Lab.

<u>Confirm and Record Pump Voltages and Amperages</u> - Using a voltage/amperage meter, observe and record the operating voltage/amperage of all pumps.

Inspect Distribution of Effluent in AX-Max Units; Clean as Required - Inspect the filter media in the AxMaxx units. Confirm that the spinner nozzles are evenly distributing the water and note any unusual solid accumulation (i.e. grease, bridging between media). Clean with garden hose if necessary.

<u>Record Scum and Sludge Accumulation in Tanks</u> - Using a sludge judge, record solid accumulation levels in the AxMaxx units.

<u>Flush Distribution Laterals in AX-Max Units</u> - Turn off recirculation pumps, remove all spinners, disassemble the distribution laterals, and clean the interiors with a brush and garden hose. Reassemble, and jog the recirc pump to flush the lines.

Inspect Pumping System Components; Clean as Required - Ensure pumps are off. Remove pumps from their basin, inspect influent screen and clean with hose if needed. Record any unusual build up and adjust inspection schedule as needed.

Replace Lithium Battery in TCOM Control Panel

Inspect and Clean UV System - Turn UV lights to dirty weir off. Switch Effluent flow to a clean weir, isolate weir to be cleaned. Drain the basin, rinse with a hose, gently scrub and use cleaning chems if needed (we generally use CLR and dilute bleach). Rinse weir and drain 2x. Put back in operation according to schedule.

<u>Cleaning of Filter Media in AX-MAX Units</u> - If needed, using the Orenco provided cleaning wand, scrape/spray solids between media vertically from above. The solids will need to be removed by pumping. These solids will need to be removed.

Remove Accumulated Solids from AX-MAX Unit Floors - Remove a section of filter media from a Maxx unit (5-10 mats should be enough). Using a pump, pump solids from the floor of the units using the gap as an access way. This will need to be done in each section of the unit. Use a sludge judge to confirm that solids have been removed. This may take multiple pumps allowing time for solids to settle between passes.

<u>Solids Removal/Pumping of Primary Tanks and EQ Tank</u> - When solids accumulation is approaching the designed limit (we use a max of 50%), remove top scum and bottom sludge as needed. This will likely need to be hired out to a septic service.

Inspect Heater Units for Leaks - Visually inspect the heater units for hydraulic fluid leaks. Repair as needed.

Inspect Heat Distribution Fans; Clean if Necessary - With the fan off, remove the blower assembly and clean if needed.

<u>Check Coolant Levels; Refill if Needed</u> - Using a vacuum pump ensure the coolant level is full in the system.

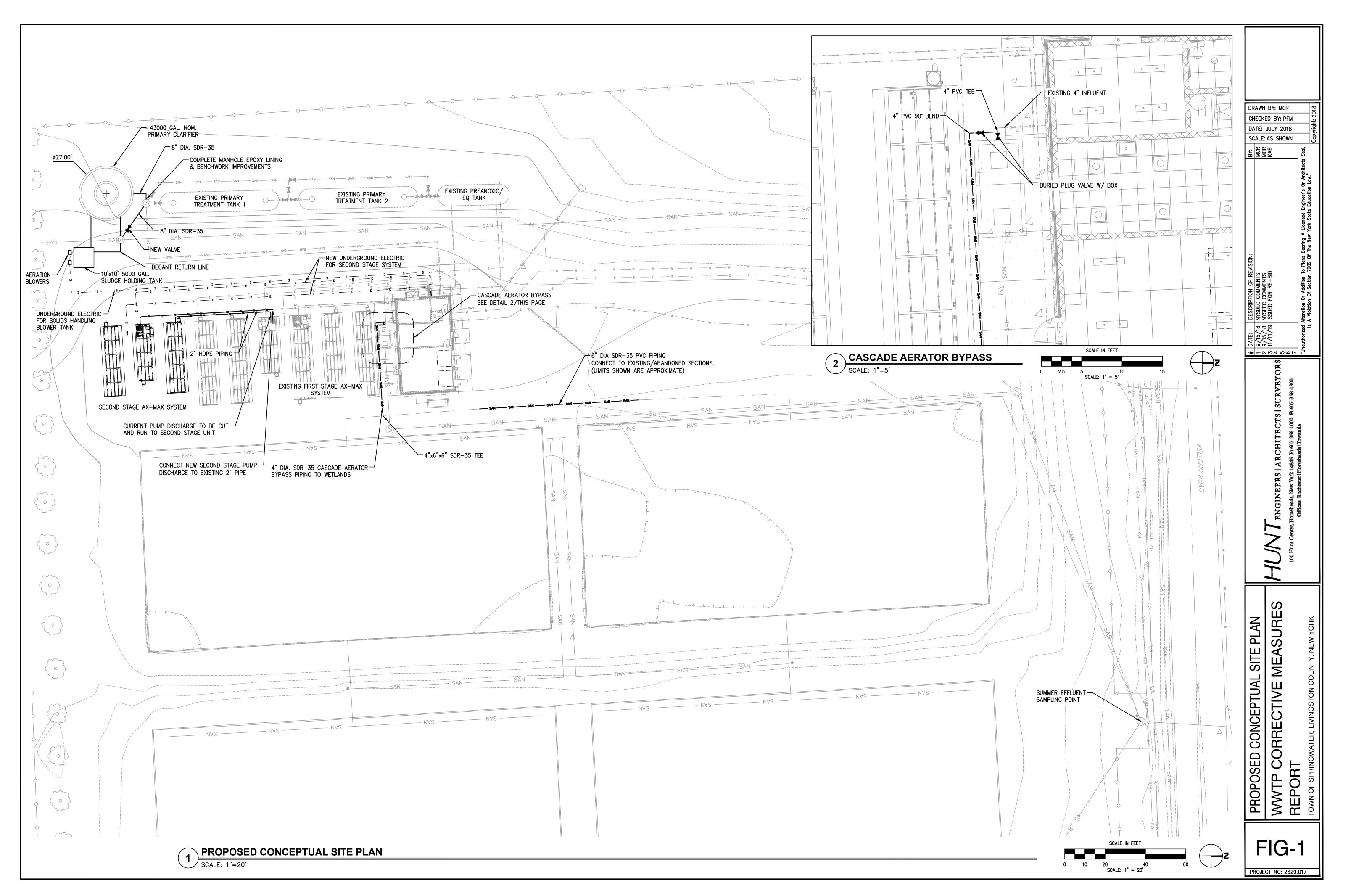
| Scheduled Maintenance Reference Chart | | Recomm | Recommended Activity Period | ty Period | | | С | urrent / | Activity | Current Activity Schedule | 0 |
|---|---------|-----------|------------------------------------|-----------|------------|---------|----------|-----------|----------|----------------------------------|---------------|
| | | | | | | | | | | | |
| Activity | Monthly | Quarterly | Semi-Annually | Annually | Biennially | Daily V | Weekly B | Bi Weekly | Monthly | Quarterly | Semi Annually |
| Visually Inspect Tank and Liquid Levels | L* | * | | | | * | | | | | |
| Check BioTube Effluent Filters; Clean as Required | r* | * | | * | | | | * | | | |
| Record Elapsed Time Meters and Event Counters for All Pumps | * | | | | | | | | * | | |
| Inspect Spin Nozzles; Clean as Required | *2 | | * | | | * | * | | | | |
| Sample Influent and Effluent Quality Parameters | | r* | * | | | | | * | | | |
| Confirm and Record Pump Voltages and Amperages | | r* | | * | | | | | | * | |
| Inspect Distribution of Effluent in AX-Max Units; Clean as Required | | | * | | | | * | | | | |
| Record Scum and Sludge Accumulation in Tanks | | | | * | | | | * | | | |
| Flush Distribution Laterals in AX-Max Units | | | | * | | | | | | * | |
| Inspect Pumping System Components; Clean as Required | | | | * | | | | | | * | |
| Replace Lithium Battery in TCOM Control Panel | | | | | * | | | | | | |
| | | | | | | | | | | | |
| Additional Activities | | | | | | | | | | | |
| Inspect and Clean UV System | * | | | | | | * | | | | |
| Cleaning of Filter Media in AX-MAX Units | N/A | N/A | N/A | N/A | N/A | | | | * | | |
| Remove Accumulated Solids from AX-MAX Unit Floors | N/A | N/A | N/A | N/A | N/A | | | | | | * |
| Solids Removal/Pumping of Primary Tanks and EQ Tank | N/A | N/A | N/A | N/A | N/A | | | | | * | |
| | | | | | | | | | | | |

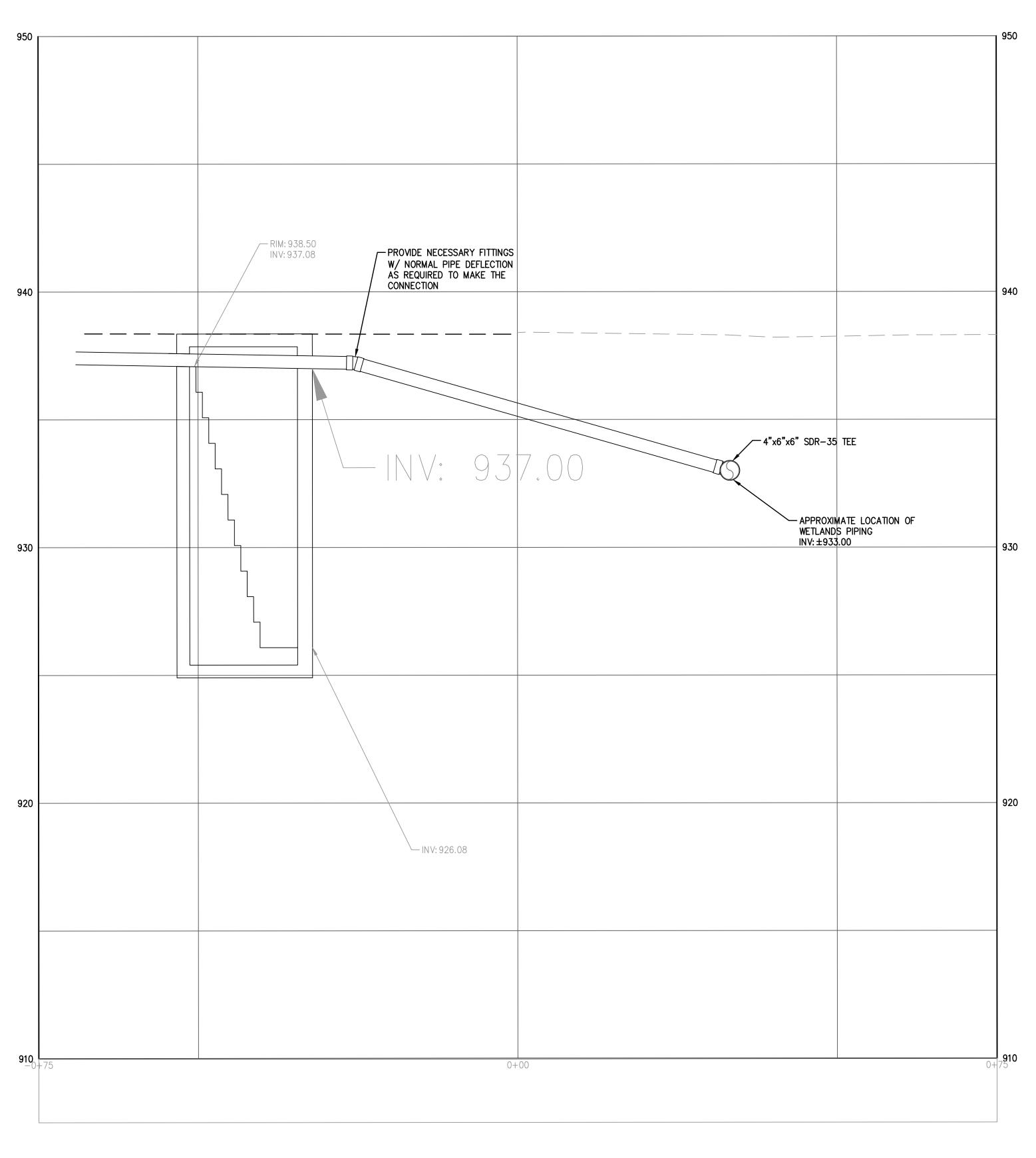
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| Weekly | 1 * | | |
| Heater Boxes Scheduled Maintenance | Inspect Heater Units for Leaks | Inspect Heat Distribution Fans; Clean if Necessary | Check Coolant Levels; Refill if Needed |

Only required the first *Year* of operation
 Only required the first *Quarter* of operation

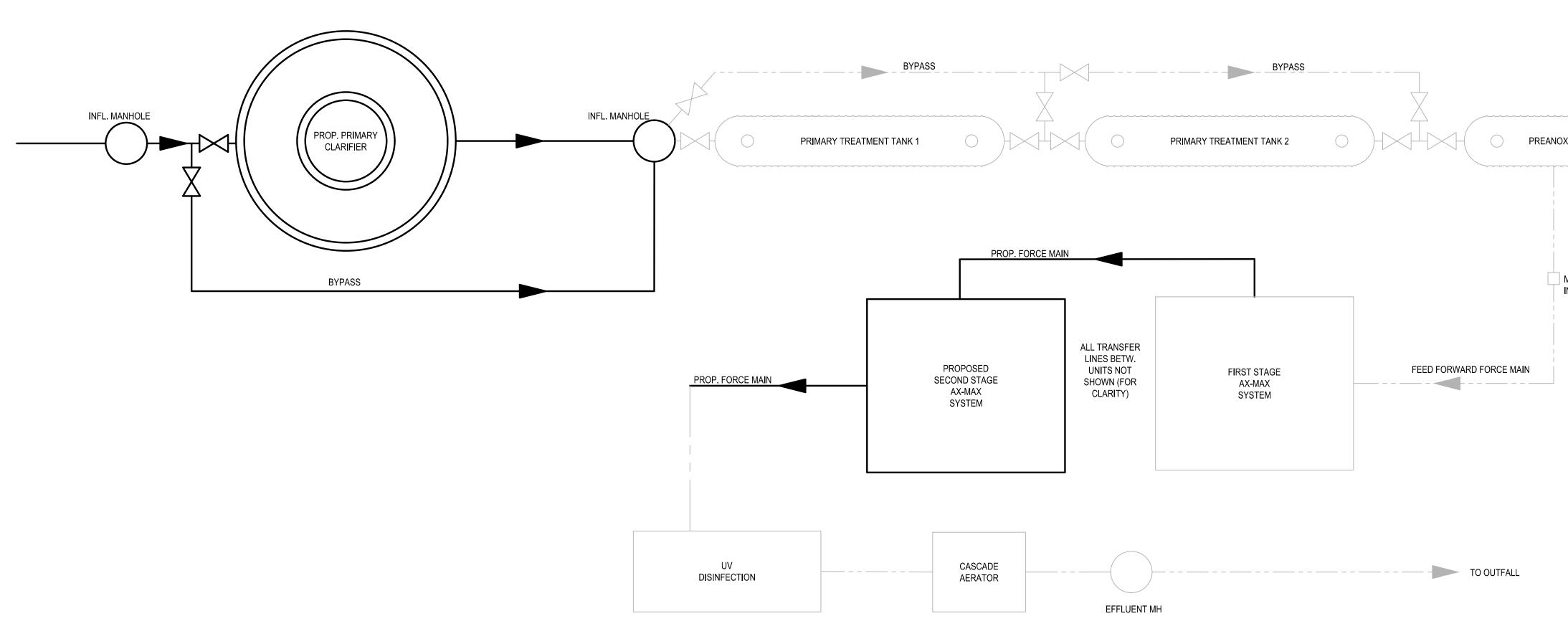
APPENDIX D PROPOSED CONCEPTUAL FIGURES AND COSTING



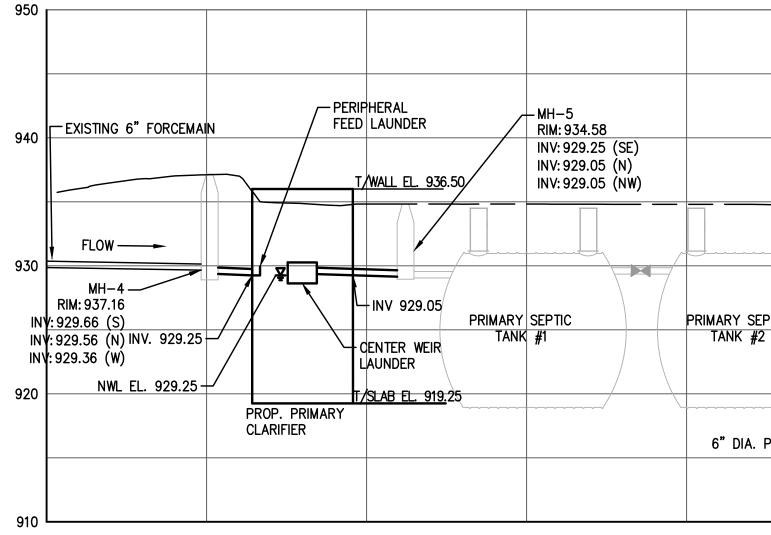




| PRC | | PROPOSED WETI AND BYPASS PROFILE | | # DATE: 1 | DATE: DESCRIPTION OF REVISION: DATE: DESCRIPTION OF REVISION: | DRA | |
|--------|-----|--|---|------------------|--|-------|---|
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| CT NO: | | WWTP CORRECTIVE MEASURES | HUN LENGINEERSIARCHITECTSISURVEYORS | 3 11/11/19 1 | JULY 2 AS SH | BY: M | |
| 2629. | 3-2 | REPORT | 100 Hunt Center, Horseheads, New York 14845 P: 607-358-1000 F: 607-358-1800 | 700 | PFM 2018 OWN | CR | |
| .017 | 2 | | Offices: Rochester Horseheads Towanda | "Unauthorized Al | "Unauthorized Alteration Or Addition To Plans Bearing A Licensed Engineer's Or Architects Seal, | | |
| | | TOWN OF SPRINGWATER, LIVINGSTON COUNTY, NEW YORK | | IS A | violation or section /209 of the New Tork state Education Law. Copyright: 2018 | 018 | |
| | | | | | | | _ |



2 PROPOSED PROCESS FLOW DIAGRAM SCALE: N.T.S.



 PROPOSED HYDRAULDIC PROFILE (1) SCALE: N.T.S.

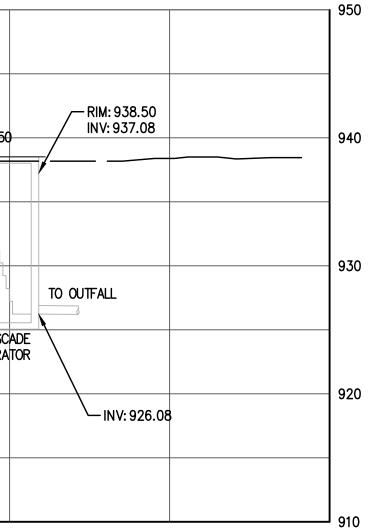
| | | | FIRST_STAGE | PROP | OSED SECOND | K 942.40 | T/SLAB 938.50 | 0 - |
|--------------|------|---|---------------|------|---------------|-----------------|---------------|------------|
| | | | AX_MAX_SYSTEM | | AX-MAX_SYSTEM | UV DISINFECTION | | = |
| | | | | | | | | |
| SEPTIC | FLOW | E7 | | | | | | |
| SEPTIC #2 | TANK | | | | | | CASC | іл I |
| . PLUG VALVE | | FORCEMAIN FROM FLOW EQ TANK PUMPS TO FLOW METER AND TANK | # 1 | | | | | |
| (TYPICAL) | | | | | | | | + |
| | | | | | | | | |

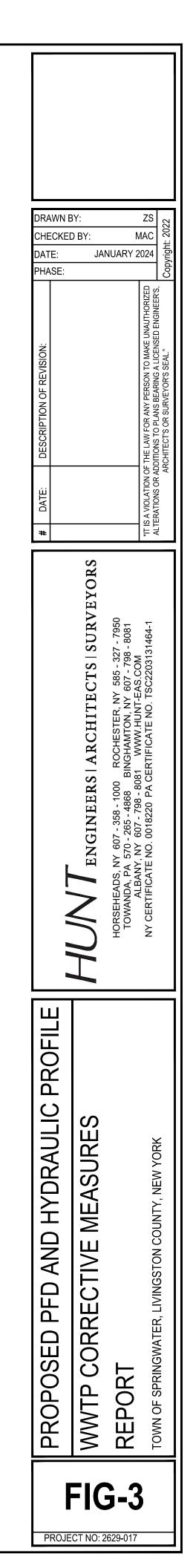
PREANOXIC/EQ TANK

MAG METER

_____ _ _ _ _ _ _ _ _ _ EXIST. FLOW

PROP. FLOW





| | ESTIMATE OF PROBABLE CONSTRUCT | FION COSTS | | | |
|---------------|---|-------------------|---------------------|---------------------|----------------------|
| Project: | Town of Springwater WWTP - Proposed Plant Modifications | HUN | T_{engine} | ERS ARCHITECTS | SURVEYORS |
| Title: | Preliminary Treatment/FOG Holding Tanks and 2nd Stage Orenco | | 2629.017 | | |
| | System | Data | 10/11/00 | 2 /0 /2 4 | |
| Made by: | MARK CHIOVARELLI, PE | | 12/11/23 | 2/8/24 | |
| Checked: | | | 12/13/23 | 2/14/24 | 17714 |
| ITEM NO. | ITEM DESCRIPTION | EST. QNTY. | MEAS. | UNIT PRICE | ITEM PRICE |
| A | Preliminary Clarifier | - | - | - | - |
| 1 | Preliminary Clarifier Tank (27' Diam x 14' H) inclds dewatering | 61 | CY | \$1,700 | \$103,921 |
| 2 | Preliminary Clarifier Equipment Complete | 1 | LS | \$260,750 | \$260,750 |
| 3 | Sludge Pump & Electric | 2 | | \$5,000 | \$10,000 |
| 4 | Aluminum Railing | 85 | LF | \$100 | \$8,482 |
| 5 | Plug Valve & Box | 1 | EA | \$3,500 | \$3,500 |
| 6 | 5,000 GAL Sludge/Scum Aerated Storage Tank (10' W x 10' L x 9' H) | 1 | LS | \$15,000 | \$15,000 |
| 7 B | Aeration System, Blowers & Elect Service | 2 | EA | \$17,000 | \$34,000 |
| <u>В</u> 8 | Second Stage Orenco Biological System | - 1 | LS | - ¢_04,220 | - ¢504.220 |
| - | Second Stage Orenco System, Piping & Electric | - | | \$584,339 | \$584,339 ¢5 100 |
| 9 | Site Piping | 60 | LF | \$85 | \$5,100 |
| С 10 | Connect Existing Wetlands | 130 | - LF | - ¢05 | - ¢11.050 |
| - | 4"/6" SDR35 PVC Piping & Fittings | | EA | \$85 | \$11,050 |
| 11 D | Plug Valve & Box | 2 | EA | \$3,500 | \$7,000 |
| 12 | Misc. Plant Items | - 1 | LS | - ¢1E 000 | - ¢15.000 |
| 12 | Miscellaneous Site Work/Restoration | 2 | EA | \$15,000 | \$15,000 |
| 13 | Composite Sampler (Infl/Effl) UV Room HVAC Improvements | 1 | LS | \$10,000 \$7,500 | \$20,000 \$7,500 |
| 14 | Influent Manhole Rehabilitation | 1 | EA | \$7,500 | \$7,500 |
| 15 | Remove Accumulated FOG in First Tank @ \$400/1000 gals | 16,500 | | \$6,500 | \$6,500 |
| 10 | Remove Accumulated FOG in First Tank @ \$400/1000 gals | 171,400 | GAL | \$0.40 | \$68,560 |
| 17 | | 171,400 | HRs | \$0.40 | \$68,360 \$8,000 |
| 10 | Cleaning the Media (2 staff @ \$50/hr, 10 days) Bypass Pumping | 5 | | \$30 | \$8,000 |
| 20 | Lighting | 2 | days EA | \$7,000 | |
| 20 | Instrumentation modification & start-up | 1 | LS | \$25,000 | \$14,000 \$25,000 |
| E | Collection System Improvements | 1 | - | ş23,000 | φ 2 3,000 |
| 22 | Sanitary Force Main DR 13.5 HDPE (Sections 34, 39, & 46) | 3,110 | LF | \$68 | \$212,724 |
| 22 | Mobilization (3%) | 3,110 | LF | \$00 | \$43,036 |
| 23 | Bonds, Permits, Insurance (2.5%) | 1 | LS | \$45,050 | \$45,050 |
| 24 | Soft Costs (20%) | 1 | 15 | \$286,905 | \$286,905 |
| 25 | | | L3 | \$200, <i>3</i> 03 | <i>φ</i> 200,905 |
| | | CONS | | I SUBSUMMARY | \$1,800,331 |
| | | | | TINGENCY (30%) | \$540,099 |
| | | GEN | | PROJECT COST | \$2,340,430 |
| | | | | | <i>φ</i> 2,340,430 |
| | | | | | |

This Estimate of Probable Project Cost is based on available information and the Engineer's experience and qualifications and represents the Engineer's best judgement as an experienced and qualified professional engineer. Since the Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over competitive bidding or market conditions, the Engineer can not and does not guarantee that the actual total project cost will not exceed the above Estimate of Probable Project Costs.



Environment One Corporation

Pressure Sewer Preliminary Cost and Design Analysis For Springwater, NY

| Prepared For: Hunt Engineering | | |
|---|---|----|
| | Y | US |
| Tel: | | |
| Fax: | | |
| Prepared By: N. Shafarzek | | |
| March 28, 2018 | | |

M:\SSB\SSB Engineering Data\AE Projects\Springwater, NY\Springwater, NY EOne LPS as-built Analysis.EOne

Springwater, NY

Prepared by : N. Shafarzek

On: March 28, 2018

Notes :

Station recommendations preliminary.

Analysis based on drawings and data provided.

GPD values effect retention times only, not line sizing or hydraulics.

Analysis intended to show operation of existing LPS system in Springwater, NY.

SDR17PE should not be used for EOne LPS systems as its pressure rating does not meet the 150 psi we specify. SDR17PE sizes were used in this analysis as we understand it has already been installed and is in operation.

With as-built pipe sizing, velocity is very low in some sections. As a consequence, some sections of forcemain may require regular flushing. Retention times are also quite high in some sections, (up to 17-18 hours) which may necessitate some form of odor control.

| Date | Date:Apr-02-18 | | | | | | recrea | Springwater, NY tion of previous a | Springwater, NY recreation of previous analysis | <u>s</u> | | | | Nichola | Prepared By: Nicholas Shafarzek |
|----------------|------------------------------|-------------------------------|---|--------------------|--------------|-----------------------|---------------------|---------------------------------------|--|-----------|------------------------------|-----------------|---------------------------|----------------|------------------------------------|
| Zone Number | Number Of Cores Connected | Accumulated Total Of Cores | Maximum Number Maximum Of Simultaneous Flow In | Maximum Flow In | Pipe Size | Actual Pipe Inside | Maximum Velocity | Length Of Main | Friction Loss Factor | | Accumulated Friction Loss | Maximum Main | Minimum Pump | Static Head | Total Dynamic |
| Dina diamatare | This Zone | | Operations | GPM | (Inch) | Diameter | (FPS) | This Zone (| (FT/100 FT) 45 | This Zone | (Feet) | Constant for | Elevation Elevation (Feet | | Head (Ft) |
| 1 DD | als used for . | | | 00 | 00 6 | 2 08 | - | 1514 | 12 0.86 | 12 98 | 60 40 | | 1030 | | - 79 40 |
| 2.00 | 9 0 | 0 | 1 m | 1 8 | 2.00 | 2.08 | 3.12 | 647 | | 11.76 | 47.41 | 1030 | 1013 | 17 | 64.41 |
| 3.00 | - | 10 | 4 | 8 4 | 2.00 | 2.08 | 4.16 | 113 | 3.10 | 3.50 | 35.66 | 1015 | 1015 | 0 | 35.66 |
| 4.00 | °, | 3 | N | 52 | 2.00 | 2.08 | 2.08 | 965 | | 8.27 | 89.83 | 1230 | 1192 | 38 | 127.83 |
| 5.00 | ო | 9 | ო | g | 2.00 | 2.08 | 3.12 | 158 | | 2.87 | 81.55 | 1130 | 1120 | 10 | 91.55 |
| 6.00 | - | - | - | 1 | 1.50 | 1.35 | 2.47 | 871 | 1.94 | 16.93 | 95.61 | 1096 | 1048 | 48 | 143.61 |
| 7.00 | 0 | 6 | ю | ŝ | 2.00 | 2.08 | 3.12 | 466 | 1.82 | 8.47 | 78.68 | 1096 | 1090 | 9 | 84.68 |
| 8.00 | ო | 12 | 4 | 44 | 2.00 | 2.08 | 4.16 | 848 | 3.10 | 26.25 | 70.21 | 1030 | 1024 | 9 | 76.21 |
| 9.00 | ო | က | 0 | 23 | 2.00 | 2.08 | 2.08 | 264 | 0.86 | 2.26 | 62.21 | 1000 | 1000 | 0 | 62.21 |
| 10.00 | ო | С | 2 | 22 | 2.00 | 2.08 | 2.08 | 181 | 0.86 | 1.55 | 61.50 | 1000 | 066 | 10 | 71.50 |
| 11.00 | e | 6 | 3 | е В | 2.00 | 2.08 | 3.12 | 215 | 1.82 | 3.91 | 59.94 | 666 | 666 | 0 | 59.94 |
| 12.00 | 9 | 15 | 4 | 4 | 2.00 | 2.08 | 4.16 | 390 | 3.10 | 12.07 | 56.04 | 666 | 666 | 0 | 56.04 |
| 13.00 | ო | 30 | Q | 55 | 3.00 | 3.06 | 2.39 | 1460 | | 10.34 | 43.96 | 1008 | 992 | 16 | 59.96 |
| 14.00 | N | 32 | 9 | 99 | 3.00 | 3.06 | 2.87 | 147 | | 1.46 | 33.62 | 1008 | 1008 | 0 | 33.62 |
| 15.00 | ო | e | N | 22 | 2.00 | 2.08 | 2.08 | 389 | | 3.34 | 55.72 | 1065 | 1065 | 0 | 55.72 |
| 16.00 | 9 | 6 | က | ŝ | 2.00 | 2.08 | 3.12 | 1113 | | 20.22 | 52.38 | 1016 | 1016 | 0 | 52.38 |
| 17.00 | 17 | 68 | 7 | 77 | 3.00 | 3.06 | 3.35 | 1690 | 1.32 | 22.33 | 32.16 | 980 | 626 | - | 33.16 |
| 18.00 | e | က | 2 | 23 | 2.00 | 2.08 | 2.08 | 532 | 0.86 | 4.56 | 31.33 | 988 | 988 | 0 | 31.33 |
| 19.00 | 9 | 6 | S | g | 2.00 | 2.08 | 3.12 | 317 | 1.82 | 5.76 | 26.76 | 985 | 985 | 0 | 26.76 |
| 20.00 | 9 | 15 | 4 | 4 | 2.00 | 2.08 | 4.16 | 361 | 3.10 | 11.17 | 21.00 | 981 | 981 | 0 | 21.00 |
| 21.00 | 18 | 101 | ω | 88 | 4.00 | 3.94 | 2.32 | 1204 | | 6.00 | 9.83 | 964 | 964 | 0 | 9.83 |
| 22.00 | ო | ო | N | ន | 2.00 | 2.08 | 2.08 | 244 | | 2.09 | 28.70 | 982 | 982 | 0 | 28.70 |
| 23.00 | 9 | ൭ | ო | g | 2.00 | 2.08 | 3.12 | 350 | | 6.36 | 26.61 | 626 | 626 | 0 | 26.61 |
| 24.00 | 6 | 18 | 4 | 4 | 2.00 | 2.08 | 4.16 | 371 | | 11.48 | 20.25 | 978 | 978 | 0 | 20.25 |
| 25.00 | 0 | 20 | 2 | 55 | 3.00 | 3.06 | 2.39 | 288 | | 2.04 | 8.77 | 972 | 972 | 0 | 8.77 |
| 26.00 | ო | ო | N | ដ | 2.00 | 2.08 | 2.08 | 339 | | 2.91 | 40.65 | 1209 | 1209 | 0 | 40.65 |
| 27.00 | 9 | 6 | ε | ខ្ល | 2.00 | 2.08 | 3.12 | 1339 | | 24.33 | 37.74 | 1019 | 1019 | 0 | 37.74 |
| 28.00 | ო | 12 | 4 | 4 | 2.00 | 2.08 | 4.16 | 216 | | 6.69 | 13.41 | 993 | 666 | 0 | 13.41 |
| 29.00 | ო | က | N | 23 | 2.00 | 2.08 | 2.08 | 251 | | 2.15 | 32.24 | 970 | 970 | 0 | 32.24 |
| 30.00 | 9 | 6 | e | g | 2.00 | 2.08 | 3.12 | 264 | | 4.80 | 30.09 | 970 | 968 | N | 32.09 |
| 31.00 | ი | 18 | 4 | 44 | 2.00 | 2.08 | 4.16 | 528 | | 16.34 | 25.30 | 970 | 965 | ഹ | 30.30 |
| 32.00 | 7 | 25 | 2 | 55 | 3.00 | 3.06 | 2.39 | 314 | | 2.22 | 8.95 | 970 | 965 | 5 | 13.95 |
| 33.00 | 12 | 69 | 7 | 4 | 4.00 | 3.94 | \$.03 | 744 | | 2.89 | 6.73 | 970 | 956 | 4 | 20.73 |
| 34.00 | B | 173 | 10 | 110 | 6.00 | 2.80 | 1.34 | 667 | 0.11 | 0.76 | 3.83 | 961 | 958 | ო | 6.83 |
| 35.00 | ო | က | ø | 8 | 2.00 | 2.08 | 2.08 | 528 | 0.86 | 4.53 | 19.40 | 1023 | 1004 | 19 | 38.40 |
| 36.00 | വ | ω | ო | g | 2.00 | 2.08 | 3.12 | 650 | 1.82 | 11.81 | 14.88 | 984 | 972 | ₽ | 26.88 |
| 37.00 | ო | က | N | 8 | 2.00 | 2.08 | 2.08 | 657 | 0.86 | 5.63 | 11.73 | 965 | 962 | ო | 14.73 |
| 38.00 | - | 4 | ε | g | 2.00 | 2.08 | 3.12 | 167 | 1.82 | 3.03 | 6.10 | 965 | 958 | ~ | 13.10 |
| 39.00 | 0 | 185 | + | 121 | 6.00 | 5.80 | 1.47 | 2141 | 0.14 | 2.93 | 3.07 | 957 | 957 | 0 | 3.07 |
| 40.00 | ო | ო | N | ដ | 2.00 | 2.08 | 2.08 | 1307 | | 11.21 | 37.59 | 066 | 066 | 0 | 37.59 |
| 41.00 | 4 | 2 | ო | е | 2.00 | 2.08 | 3.12 | 1439 | | 26.15 | 26.38 | 935 | 935 | 0 | 26.38 |
| 42 DD | c | ď | <u>ر</u> | 2 | 000 | | | | | | | | | | 2 |

LPS 2000 -- Ver 1.0

Note: This analysis valid only with the use of E|One positive displacement pumps.

Page 1 of 2

PRELIMINARY PRESSURE SEWER -- PIPE SIZING AND BRANCH ANALYSIS

Date : Apr-02-18

Springwater, NY EOne LPS Analysis.xls

Prepared By: Nicholas Shafarzek

Springwater, NY recreation of previous analysis

54.53 47.97 0.23 0.14 58.41 Dynamic Head (Ft) Total = 150 Head (Feet) Static Constant for inside roughness of "C" 0 0 0 <mark>0</mark> C Minimum Elevation Pump 962 959 940 938 938 Maximum Elevation Main 962 959 940 938 938 Accumulated Friction Loss 58.41 54.53 47.97 (Feet) 0.23 0.14 This Zone Friction 10.45 6.56 47.73 0.10 0.14 Loss This Zone (FT/100 FT) Loss Factor Friction 0.86 3.10 1.82 0.03 0.14 Power: 240 Volt 60 Hz 765 1542 575 301 Of Main 100 Length Maximum Pipe Inside Velocity <u>(1</u>0 (FPS) 3.12 2.08 0.67 1.47 Diameter 2.08 2.08 2.08 5.80 Actual 5.80 2.00 2.00 2.00 6.00 (Inch) Pipe Size 6.00 Number Of Cores Accumulated Maximum Number Maximum Total Of Cores Of Simultaneous Flow In GPM 22 44 <mark>73</mark> Operations ლ ი 4 <mark>ი</mark> SDR17 PE (PE3408) This Zone 17 24 ი ო 209 Connected This Zone Pipe diameters used for : 0230 C Number Zone 43.00 44.00 45.00 46.00 47.00

cement pumps. LPS 2000 -- Ver 1.0

Springwater, NY EOne LPS Analysis.xls PRELIMINARY PRESSURE SEWER -- PIPE SIZING AND BRABCH ANALYSIS

Date : Apr-02-18

Springwater, NY recreation of previous analysis

Prepared By: Nicholas Shafarzek

| Zone | Accumulated | Existing | Gal Per | Length | Capacity | Average | Average | Average | Accumulated |
|-------------------------|----------------|----------------------|------------|---------|----------|----------|---------------|---------------------------|-------------|
| Number | Total Of Cores | Pipe | 100 Lineal | đ | đ | Daily | Fluid Changes | Retention | Retention |
| | This Zone | Size | Feet | Zone | Zone | Flow | Per Day | Time (Hr) | Time (Hr) |
| Pipe diameters used for | | SDR 17 PVC Pipe (US) | Pipe (US) | | | | Gallon | Gallons/Day/Core = 200.00 | 200.00 |
| 1.00 | ო | 2.00 | 17.62 | 1514.00 | 266.71 | 600.00 | 2.25 | × 10.67 | 17.09 |
| 2.00 | 6 | 2.00 | 17.62 | 647.00 | 113.98 | 1800.00 | 15.79 | 1.52 | 6.42 |
| 3.00 | 10 | 2.00 | 17.62 | 113.00 | 19.91 | 2000.00 | 100.47 | 0.24 | 4.90 |
| 4.00 | ო | 2.00 | 17.62 | 965.00 | 170.00 | 600.00 | 3.53 | 6.80 | 17.06 |
| 5.00 | 9 | 2.00 | 17.62 | 158.00 | 27.83 | 1200.00 | 43.11 | ✓ 0.56 | 10.26 |
| 6.00 | | 1.50 | 7.42 | 871.00 | 64.67 | 200.00 | 3.09 | 7.76 | 17.46 |
| 7.00 | ൭ | 2.00 | 17.62 | 466.00 | 82.09 | 1800.00 | 21.93 | | 9.70 |
| 8.00 | 12 | 2.00 | 17.62 | 848.00 | 149.39 | 2400.00 | 16.07 | 1.49 | 8.60 |
| 9.00 | ო | 2.00 | 17.62 | 264.00 | 46.51 | 600.00 | 12.90 | 1.86 | 10.03 |
| 10.00 | ო | 2.00 | 17.62 | 181.00 | 31.89 | 600.00 | 18.82 | 1.28 | 9.44 |
| 11.00 | 6 | 2.00 | 17.62 | 215.00 | 37.88 | 1800.00 | 47.52 | 0.51 | 8.17 |
| 12.00 | 15 | 2.00 | 17.62 | 390.00 | 68.70 | 3000.00 | 43.67 | 0.55 | 7.66 |
| 13.00 | 30 | 3.00 | 38.28 | 1460.00 | 558.83 | 6000.00 | 10.74 | 2.24 | 7.11 |
| 14.00 | 32 | 3.00 | 38.28 | 147.00 | 56.27 | 6400.00 | 113.75 | 0.21 | 4.88 |
| 15.00 | ო | 2.00 | 17.62 | 389.00 | 68.53 | 600.00 | 8.76 | 2.74 | 10.02 |
| 16.00 | 6 | 2.00 | 17.62 | 1113.00 | 196.07 | 1800.00 | 9.18 | 2.61 | 7.28 |
| 17.00 | 68 | 3.00 | 38.28 | 1690.00 | 646.86 | 13600.00 | 21.02 | 1.14 | 4.66 |
| 18.00 | ო | 2.00 | 17.62 | 532.00 | 93.72 | 600.00 | 6.40 | 3.75 | 8.53 |
| 19.00 | ൭ | 2.00 | 17.62 | 317.00 | 55.84 | 1800.00 | 32.23 | 0.74 | 4.78 |
| 20.00 | 15 | 2.00 | 17.62 | 361.00 | 63.60 | 3000.00 | 47.17 | 0.51 | 4.03 |
| 21.00 | 101 | 4.00 | 63.27 | 1204.00 | 761.74 | 20200.00 | 26.52 | 0.91 | 3.52 |
| 22.00 | ო | 2.00 | 17.62 | 244.00 | 42.98 | 600.00 | 13.96 | 1.72 | 7.08 |
| 23.00 | 6 | 2.00 | 17.62 | 350.00 | 61.66 | 1800.00 | 29.19 | 0.82 | 5.36 |
| 24.00 | 18 | 2.00 | 17.62 | 371.00 | 65.36 | 3600.00 | 55.08 | 0.44 | 4.53 |
| 25.00 | 20 | 3.00 | 38.28 | 288.00 | 110.23 | 4000.00 | 36.29 | 0.66 | 4.10 |
| 26.00 | ო | 2.00 | 17.62 | 339.00 | 59.72 | 600.00 | 10.05 | 2.39 | 9.35 |
| 27.00 | ൭ | 2.00 | 17.62 | 1339.00 | 235.89 | 1800.00 | 7.63 | 3.15 | 6.96 |
| 28.00 | 12 | 2.00 | 17.62 | 216.00 | 38.05 | 2400.00 | 63.07 | 0.38 | 3.82 |
| 29.00 | ო | 2.00 | 17.62 | 251.00 | 44.22 | 600.00 | 13.57 | 1.77 | 7.02 |
| 30.00 | б. | 2 00 | 17.62 | 264.00 | 46.51 | 1800.00 | 38 70 | 0 62 | 5 25 |

Springwater, NY EOne LPS Analysis.xls PRELIMINARY PRESSURE SEWER -- PIPE SIZING AND BRABCH ANALYSIS

Date : Apr-02-18

Springwater, NY recreation of previous analysis

Prepared By: Nicholas Shafarzek

| Zone | Accumulated | Existing | Gal Per | Length | Capacity | Average | Average | Average | Accumulated |
|-------------|-----------------------------|----------------------|------------|---------|----------|----------|---------------|--------------------|-------------|
| Number | Total Of Cores | Pipe | 100 Lineal | đ | ō | Daily | Fluid Changes | Retention | Retention |
| | This Zone | Size | Feet | Zone | Zone | Flow | Per Day | Time (Hr) | Time (Hr) |
| ipe diamete | Pipe diameters used for : 5 | SDR 17 PVC Pipe (US) | Pipe (US) | | | | Gallon | Gallons/Day/Core = | 200.00 |
| 31.00 | 18 | 2.00 | 17.62 | 528.00 | 93.02 | 3600.00 | 38.70 | 0.62 | 4.63 |
| 32.00 | 25 | 3.00 | 38.28 | 314.00 | 120.19 | 5000.00 | 41.60 | 0.58 | 4.01 |
| 33.00 | 69 | 4.00 | 63.27 | 744.00 | 470.71 | 13800.00 | 29.32 | 0.82 | 3.44 |
| 34.00 | 173 | 6.00 | 137.15 | 667.00 | 914.77 | 34600.00 | 37.82 | 0.63 | 2.62 |
| 35.00 | က | 2.00 | 17.62 | 528.00 | 93.02 | 600.00 | 6.45 | 3.72 | 7.42 |
| 36.00 | 8 | 2.00 | 17.62 | 650.00 | 114.51 | 1600.00 | 13.97 | 1.72 | 3.70 |
| 37.00 | ო | 2.00 | 17.62 | 657.00 | 115.74 | 600.009 | 5.18 | 4.63 | 7.50 |
| 8.00 | 4 | 2.00 | 17.62 | 167.00 | 29.42 | 800.00 | 27.19 | 0.88 | 2.87 |
| 39.00 | 185 | 4.00 | 137.15 | 2141.00 | 2936.31 | 37000.00 | 12.60 | (06.1 | 1.98 |
| 40.00 | ო | 2.00 | 17.62 | 1307.00 | 230.25 | 600.00 | 2.61 | ✓ 9.21 × | 15.70 |
| 41.00 | 7 | 2.00 | 17.62 | 1439.00 | 253.50 | 1400.00 | 5.52 | (435) | 6.49 |
| 42.00 | ო | 2.00 | 17.62 | 327.00 | 57.61 | 600.00 | 10.42 | 2.30 | 7.72 |
| 43.00 | ൭ | 2.00 | 17.62 | 575.00 | 101.29 | 1800.00 | 17.77 | .35 | 5.41 |
| 44.00 | ო | 2.00 | 17.62 | 765.00 | 134.77 | 600.009 | 4.45 | 5.39 | 9.45 |
| 45.00 | 17 | 2.00 | 17.62 | 1542.00 | 271.65 | 3400.00 | 12.52 | 1.96 | 4.06 |
| 46.00 | 24 | 6.00 | 137.15 | 301.00 | 412.81 | 4800.00 | 11.63 | 2.06 | 2.14 |
| 47 NN | 000 | e OO | 127 15 | | 107 1E | 1100000 | 02 700 | 000 | |

LPS 2000 -- Ver 1.0

Springwater Sanitary Sewer Project SHEET NO. <u>1</u> OF <u>1</u> July, 12 2004

Constructed Wetland Wastewater Treatment Cell Sizing For Continuous Flow System

Design Guidelines used are as outlined in EPAs Manual for "Constructed Wetlands Treatment of Municipal Wastewaters"

1. Determination of Surface Area (As) for both pollutants

As = (Q) (Co) / ALR

Q = Maximum Design Monthly Flow = 40,000 gallons/day

Q = 40,000 gallons/day = 151.42m³/day

Area Loading Rates (ALR)

| BOD | 6glm ² – d to attain 30mg/L effluent |
|-----|--|
| TSS | 20glm ² – d to attain 30mg/L effluent |

Maximum monthly Influent (Co) $*BOD = 167 \text{ mg/L} = 167 \text{ g/m}^3$ Maximum monthly Influent (Co) $TSS = 100 \text{ mg/L} = 100 \text{ g/m}^3$

As = (Q) x (Co) / ALR For BOD, As = $(151.42m^3/day) (167glm^3) / 6 glm^2 - d = 4,214.52m^2$ For TSS, As = $(151.42m^3/day) (100glm^3) / 20glm^2 - d = 757.1m^2$

Using the larger area requirement Surface area for the initial treatment zone $(Asf) = (30\%) (4,214.52 \text{ m}^2) = 1,264.36 = 13,609.52 \text{ ft}^2$ Surface area for the final treatment zone $(Asf) = (70\%) (4,214.52 \text{ m}^2) = 2,950.17 = 31,755.36 \text{ ft}^2$

Total area of a cell = 45364.88 ft²

* BOD quality based on data collected from seven septic tank effluent systems. 167mg/L is the highest quality output data gathered from these systems within the region. Data provided by the NYDEC.

APPENDIX E ORENCO STAGE II CALCULATIONS



AdvanTex[®] Treatment Design Calculations

Project Name: Town of Springwater

Project Location: Springwater, NY

Application: Community

DESIGN

NOTE: The enclosed design uses concentrations averages from DMRs between the dates of February 2022 and July 2023 at which time the plant experienced ventilation, hydraulic and organic loading. Orenco expects the recent upgrades to the ventilation and heating completed late this fall will continue to improve those numbers.

WASTEWATER FLOW RATES

Hydraulic Design Parameters

| Design Average Day Flow (DADF) | 40,000 gal/day |
|--------------------------------|----------------|
| Number of EDUs | 213 EDUs |
| Design Peak Hourly Flow | 122 gal/min |

WASTEWATER STRENGTHS

The waste strengths into a second stage Advantex system were based on average concentrations from the facilities DMRs between the dates of February 2022 – July 2023. For TKN, TN, and NH₃-N restrictive permit limits, the treated effluent should have a minimum temperature of 15°C, with pH ranging from 7.2 to 8, and a residual alkalinity of greater than 100 mg/L maintained throughout the process. This will typically require an alkalinity feed system.

Mass Loading

Equation:

Mass Load (lbs/day) = $(Q)(mg/L)(10 \times 8.34^{-6})$

Where:

Q = Design Average Day Flow mg/L = Wastewater Concentration

Constituent Loading Assumptions DADF, gpd Concentration Primary Treated Load (lbs/day) (mg/L)Biochemical Oxygen Demand (BOD5), mg/L: 40,000 38 12.7 Total Suspended Solids (TSS), mg/L: 9.0 27 40.000 40,000 20 Ammonia (NH₃-N), mg/L: 6.6

TECHNOLOGY SIZING – STAGE TWO

A second stage of AdvanTex treatment can be used cost-effectively for enhanced nitrification. Stage two AdvanTex

systems have the same operation as stage one. With the organic loads reduced, stage two AdvanTex systems provide ideal conditions for nitrifying organicism's to thrive.

Hydraulic Loading Rate

| Equation: | AX sqft = (DADF) / (HLR) |
|--------------|--|
| Where: | AX sqft = Required Textile DADF = Design Average Daily Flow (gpd) |
| Calculation: | HLR = Hydraulic Loading Rate (gpd/sqft) AX sqft = (40,000 gpd) / (75gpd/sqft/d) |
| | AX sqft = 533 sqft |

Organic Loading Rate

| Equation: | AX sqft = (OL) / (OLR) |
|--------------|--|
| Where: | AX sqft = Required Textile OL = Organic Load (Ibs/day) |
| Calculation: | OLR = Organic Loading Rate (lbs/sqft •d) AX sqft = (12.7 lbs/day) / (0.02 lbs/sqft •d) |
| | AX sqft = $(12.7 \text{ lbs/day}) / (0.02 \text{ lbs/sqft} \cdot d)$ AX sqft = 635 sqft |

Ammonia Loading Rate

| Equation: | AX sqft = (AL) / (ALR lbs/sqft •d) |
|--------------|---|
| Where: | AX sqft = Required Textile AL = Ammonia Load (lbs/day) ALR = Ammonia Loading Rate (lbs/sqft •d) |
| Calculation: | AX sqft = (6.6 lbs/day) / (0.008 lbs/sqft •d) AX sqft = 825 sqft |

Summary

| Permit Constituent or Parameter | Load Value (DADF, gpd) | Treated Load (Ibs/day) | AdvanTex Loading Rate | Required Treatment Area |
|--|---------------------------|---------------------------|--------------------------|----------------------------|
| Hydraulic | 40,000 | | 75 gpd/sqft•d | 533 sqft |
| Biochemical Oxygen Demand (BOD5), mg/L: | 40,000 | 12.7 | 0.04 lbs/sqft •d | 318 sqft |
| Ammonia (NH ₃ -N), mg/L: (Winter) | 40,000 | 6.6 | 0.01 lbs /sqft •d | 825 sqft |

ANTICIPATED TREATMENT PERFORMANCE – STAGE TWO

| Biochemical Oxygen Demand (BOD ₅) | | | |
|---|---|--|--|
| Equation: | $BOD_{5e} = BOD_{5i} \times (1 - C_{BR})$ | | |
| Where: | $BOD_{5e} = Effluent BOD_5$ $BOD_{5i} = Influent BOD_5$ $C_{BR} = 0.75 BOD reduction coefficient$ | | |
| Calculation: | BOD _{5e} = 38 mg/L x (1 – 0.75) BOD _{5e} = 10 mg/L | | |
| Ammonia (NH ₃ -N) | | | |
| Equation: | $NH_{3}-N_{e} = NH_{3}-N_{i} \times (1 - C_{NR})$ | | |
| Where: | NH ₃ -N _e = Effluent NH ₃ -N | | |
| | NH ₃ -N _i = Influent NH ₃ -N | | |
| | $C_{NR} = 0.75 \text{ NH}_3 \text{-N}$ reduction coefficient | | |
| Calculation: | NH ₃ -N _e = 20 mg/L x (1 – 0.75) | | |
| | NH ₃ -N _e = 5 mg/L | | |

PERMIT LIMITATIONS

The following table provides the discharge limitations as provided by Hunt Engineers on January 22, 2016.

| Limitations | Permit Concentration mg/L | Anticipated WWTP Final Concentration mg/L | |
|-------------|---------------------------------|--|--|
|-------------|---------------------------------|--|--|

| Biochemical Oxygen Demand (BOD ₅) | 25 | 10 |
|---|----|----|
| Total Suspended Solids (TSS) | 30 | 10 |
| Ammonia (NH ₃ -N), mg/L(Summer): | 5 | 5 |
| Ammonia (NH ₃ -N), mg/L(Winter): | 8 | 5 |