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Affirmative Action/Equal Opportunity Employer

### NPDES PERMIT

#### Issued to

**Permittee:** 

Town of Stonington 152 Elm Street Stonington, CT 06378 **Location Address:** 

Stonington Borough, WPCF 2 High Street Stonington, CT 06378

**Permit ID:** CT0101281 **Design Flow Rate:** 0.66 MGD **Effective Date:** 

Receiving Stream: Stonington Harbor Permit Expires:

#### SECTION 1: GENERAL PROVISIONS

- (A) This permit is reissued in accordance with Section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), and Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended, and Section 402(b) of the Clean Water Act, as amended, 33 USC 1251, et. seq., and pursuant to an approval dated September 26, 1973, by the Administrator of the United States Environmental Protection Agency for the State of Connecticut to administer a N.P.D.E.S. permit program.
- (B) The Town of Stonington, ("Permittee"), shall comply with all conditions of this permit including the following sections of the RCSA which have been adopted pursuant to Section 22a-430 of the CGS and are hereby incorporated into this permit. Your attention is especially drawn to the notification requirements of subsection (i)(2), (i)(3), (j)(1), (j)(6), (j)(8), (j)(9)(C), (j)(10)(C), (j)(11)(C), (D), (E), and (F), (k)(3) and (4) and (1)(2) of Section 22a-430-3. To the extent this permit imposes conditions more stringent than those found in the regulations, this permit shall apply.

### Section 22a-430-3 General Conditions

- (a) Definitions
- (b) General
- (c) Inspection and Entry
- (d) Effect of a Permit
- (e) Duty to Comply
- (f) Proper Operation and Maintenance
- (g) Sludge Disposal
- (h) Duty to Mitigate
- (i) Facility Modifications; Notification
- (j) Monitoring, Records and Reporting Requirements
- (k) Bypass
- (I) Conditions Applicable to POTWs
- (m) Effluent Limitation Violations
- (n) Enforcement
- (o) Resource Conservation
- (p) Spill Prevention and Control
- (q) Instrumentation, Alarms, Flow Recorders
- (r) Equalization

### Section 22a-430-4 Procedures and Criteria

- (a) Duty to Apply
- **(b)** Duty to Reapply
- (c) Application Requirements
- (d) Preliminary Review

- (e) Tentative Determination
- (f) Draft Permits, Fact Sheets
- (g) Public Notice, Notice of Hearing
- (h) Public Comments
- (i) Final Determination
- (j) Public Hearings
- (k) Submission of Plans and Specifications. Approval.
- (I) Establishing Effluent Limitations and Conditions
- (m) Case-by-Case Determinations
- (n) Permit Issuance or Renewal
- (o) Permit or Application Transfer
- (p) Permit Revocation, Denial or Modification
- (q) Variances
- (r) Secondary Treatment Requirements
- (s) Treatment Requirements
- (t) Discharges to POTWs Prohibitions
- (C) Violations of any of the terms, conditions, or limitations contained in this permit may subject the Permittee to enforcement action including, but not limited to, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA.
- (**D**) Any false statement in any information submitted pursuant to this Section of the permit may be punishable as a criminal offense under Section 22a-438 or 22a-131a of the CGS or in accordance with Section 22a-6, under Section 53a-157b of the CGS.
- (E) The Permittee shall comply with Section 22a-416-1 through Section 22a-416-10 of the RCSA concerning operator certification.
- (F) No provision of this permit and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by the Permittee pursuant to this permit will result in compliance or prevent or abate pollution.
- (G) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- (H) An annual fee shall be paid for each year this permit is in effect as set forth in Section 22a-430-7 of the RCSA. As of October 1, 2009 the annual fee is \$ 1722.50.
- (I) This permitted discharge is consistent with the applicable goals and policies of the Connecticut Coastal Management Act (Section 22a-92 of the CGS)

### **SECTION 2: DEFINITIONS**

- (A) The definitions of the terms used in this permit shall be the same as the definitions contained in Section 22a-423 of the CGS and Section 22a-430-3(a) and 22a-430-6 of the RCSA, except for "Composite" and "No Observable Acute Effect Level (NOAEL)" which are redefined below.
- **(B)** In addition to the above, the following definitions shall apply to this permit:
  - "-----" in the limits column on the monitoring tables in Attachment 1 means a limit is not specified but a value must be reported on the DMR, MOR, and/or the ATMR.
  - "Average Monthly Limit" means the maximum allowable "Average Monthly Concentration" as defined in Section 22a-430-3(a) of the RCSA when expressed as a concentration (e.g. mg/l); otherwise, it means "Average Monthly Discharge Limitation" as defined in Section 22a-430-3(a) of the RCSA.
  - "Bi-Weekly" in the context of any sampling frequency, shall mean once every two weeks.
  - "Composite" or "(C)" means a sample consisting of a minimum of eight aliquot samples collected at equal intervals of no less than 30 minutes and no more than 60 minutes and combined proportionally to flow over the sampling period provided that during the sampling period the peak hourly flow is experienced.
  - "Critical Test Concentration" or "(CTC)" means the specified effluent dilution at which the Permittee is to conduct a single-concentration

Aquatic Toxicity Test.

- "Daily Composite" or "(DC)" means a composite sample taken over a full operating day consisting of grab samples collected at equal intervals of no more than sixty (60) minutes and combined proportionally to flow; or, a composite sample continuously collected over a full operating day proportionally to flow.
- "Daily Concentration" means the concentration of a substance as measured in a daily composite sample, or, arithmetic average of all grab sample results defining a grab sample average.
- "Daily Quantity" means the quantity of waste discharged during an operating day.
- "Geometric Mean" is the "n"th root of the product of "n" observations.
- "Infiltration" means water other than wastewater that enters a sewer system (including sewer system and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.
- "Inflow" means water other than wastewater that enters a sewer system (including sewer service connections) from sources such as, but not limited to, roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.
- "Instantaneous Limit" means the highest allowable concentration of a substance as measured by a grab sample, or the highest allowable measurement of a parameter as obtained through instantaneous monitoring.
- "In-stream Waste Concentration" or "(IWC)" means the concentration of a discharge in the receiving water after mixing has occurred in the allocated zone of influence.
- "MGD" means million gallons per day.
- "Maximum Daily Limit" means the maximum allowable "Daily Concentration" (defined above) when expressed as a concentration (e.g. mg/l), otherwise, it means the maximum allowable "Daily Quantity" as defined above, unless it is expressed as a flow quantity. If expressed as a flow quantity it means "Maximum Daily Flow" as defined in Section 22a-430-3(a) of the RCSA.
- "Monthly Minimum Removal Efficiency" means the minimum reduction in the pollutant parameter specified when the effluent average monthly concentration for that parameter is compared to the influent average monthly concentration.
- "NA" as a Monitoring Table abbreviation means "not applicable".
- "NR" as a Monitoring Table abbreviation means "not required".
- "No Observable Acute Effect Level" or "(NOAEL)" means any concentration equal to or less than the critical test concentration in a single concentration (pass/fail) toxicity test, conducted pursuant to Section 22a-430-3(j)(7)(A)(i) of the RCSA, demonstrating 90% or greater survival of test organisms at the CTC.
- "Quarterly" in the context of any sampling frequency, shall mean sampling is required in the months of January, April, July and October.
- "Range During Sampling" or "(RDS)" as a sample type means the maximum and minimum of all values recorded as a result of analyzing each grab sample of; 1) a Composite Sample, or, 2) a Grab Sample Average. For those Permittee with pH meters that provide continuous monitoring and recording. Range During Sampling means the maximum and minimum readings recorded with the continuous monitoring device during the Composite or Grab Sample Average sample collection.
- "Range During Month" or "(RDM)" as a sample type means the lowest and the highest values of all of the monitoring data for the reporting month.
- "Sanitary Sewage" means wastewaters from residential, commercial and industrial sources introduced by direct connection to the sewerage collection system tributary to the treatment works including non-excessive inflow/infiltration sources.
- "Semi-Annual" in the context of any sampling frequency, shall mean the sample must be collected in the months of January and July.

"Twice per Month" in the context of any sampling frequency, mean two samples per calendar month collected no less than 12 days apart.

"ug/l" means micrograms per liter

"Work Day" in the context of a sampling frequency means, Monday through Friday excluding holidays.

#### SECTION 3: COMMISSIONER'S DECISION

- (A) The Commissioner of Energy and Environmental Protection ("Commissioner") has issued a final decision and found continuance of the existing system to treat the discharge will protect the waters of the state from pollution. The Commissioner's decision is based on application #201805890 for permit reissuance received on April 13, 2018 and the administrative record established in the processing of that application.
- (B) The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit, the above referenced application, and all approvals issued by the Commissioner or his authorized agent for the discharges and/or activities authorized by, or associated with, this permit.
- (C) The Commissioner reserves the right to make appropriate revisions to the permit, if required after Public Notice, in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the Federal Clean Water Act or the CGS or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Federal Clean Water Act or CGS or regulations adopted thereunder which are then applicable.

#### SECTION 4: GENERAL LIMITATIONS AND OTHER CONDITIONS

- (A) The Permittee shall not accept any new sources of non-domestic wastewater conveyed to its POTW through its sanitary sewerage system or by any means other than its sanitary sewage system unless the generator of such wastewater; (a) is authorized by a permit issued by the Commissioner under Section 22a-430 CGS (individual permit), or, (b) is authorized under Section 22a-430b (general permit), or, (c) has been issued an emergency or temporary authorization by the Commissioner under Section 22a-6k. All such non-domestic wastewaters shall be processed by the POTW via receiving facilities at a location and in a manner prescribed by the Permittee which are designed to contain and control any unplanned releases.
- (B) No new discharge of domestic sewage from a single source to the POTW in excess of 33,000 gallons per day shall be allowed by the Permittee until the Permittee has notified in writing the Connecticut Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater Section, 79 Elm Street, Hartford, CT 06106-5127 of said new discharge.
- (C) The Permittee shall maintain a system of user charges based on actual use sufficient to operate and maintain the POTW (including the collection system) and replace critical components.
- (D) The Permittee shall maintain a sewer use ordinance that is consistent with the Model Sewer Ordinance for Connecticut Municipalities prepared by the Department of Energy and Environmental Protection. The Commissioner of Energy and Environmental Protection alone may authorize certain discharges which may not conform to the Model Sewer Ordinance.
- (E) No sludge deposits-solid refuse-floating solids oils and grease-scum except for small amounts that may result from the discharge from a grease waste treatment facility providing appropriate treatment and none exceeding levels necessary to protect and maintain all designated uses.
- (F) No color resulting in obvious discoloration of the surface water outside of any designated zone of influence.
- (G) No suspended and settleable solids in concentrations or combinations which would impair the designated uses; none aesthetically objectionable; none which would significantly alter the physical or chemical composition of bottom sediments; none which would adversely impact organisms living in or on the bottom sediment.
- (H) No silt or sand deposits other than of natural origin except as may result from normal road maintenance and construction activity provided all reasonable controls or Best Management Practices are used in such activities and all designated uses are protected and maintained.
- (I) No turbidity other than of natural origin except as may result from normal agricultural, road maintenance, or construction activity, or discharge from a waste treatment facility providing appropriate treatment, dredging activity or discharge of dredged or fill materials provided all reasonable controls and Best Management Practices are used to control turbidity and none exceeding levels necessary to protect and

- maintain all designated uses.
- (J) Taste and odor as naturally occurs and none that would impair any uses specifically assigned to this Class.
- (K) No discharge from the permitted facility shall cause acute or chronic toxicity in the receiving water body beyond any Zone Of Influence (ZOI) specifically allocated to that discharge in this permit.
- (L) The Permittee shall maintain an alternate power source adequate to provide full operation of all pump stations in the sewerage collection system and to provide a minimum of primary treatment and disinfection at the water pollution control facility to insure that no discharge of untreated wastewater will occur during a failure of a primary power source.
- (M) The average monthly effluent concentration shall not exceed 15% of the average monthly influent concentration for BOD<sub>5</sub> and Total Suspended Solids for all daily composite samples taken in any calendar month.
- (N) Any new or increased amount of sanitary sewage discharge to the sewer system is prohibited where it will cause a dry weather overflow or exacerbate an existing dry weather overflow.
- (O) Sludge Conditions
  - (1) The Permittee shall comply with all existing federal and state laws and regulations that apply to sewage sludge use and disposal practices, including but not limited to 40 CFR Part 503.
  - (2) If an applicable management practice or numerical limitation for pollutants in sewage sludge more stringent than existing federal and state regulations is promulgated under Section 405(d) of the Clean Water Act (CWA), this permit shall be modified or revoked and reissued to conform to the promulgated regulations.
  - (3) The Permittee shall give prior notice to the Commissioner of any change(s) planned in the Permittee' sludge use or disposal practice. A change in the Permittee' sludge use or disposal practice may be a cause for modification of the permit.
  - (4) Testing for inorganic pollutants shall follow "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846 as updated and/or revised.
- (P) This permit becomes effective on the 1<sup>st</sup> day of the month following the date of signature of the Commissioner or designee.
- (Q) When the arithmetic mean of the average daily flow from the POTW for the previous 180 days exceeds 90% of the design flow rate, the Permittee shall develop and submit within one year, for the review and approval of the Commissioner, a plan to accommodate future increases in flow to the plant. This plan shall include a schedule for completing any recommended improvements and a plan for financing the improvements.
- (R) When the arithmetic mean of the average daily BOD<sub>5</sub> or TSS loading into the POTW for the previous 180 days exceeds 90% of the design load rate, the Permittee shall develop and submit for the review and approval of the Commissioner within one year, a plan to accommodate future increases in load to the plant. This plan shall include a schedule for completing any recommended improvements and a plan for financing the improvements.
- (S) On or before July 31st of each calendar year the main flow meter shall be calibrated by an independent contractor in accordance with the manufacturer's specifications. The actual record of the calibration shall be retained onsite and, upon request, the Permittee shall submit to the Commissioner a copy of that record.
- (T) The Permittee shall operate and maintain all processes as installed in accordance with the approved plans and specifications and as outlined in the associated operation and maintenance manual. This includes but is not limited to all preliminary treatment processes, primary treatment processes, recycle pumping processes, anaerobic treatment processes, anoxic treatment processes, aerobic treatment processes, flocculation processes, effluent filtration processes or any other processes necessary for the optimal removal of pollutants. The Permittee shall not bypass or fail to operate any of the aforementioned processes without the written approval of the Commissioner.
- (U) The temperature of any discharge shall not increase the temperature of the receiving stream above 83°F, or, in any case, raise the temperature of the receiving stream by more than 4°F beyond the permitted zone of influence. The incremental temperature increase in coastal and marine waters is limited to 1.5°F during the period including July, August and September.

- (V) The Permittee is hereby authorized to accept wastewater flow from the Stonington Mystic Water Pollution Facility in accordance with the following conditions and requirements:
  - (1) The Permittee informed the Commissioner via a letter dated June 17, 2019 that the Stonington Mystic Water Pollution Control Facility ("Mystic WPCF") had violated condition 4(L) included in NPDES permit No.CT0100544 issued to this facility. The Permittee submitted with this letter a report prepared by the engineering firm Wright-Pierce dated May 20, 2019 proposing measures to address the permit violation mentioned in this paragraph.
  - (2) The Permittee requested via the above-mentioned letter, approval from the Commissioner to proceed with the reactivation of the existing wastewater conveyance system that interconnects the Mystic WPCF and the Borough Water Pollution Control Facility ("Borough WPCF"). The Permittee proposes to utilize this interconnection to divert excess wastewater from the Mystic WPCF to the Borough WPCF. The report referenced in the preceding paragraph described the condition of the interconnection system and recommended a series of improvements to reactivate this system.
  - (3) No later than **60 days prior** to the initiation of the diversion of wastewater flows from Mystic WPCF to the Borough WPCF, the Permittee shall provide the Commissioner with the following information:
    - (i) A written plan describing how the flow diversion will be initiated and managed in the long term to account for flow variations at the Mystic and Borough Water Pollution Control Facilities, as well as to protect the treatment process and effluent quality at both facilities.
    - (ii) Written confirmation that all of the recommended improvements included in the above-mentioned report have been completed. Nothing in this section of the permit shall preclude the Commissioner from finding the improvements described in the above-mentioned report inadequate or insufficient, or from requiring the Permittee to implement additional improvements deemed necessary to ensure the adequacy of the Borough WPCF's treatment system to be able to meet final effluent quality requirements listed in this permit.
  - (4) Subsequent to the commissioning of the improvements mentioned in the above-mentioned report, the Borough WPCF is hereby authorized to accept up to 300,000 gallons per day of wastewater flow on a maximum daily basis from the Mystic WPCF. Subsequent to the initiation of this flow diversion, the Permittee must provide DEEP with relevant information and an analysis using no less than 12 months' worth of influent and effluent monitoring data demonstrating that the ability of the Borough WPCF to continue to meet effluent quality requirements listed in this permit has not been negatively impacted.
  - (5) Nothing in this Permit shall preclude the Commissioner from requiring the Permittee to decrease the volume of flow accepted at the Borough WPCF, if effluent quality requirements listed in Section 5 of this permit are not met.
  - (6) The Permittee shall not exceed the flow diversion limits stipulated in this Section of the permit and shown on Table E included herein unless specifically authorized to do so in writing by the Commissioner. All other requirements listed in this permit shall remain in full force and effect.
  - (7) Notification of noncompliance. In the event that the Permittee becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this Section of the permit or of any document required hereunder, the Permittee shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the Commissioner, the Permittee shall state in writing the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and the Permittee shall comply with any dates which may be approved in writing by the Commissioner. Notification by the Permittee shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.
  - (8) Notice to Commissioner of changes. Within fifteen days of the date the Permittee becomes aware of a change in any information submitted to the Commissioner under this Section of the permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the correct or omitted information to the Commissioner.
  - (9) Submission of documents. Any document, other than a DMR, ATMR or MOR required to be submitted to the Commissioner under this Section of the permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

Carlos Esguerra, Sanitary Engineer Department of Energy and Environmental Protection Bureau of Water Protection and Land Reuse Water Planning and Management Division Municipal Wastewater Section 79 Elm Street Hartford, Connecticut 06106-5127

#### SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- (A) The discharge(s) shall not exceed and shall otherwise conform to the specific terms and conditions listed in this permit. The discharge is restricted by, and shall be monitored in accordance with Tables A through G incorporated in this permit as Attachment 1.
- (B) The Permittee shall monitor the performance of the treatment process in accordance with the Monthly Operating Report (MOR) incorporated in this permit as Attachment 2.

### SECTION 6: SAMPLE COLLECTION, HANDLING and ANALYTICAL TECHNIQUES

- (A) Chemical Analysis
  - (1) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved pursuant to the Code of Federal Regulations, Part 136 of Title 40 (40 CFR 136) unless an alternative method has been approved in writing pursuant to 40 CFR 136.4 or as provided in Section 22a-430-3-(j)(7) of the RCSA. Chemicals which do not have methods of analysis defined in 40 CFR 136 or the RCSA shall be analyzed in accordance with methods specified in this permit.
  - (2) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal, as defined in 40 CFR 136 unless otherwise specified.
  - (3) Grab samples shall be taken during the period of the day when the peak hourly flow is normally experienced.
  - (4) Samples collected for bacteriological examination shall be collected between the hours of 11 a.m. and 3 p.m. or at that time of day when the peak hourly flow is normally experienced.
  - (5) The Minimum Levels specified below represent the concentrations at which quantification must be achieved and verified during the chemical analyses for the parameters identified in Attachment 1, Table C. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

<u>Parameter</u>	Minimum Level
Arsenic, Total	0.005 mg/l
Beryllium, Total	0.001 mg/l
Thallium, Total	0.005 mg/l
Mercury, Total	0.0002 mg/l

- (6) The value of each parameter for which monitoring is required under this permit shall be reported to the maximum level of accuracy and precision possible consistent with the requirements of this Section of the permit.
- (7) Effluent analyses for which quantification was verified during the analysis at or below the minimum levels specified in this Section and which indicate that a parameter was not detected shall be reported as "less than x" where 'x' is the numerical value equivalent to the analytical method detection limit for that analysis.
- (8) Results of effluent analyses which indicate that a parameter was not present at a concentration greater than or equal to the Minimum Level specified for that analysis shall be considered equivalent to zero (0.0) for purposes of determining compliance with effluent limitations or conditions specified in this permit.
- (B) Acute Aquatic Toxicity Test
  - (1) Samples for monitoring of Acute Aquatic Toxicity shall be collected and handled as prescribed in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA-821-R-02-012).
    - (a) Composite samples shall be chilled as they are collected. Grab samples shall be chilled immediately following collection. Samples shall be held at 0 6°C until Acute Aquatic Toxicity testing is initiated.

- (b) Effluent samples shall not be dechlorinated, filtered, or, modified in any way, prior to testing for Acute Aquatic Toxicity unless specifically approved in writing by the Commissioner for monitoring at this facility. Facilities with effluent dechlorination and/or filtration designed as part of the treatment process are not required to obtain approval from the Commissioner.
- (c) Samples shall be taken at the final effluent for Acute Aquatic Toxicity unless otherwise approved in writing by the Commissioner for monitoring at this facility.
- (d) Chemical analyses of the parameters identified in Attachment 1, Table C shall be conducted on an aliquot of the same sample tested for Acute Aquatic Toxicity.
  - (i) At a minimum, pH, salinity, total alkalinity, total hardness, and total residual chlorine shall be measured in the effluent sample and, during Acute Aquatic Toxicity tests, in the highest concentration of the test and in the dilution (control) water at the beginning of the test and at test termination. If total residual chlorine is not detected at test initiation, it does not need to be measured at test termination. Dissolved oxygen, pH, and temperature shall be measured in the control and all test concentrations at the beginning of the test, daily thereafter, and at test termination. Salinity shall be measured in each test concentration at the beginning of the test and at test termination.
- (e) Tests for Acute Aquatic Toxicity shall be initiated within 36 hours of sample collection.
- (2) Monitoring for Acute Aquatic Toxicity to determine compliance with the permit condition on Acute Aquatic Toxicity (invertebrate) shall be conducted for 48 hours utilizing neonatal (less than 24 hours old) *Daphnia pulex*.
- (3) Monitoring for Acute Aquatic Toxicity to determine compliance with the permit condition on Acute Aquatic Toxicity (vertebrate) shall be conducted for 48 hours utilizing larval (1 to 14-day old with no more than 24 hours range in age) *Pimephales promelas*.
- (4) Tests for Acute Aquatic Toxicity shall be conducted as prescribed for static non-renewal acute tests in "Methods for measuring the Acute Aquatic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012), except as specified below.
  - (a) For Acute Aquatic Toxicity limits, and for monitoring only conditions, expressed as a NOAEL value, Pass/Fail (single concentration) tests shall be conducted at a specified Critical Test Concentration (CTC) equal to the Aquatic Toxicity limit, (100% in the case of monitoring only conditions), as prescribed in Section 22a-430-3(j)(7)(A)(j) of the RCSA.
  - (b) Organisms shall not be fed during the tests.
  - (c) Synthetic freshwater prepared with deionized water adjusted to a hardness of 50±5 mg/L as CaCO<sub>3</sub> shall be used as dilution water in the tests.
  - (d) Copper nitrate shall be used as the reference toxicant.
- (5) For monitoring only conditions, toxicity shall be demonstrated when the results of a valid pass/fail Acute Aquatic Toxicity indicates less than 90% survival in the effluent at the CTC (100%).

### SECTION 7: RECORDING AND REPORTING REQUIREMENTS

- (A) The Permittee and/or the Signatory Authority shall continue to report the results of chemical analyses and any aquatic toxicity test required above in Section 5 and the referenced Attachment 1 by electronic submission of DMRs under this permit to the Department using NetDMR in satisfaction of the DMR submission requirement of this permit. The report shall include a detailed explanation of any violations of the limitations specified. DMRs shall be submitted electronically to the Department no later than the 15th day of the month following the month in which samples are collected.
  - (1) For composite samples, from other than automatic samplers, the instantaneous flow and the time of each aliquot sample collection shall be recorded and maintained at the POTW.
- (B) Complete and accurate test data, including percent survival of test organisms in each replicate test chamber, LC<sub>50</sub> values and 95% confidence intervals for definitive test protocols, and all supporting chemical/physical measurements performed in association with any aquatic toxicity

test, shall be entered on the Aquatic Toxicity Monitoring Report form (ATMR) and sent to the Bureau of Water Protection and Land Reuse at the address specified below by the 15<sup>th</sup> day of the month following the month in which samples are collected:

ATTN: Municipal Wastewater Monitoring Coordinator Connecticut Department of Energy and Environmental Protection Bureau of Water Protection and Land Reuse Water Planning and Management Division 79 Elm Street Hartford, Connecticut 06106-5127

(C) The results of the process monitoring required above in Section 5 shall be entered on the Monthly Operating Report (MOR) form, included herein as Attachment 2, and reported to the Bureau of Water Protection and Land Reuse. The MOR report shall also be accompanied by a detailed explanation of any violations of the limitations specified. The MOR must be received at the address specified above in Section 7 (B) of this permit by the 15<sup>th</sup> day of the month following the month in which the data and samples are collected.

# SECTION 8: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS, BYPASSES, MECHANICAL FAILURES, AND MONITORING EQUIPMENT FAILURES

- (A) If any Acute Aquatic Toxicity sample analysis indicates toxicity, or that the test was invalid, an additional sample of the effluent shall be collected and tested for Acute Aquatic Toxicity and associated chemical parameters, as described above in Section 5 and Section 6, and the results reported to the Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity) via the ATMR form (see Section 7 (B)) within 30 days of the previous test. These test results shall also be reported on the next month's DMR report pursuant to Section 7 (A). The results of all toxicity tests and associated chemical parameters, valid and invalid, shall be reported.
- (B) If any two consecutive Acute Aquatic Toxicity test results or any three Acute Aquatic Toxicity test results in a twelve month period indicates toxicity, the Permittee shall immediately take all reasonable steps to eliminate toxicity wherever possible and shall submit a report, to the Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity), for the review and written approval of the Commissioner in accordance with Section 22a-430-3(j)(10)(c) of the RCSA describing proposed steps to eliminate the toxic impact of the discharge on the receiving water body. Such a report shall include a proposed time schedule to accomplish toxicity reduction and the Permittee shall comply with any schedule approved by the Commissioner.
- (C) Sewage Right-to-Know Electronic Bypass Reporting
  - (1) Section 22a-430-3(k) of the RCSA shall apply in all instances of bypass including a bypass of the treatment plant or a component of the sewage collection system planned during required maintenance. The Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater, the Department of Public Health, Water Supply Section and Recreation Section, and the local Director of Health shall be notified within 2 hours of the Permittee learning of the event via online reporting in a format approved by the Commissioner. A final incident report shall be submitted to the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater within five days of the Permittee learning of each occurrence of a discharge or bypass of untreated or partially treated sewage via online reporting in a format approved by the Commissioner.

If the online reporting system is nonfunctional, then the Permittee shall notify DEEP via telephone during normal business hours (8:30 a.m. to 4:30 p.m. Monday through Friday) at (860) 424-3704 or after hours to the DEEP Emergency Response Unit at (860) 424-3338 and the Department of Public Health at (860) 509-8000 with the final incident report being submitted online.

- (D) Section 22a-430-3(j) 11 (D) of the RCSA shall apply in the event of any noncompliance with a maximum daily limit and/or any noncompliance that is greater than two times any permit limit. The Permittee shall notify in the same manner as in paragraph C (1) of this Section, the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater Section except, if the online reporting system is nonfunctional and the noncompliance occurs outside normal working hours (8:30 a.m. to 4:30 p.m. Monday through Friday) the Permittee may wait to make the verbal report until 10:30 am of the next business day after learning of the noncompliance.
- (E) Section 22a-430-3(j) 8 of the RCSA shall apply in all instances of monitoring equipment failures that prevent meeting the requirements in this permit. In the event of any such failure of the monitoring equipment including, but not limited to, loss of refrigeration for an auto-sampler or lab refrigerator or loss of flow proportion sampling ability, the Permittee shall notify in the same manner as in paragraph C (1) of this Section, the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater Section except, if the online reporting system is nonfunctional and the failure occurs outside normal working hours (8:30 a.m. to 4:30 p.m. Monday through Friday) the Permittee may wait to make the verbal report until 10:30 am of the

next business day after learning of the failure.

(F) In addition to the reporting requirements contained in Section 22a-430-3(i), (j), and (k) of the Regulations of Connecticut State Agencies, the Permittee shall notify in the same manner as in paragraph C (1) of this Section, the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater concerning the failure of any major component of the treatment facilities which the Permittee may have reason to believe would result in an effluent violation.

This permit is hereby issued on:

Graham J. Stevens
Bureau Chief
Russey of Woter Protection on

Bureau of Water Protection and Land Reuse

# ATTACHMENT 1

Tables A through G



# **TABLE A**

Discharge Serial Number (DSN): 001-1

Wastewater Description: Sanitary Sewage

Monitoring Location Description: Final Effluent

Allocated Zone of Influence (ZOI): 100:1 cfs

In-stream Waste Concentration (IWC): 1 %

FLOW/TIME PASED MONITORING
INSTANTANEOUS PEROPT

DA DA METED		FLOW/TIME BASED MONITORING			INSTANTANEOUS MONITORING		REPORT FORM	Minimum Level		
PARAMETER	Units	Average Monthly Limit	Maximum Daily Limit	Sample Freq.	Sample type	Instantaneous Limit or Required Range 3	Sample Freq.	Sample Type		Analysis See Section 6
Alkalinity	mg/l	NA	NA	NR	NA		Monthly	Grab	MOR	
Biochemical Oxygen Demand (5 day) <sup>1</sup>	mg/l	30	50	Weekly	Daily Composite	NA	NR	NA	DMR/MOR	
Carbonaceous Biochemical Oxygen Demand (5 day)	Mg/l			Monthly	Daily Composite	NA	NR	NA	MOR	
Fecal coliform. See remark (B) below	Colonies per100 ml	NA	NA	NR	NA	260	Weekly	Grab	DMR/MOR	
Enterococci. See remark (C)	Colonies per100 ml	NA	NA	NR	NA	500	Weekly	Grab	DMR/MOR	
Flow	MGD			Continuous <sup>2</sup>	Average Daily Flow	NA	NR	NA	DMR/MOR	
Nitrogen, Ammonia (total as N)	mg/l	NA		Monthly	Daily Composite	NA	NR	NA	DMR/MOR	
Nitrogen, Nitrate (total as N)	mg/l	NA		Monthly	Daily Composite	NA	NR	NA	MOR	
Nitrogen, Nitrite (total as N)	mg/l	NA		Monthly	Daily Composite	NA	NR	NA	MOR	
Nitrogen, Total Kjeldahl	mg/l	NA		Monthly	Daily Composite	NA	NR	NA	MOR	
Nitrogen, Total	mg/l	NA		Monthly	Daily Composite	NA	NR	NA	MOR	
Nitrogen, Total	lbs/day	NA		Monthly	Daily Composite	NA	NR	NA	MOR	
Oxygen, Dissolved	mg/l	NA	NA	NR	NA		Work Day	Grab	MOR	
pH	S.U.	NA	NA	NR	NA	6 - 9	Work Day	Grab	DMR/MOR	
Phosphate, Ortho	mg/l	NA		Monthly	Daily Composite	NA	NR	NA	MOR	
Phosphorus, Total	mg/l	NA		Monthly	Daily Composite	NA	NR	NA	DMR/MOR	

Solids, Settleable	ml/l	NA	NA	NR	NA		Work Day	Grab	MOR	
Solids, Total Suspended <sup>1</sup>	mg/l	30	50	Weekly	Daily Composite	NA	NA	NA	DMR/MOR	
Temperature	°F	NA	NA	NR	NA		Work Day	Grab	MOR	
Turbidity	NTU	NA	NA	NR	NA		Work Day	Grab	MOR	
UV Dose. Year Round. See remark (A)	mW,s/cm <sup>2</sup>	NA	NA	NR	NA	≥30.0	4/Work Day	Grab	DMR/MOR	
UV Transmittance. See remark (A)	%	NA	NA	NR	NA		Lowest daily reading	Grab	MOR	

#### TABLE A – CONDITIONS

#### Footnotes:

#### Remarks:

- (A) Ultraviolet disinfection shall be utilized year-round.
- (B) The geometric mean of the Fecal coliform bacteria values for the effluent samples collected in a period of a calendar month shall not exceed 88 per 100 milliliters.
- (C) The geometric mean of the Enterococci bacteria values for the effluent samples collected in a period of a calendar month shall not exceed 35 per 100 milliliters.



<sup>&</sup>lt;sup>1</sup> The discharge shall not exceed an average monthly 30 mg/l or a maximum daily 50 mg/l for BOD and TSS.

<sup>&</sup>lt;sup>2</sup> The Permittee shall record and report on the monthly operating report the minimum, maximum and total flow for each day of discharge and the average daily flow for each sampling month. The Permittee shall report, on the discharge monitoring report, the average daily flow and maximum daily flow for each sampling month.

<sup>&</sup>lt;sup>3</sup> The instantaneous limits in this column are maximum limits except for UV Dose which is a minimum limit.

# **TABLE B**

Discharge Serial Number (DSN): 001-1		Monitor	ring Location: <b>K</b>			
Wastewater Description: Sanitary Sewage						
Monitoring Location Description: Final Effluent						
Allocated Zone of Influence (ZOI): 100:1 cfs		In-stream Wast	e Concentration (	IWC): 1 %		
		FLOW/TIM	E BASED MONI	ED MONITORING		
PARAMETER	Units	Average Monthly Minimum	Sample Freq.	Sample type		
Biochemical Oxygen Demand (5 day) Percent Removal <sup>1</sup>	% of Influent	85	Weekly	Calculated <sup>2</sup>	DMR	
Solids, Total Suspended Percent Removal <sup>1</sup>	% of Influent	85	Weekly	Calculated <sup>2</sup>	DMR	

### TABLE B – CONDITIONS

## Footnotes:



<sup>&</sup>lt;sup>1</sup> The discharge shall be less than or equal to 15% of the average monthly influent BOD<sub>5</sub> and total suspended solids (Table E, Monitoring Location G).

<sup>&</sup>lt;sup>2</sup> Calculated based on the average monthly results described in Table A. Removal efficiency =  $\frac{Inf.BOD \text{ or TSS}-Effluent BOD \text{ or TSS}}{Inf.BOD \text{ or TSS}} \text{ X 100}$ 

# **TABLE C**

Discharge Serial Number (DSN): 001-1			Monitoring Location: T				
Wastewater Description: Sanitary Sewage							
Monitoring Location Description: Final Ef	fluent (after l	UV Disinfection)					
Allocated Zone of Influence (ZOI): 100:1 cf	`s		In-stream Was	te Concentration (IW	/C): 1 %		
PARAMETER	Units	Maximum Daily Limit	Sampling Frequency	Sample Type	Reporting form	Minimum Level Analysis See Section 6	
Aluminum, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Antimony, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		
NOAEL Static 48Hr Acute D. Pulex <sup>1</sup>	% survival		Quarterly	Daily Composite	ATMR/DMR		
NOAEL Static 48Hr Acute Pimephales <sup>1</sup>	% survival		Quarterly	Daily Composite	ATMR/DMR		
Arsenic, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR	*	
Beryllium, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR	*	
BOD <sub>5</sub>	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Cadmium, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Chromium, Hexavalent	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Chromium, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Chlorine, Total Residual	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Copper, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Cyanide, Amenable	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Cyanide, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Iron, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Lead, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Mercury, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR	*	
Nickel, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Nitrogen, Ammonia (total as N)	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Nitrogen, Nitrate, (total as N)	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Nitrogen, Nitrite, (total as N)	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Phenols, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Phosphorus, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Selenium, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Silver, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Suspended Solids, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		
Thallium, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR	*	
Zinc, Total	mg/l		Quarterly	Daily Composite	ATMR/DMR		

## TABLE C - CONDITIONS

Remarks:  $^1$  The results of the Toxicity Tests are recorded in % survival. The Permittee shall report  $\frac{\%$  survival on the DMR based on criteria in Section 6(B) of this permit.

ATMR – Aquatic Toxicity Monitoring Report

# TABLE D

Discharge Serial Number: 001-1	N	Monitoring Loc	cation: N		
Wastewater Description: Activated Sludge					
Monitoring Location Description:	escription: Each Aeration Unit				
	REPORTING F	ORMAT	INSTANTANEO	REPORTING	
PARAMETER			Sample Frequency	Sample Type	FORM
Oxygen, Dissolved	High & low for eac	h WorkDay	4/WorkDay	Grab	MOR
Sludge Volume Index	WorkDa	ıy	WorkDay	Grab	MOR
Mixed Liquor Suspended Solids	WorkDa	ıy	WorkDay	Grab	MOR

# **TABLE E**

Discharge Serial Number: 001-1							Monitoring location: G					
Wastewater Description:	Sanitary	Sewage										
Monitoring description: I	nfluent											
PARAMETER	Units	REPO	DMR REPORTING FORMAT		REPORTING		FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING	
		Monthly Average	Maximum Daily	Sample Frequency	Sample Type	Sample Frequency	Sample Type					
Alkalinity, Total	mg/l			NA	NA	Monthly	Grab	MOR				
Biochemical Oxygen Demand (5 day)	mg/l		NA	3/Week	Daily Composite	NR	NA	DMR/MOR				
Flow Diversion from Mystic WPCF <sup>1</sup>	MGD		0.3	Continuous	Calculated	NR	NA	DMR/MOR				
Nitrogen, Ammonia	mg/l			Monthly	Daily	NR	NA	MOR				
Nitrogen, Nitrate (total	mg/l			Monthly	Daily	NR	NA	MOR				
Nitrogen, Nitrite (total	mg/l			Monthly	Daily	NR	NA	MOR				
Nitrogen, TKN	mg/l			Monthly	Daily	NR	NA	MOR				
Nitrogen, Total	mg/l			Monthly	Daily	NR	NA	MOR				
Phosphorus, Ortho	mg/l			Monthly	Daily	NR	NA	MOR				
Phosphorus, Total	mg/l			Monthly	Daily	NR	NA	MOR				
pН	S.U.			NR	NA	Work day	Grab	MOR				
Solids, Total Suspended	mg/l		NA	3/Week	Daily Composite	NR	NA	DMR/MOR				
Temperature	°F			NR	NA	continuous	Instantaneous	MOR				

Footnote: <sup>1)</sup> The permittee is authorized to implement the flow increment authorized herein following the requirements and conditions listed in Section 4(V) of this permit.

## **TABLE F**

Discharge Serial Number: 001-1 Monitoring Location: P Wastewater Description: Primary Effluent Monitoring Location Description: Primary Sedimentation Basin Effluent REPORTING TIME/FLOW BASED INSTANTANEOUS REPORTING **FORMAT** MONITORING MONITORING **FORM PARAMETER** Units Sample Sample Sample Sample type Frequency Frequency Type Alkalinity, Total MOR mg/l NA NA Monthly Grab NA MOR Biochemical Oxygen Demand (5 day) mg/l Monthly average Weekly Composite NA MOR Nitrogen, Ammonia (total as N) mg/l Monthly Composite NA NA MOR Nitrogen, Nitrate (total as N) Monthly Composite NANAmg/l MOR Nitrogen, Nitrite (total as N) Composite NA NA mg/l Monthly MOR Nitrogen, Total Kjeldahl mg/l Monthly Composite NA NA MOR NA Nitrogen, Total Composite NA mg/l Monthly рΗ S.U. NA NA Monthly Grab MOR

Weekly

Composite

Monthly average

NA

NA

MOR



mg/l

Solids, Total Suspended

# **TABLE G**

Discharge Serial Number: 001-1 Monitoring Location: SL

Wastewater Description: Dewatered Sludge

Monitoring Location Description: Dewatered Sludge

PARAMETER	PARAMETER INSTANTANEOUS MON			
	Units	Grab Sample Freq.		
Arsenic, Total	mg/kg	semiannual	DMR	
Beryllium, Total	mg/kg	semiannual	DMR	
Cadmium, Total	mg/kg	semiannual	DMR	
Chromium, Total	mg/kg	semiannual	DMR	
Copper, Total	mg/kg	semiannual	DMR	
Lead, Total	mg/kg	semiannual	DMR	
Mercury, Total	mg/kg	semiannual	DMR	
Nickel, Total	mg/kg	semiannual	DMR	
Nitrogen, Ammonia *	mg/kg	semiannual	DMR*	
Nitrogen, Nitrate (total as N) *	mg/kg	semiannual	DMR*	
Nitrogen, Organic *	mg/kg	semiannual	DMR*	
Nitrogen, Nitrite (total as N) *	mg/kg	semiannual	DMR*	
Nitrogen, Total *	mg/kg	semiannual	DMR*	
pH *	S.U.	semiannual	DMR*	
Polychlorinated Biphenyls	mg/kg	semiannual	DMR	
Solids, Fixed	%	semiannual	DMR	
Solids, Total	%	semiannual	DMR	
Solids, Volatile	%	semiannual	DMR	
Zinc, Total	mg/kg	semiannual	DMR	

### (\*) required for composting or land application only

 $Testing \ for \ inorganic \ pollutants \ shall \ follow \ ``Test \ Methods \ for \ Evaluating \ Solid \ Waste, \ Physical/Chemical \ Methods", \ EPA \ Publication \ SW-846 \ as \ updated \ and/or \ revised.$ 

# ATTACHMENT 2

# MONTHLY OPERATING REPORT FORM

# DATA TRACKING AND TECHNICAL FACT SHEET

**PERMITTEE**: Town of Stonington (Borough)

# PERMIT, ADDRESS, AND FACILITY DATA

<b>PERMIT #:</b> CT0101281 <b>APPLI</b>	<b>CATION</b> #: 20180	5890 <b>FACILI</b>	<b>FY ID:</b> 137-001		
Mailing Address:		Location Address:			
Street: Town of Stonington (Town	n Hall)	2 High Street			
152 Elm Street, 06378, Stonington		Stonington (Borough	WWTP), CT 06378		
Contact Name: Douglas Nettleton		William Waterhouse,	(Chief Operator) Suez.		
Phone No.: 860-535-5065		Phone No.: 860-599-4	1548		
		DMR Contact email a	address: Bill.Waterhouse@Suez.com		
PERMIT INFORMATION DURATION 5 YEAR X	10 YEAR	30 YEAR	_		
TYPE New _ Reissua	nce X Mod	lification			
CATEGORIZATION POINT	(X) NON-POINT	() GIS #			
NPDES (X) PRETREAT () NPDES MAJOR( <b>MA</b> ) NPDES SIGNIFICANT MI NPDES <u>or</u> PRETREATME		AT SIU (SI)	OUND WATER (OTHER) ( )		
COMPLIANCE SCHEDULE POLLUTION PREVENTION	TREATMENT REC	QUIREMENT	blic		
<b>DEEP STAFF ENGINEER</b> Carlos E	Esguerra	DATE DRAFTED: 7/	9/18		
PERMIT FEES					
Discharge Code DSN Numb	er Annual Fee				
111000b 001	1,722.50				
APPLICATION FEE PAID Pd 4/13	3/2018				
PROCESSING FEE PAID Pd 6/3/2	019				
ANNUAL FEE PAID Pd 7/29/2019					
PUBLIC NOTICE					
	1st Notice		2 <sup>nd</sup> notice (Flow Diversion from Mystic WPCF)		
Date of Public Notice:	6/11/2019		,		
Date Permit Cleared Public Notice:	7/12/2019				
Date Public Notice Fees Paid:	6/24/2019				

### FOR NPDES DISCHARGES

Drainage Basin Code: 2000 Water Quality Classification Goal: SB Segment: Stonington Harbor

### NATURE OF BUSINESS GENERATING DISCHARGE

Municipal Sanitary Sewage Treatment

### PROCESS AND TREATMENT DESCRIPTION (by DSN)

001-1: Municipal Wastewater Treatment plant with secondary treatment, denitrification and year round UV disinfection.

RESOUR	CES	USED	TO	DRA	FT	PERM	ЛІТ
KESSUK	CEO	COLD	$\mathbf{I}$	$\nu$	м. т		-

X_	Federal Effluent Limitation Guideline 40CFR 133 Sec	ondary Treatment Category
	Performance Standards	
_	Federal Development Document	
_	name of category  Department File Information	
<u>X</u>	Connecticut Water Quality Standards	
<u>X</u>	Anti-degradation Policy	
_	Coastal Management Consistency Review Form	
_	Other - Explain	
	R LIMITATIONS, STANDARDS OR CONDITIONS Secondary Treatment (Section 22a-430-4(r) of the Regulations	of Connecticut State Agencies)
_	Case-by-Case Determination (See Other Comments)	
_	In order to meet in-stream water quality (See General Commen	nts)
	Anti-degradation policy	

### **GENERAL COMMENTS**

The Town of Stonington ("The Permittee") operates a municipal water pollution control facility ("the facility") located at 2 High Street in Stonington (Borough). The facility is designed to treat and discharge up to 0.66 million gallons a day of effluent into Stonington Harbor. The facility currently uses secondary treatment with denitrification and UV disinfection to treat effluent before being discharged. Pursuant to Conn. Gen. Stat. § 22a-430, the Department of Energy and Environmental Protection has issued Stonington a permit for the discharge from this facility. Stonington has submitted an application to renew its permit. The Department has made a tentative determination to approve Stonington and has prepared a draft permit consistent with that determination.

Aluminum monitoring to be consistent with the most recent CT Water Quality Standards and Iron monitoring to be consistent with EPA's National Recommended Water Quality Criteria have been continued in this permit. Continuation of CBOD<sub>5</sub> testing in the new permit is no longer deemed necessary and for this reason it has been substituted with BOD<sub>5</sub> testing. Accordingly, this permit includes an average monthly limit of 30 mg/l and a maximum daily of 50 mg/l as set forth in Regulations of Connecticut State Agencies Section 22a-430-4(r)(Secondary treatment requirements for POTWs and facilities discharging only domestic sewage to surface waters).

WASTEWATER DIVERSION FROM MYSTIC WPCF: A notice of tentative determination for this permit renewal was issued on June 11, 2019. On June 17, 2019, the Permittee informed the Commissioner in writing that the Stonington Mystic Water Pollution Control Facility ("Mystic") had violated condition 4(L) included in NPDES permit No.CT0100544 issued to Mystic. This condition states the following: "When the arithmetic mean of the average daily flow from the POTW for the previous 180 days exceeds 90% of the design flow rate, the Permittee shall develop and submit within one year, for the review and approval of the Commissioner, a plan to accommodate future increases in flow to the plant. This plan shall include a schedule for completing any recommended improvements and a plan for financing the improvements." With this letter, the permittee submitted a report prepared by the engineering firm Wright-Pierce proposing measures to address this permit violation.

The Permittee proposed via the above-mentioned letter and report approval from the Department to proceed with the reactivation of the existing wastewater conveyance system that interconnects Mystic and the Borough Water Pollution Control Facility ("Borough"). The interconnection pipe was installed in the 1980's to allow Mystic to pump sludge to the Borough facility for processing and disposal. This was done as Mystic did not have the necessary equipment to process sludge on-site. Subsequent to the 2014-2015 comprehensive facility upgrades at Mystic that included the addition of sludge processing equipment, the interconnection pipe was taken out of service. The Permittee currently proposes to utilize this interconnection to divert excess wastewater from Mystic to the Borough WPCF to address the violation referenced in the preceding paragraph. The above-mentioned report describes the condition of the interconnection system and recommends a series of improvements to reactivate this system.

Based on a detailed review of the information submitted by the Permittee, a review of flow and effluent quality data at Mystic and at the Borough plant, the Department is, through this permit renewal, authorizing the Borough facility to accept flow from Mystic up to a maximum daily flows of 0.3 MGD. The Permittee must provide DEEP with relevant information and an analysis using no less than 12 months' worth of influent and effluent monitoring data demonstrating that the ability of the Borough WPCF to continue to meet effluent quality requirements listed in this permit has not been negatively impacted by the initial flow diversion. The Department reserves the regulatory authority to decrease the amount of flow diverted from Mystic to the Borough facility, if the effluent quality requirements at the Borough facility are not being met due to the flow increase.

Given the substantive modifications to the subject permit that will allow the Borough plant to accept additional wastewater flow from Mystic, the Department is issuing a second notice of tentative determination to allow the public to review and comment on the proposed flow diversion.

# SUMMARY OF COMMENTS RECEIVED DURING THE PUBLIC NOTICE PERIOD AND THE DEPARTMENT'S RESPONSES

☐ The Department has received no written comments on the proposed action. (REVIEW BY MANAGEMENT
ONLY)
☐ Staff has reviewed the written comments and responded to the comments, no significant permit changes have
been made. (REVIEW BY SUPERVISOR AND MANAGEMENT ONLY)
☐ The Department has received and Staff has reviewed written comments on the proposed action and made
significant changes as follows:

### SPECIFIC REQUIREMENTS OR REVISIONS

The Department reviewed the application for consistency with Connecticut's Water Quality Standards and determined that with the limits in the draft permit, including those discussed below, that the draft permit is consistent with maintenance and protection of water quality in accordance with the Tier I Anti-degradation Evaluation and Implementation Review provisions of such Standards.

The need for inclusion of water quality based discharge limitations in this permit was evaluated consistent with Connecticut Water Quality Standards and criteria, pursuant to 40 CFR 122.44(d). Discharge monitoring data was evaluated for consistency with the available aquatic life criteria (acute and chronic) and human health (fish consumption only) criteria, considering the zone of influence allocated to the facility where appropriate. In addition to this review, the statistical procedures outlined in the EPA Technical Support Document for Water Quality-based Toxics

Control (EPA/505/2-90-001) were employed to calculate the need for such limits. Comparison of the attached monitoring data and its inherent variability with the calculated water quality based limits indicates a low statistical probability of exceeding such limits. Therefore, no water quality based limits were included in the permit at this time.

## WATER QUALITY LIMIT CALCULATIONS

See attached



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Affirmative Action/Equal Opportunity Employer

# Notice of Tentative Determination to Approve NPDES Permit Renewal Applicant: Town of Stonington Application No. 201805890 Town of Stonington

The Commissioner of the Department of Energy and Environmental Protection ("DEEP") hereby gives notice that a tentative determination has been reached to approve the following application.

Applicant's Name and Address: Town of Stonington 152 Elm Street, Stonington, CT 06378

Contact Name and Phone No.: Douglas Nettleton, WPCA Director, 860-535-5065

Type of Permit and #: NPDES – CT0101281

Type of Facility: Domestic Wastewater Treatment

Facility Location: Borough Wastewater Treatment Plant

2 High Street, Stonington, CT 06378

Facility design capacity: 0.66 million gallons per day

## COMMISSIONER'S FINDINGS/REGULATORY CONDITIONS

The applicant has previously received a permit from the Department of Energy and Environmental Protection ("Department") authorizing the discharge of up to an annual average daily design flow of 0.66 million gallons a day of secondary advanced treated municipal wastewaters to the Stonington Harbor. The applicant has submitted an application to renew its existing permit. This renewal application is the subject of this notice.

### THE DRAFT PERMIT

The Department has prepared a draft permit consistent with the tentative determination to approve Town of Stonington's renewal application. This draft is available on the public participation section of the Department's website. In accordance with Sections 22a-430-4(1) and 22a-430-4(r) of the Regulations of Connecticut State Agencies (RCSA), the draft permit contains effluent limitations that meet Connecticut's Water Quality Standards for the following: Biochemical Oxygen Demand (5 day), enterococci, fecal coliform, flow, pH, total suspended solids and Ultraviolet light disinfection (dose).

The draft permit includes language that allows the applicant to accept excess wastewater flow from the Mystic Wastewater Treatment Facility ("Mystic") using the existing system that interconnects Mystic with the Borough Wastewater Treatment Facility. This will allow the Mystic Facility to address a permit violation pursuant to Section 4(L) included in NPDES Permit No. CT-0100544. The

enabling language authorizing the reactivation of this system has been included in Section 4(V) and Table E of the draft permit. The Borough Wastewater Treatment Facility has been documented to have sufficient available hydraulic capacity to accept the additional flow from Mystic.

## INFORMATION REQUESTS/PUBLIC COMMENT

This application has been assigned No. 201805890; please use this number when corresponding with DEEP regarding this application. Interested persons may obtain copies of the application from the applicant at the above address. Due to the ongoing Covid-19 virus pandemic, the Department of Energy and Environmental Protection located at 79 Elm Street, Hartford, CT is closed to the public until further notice. However, electronic copies of the application and supporting documentation can be provided to interested persons via email. Any such requests for electronic documents may be directed to Carlos A. Esguerra of the Municipal Wastewater Section at 860-424-3756 or carlos.esguerra@ct.gov.

Before making a final decision on this application, the Commissioner shall consider written comments on the application from interested persons. Written comments on the application should be directed to Carlos Esguerra via electronic mail to: carlos.esguerra@ct.gov no later than thirty (30) days from the publication date of this notice. Written comments may also be submitted in paper form to the Department of Energy and Environmental Protection located at 79 Elm Street, Bureau of Water Protection and Land Reuse Hartford, CT. In this submittal please identify the name of the staff assigned to the application, the permit application number and your phone number and/or email address to facilitate responses to your comments. Due to the Covid - 19 virus Pandemic and social distancing measures implemented by DEEP staff, there could be delays in the response to your comments. You may contact the staff person identified in this notice with any questions you may have.

### PETITIONS FOR HEARING

The Commissioner may conduct a public hearing if the Commissioner determines that the public interest will best be served thereby, or shall hold a hearing upon receipt of a petition signed by at least twenty-five persons. Petitions should include the application number noted above and also identify a contact person to receive notifications. Petitions may also identify a person who is authorized to engage in discussions regarding the application and, if resolution is reached, withdraw the petition. Original signed petitions may be scanned and sent electronically to <a href="mailto:deep.adjudications@ct.gov">deep.adjudications@ct.gov</a> or may be mailed to: DEEP Office of Adjudications, 79 Elm Street, 3rd floor, Hartford, CT 06106-5127. All petitions must be received within the comment period noted above. If submitted electronically, original signed petitions must also be mailed to the address above within ten days of electronic submittal. If a hearing is held, timely notice of such hearing will be published in a newspaper of general circulation and posted on the DEEP website at <a href="https://www.ct.gov/deep.">www.ct.gov/deep.</a>.

Dated:6/18/2020

Jennifer L. Perry, P.E.

**Assistant Director** 

Water Planning and Management Division Bureau of Water Protection and Land Reuse The Connecticut Department of Energy and Environmental Protection is an Affirmative Action and Equal Opportunity Employer that is committed to complying with the Americans with Disabilities Act. To request an accommodation contact us at (860) 418-5910 or deep.accommodations@ct.gov.