

## MUNICIPAL NPDES PERMIT

### issued to

**Permittee:**

City of Groton  
Water Pollution Control Authority  
Groton, Connecticut 06340

**Location Address:**

311 Thames Street  
Groton, Connecticut 06340

**Facility ID:** 059-002**Permit ID:** CT0101184**Permit Expires:****Receiving Stream:** Thames River**Design Flow Rate:** 3.1 MGD

### SECTION 1: GENERAL PROVISIONS

- (A) This permit modification 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 City of **Groton**, ("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).** 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
- (l) 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.
- (l) 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 \$2,367.50.

## 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.

"**Annual**" in the context of any sampling frequency, shall mean the sample must be collected in the months of July, August or September of each year.

"**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.

"**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 **[greater than 50% survival of test organisms in 100% (undiluted) effluent and]** 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 permittees 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.

**"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 #200800549 for permit reissuance received on February 26, 2008 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 50,000 gallons per day shall be allowed by the permittee until the permittee has notified in writing the Municipal Facilities Section of said new discharge
- (C) The permittee shall maintain a system of user charges based on Ad Valorem taxes 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 discharge shall contain or cause in the receiving stream a visible oil sheen, floating solids, visible discoloration, or foaming.
- (F) No discharge 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.
- (G) 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.
- (H) 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.
- (I) 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.
- (J) 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 permittees' sludge use or disposal

practice. A change in the permittees' 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.
- (K) This permit becomes effective on the 1<sup>st</sup> day of the month following the date of signature.
- (L) 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.
- (M) 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 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.
- (N) On or before July 31<sup>st</sup> 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.
- (O) 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 recycle pumping systems, aeration equipment, aeration tank cycling, mixing equipment, anoxic basin, chemical feed systems, effluent filters or any other process equipment necessary for the optimal removal of pollutants. The permittee shall not bypass or fail to operate any of the approved process equipment without the written approval of the Commissioner.
- (P) On or before 2.5 years from issuance each anaerobic digester unit shall be sampled, in a manner approved in writing by the Commissioner, to determine the amount of grit and depth of scum blanket. The results of the sampling shall be maintained at the POTW and, upon request, the permittee shall submit to the Commissioner a copy of the sampling data.
- (Q) The permittee is hereby authorized to accept septage at the treatment facility; or other locations as approved by the Commissioner.
- (R) The temperature of any discharge shall not increase the temperature of the receiving stream above 85°F, or, in any case, raise the normal temperature of the receiving stream more than 4°F. The incremental temperature increase in coastal and marine waters is limited to 1.5°F during the period including July, August and September.

#### **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. A chlorine residual sample must be taken at the same time and the results recorded.
- (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> | <u>Minimum Level</u> |
|------------------|----------------------|
| Arsenic, 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 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 prior to chlorination 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, specific conductance, 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.
  - (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)(i) of the RCSA.
  - (b) Organisms shall not be fed during the tests.
  - (c) Synthetic freshwater prepared with deionized water adjusted to a hardness of  $50 \pm 5$  mg/L as  $\text{CaCO}_3$  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%).

(C) Chronic Aquatic Toxicity Test for Estuarine or Marine Discharges

- (1) Chronic Aquatic Toxicity testing of the discharge shall be conducted annually during July, August, or September of each year.
- (2) Chronic Aquatic Toxicity testing shall be performed on the discharge in accordance with the test methodology established in “Short-Term Methods for Estimating The Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms” (EPA-821-R-02-014) as referenced in 40 CFR 136 for sheepshead minnow, *Cyprinodon variegates*, survival and growth and mysid, *Mysidopsis bahia*, survival, growth and reproduction.
  - (a) Chronic Aquatic Toxicity tests shall utilize a minimum of six effluent dilutions prepared using a dilution factor of 0.5 (100% effluent, 50% effluent, 25% effluent, 12.5% effluent, 6.25% and 1% effluent).
  - (b) Thames River water collected immediately upstream of the area influenced by the discharge (with the outgoing tide) shall be used as control (0% effluent) and dilution water in the toxicity tests.
  - (c) A laboratory water control consisting of synthetic seawater prepared in accordance with EPA-821-R-02-014 shall be used as an additional control (0% effluent) in the toxicity tests.
  - (d) Daily composite samples of the discharge (final effluent following disinfection) and grab samples of the Thames River, for use as site water control and dilution water, shall be collected on day 0 for test solution renewal on day 1 and day 2 of the test; day 2, for test solution renewal on day 3 and day 4 of the test; and day 4, for test solution renewal for the remainder of the test. Samples shall not be pH or hardness adjusted, or chemically altered in any way.
- (3) All samples of the discharge and Thames River water used in the Chronic Aquatic Toxicity test shall, at a minimum, be analyzed and results reported in accordance with the provisions listed in Section 6(A) of this permit for the parameters listed in Attachment 1, Table C included herein.

**SECTION 7: RECORDING AND REPORTING REQUIREMENTS**

- (A) The results of chemical analyses and any aquatic toxicity test required above in Section 5 and the referenced Attachment 1 shall be entered on the Discharge Monitoring Report (DMR) and reported to the Bureau of Water Protection and Land Reuse. The report shall also include a detailed explanation of any violations of the limitations specified. The DMR must be received at the following address 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, Planning and Standards Division  
79 Elm Street  
Hartford, Connecticut 06106-5127

- (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,  $\text{LC}_{50}$  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 above in Section 7 (A) of this permit by the 15<sup>th</sup> day of the month following the month in which samples are collected.

- (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 (A) of this permit by the 15<sup>th</sup> day of the month following the month in which the data and samples are collected.
- (D) A complete and thorough report of the results of the chronic toxicity monitoring outlined in Section 6(C) shall be prepared as outlined in Section 10 of EPA-821-R-02-014 for estuarine and marine waters) and submitted to the Department for review on or before December 31 of each calendar year to the address specified above in Section 7 (A) of this permit.
- (E) The Permittee and/or the Signatory Authority shall continue to electronically submit DMRs required under this permit to the Department using NetDMR. DMRs shall be submitted electronically to the Department no later than the 15th day of the month following the completed reporting period.

#### **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 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) 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, Planning and Standards Division, Municipal Facilities Section (860) 424-3704, the Department of Public Health, Water Supply Section (860) 509-7333 and Recreation Section (860) 509-7297, and the local Director of Health shall be notified within 2 hours of the permittee learning of the event by telephone during normal business hours. If the discharge or bypass occurs outside normal working hours (8:30 a.m. to 4:30 p.m. Monday through Friday), notification shall be made within 2 hours of the permittee learning of the event to the Emergency Response Unit at (860) 424-3338 and the Department of Public Health at (860) 509-8000. A written report shall be submitted to the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Planning and Standards Division, Municipal Facilities Section within five days of the permittee learning of each occurrence, or potential occurrence, of a discharge or bypass of untreated or partially treated sewage.

The written report shall contain:

- (i) The nature and cause of the bypass, permit violation, treatment component failure, and/or equipment failure,
  - (ii) the time the incident occurred and the anticipated time which it is expected to continue or, if the condition has been corrected, the duration,
  - (iii) the estimated volume of the bypass or discharge of partially treated or raw sewage,
  - (iv) the steps being taken to reduce or minimize the effect on the receiving waters, and
  - (v) the steps that will be taken to prevent reoccurrence of the condition in the future.
- (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 of



this Section, the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse Planning and Standards Division, Municipal Facilities Section except, if 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 of this Section, the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Planning and Standards Division, Municipal Facilities Section except, if 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 of this Section, the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Planning and Standards Division, Municipal Facilities Section 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

DRAFT

Betsey Wingfield  
Bureau Chief  
Bureau of Water Protection and Land Reuse

ATTACHMENT 1

Tables A through G

DRAFT

**TABLE A**

| Discharge Serial Number (DSN): <b>001-1</b>                    |  |                            |                     |                         | Monitoring Location: <b>1</b>                  |  |              |             |             |                                      |
|--|--|----------------------------|---------------------|-------------------------|--|--|--------------|-------------|-------------|--------------------------------------|
| Wastewater Description: <b>Sanitary Sewage</b>                 |  |                            |                     |                         |  |  |              |             |             |                                      |
| Monitoring Location Description: <b>Final Effluent</b>         |  |                            |                     |                         |  |  |              |             |             |                                      |
| Allocated Zone of Influence (ZOI): <b>473 cfs</b>              |  |                            |                     |                         | In-stream Waste Concentration (IWC): <b>1%</b> |  |              |             |             |                                      |
| PARAMETER  | Units  | FLOW/TIME BASED MONITORING |                     |                         |  | INSTANTANEOUS MONITORING                           |              |             | REPORT FORM | Minimum Level Analysis See Section 6 |
|  |  | Average Monthly Limit      | Maximum Daily Limit | Sample Freq.            | Sample type                                    | Instantaneous Limit or Required Range <sup>3</sup> | Sample Freq. | Sample Type |             |                                      |
| Alkalinity   | mg/l   | NA                         | NA                  | NR                      | NA   | -----  | Monthly      | Grab        | MOR         |                                      |
| Biochemical Oxygen Demand (5 day) <sup>1</sup><br>See remark D | mg/l   | 30                         | 50                  | 3/week                  | Daily Composite                                | NA   | NR           | NA          | DMR/MOR     |                                      |
| Chlorine, Total Residual                                       | mg/l   | NA                         | NA                  | NR                      | NA   | 0.2 - 1.5  | 4/ Work Day  | Grab        | DMR/MOR     |                                      |
| Fecal coliform (year round)                                    | Colonies per100 ml                                       | NA                         | NA                  | NR                      | NA   | see remark (A)                                     | 3/Week       | Grab        | DMR/MOR     |                                      |
| Fecal coliform (year round). See remark (B)                    | Percent of samples with more than 260 colonies per100 ml | NA                         | NA                  | 3/Week                  | Calculated                                     | ≤10  | 3/Week       | Grab        | DMR/MOR     |                                      |
| Enterococci. See remark (C).                                   | Colonies per100 ml                                       | NA                         | NA                  | NR                      | NA   | 500  | 3/week       | Grab        | DMR/MOR     |                                      |
| Flow (average daily)   | MGD  | -----                      | -----               | Continuous <sup>2</sup> | Daily Flow                                     | NA   | NR           | NA          | DMR/MOR     |                                      |
| Nitrogen, Ammonia (total as N)                                 | mg/l   | NA                         | -----               | Monthly                 | Daily Composite                                | NA   | NR           | NA          | 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> . See remark D | mg/l | 30 | 50    | 3/week  | 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     |  |

**TABLE A – CONDITIONS**

**Footnotes:**

<sup>1</sup> The discharge shall not exceed an average monthly 30 mg/l and maximum daily 50 mg/l.

<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>3</sup> The instantaneous limits in this column are minimum and maximum limits, except for fecal coliform and Enterococci which are maximum limits. .

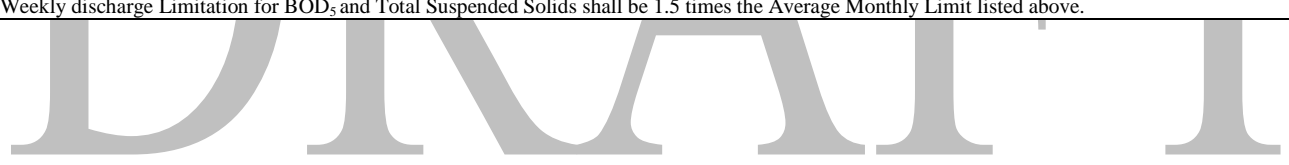
**Remarks:**

(A) The geometric mean of the Fecal coliform bacteria values for the effluent samples collected in a period of thirty (30) consecutive days shall not exceed 88 per 100 milliliters.

(B) No more than 10% of the Fecal coliform bacteria values for the effluent samples collected in a period of thirty (30) consecutive days shall exceed 260 per 100 milliliters.

(C) The geometric mean of the Enterococci bacteria values for the effluent samples collected in a period of thirty (30) consecutive days shall not exceed 35 per 100 milliliters.

(D) The Average Weekly discharge Limitation for BOD<sub>5</sub> and Total Suspended Solids shall be 1.5 times the Average Monthly Limit listed above.



**TABLE B**

| Discharge Serial Number (DSN): <b>001-1</b>   |               | Monitoring Location: <b>K</b> |  |                         |             |
|---|---------------|-------------------------------|--|-------------------------|-------------|
| Wastewater Description: <b>Sanitary Sewage</b>  |               |                               |  |                         |             |
| Monitoring Location Description: <b>Final Effluent</b>  |               |                               |  |                         |             |
| Allocated Zone of Influence (ZOI): <b>473 cfs</b>   |               |                               | In-stream Waste Concentration (IWC): <b>1%</b> |                         |             |
| PARAMETER   | Units         | FLOW/TIME BASED MONITORING    |  |                         | REPORT FORM |
|   |               | Average Monthly Minimum       | Sample Freq.                                   | Sample type             |             |
| Biochemical Oxygen Demand (5 day) Percent Removal <sup>1</sup>  | % of Influent | 85                            | 3/Week   | Calculated <sup>2</sup> | DMR/MOR     |
| Solids, Total Suspended Percent Removal <sup>1</sup>  | % of Influent | 85                            | 3/Week   | Calculated <sup>2</sup> | DMR/MOR     |
| <b>TABLE B – CONDITIONS</b>   |               |                               |  |                         |             |
| <b>Footnotes:</b><br><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).<br><sup>2</sup> Calculated based on the average monthly results described in Table A. Removal efficiency = _____ - _____ |               |                               |  |                         |             |

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**TABLE C**

| Discharge Serial Number (DSN): <b>001-1</b>  |            |                     | Monitoring Location: <b>T</b>                   |                 |                |                                      |
|--|------------|---------------------|---|-----------------|----------------|--------------------------------------|
| Wastewater Description: <b>Sanitary Sewage</b>   |            |                     |   |                 |                |                                      |
| Monitoring Location Description: <b>Final Effluent prior to Chlorination</b>   |            |                     |   |                 |                |                                      |
| Allocated Zone of Influence (ZOI): <b>473 cfs</b>  |            |                     | In-stream Waste Concentration (IWC): <b>1 %</b> |                 |                |                                      |
| 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           |                                      |
| Antimony, Total  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| 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           | *                                    |
| Beryllium, Total   | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| BOD <sub>5</sub>   | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Cadmium, Total   | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Chromium, Hexavalent   | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Chromium, Total  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Chlorine, Total Residual   | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Copper, Total  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Cyanide, Amenable  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Cyanide, Total   | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Iron, Total  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Lead, Total  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Mercury, Total   | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           | *                                    |
| Nickel, Total  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Nitrogen, Ammonia (total as N)   | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Nitrogen, Nitrate, (total as N)  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Nitrogen, Nitrite, (total as N)  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Phosphorus, Total  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Phenols, Total   | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Selenium, Total  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Silver, Total  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Suspended Solids, Total  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Thallium, Total  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| Zinc, Total  | mg/l       | -----               | Quarterly                                       | Daily Composite | ATMR           |                                      |
| <b>TABLE C - CONDITIONS</b>  |            |                     |   |                 |                |                                      |
| Remarks: <sup>1</sup> The results of the Toxicity Tests are recorded in % survival. The permittee shall report % survival on the DMR based on criteria in Section 6(B) of this permit. |            |                     |   |                 |                |                                      |
| ATMR – Aquatic Toxicity Monitoring Report  |            |                     |   |                 |                |                                      |

**TABLE D**

| Discharge Serial Number: <b>001-1</b>                      |                             | Monitoring Location: <b>N</b> |             |                |
|--|-----------------------------|-------------------------------|-------------|----------------|
| Wastewater Description: <b>Activated Sludge</b>            |                             |                               |             |                |
| Monitoring Location Description: <b>Each Aeration Unit</b> |                             |                               |             |                |
| PARAMETER  | REPORTING FORMAT            | INSTANTANEOUS MONITORING      |             | REPORTING FORM |
|  |                             | Sample Frequency              | Sample Type |                |
| Oxygen, Dissolved  | High & low for each WorkDay | 2/WorkDay                     | Grab        | MOR            |
| Sludge Volume Index  | WorkDay                     | WorkDay                       | Grab        | MOR            |
| Mixed Liquor Suspended Solids                              | WorkDay                     | WorkDay                       | Grab        | MOR            |

**TABLE E**

| Discharge Serial Number: <b>001-1</b>            |       |                      | Monitoring Location: <b>G</b> |                 |                          |             |                |
|--|-------|----------------------|-------------------------------|-----------------|--------------------------|-------------|----------------|
| Wastewater Description: <b>Sanitary Sewage</b>   |       |                      |                               |                 |                          |             |                |
| Monitoring Location Description: <b>Influent</b> |       |                      |                               |                 |                          |             |                |
| PARAMETER  | Units | DMR REPORTING FORMAT | FLOW/TIME BASED MONITORING    |                 | INSTANTANEOUS MONITORING |             | REPORTING FORM |
|  |       |                      | Sample Frequency              | Sample Type     | Sample Frequency         | Sample Type |                |
| Biochemical Oxygen Demand (5 day)                | mg/l  | Monthly average      | 3/Week                        | Daily Composite | NA                       | NA          | DMR/MOR        |
| Nitrogen, Ammonia (total as N)                   | mg/l  |                      | Monthly                       | Daily Composite | NA                       | NA          | MOR            |
| Nitrogen, Nitrate (total as N)                   | mg/l  |                      | Monthly                       | Daily Composite | NA                       | NA          | MOR            |
| Nitrogen, Nitrite (total as N)                   | mg/l  |                      | Monthly                       | Daily Composite | NA                       | NA          | MOR            |
| Nitrogen, Total Kjeldahl                         | mg/l  |                      | Monthly                       | Daily Composite | NA                       | NA          | MOR            |
| Nitrogen, Total                                  | mg/l  |                      | Monthly                       | Daily Composite | NA                       | NA          | MOR            |
| Phosphate, Ortho                                 | mg/l  |                      | Monthly                       | Daily Composite | NA                       | NA          | MOR            |
| Phosphorus, Total                                | mg/l  |                      | Monthly                       | Daily Composite | NA                       | NA          | MOR            |
| pH   | S.U.  |                      | NA                            | NA              | Work Day                 | Grab        | MOR            |
| Solids, Total Suspended                          | mg/l  | Monthly average      | 3/week                        | Daily Composite | NA                       | NA          | DMR/MOR        |
| Temperature                                      | °F    |                      | NA                            | NA              | Work Day                 | Grab        | MOR            |

**TABLE F**

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

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**TABLE G**

| Discharge Serial Number: <b>001-1</b>                      |                          | Monitoring Location: <b>SL</b> |                |
|--|--------------------------|--------------------------------|----------------|
| Wastewater Description: <b>Digester Sludge</b>             |                          |                                |                |
| Monitoring Location Description: <b>At sludge draw off</b> |                          |                                |                |
| PARAMETER  | INSTANTANEOUS MONITORING |                                | REPORTING FORM |
|  | Units                    | Grab Sample Freq.              |                |
| Arsenic, Total   | mg/kg                    | Quarterly                      | DMR            |
| Beryllium, Total   | mg/kg                    | Quarterly                      | DMR            |
| Cadmium, Total   | mg/kg                    | Quarterly                      | DMR            |
| Chromium, Total  | mg/kg                    | Quarterly                      | DMR            |
| Copper, Total  | mg/kg                    | Quarterly                      | DMR            |
| Lead, Total  | mg/kg                    | Quarterly                      | DMR            |
| Mercury, Total   | mg/kg                    | Quarterly                      | DMR            |
| Nickel, Total  | mg/kg                    | Quarterly                      | DMR            |
| Nitrogen, Ammonia *  | mg/kg                    | Quarterly                      | DMR*           |
| Nitrogen, Nitrate (total as N) *                           | mg/kg                    | Quarterly                      | DMR*           |
| Nitrogen, Organic *  | mg/kg                    | Quarterly                      | DMR*           |
| Nitrogen, Nitrite (total as N) *                           | mg/kg                    | Quarterly                      | DMR*           |
| Nitrogen, Total *  | mg/kg                    | Quarterly                      | DMR*           |
| pH *   | S.U.                     | Quarterly                      | DMR*           |
| Polychlorinated Biphenyls                                  | mg/kg                    | Quarterly                      | DMR            |
| Solids, Fixed  | %                        | Quarterly                      | DMR            |
| Solids, Total  | %                        | Quarterly                      | DMR            |
| Solids, Volatile   | %                        | Quarterly                      | DMR            |
| Zinc, Total  | mg/kg                    | Quarterly                      | DMR            |
| <b>(* required for composting or land application)</b>     |                          |                                |                |

ATTACHMENT 2

MONTHLY OPERATING REPORT FORM

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# DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: City of Groton

## PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: CT0101184 APPLICATION #: 200800549 FACILITY ID. 059-002

|   |  |
|---|--|
| <u>Mailing Address:</u><br>Street: 311 Thames Street<br>City: Groton ST: CT Zip: 06340<br>Contact Name: Kevin Cini<br>Phone No.: (860) 441-6736 | <u>Location Address:</u><br>Street: 311 Thames Street<br>City: Groton ST: CT Zip: 06340<br>Contact Name: Kevin Cini<br>Phone No.: (860) 441-6736<br>DMR Contact<br>email address: cinik@yurservice.com |
|---|--|

## PERMIT INFORMATION

DURATION 5 YEAR  10 YEAR \_\_\_ 30 YEAR \_\_\_

TYPE New \_\_\_ Reissuance  Modification \_\_\_

CATEGORIZATION POINT (X) NON-POINT ( ) GIS #

NPDES (X) PRETREAT ( ) GROUND WATER(UIC) ( ) GROUND WATER (OTHER) ( )

NPDES MAJOR(MA)

NPDES SIGNIFICANT MINOR or PRETREAT SIU (SI) \_\_\_

NPDES or PRETREATMENT MINOR (MI) \_\_\_

COMPLIANCE SCHEDULE YES \_\_\_ NO

POLLUTION PREVENTION \_\_\_ TREATMENT REQUIREMENT \_\_\_

WATER QUALITY REQUIREMENT \_\_\_ OTHER \_\_\_

## OWNERSHIP CODE

Private \_\_\_ Federal \_\_\_ State \_\_\_ Municipal (town only)  Other public \_\_\_

DEP STAFF ENGINEER Iliana Raffa

## PERMIT FEES

| Discharge Code | DSN Number | Annual Fee |
|----------------|------------|------------|
| 111000c        | 002        | \$2,367.50 |

## **FOR NPDES DISCHARGES**

Drainage Basin Code: 3000 Water Quality Classification Goal: SB

## **NATURE OF BUSINESS GENERATING DISCHARGE**

*Municipal Sanitary Sewage Treatment*

## **PROCESS AND TREATMENT DESCRIPTION (by DSN)**

*Secondary treatment with biological nutrient removal and year round chlorine disinfection*

## **RESOURCES USED TO DRAFT PERMIT**

Federal Effluent Limitation Guideline 40CFR 133 Secondary Treatment Category

Performance Standards  
 Federal Development Document  
name of category

Department File Information

Connecticut Water Quality Standards

Anti-degradation Policy

Coastal Management Consistency Review Form

Other - Explain

#### **BASIS FOR 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 Comments)

Anti-degradation policy

#### **GENERAL COMMENTS**

The activities authorized within this permit have been reviewed for consistency with the Connecticut Antidegradation Policies and associated implementation guidance contained in the Connecticut Water Quality Standards. The authorized activities are consistent with maintenance and protection of water quality in accordance with Tier I Antidegradation Evaluation and Implementation Review provisions of the Connecticut Water Quality Standards.

The City of Groton operates a municipal water pollution control facility ("the facility") located at 311 Thames Street. The facility is designed to treat and discharge up to 3.1 million gallons a day of effluent into Thames River. The facility currently uses advanced treatment with denitrification and chlorine disinfection to treat effluent before being discharged. Pursuant to Conn. Gen. Stat. § 22a-430, the Department of Energy and Environmental Protection has issued October 4, 2009 a permit for the discharge from this facility. City of Groton has submitted an application to renew its permit. The Department has made a tentative determination to approve City of Groton's application and has prepared a draft permit consistent with that determination.

The most significant changes from the current permit are the inclusion of revised bacteria monitoring requirements and Aluminum and Iron monitoring to be consistent with the most recent CT Water Quality Standards. In addition the permittee shall comply with a minimum detection limit for mercury in accordance with the North East regional TMDL for this metal.

#### **SPECIFIC REQUIREMENTS OR REVISIONS**

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). Southington 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.

The permit includes revised bacteria monitoring requirements for fecal and enterococci; and Aluminum and Iron

*monitoring to be consistent with the most recent CT Water Quality Standards and EPA's recommended water quality criteria respectively.*

***WATER QUALITY LIMIT CALCULATIONS***

*See attached*

DRAFT

**Notice of Tentative Determination to approve  
NPDES Permit Renewal  
Applicant: City of Groton  
Application No. 200800549  
City/Town: City of Groton**

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 submitted under Section 22a-430 of the Connecticut General Statutes to renew a permit to discharge into the waters of the state.

Applicant’s Name and Address: City of Groton, 311 Thames River. Groton, CT 06340

Contact Name and Phone No.: Kevin Cini - (860) 441-6736

Type of Permit and #: NPDES – CT 0101184

Type of Facility: Domestic wastewater treatment

Facility Location: 311 Thames Street, Groton, CT 06340

Facility design capacity: 3.1 million gallons per day

**PROPOSED ACTIVITY/FACILITY**

The applicant proposes to discharge up to an annual average daily design flow of 3.1 MGD of secondary biological treated municipal wastewaters to the Thames River.

**THE DRAFT PERMIT**

The Department has prepared a draft permit consistent with the tentative determination to approve the City of Groton renewal application. This draft is available on the public participation section of the Department’s website. In accordance with Sections 22a-430-4(l) 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), chlorine, fecal coliform, enterococci, flow, pH and total suspended solids.

**INFORMATION REQUESTS/PUBLIC COMMENT**

Interested persons may obtain copies of the application from the applicant at the above address. The application and supporting documentation are available for inspection at the Department of Energy and Environmental Protection, Water Protection and Land Reuse, 79 Elm Street, Hartford, CT from Monday through Friday 8:00 A.M. to 4:00 P.M. and at other times by appointment. Questions may be directed to Carlos Esguerra of the Municipal Facilities Section

at 860-424-3756.

All interested persons are invited to express their views on the tentative determination concerning this application. Written comments on the application should be directed to Carlos Esguerra, Planning and Standards Division, Water Protection and Land Reuse Bureau, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127, no later than thirty (30) days from the publication date of this notice. Comments regarding this application may be submitted via electronic mail to: [carlos.esguerra@ct.gov](mailto:carlos.esguerra@ct.gov)

#### PETITIONS FOR HEARING

The Commissioner may hold a public hearing prior to approving or denying an application if in the Commissioner's discretion the public interest will be best served thereby and shall hold a hearing upon the receipt of a petition signed by at least twenty-five persons. Any petition for a hearing should include the application number noted above and also identify a contact person to receive notifications. A petition may also identify a person who is authorized to engage in discussions regarding the application and, if resolution is reached, withdraw the petition. Original petitions must be *mailed or delivered* within the comment period noted above to: DEEP Office of Adjudications, 79 Elm Street, 3<sup>rd</sup> floor, Hartford, 06106-5127. Petitions cannot be sent by fax or email. For additional information go to [www.ct.gov/deep/adjudications](http://www.ct.gov/deep/adjudications). If a hearing is held, notice of such hearing will be published at least thirty days before any hearing is held.

Dated: 4/18/2013

/s/Denise Ruzicka, P.E. Director  
Planning and Standards Division  
Bureau of Water Protection and Land Reuse

The Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer. Persons with a disability who may need information in an alternative format should contact the ADA Coordinator at 860-424-3194 or at [DEEP.HRmed@CT.Gov](mailto:DEEP.HRmed@CT.Gov). Persons who are limited English proficient who may need information in another language should contact the Title VI Coordinator at (860) 424-3035 or at [DEEP.aoffice@ct.gov](mailto:DEEP.aoffice@ct.gov). Persons who are hearing impaired should call the State of Connecticut relay number 711. Discrimination complaints should be filed with the Title VI Coordinator