Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

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MUNICIPAL NPDES PERMIT

issued to

Permittee:
City of Milford
110 River Street
Milford, CT, Connecticut 06460

Location Address:
Housatonic WPCF
1225 Oronoque Road
Milford, Connecticut 06460

Facility ID: 084-133 **Permit ID:** CT0101656 **Permit Expires:July 10, 2018**

Receiving Stream: Housatonic River **Design Flow Rate:** 8,200,000 gpd

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 City of Milford, ("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) 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
- **(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 $ 2,807.50.

(I) The permittee shall discharge so as not to violate the Interstate Environmental Commission (IEC) Water Quality Regulations promulgated pursuant to the authority conferred upon the IEC by the Tri-State Compact (CGS 22a-294 et seq.) as defined in Attachment 1 Table A.

(J) 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-Monthly" in the context of any sampling frequency, shall mean once every two months including the months of February, April, June, August, October, and December.

"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 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 February, May, August, and November.

"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.

"**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 [the system installed for the treatment of the discharge will protect the waters of the state from pollution 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 #200901866 for permit reissuance received on October 01, 2009 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. New discharge notifications as described in this section shall be submitted to the staff identified in section 9(H) included herein.

(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 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_5 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 1st 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_5 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 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.

(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 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.

(P) On or before December 1st, 2013 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.

(R) 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. 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 H 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, Tables A and 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.

Parameter	Minimum Level
Aluminum	0.050 mg/l
Antimony, Total	0.010 mg/l
Arsenic, Total	0.005 mg/l
Beryllium, Total	0.001 mg/l
Cadmium, Total	0.0005 mg/l
Chromium, Total	0.005 mg/l
Chromium, Total Hexavalent	0.010 mg/l
Copper, Total	0.005 mg/l
Cyanide, Total	0.010 mg/l
Iron, Total	0.040 mg/l
Lead, Total	0.005 mg/l
Mercury, Total	0.0002 mg/l
Nickel, Total	0.005 mg/l
Selenium, Total	0.005 mg/l
Silver, Total	0.002 mg/l
Thallium, Total	0.010 mg/l
Zinc, Total	0.020 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 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 limit 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 limit 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±5 mg/L as $CaCO_3$ shall be used as dilution water in the tests.

(d) Copper nitrate shall be used as the reference toxicant.

(5) For limits expressed as NOAEL = 100%, compliance shall be demonstrated when the results of a valid pass/fail Acute Aquatic Toxicity Test indicate 90% or greater survival in the effluent sample at the CTC (100%).

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 15th 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, 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 15th 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 15th day of the month following the

month in which the data and samples are collected.

(D) NetDMR Reporting Requirements

(1) Unless otherwise approved in writing by the Commissioner, no later than one-hundred and twenty (120) days after the issuance of this permit, the Permittee shall begin reporting to the Department electronically using NetDMR, a web-based tool that allows Permittees to electronically submit discharge monitoring reports (DMRs) and other required reports through a secure internet connection. Specific requirements regarding subscription to NetDMR and submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

(a) NetDMR Subscriber Agreement

On or before fifteen (15) days after the issuance of this permit, the Permittee and/or the person authorized to sign the Permittee's discharge monitoring reports ("Signatory Authority") as described in RCSA Section 22a-430-3(b)(2) shall contact the Department and initiate the subscription process for electronic submission of Discharge Monitoring Report (DMR) information. On or before ninety (90) days after issuance of this permit the Permittee shall submit a signed and notarized copy of the *Connecticut DEP NetDMR Subscriber Agreement* to the Department.

(b) Submittal of Reports Using NetDMR

Unless otherwise approved by the Commissioner, on or before one-hundred and twenty (120) days after issuance of this permit, the Permittee and/or the Signatory Authority shall electronically submit DMRs and reports required under this permit to the Department using NetDMR in satisfaction of the DMR submission requirement of this permit. DMRs shall be submitted electronically to the Department no later than the 15th day of the month following the completed reporting period.

(c) Submittal of NetDMR Opt-Out Requests

If the Permittee is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for electronically submitting DMRs and reports, the Commissioner may approve the submission of DMRs and other required reports in hard copy form ("opt-out request"). Opt-out requests must be submitted in writing to the Department for written approval on or before fifteen (15) days prior to the date a Permittee would be required under this permit to begin filing DMRs and other reports using NetDMR. This demonstration shall be valid for twelve (12) months from the date of the Department's approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to the Department using NetDMR unless the Permittee submits a renewed opt-out request and such request is approved by the Department.

All opt-out requests and requests for the NetDMR subscriber form should be sent to the following address:

Attn: NetDMR Coordinator
Connecticut Department of Energy and Environmental Protection
Water Permitting and Enforcement Division – 2nd Floor
79 Elm Street
Hartford, CT 06106-5127

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 that an Aquatic toxicity effluent limitation has been exceeded, or that the test was invalid, a second 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 that the Acute Aquatic Toxicity limit has been exceeded, 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:

(a) The nature and cause of the bypass, permit violation, treatment component failure, and/or equipment failure,

(b) the time the incident occurred and the anticipated time which it is expected to continue or, if the condition has been corrected, the duration,

(c) the estimated volume of the bypass or discharge of partially treated or raw sewage,

(d) the steps being taken to reduce or minimize the effect on the receiving waters, and

(d) the steps that will be taken to prevent reoccurrence of the condition in the future.

For treatment plants south of Interstate 95 and any other plants which may impact shellfishing areas the Department of Agriculture/Aquaculture Division must also be notified within 2 hours of the permittee learning of the event by telephone at (203) 874-0696 and in writing within 72 hours of each occurrence of an emergency diversion or by-pass of untreated or partially treated sewage and a copy of the written report should be sent to:

State of Connecticut
Department of Agriculture/Aquaculture Division
P.O. Box 97
Milford, Connecticut 06460

(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 July 11, 2013

Betsey Wingfield
Bureau Chief
Bureau of Water Protection and Land Reuse

ATTACHMENT 1

Tables A through H

TABLE A

Discharge Serial Number (DSN): **001-1** | Monitoring Location: **1**

Wastewater Description: **Sanitary Sewage**

Monitoring Location Description: **Final Effluent**

Allocated Zone of Influence (ZOI): **289cfs** | In-stream Waste Concentration (IWC): **4.21%**

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[2]	Sample Freq.	Sample Type		
Alkalinity	mg/l	NA	NA	NR	NA	------	Monthly	Grab	MOR	
Biochemical Oxygen Demand (5 day)	mg/l	30	50	3/Week	Daily Composite	NA	NR	NA	DMR/MOR	
Fecal coliform	Colonies per100 ml	NA	NA	NR	NA	see remark (B)	3/Week	Grab	DMR/MOR	
Fecal coliform. See remark (C)	Percent of samples with more than 260 colonies per100 ml	NA	NA	NR	NA	≤10	3/Week	Grab	DMR/MOR	
Enterococci. See remark (D)	Colonies per100 ml	NA	NA	NR	NA	≤500	3/Week	Grab	DMR/MOR	
Flow (average daily)	MGD	------	------	Continuous[1]	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	MOR	
Solids, Settleable	ml/l	NA	NA	NR	NA	------	Work Day	Grab	MOR	
Solids, Total Suspended	mg/l	30	50	3/Week	Daily Composite	NA	NR	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. See remark (A)	$mW,s/cm^2$	NA	NA	NR	NA	≥30.0	4/Work Day	Grab	DMR/MOR	
UV Transmittance. See remark (A)	%	NA	NA	NR	NA	------	4/Work Day	Grab	MOR	

TABLE A – CONDITIONS

Footnotes:

[1] 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.

[2] The instantaneous limits in this column are maximum limits.

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 thirty (30) consecutive days shall not exceed 88 per 100 milliliters.

(C) 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.

(D) 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.

(E) The Average Weekly discharge Limitation for BOD_5 and Total Suspended Solids shall be 1.5 times the Average Monthly Limit listed above.

(F) In addition to the discharge limits included herein, the following conditions shall apply:

(i) Biochemical Oxygen Demand shall not exceed 50 mg/l on a 6 consecutive hour average.

(ii) Total Suspended Solids content shall not exceed 50 mg/l on a 6 consecutive hour average.

(iii) Fecal Coliform content shall not exceed:

(a) 800 per 100 ml on a 6 consecutive hour geometric mean.

(a) No sample may contain more than 2,400 per 100 ml.

TABLE B

Discharge Serial Number (DSN): **001-1**		Monitoring Location: **K**			
Wastewater Description: **Sanitary Sewage**					
Monitoring Location Description: **Final Effluent**					
Allocated Zone of Influence (ZOI): **289 cfs**		In-stream Waste Concentration (IWC): **4.21 %**			
PARAMETER	**Units**	**FLOW/TIME BASED MONITORING**			**REPORT FORM**
		Average Monthly Minimum	**Sample Freq.**	**Sample type**	
Biochemical Oxygen Demand (5 day) Percent Removal[1]	%	85	3/week	Calculated[2]	DMR/MOR
Solids, Total Suspended Percent Removal[1]	%	85	3/week	Calculated[2]	DMR/MOR

TABLE B – CONDITIONS

Footnotes:

[1] The discharge shall be less than 15% of the average monthly influent BOD and suspended solids (Table E, Monitoring Location G).

[2] Calculated based on the average monthly results described in Table A. Removal efficiency $= \frac{\text{Inf.BOD or TSS} - \text{Effluent BOD or TSS}}{\text{Inf.BOD or TSS}} \times 100$

TABLE C

Discharge Serial Number (DSN): **001-1**				Monitoring Location: **T**		
Wastewater Description: **Sanitary Sewage**						
Monitoring Location Description: **Final Effluent before completion of UV**						
Allocated Zone of Influence (ZOI): **289 cfs**			In-stream Waste Concentration (IWC): **4.21%**			
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[1]	% survival	------	Quarterly	Daily Composite	ATMR/DMR	
NOAEL Static 48Hr Acute Pimephales[1]	% survival	------	Quarterly	Daily Composite	ATMR/DMR	
Arsenic, Total	mg/l	------	Quarterly	Daily Composite	ATMR	*
Beryllium, Total	mg/l	------	Quarterly	Daily Composite	ATMR	
BOD_5	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	
Phenols, Total	mg/l	------	Quarterly	Daily Composite	ATMR	
Phosphorus, 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	

TABLE C - CONDITIONS

Remarks: [1]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: **001-1**	Monitoring Location: **N**			
Wastewater Description: **Activated Sludge**				
Monitoring Location Description: **Each Aeration Unit**				
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: **001-1**							Monitoring Location: **G**
Wastewater Description: **Sanitary Sewage**							
Monitoring Location Description: **Influent**							
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: **001-1**			Monitoring Location: **P**				
Wastewater Description: **Primary Effluent**							
Monitoring Location Description: **Primary Sedimentation Basin Effluent**							
PARAMETER	**Units**	**REPORTING FORMAT**	**TIME/FLOW BASED MONITORING**		**INSTANTANEOUS MONITORING**		**REPORTING FORM**
			Sample Frequency	**Sample Type**	**Sample 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

TABLE G

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

TABLE H

Discharge Serial Number: **001-1**	Monitoring Location: L		
Wastewater Description: **Digested sludge**			
Monitoring Location Description: **Each Anaerobic Digestion Unit**			
PARAMETER	**INSTANTANEOUS MONITORING**		**REPORTING FORM**
	Sample Frequency	Sample Type	
Temperature	Weekly	Grab	MOR
Alkalinity	Weekly	Grab	MOR
Volatile Acids	Weekly	Grab	MOR
pH	Weekly	Grab	MOR

ATTACHMENT 2

MONTHLY OPERATING REPORT FORM

Facility: Housatonic WPCF

Town: Milford Phone: 203-783-3263 Facility ID: 084-133

Sample Month: May 2013 Permit No.: CT0101656 Superintendant _____

	Daily Flow			Septic	Sludge (Primary)			Return Sludge		Waste	Press Sludge		UV Dose		UV Trans	
Date	Max MGD	Min MGD	Total MGD	Waste GAL	GAL	% SOL	LBS Dry	% FLOW	% SOLID	Sludge LBS	IN LBS (Dry)	Out LBS (Wet)	mW s/cm2 High	mW s/cm2 Low	% High	% Low
Wed 01																
Thu 02																
Fri 03																
Sat 04																
Sun 05																
Mon 06																
Tue 07																
Wed 08																
Thu 09																
Fri 10																
Sat 11																
Sun 12																
Mon 13																
Tue 14																
Wed 15																
Thu 16																
Fri 17																
Sat 18																
Sun 19																
Mon 20																
Tue 21																
Wed 22																
Thu 23																
Fri 24																
Sat 25																
Sun 26																
Mon 27																
Tue 28																
Wed 29																
Thu 30																
Fri 31																
TOTAL	*****	*****				*****		*****	*****				*****	*****	*****	*****
AVERAGE																

Facility: Housatonic WPCF
Town: Milford
Phone: 203-783-3263
Facility ID: 084-133
Permit #: CT0101656
Sample Month: May 2013

	Fecal	Settleable Solids		BOD			COD		Suspended Solids				Turbidity	Temperature		pH		Eff.	Entero-cocci
	Coliform	Inf.	Eff.	Inf	Pri. Eff.	Fin.Eff.	Inf.	Eff.	Inf.	Inf.TSS Load	Prim.Eff.	Fin.Eff.		Inf.	Eff.				
		ml/L	ml/L	mg/L	mg/L	mg/L	mg/L	mg/L	TSS	Pounds Per Day	TSS	TSS	NTU	Deg	Deg	Inf.	Fin.Eff.	D.O.	
									mg/L		mg/L	mg/L		C	C				#/100ml
Date	#/100mL																		
Mon 01																			
Tue 02																			
Wed 03																			
Thu 04																			
Fri 05																			
Sat 06																			
Sun 07																			
Mon 08																			
Tue 09																			
Wed 10																			
Thu 11																			
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Wed 24																			
Thu 25																			
Fri 26																			
Sat 27																			
Sun 28																			
Mon 29																			
Tue 30																			
Wed 31																			
TOTAL	*****	*****	*****	*****	*****	*****	*****	*****	*****		*****	*****	*****	*****	*****	*****	*****	*****	********
AVERAGE																			

Facility: Housatonic WPCF
Town: Milford Phone: 203-783-3263 Facility ID: 084-133
Sample Month: May 2013 Permit #: CT0101656

Date	Digester Temp		Digester Alkalinity		Digester pH		Digester Vol. Acids		Primary Digester Total Solids %TS	Primary Digester Vol. Solids %VS	Secondary Digester Total Solids %TS	Secondary Digester Vol. Solids %VS
	Primary Deg F	Secondary Deg F	Primary mg/L	Secondary mg/L	Primary	Secondary	Primary mg/L	Secondary mg/L				
Wed 01												
Thu 02												
Fri 03												
Sat 04												
Sun 05												
Mon 06												
Tue 07												
Wed 08												
Thu 09												
Fri 10												
Sat 11												
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Sat 25												
Sun 26												
Mon 27												
Tue 28												
Wed 29												
Thu 30												
Fri 31												
TOTAL		*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
AVERAGE												

Facility: Housatonic WPCF
Town: Milford
Phone: 203-783-3263
Facility ID: 084-133
Sample Month: May 2013
Permit #: CT0101656

Date	Total Nitrogen		Ammonia		Nitrite		Nitrate		Phosphorus		Digester Gas
	Influent mg/L	Effluent mg/L	Influent mg/L	Effluent mg/L	Influent mg/L	Effluent mg/L	Influent mg/L	Effluent mg/L	Influent mg/L	Effluent mg/L	Cubic Feet
Wed 01											
Thu 02											
Fri 03											
Sat 04											
Sun 05											
Mon 06											
Tue 07											
Wed 08											
Thu 09											
Fri 10											
Sat 11											
Sun 12											
Mon 13											
Tue 14											
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Mon 20											
Tue 21											
Wed 22											
Thu 23											
Fri 24											
Sat 25											
Sun 26											
Mon 27											
Tue 28											
Wed 29											
Thu 30											
Fri 31							0.0	*****		*****	
TOTAL	*****	*****	*****	*****	*****	*****					
AVERAGE											

Facility: Housatonic WPCF
Town: Milford Phone: 203-783-3263 Facility ID: 084-133
Sample Month: May, 2013 Permit #: CT0101656

	NORTH AERATION TANKS D.O.								SOUTH AERATION TANKS D.O.							
			ANOXIC 1	ANOXIC 2	BASIN 1		BASIN 2				ANOXIC 1	ANOXIC 2	BASIN 1		BASIN 2	
Date	MLSS	SVI			HI	LOW	HI	LOW	MLSS	SVI			HI	LOW	HI	LOW
Wed 01																
Thu 02																
Fri 03																
Sat 04																
Sun 05																
Mon 06																
Tue 07																
Wed 08																
Thu 09																
Fri 10																
Sat 11																
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Wed 22																
Thu 23																
Fri 24																
Sat 25																
Sun 26																
Mon 27																
Tue 28																
Wed 29																
Thu 30																
Fri 31																
TOTAL	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
AVERAGE																

STATEMENT OF ACKNOWLEDGEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisoment for knowing violations.

Authorized Official: Mr. James Cooper Title: Superintendant

Signature: _____ Date: _____

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: City of Milford (Milford-Housatonic)

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: CT0101656 **APPLICATION #:**200901866 **FACILITY ID.** 084-133

Mailing Address:110 River Street	Location Address:1255 Oronoque Road
Street:	Street:
City: Milford ST: CT Zip: 06460	City: Milford ST: CT Zip: 06460
Contact Name: James F. Cooper	Contact Name: James F. Cooper
Phone No.: 203-783-3263	Phone No.: 203-783-3263

PERMIT INFORMATION

DURATION 5 YEAR X 10 YEAR ___ 30 YEAR ___

TYPE New ___ Reissuance X Modification ___

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

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

NPDES MAJOR**(MA)** X
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) X Other public___

DEP STAFF ENGINEER Stela Marusin

PERMIT FEES

Discharge Code	DSN Number	Annual Fee
111000e	001	$2,807.50

FOR NPDES DISCHARGES
Drainage Basin Code: 4952 Present/Future Water Quality Standard: SB

NATURE OF BUSINESS GENERATING DISCHARGE
Municipal Sanitary Sewage Treatment

PROCESS AND TREATMENT DESCRIPTION (by DSN)
Advanced biological treatment with Nitrogen removal and year round disinfection (UV)

RESOURCES USED TO DRAFT PERMIT
X *Federal Effluent Limitation Guideline 40CFR 133*
Secondary Treatment Category
___ *Performance Standards*

__ *Federal Development Document*
name of category

_X_ *Department File Information*

_X_ *Connecticut Water Quality Standards*

_X_ *Anti-degradation Policy*

_X_ *Coastal Management Consistency Review Form*

__ *Other - Explain*

BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS

_X_ *Secondary Treatment (Section 22a-430-4(r) of the Regulations of Connecticut State Agencies)*

_X_ *Case-by-Case Determination (See Other Comments)*

_X_ *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 Anti-degradation 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 Anti-degradation Evaluation and Implementation Review provisions of the Connecticut Water Quality 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). Each parameter 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. 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 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.

OTHER COMMENTS

This is a reissuance.

The Housatonic Wastewater Treatment Plant has undergone a recent upgrade which is now complete and the new Design Flow Rate is 8.2 MGD while the old Design Flow Rate was 8.0 MGD. The increase form 8.0 MGD to 8.2 MGD corresponds to a 2.4% which is a negligible flow increase, therefore the 5-day BOD and TSS limits were left unchanged.

Enterococci and new Fecal coliform testing requirements have been included herein in accordance with 2011 CT Water Quality Standards.

Permit also includes monitoring conditions for Aluminum and Iron following CT Water Quality Standards and EPA's National recommended Water Quality Criteria respectively.

WATER QUALITY LIMIT CALCULATIONS

See attached

Effluent Chemistry: MILFORD HOUSATONIC WPC

as of Friday, February 03, 2012 **Design Flow** 8.2 MGD **Avg. Monthly Flow '10:** 6.32 MGD **Max. Monthly Flow '10:** 11.55 MGD

Receiving Waterbody: Housatonic River
Allocated ZOI: 289 cfs
Database IWC: 4.21%

Date	BOD	TSS	NH3	NO2	NO3	CNt	CNa	Be	As	Cd	Cr6	Cr3	Cu	Pb	Th	Ni	Ag	Zn	Sb	Se	Phen	Hg
2/7/2007	4.84	4.00	2.14	0.290	8.52	< 5.0	< 5.0	< 1.0	< 5.0	< 10.0	< 10.0	<20.0	<10.0	< 5.0	< 10.0	< 20.0	< 1.0	40.0	< 5.0	<100.0	< 50.0	< 0.2
5/2/2007	4.64	6.00	6.73	< 0.010	4.57	< 5.0	< 5.0	< 1.0	< 5.0	< 10.0	< 10.0	<20.0	<10.0	< 5.0	<100.0	< 20.0	1.0	30.0	<100.0	< 50.0	< 50.0	< 0.2
8/15/2007	1.40	3.00	0.38	0.100	4.96	< 5.0	< 5.0	< 1.0	< 5.0	< 10.0	< 10.0	<20.0	<10.0	< 5.0	<100.0	< 20.0	< 1.0	20.0	<100.0	< 5.0	< 50.0	< 0.2
2/6/2008	10.53	< 1.00	13.21	< 0.010	1.60	< 5.0	< 5.0	< 1.0	< 5.0	< 0.5	< 10.0	< 5.0	< 2.0	< 5.0	< 10.0	< 20.0	< 1.0	40.0	<100.0	< 5.0	< 50.0	< 0.2
6/17/2008	6.48	7.00	19.03	< 0.050	< 0.20	< 5.0	< 5.0	< 1.0	< 5.0	< 10.0	< 10.0	<20.0	<10.0	< 5.0	<100.0	< 10.0	< 1.0	20.0	<100.0	< 5.0	< 50.0	< 0.2
9/10/2008	13.88	7.50	0.88	< 0.010	< 0.20	< 5.0	< 5.0	< 1.0	< 5.0	< 0.5	< 10.0	<20.0	<10.0	< 5.0	<100.0	< 10.0	< 1.0	30.0	<100.0	< 5.0	< 50.0	< 0.2
2/4/2009	66.50	93.00	1.93	< 0.050	3.60	< 5.0	< 5.0	< 1.0	< 5.0	< 0.5	< 10.0	<20.0	60.0	< 5.0	<100.0	< 10.0	< 1.0	90.0	<100.0	< 5.0	< 50.0	< 0.2
5/13/2009	1.00	< 1.00	0.69	< 0.010	6.60	< 5.0	< 5.0	< 1.0	< 5.0	< 0.5	< 10.0	<20.0	10.0	< 5.0	<100.0	< 10.0	1.0	40.0	<100.0	< 5.0	< 50.0	< 0.2
8/18/2009	1.00	3.00	< 0.10	< 0.100	5.40	< 5.0	< 5.0	< 1.0	< 5.0	< 10.0	< 10.0	<20.0	<10.0	< 5.0	<100.0	< 10.0	< 1.0	50.0	<100.0	< 5.0	< 50.0	< 0.2
11/4/2009	1.13	9.00	< 0.10	< 0.100	7.10	< 5.0	< 5.0	< 1.0	< 5.0	< 0.5	< 10.0	<20.0	<10.0	< 5.0	<100.0	< 10.0	< 1.0	30.0	< 5.0	<100.0	< 50.0	< 0.2
2/17/2010	1.68	4.00	0.25	< 0.050	1.70	< 5.0	< 5.0	< 1.0	< 5.0	< 0.5	< 10.0	<20.0	<10.0	< 5.0	<100.0	< 10.0	< 1.0	40.0	<100.0	< 5.0	< 50.0	< 0.2
6/2/2010	1.80	< 1.00	< 0.10	< 0.050	6.10	< 5.0	< 5.0	< 1.0	< 5.0	< 0.5	< 10.0	<20.0	<10.0	< 5.0	<100.0	< 10.0	< 1.0	40.0	<100.0	< 5.0	< 50.0	< 0.2
8/3/2010	1.80	7.00	0.14	< 0.050	2.80	< 5.0	< 5.0	< 1.0	< 5.0	< 0.5	< 10.0	<20.0	<10.0	< 5.0	<100.0	< 10.0	< 1.0	< 10.0	<100.0	< 5.0	< 50.0	< 0.2
11/10/2010	1.70	< 1.00	9.37	< 0.050	1.60	< 5.0	< 5.0	< 1.0	< 5.0	< 0.5	< 10.0	<20.0	<10.0	< 5.0	<100.0	< 10.0	< 1.0	70.0	<100.0	< 5.0	< 50.0	< 0.2
2/15/2011	2.00	4.00	10.81	< 0.050	0.60	< 5.0	< 5.0	< 1.0	< 5.0	< 0.5	< 10.0	<20.0	<10.0	< 5.0	<100.0	< 10.0	< 1.0	70.0	<100.0	< 5.0	< 50.0	< 0.2
5/17/2011	2.00	2.00	15.67	< 0.050	0.24	< 5.0	< 5.0	< 1.0	< 5.0	< 0.5	< 10.0	<20.0	<10.0	< 5.0	<100.0	< 10.0	< 1.0	10.0	<100.0	< 5.0	< 50.0	< 0.2
8/9/2011	2.60	6.00	5.11	< 0.150	0.28	< 5.0	< 5.0	< 1.0	< 5.0	< 0.5	< 10.0	<20.0	10.0	< 5.0	<100.0	< 10.0	< 1.0	30.0	<100.0	< 5.0	< 50.0	< 0.2
11/15/2011	1.00	< 1.00	0.20	< 0.100	4.20	< 5.0	< 5.0	< 1.0	< 5.0	< 0.5	< 10.0	<20.0	10.0	< 5.0	<100.0	< 10.0	< 1.0	40.0	<100.0	< 5.0	< 50.0	< 0.2

	BOD	TSS	NH3	NO2	NO3	CNt	CNa	Be	As	Cd	Cr6	Cr3	Cu	Pb	Th	Ni	Ag	Zn	Sb	Se	Phen	Hg
Count	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
# Detected	18	13	15	2	16	0	0	0	0	0	0	0	3	0	0	0	2	17	0	0	0	0
Average	7.00	8.92	4.82	0.071	3.35	5.0	5.0	1.0	5.0	3.1	10.0	19.2	12.3	5.0	90.0	12.2	1.0	38.9	89.4	18.1	50.0	0.2
Maximum	66.50	93.00	19.03	0.290	8.52	5.0	5.0	1.0	5.0	10.0	10.0	20.0	60.0	5.0	100.0	20.0	1.0	90.0	100.0	100.0	50.0	0.2
CV	2.2	2.4	1.3	0.9	0.8	0.0	0.0	0.0	0.0	1.4	0.0	0.2	1.0	0.0	0.3	0.4	0.0	0.5	0.3	1.8	0.0	0.0

Bold => mg/L Normal => ug/L

WQB LIMITS:

Discharger: Milford Housatonic WPCF — by: SMarusin, 2/6/2012, 13:55

Receiving Water: Housatonic River

Design Flow: 8.200 MGD
Allocated ZOI: 289.00 CFS
Samples/Month: 4

CURRENT CONDITIONS
Avg. Flow: 6.320 MGD
Max. Flow: 11.550 MGD
IWC: 4.21 %

WQB Limits - **Freshwater**

Compound	C.V.	AML ug/l	MDL ug/l	AML kg/d	MDL kg/d	LIMIT? ML?
Aluminum	0.0	2.07E+03	2.07E+03	6.43E+01	6.43E+01	
Ammonia	1.3	2.27E+04	6.29E+04	7.05E+02	1.95E+03	
Antimony	0.3	4.08E+03	6.12E+03	1.27E+02	1.90E+02	
Arsenic	0.0	2.10E-02	2.10E-02	6.52E-04	6.52E-04	ML
Beryllium	0.0	8.56E+01	8.56E+01	2.66E+00	2.66E+00	
Cadmium	1.4	1.93E+00	5.48E+00	6.01E-02	1.70E-01	
Chlorine	0.6	2.14E+02	4.30E+02	6.65E+00	1.33E+01	
Chromium (hex)	0.0	2.62E+02	2.62E+02	8.12E+00	8.12E+00	
Chromium (tri)	0.2	9.33E+02	1.24E+03	2.90E+01	3.84E+01	
Copper	1.0	1.14E+02	2.88E+02	3.55E+00	8.94E+00	
Cyanide (amen)	0.0	1.24E+02	1.24E+02	3.84E+00	3.84E+00	
Lead	0.0	2.85E+01	2.85E+01	8.86E-01	8.86E-01	
Mercury	0.0	1.21E+00	1.21E+00	3.77E-02	3.77E-02	
Nickel	0.4	6.01E+02	1.01E+03	1.87E+01	3.12E+01	
Phenol	0.0	3.80E+03	3.80E+03	1.18E+02	1.18E+02	
Selenium	1.8	7.04E+01	2.12E+02	2.19E+00	6.58E+00	ML
Silver	0.0	2.43E+01	2.43E+01	7.53E-01	7.53E-01	
Thallium	0.3	1.14E+01	1.71E+01	3.55E-01	5.32E-01	ML
Zinc	0.5	8.38E+02	1.55E+03	2.60E+01	4.80E+01	

Current Conditions

Compound	# DETECTS	AMC ug/l	MMC ug/l	AMM kg/d	MMM kg/d
Aluminum	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ammonia	15	4.82E+03	1.90E+04	1.15E+02	8.33E+02
Antimony	0	8.94E+01	1.00E+02	2.14E+00	4.38E+00
Arsenic	0	5.00E+00	5.00E+00	1.20E-01	2.19E-01
Beryllium	0	1.00E+00	1.00E+00	2.39E-02	4.38E-02
Cadmium	0	3.10E+00	1.00E+00	7.42E-02	4.38E-02
Chlorine					
Chromium (hex)	0	1.00E+01	1.00E+01	2.39E-01	4.38E-01
Chromium (tri)	0	1.92E+01	2.00E+01	4.60E-01	8.75E-01
Copper	3	1.23E+01	6.00E+01	2.94E-01	2.63E+00
Cyanide (amen)	0	5.00E+00	5.00E+00	1.20E-01	2.19E-01
Lead	0	5.00E+00	5.00E+00	1.20E-01	2.19E-01
Mercury	0	2.00E-01	2.00E-01	4.79E-03	8.75E-03
Nickel	0	1.22E+01	2.00E+01	2.92E-01	8.75E-01
Phenol	0	5.00E+01	5.00E+01	1.20E+00	2.19E+00
Selenium	0	1.81E+01	1.00E+02	4.33E-01	4.38E+00
Silver	2	1.00E+00	1.00E+00	2.39E-02	4.38E-02
Thallium	0	9.00E+01	1.00E+02	2.15E+00	4.38E+00
Zinc	17	3.89E+01	9.00E+01	9.31E-01	3.94E+00

	AML (kg/d)	MDL (kg/d)

Interim WQB Limits

	AML (kg/d)	MDL (kg/d)

Minimum Levels

Arsenic	0.005 mg/L
Selenium	0.005 mg/L
Thallium	0.005 mg/L