MUNICIPAL NPDES PERMIT

issued to

Permittee:
Greater New Haven WPCA
260 East Street
New Haven, Connecticut 06511

Location Address:
New Haven, East Shore WPAF
345 East Shore Parkway
New Haven, Connecticut 06512

Facility ID: 093-001 **Permit ID:** CT0100366 **Permit Expires:** September 30, 2015

Receiving Stream: New Haven Harbor **Design Flow Rate:** 40 MGD

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 Greater New Haven Water Pollution Control Authority, ("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 August 20, 2003 the annual fee is $3,195.00**.**

(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, NAR, and/or the ATMR.

"Annual" in the context of any sampling frequency, shall mean the sample must be collected in the month of August.

"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 January, March, May, July, September and November.

"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.

"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 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 #200701995 for permit reissuance received on September 27, 2007 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 wastewater treatment works 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 private domestic wastewater treatment works in excess of or 50,000 gpd, may be authorized by the permittee until the discharger has registered the discharge under the "General Permit for Domestic Sewage" reissued by the Commissioner on June 12, 2002 pursuant to Section 22a-430b of the CGS.

(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 Environmental Protection. The Commissioner of 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) The limits imposed on the discharges listed in this permit take effect on the issuance date of this permit, hence any sample taken after this date which, upon analysis, shows an exceedence of permit limits will be considered non-compliance.

(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 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) The permittee is hereby authorized to accept septage at the treatment facility; or other locations as approved by the Commissioner.

(Q) The temperature of any discharge shall not increase the temperature of the receiving stream above 83ºF, or, in any case, raise the temperature of the receiving stream by more than 4ºF. The incremental temperature increase in coastal and marine waters is limited to 1.5ºF 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) and the Nutrient Analysis Report (NAR) incorporated in this permit as Attachment 2.

SECTION 6: SAMPLE COLLECTION, HANDLING and ANALYTICAL TECHNIQUES

(A) Chemical Analysis

(1) Chemical analyses to determine compliance with effluent limits and conditions established in this permit, shall be performed using the methods approved pursuant to the Code of Federal Regulations, Part 136 of Title 40 (40 CFR 136) unless an alternative method has been approved in writing pursuant to 40 CFR 136.4 or as provided in Section 22a-430-3-(j)(7) of the RCSA. Chemicals which do not have methods of analysis defined in 40 CFR 136 or the RCSA shall be analyzed in accordance with methods specified in this permit.

(2) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal, as defined in 40 CFR 136 unless otherwise specified.

(3) Grab samples shall be taken during the period of the day when the peak hourly flow is normally experienced.

(4) Samples collected for bacteriological examination shall be collected between the hours of 11 a.m. and 3 p.m. or at that time of day when the peak hourly flow is normally experienced.

(5) The Minimum Levels specified below represent the concentrations at which quantification must be achieved and verified during the chemical analyses for the parameters identified in Attachment 1, Table B. 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**
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 - 6ºC 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 B shall be conducted on an aliquot of the same sample tested for Acute Aquatic Toxicity.

(i) At a minimum, pH, salinity, total alkalinity, total hardness, and total residual chlorine shall be measured in the effluent sample and, during Acute Aquatic Toxicity tests, in the highest concentration of the test and in the dilution (control) water at the beginning of the test and at test termination. If total residual chlorine is not detected at test initiation, it does not need to be measured at test termination. Dissolved oxygen, pH, and temperature shall be measured in the control and all test concentrations at the beginning of the test, daily thereafter, and at test termination. Salinity shall be measured in each test concentration

at the beginning of the test and at test termination.

(e) Tests for Acute Aquatic Toxicity shall be initiated within 36 hours of sample collection.

(2) Monitoring for Acute Aquatic Toxicity to determine compliance with the permit condition on Acute Aquatic Toxicity (invertebrate) shall be conducted for 48 hours utilizing neonatal (less than 24 hours old) *Daphnia pulex*.

(3) Monitoring for Acute Aquatic Toxicity to determine compliance with the permit condition on Acute Aquatic Toxicity (vertebrate) shall be conducted for 48 hours utilizing larval (1 to 14-day old with no more than 24 hours range in age) *Pimephales promelas.*

(4) Tests for Acute Aquatic Toxicity shall be conducted as prescribed for static non-renewal acute tests in "Methods for measuring the Acute Aquatic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012), except as specified below.

(a) For Acute Aquatic Toxicity limits, and for monitoring only conditions, expressed as a NOAEL value, Pass/Fail (single concentration) tests shall be conducted at a specified Critical Test Concentration (CTC) equal to the Aquatic Toxicity limit, (100% in the case of monitoring only conditions), as prescribed in Section 22a-430-3(j)(7)(A)(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 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

(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 Freshwater Organisms” (EPA-821-R-02-013) as referenced in 40 CFR 136 for *Ceriodaphnia* survival and reproduction and Fathead minnow larval survival and growth.

(a) Chronic Aquatic Toxicity tests shall utilize a minimum of five effluent dilutions prepared using a dilution factor of 0.5 (100% effluent, 50% effluent, 25% effluent, 12.5% effluent, 6.25% effluent).

(b) A laboratory water control consisting of synthetic freshwater prepared in accordance with EPA-821-R-02-013 at a hardness of 50±5 mg/l shall be used as an additional control (0% effluent) and dilution water in the toxicity tests.

(c) Daily composite samples of the discharge (final effluent following disinfection) 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 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 following parameters:

pH
Hardness
Alkalinity
Conductivity
Nitrogen, ammonia (total as N)
Solids, Total Suspended

Copper (total recoverable and dissolved)
Zinc (total recoverable and dissolved)

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 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) and Nutrient Analysis Report (NAR) forms, 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 and NAR 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) 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-02-013 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.

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

(A) If any Acute Aquatic Toxicity sample analysis indicates toxicity, or that the test was invalid, 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 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 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 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

(e) 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 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 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 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.

SECTION 9: COMBINED SEWER OVERFLOWS

(A) The permittee shall use, to the maximum extent practicable, available sewerage system transportation capabilities for the conveyance of combined sewage to treatment facilities. The permittee is authorized to discharge combined sewage flows from combined sewer overflow outfalls listed in Attachment 3 in response to wet weather flow, i.e. rainfall or snowmelt conditions, when total available transportation, treatment and storage capabilities are exceeded.

The locations of outfalls and regulators listed in Attachment 3 are taken from Department records. Any information on the locations of any outfalls and regulators in addition to or in conflict with the information in Attachment 3 shall be submitted to the Commissioner within 30 days of the date of issuance of this permit or the date the permittee becomes aware of such information, whichever is earlier.

(1) Control Requirements for Combined Sewer Overflows (CSOs)

(a) During wet weather flows, the permittee is authorized to discharge stormwater/wastewater from combined

sewer outfalls listed in Attachment 3. Dry weather overflows are prohibited. Any other discharge from the outfalls listed in Attachment 3 constitutes a bypass and is subject to the requirements of Section 8 of this permit.

(b) The discharge from CSO's shall not contain septage or holding tank waste.

(c) Discharges from combined sewer overflows shall not cause violations of State Water Quality Standards.

SECTION 10: REGIONAL MUNICIPAL SLUDGE INCINERATOR FACILITIES

(A) On or before 90 days after the issuance date of this permit, the permittee shall submit to the Commissioner for review and approval either: (i) verification that the previously submitted and approved wastewater sludge screening, monitoring and reporting protocol for acceptance of wastewater sludges generated from outside sources that will be transported to the permittee's POTW for further processing and disposal by means of incineration has not changed or (ii) the new protocol. "Transported" means trucked or hauled wastewater sludge taken to dedicated receiving facilities at the POTW. "Sludge" means solid, semi-solid or liquid residue generated from municipal, residential, commercial or industrial biological wastewater treatment processes exclusive of the treated effluent, including water treatment wastewater sludges. Such protocol shall address and include, at a minimum, the following elements:

(1) All Out of State Municipal POTW Sewage Sludge Generators and All Out of State Privately Owned Domestic Sewage Sludge Generators

(a) The permittee shall monitor or cause each generator to monitor the pollutants specified in Table F of this permit at a frequency no less than quarterly. These results shall be included in the annual report described in subparagraph 3.d. below. In the event of an infrequent delivery to the POTW, the generator shall submit monitoring results for all the pollutants listed in Table F from a representative sludge sample generated and collected within the previous three months.

(b) Each out of state generator must be analyzed by the permittee for all the pollutants listed in Table F prior to acceptance at the POTW. The permittee shall determine that each such source is compatible with all other wastewater sludges accepted for incineration.

(c) Each out of state generator shall provide a description of the domestic, commercial and industrial components generating the biological sludge.

(2) All (In state or Out of State) Commercial and Industrial (Non-Domestic) Sludges

(a) Prior to acceptance of any non-domestic wastewater sludge for incineration, the permittee shall, as applicable, require the generator of such sludge to: **(i)** submit to the POTW a copy of its current active individual wastewater discharge permit issued by DEP under section 22a-430 of the Connecticut General Statutes (CGS); **(ii)** if eligible under DEP's general permit program (section 22a-430b CGS), submit to the POTW a copy of that permit and, if required, the associated registration; or **(iii)** submit to the POTW a copy of any pertinent emergency or temporary authorization issued by the Commissioner pursuant to section 22a-6k CGS.

(3) Permittee Actions

(a) The permittee shall conduct at its facility bimonthly monitoring of all the pollutants listed in Table F on a representative sample of filter cake taken prior to incineration.

(b) The Permittee shall conduct annual monitoring of all the pollutants listed in Table F for each municipal POTW and private sewage sludge generator accepted for incineration.

(c) The permittee shall include in its Monthly Operating Report (MOR) a list of all municipal, private and commercial/industrial sludge sources and the quantity of sludge accepted from each source.

(d) Beginning April 15th of the second year after approval of this protocol and each year after, the permittee shall submit to the Commissioner an annual report for the previous calendar year which will include the following:

(i) A statement certifying that all new out of state generators have been screened for acceptance in accordance with the approved protocol.

(ii) A statement certifying that the permittee has monitored or caused the generator of all out of state municipal POTW sewage sludge and privately owned domestic sewage sludge to monitor its wastewater sludge in accordance with paragraph (1) (a).

(iii) A statement certifying that all generators of commercial and industrial (non-domestic) wastewater sludge accepted for incineration have complied with the requirements of paragraph (2) (a).

(iv) A copy of the permittee's most current annual 40CFR 503 report.

(v) The individuals responsible for submitting the report shall certify in writing the following: "I certify 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."

SECTION 11: COMPLIANCE SCHEDULES

(A) The permittee shall submit to the Commissioner quarterly status reports beginning sixty days after the date of approval of the report referenced in Section 9 and10 above. Status reports shall include, but not be limited to, a detailed description of progress made by the permittee in performing actions required by this Section of the permit in accordance with the approved schedule including, but not limited to, development of engineering plans and specifications, construction activity, contract bidding, operational changes, preparation and submittal of permit applications, and any other actions specified in the program approved pursuant to paragraph A of this Section.

(B) The permittee shall perform the approved actions in accordance with the approved schedule, but in no event shall the approved actions be completed later than 240 days after the date of issuance of this permit. Within fifteen days after completing such actions, the permittee shall certify to the Commissioner in writing that the actions have been completed as approved.

(C) The permittee shall use best efforts to submit to the Commissioner all documents required by this Section of the permit in a complete and approvable form. If the Commissioner notified the permittee that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and the permittee shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within thirty days of the Commissioner's notice of deficiencies. In approving any document or other action under this Compliance Schedule, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this Section of the permit. Nothing in this paragraph shall excuse noncompliance or delay.

(D) Dates. The date of submission to the Commissioner of any document required by this section of the permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this section of the permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" as used in this Section of the permit means calendar day. Any document or action which is required by this Section only of the permit, to be submitted, or performed, by a date which falls on, Saturday, Sunday, or, a Connecticut or federal holiday, shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or Connecticut or federal holiday.

(E) Notification of noncompliance. In the event that the permittee becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this Section of the permit or of any document required hereunder, the permittee shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the Commissioner, the permittee shall state in writing the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and the permittee shall comply with any dates which may be approved in writing by the Commissioner. Notification by the permittee shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.

(F) Notice to Commissioner of changes. Within fifteen days of the date the permittee becomes aware of a change in any information submitted to the Commissioner under this Section of the permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the permittee shall submit the correct or omitted information to the Commissioner.

(G) Submission of documents. Any document, other than a DMR, ATMR, MOR, or NAR required to be submitted to the Commissioner under this Section of the permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

Iliana Ayala/Analyst
Department of Environmental Protection
Bureau of Water Protection and Land Reuse, Planning and Standards Division
79 Elm Street
Hartford, Connecticut 06106-5127

This permit is hereby issued on October 1, 2010.

/s/ BETSEY WINGFIELD
Betsey Wingfield
Bureau Chief
Bureau of Water Protection and Land Reuse

ATTACHMENT 1

Tables A through G

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): 4,000 MGD	In-stream Waste Concentration (IWC):1%

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[3]	Sample Freq.	Sample Type		
Alkalinity	mg/l	NA	NA	NR	NA	------	Monthly	Grab	MOR	
Biochemical Oxygen Demand (5 day), See remark C	mg/l	30 mg/l and 15% of Influent [1]	50.0 mg/l	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 See Remarks A and B	Colonies per100 ml	NA	NA	NR	NA	see remarks (A) and (B) below	3 Week	Grab	DMR/MOR	
Flow, Average Daily	MGD	------	------	Continuous[2]	Daily flow	NA	NR	NA	DMR/MOR	
Nitrogen, Ammonia (total as N)	mg/l	NA	------	Monthly	Daily Composite	NA	NR	NA	NAR	
Nitrogen, Nitrate (total as N)	mg/l	NA	------	Monthly	Daily Composite	NA	NR	NA	NAR	
Nitrogen, Nitrite (total as N)	mg/l	NA	------	Monthly	Daily Composite	NA	NR	NA	NAR	
Nitrogen, Total Kjeldahl	mg/l	NA	------	Monthly	Daily Composite	NA	NR	NA	NAR	
Nitrogen, Total	mg/l	NA	------	Monthly	Daily Composite	NA	NR	NA	NAR	
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	NAR	
Phosphorus, Total	mg/l	NA	------	Monthly	Daily Composite	NA	NR	NA	NAR	
Solids, Settleable	ml/l	NA	NA	NA	NA	------	Work Day	Grab	MOR	
Solids, Total Suspended, See remark C	mg/l	30 mg/l and 15% of Influent [1]	50.0 mg/l	3 Week	Daily Composite	NA	NA	NA	DMR/MOR	
Temperature	^{o}F	NA	NA	NR	NA	------	Work Day	Grab	MOR	
Turbidity	NTU	NA	NA	NA	NA	------	Work Day	Grab	MOR	

TABLE A – CONDITIONS

Footnotes:

[1] The discharge shall meet 30 mg/l and 15% of the average monthly influent BOD_5 and suspended solids (Table D, Monitoring Location G). 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 thirty calendar day period. The 15% provision and the Maximum Daily Limit of 50.0 mg/l BOD and 50.0 mg/l Total Suspended Solids are waived during periods when the facility is treating dilute influent due to storm runoff collected by the Combined Sewer System causing influent flows to exceed 60 MGD. The Permittee shall state on the monthly Discharge Monitoring Reports and MOR's when exceedance of the 15% provision is due to storm induced flows.

[2] 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.

[3] When the influent flows exceed 60 MGD due to storm events the permittee may bypass secondary biological treatment. During bypass events these parameters shall be sampled daily during the event. Analysis for these parameters shall comply with the normal working schedule of the Facility's Laboratory and holding times per the most recently approved version of Standard Methods. Samples collected outside of the normal working schedule of the Facility's Laboratory and holding time requirements per the most recently approved version of Standard Methods will not be analyzed. For bypass events exceeding one million gallons and less than 24 hours in duration, sampling shall be performed during the event according to the measurement frequency specified. If a bypass event exceeding one million gallons covers all or part of three days, the Permittee shall take three daily composite samples for BOD_5 and TSS, initiating samples at the start of the bypass event and each subsequent day and terminating samples at the end of the day or at the end of the bypass event and analyzing those samples for all days in which the bypass occurs excluding time periods mentioned above due to Facility Laboratory working hours or holding times. Samples shall be flow proportional. Chlorine residual samples shall be taken and analyses performed daily during the event as specified. Fecal coliform samples shall be taken and analyses performed daily during the event. These sampling requirements are waived for bypass events of less than one million gallons. Flows and volumes for all bypassed flows shall be reported on the MOR forms.

Remarks:

(A) The geometric mean of the fecal coliform bacteria values for the effluent samples collected in a period of thirty (30) consecutive days

(B) The geometric mean of the fecal coliform bacteria values for the effluent samples collected in a period of seven (7) consecutive days shall not exceed 400 per 100 milliliters.

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

(D) In addition to the discharge limits included herein, the following conditions shall apply with the exception of during bypass events due to storm-induced flows exceeding **60** MGD

(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.

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

TABLE B

Discharge Serial Number (DSN): **001-1**				Monitoring Location: **T**		
Wastewater Description: **Sanitary Sewage**						
Monitoring Location Description: **Final Effluent prior to Chlorination**						
Allocated Zone of Influence (ZOI):100:1 **cfs**			In-stream Waste Concentration (IWC) 1**%**			
PARAMETER	**Units**	**Maximum Daily Limit**	**Sampling Frequency**	**Sample Type**	**Reporting form**	**Minimum Level Analysis See Section 6**
Antimony, Total	mg/l	------	Quarterly	Daily Composite	ATMR	
Aquatic Toxicity, *Daphnia pulex* [1] (See new DMR reporting remark below)	%	------	Quarterly	Daily Composite	ATMR/DMR	
Aquatic Toxicity, *Pimephales promelas* [1] (See new DMR reporting remark below)	%	------	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	
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	
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 B – CONDITIONS

Remarks:[1]The results of the Toxicity Tests are recorded in % survival. The permittee shall report <u>% survival</u> on the DMR based on criteria in Section 6(B) of this permit.

TABLE C

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	4/WorkDay	Grab		MOR
Sludge Volume Index	WorkDay	WorkDay	Grab		MOR
Mixed Liquor Suspended Solids	WorkDay	WorkDay	Grab		MOR

TABLE D

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	NAR
Nitrogen, Nitrate (total as N)	mg/l		Monthly	Daily Composite	NA	NA	NAR
Nitrogen, Nitrite (total as N)	mg/l		Monthly	Daily Composite	NA	NA	NAR
Nitrogen, Total Kjeldahl	mg/l		Monthly	Daily Composite	NA	NA	NAR
Nitrogen, Total	mg/l		Monthly	Daily Composite	NA	NA	NAR
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	^{o}F		NA	NA	Work Day	Grab	MOR

TABLE E

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	NAR
Nitrogen, Nitrite (total as N)	mg/l		Monthly	Composite	NA	NA	NAR
Nitrogen, Total Kjeldahl	mg/l		Monthly	Composite	NA	NA	NAR
Nitrogen, Total	mg/l		Monthly	Composite	NA	NA	MOR/NAR
pH	S.U.		NA	NA	Monthly	Grab	MOR
Solids, Total Suspended	mg/l	Monthly average	Weekly	Composite	NA	NA	MOR

TABLE F

Discharge Serial Number: **001-1**	Monitoring Location**: S**		
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.

ATTACHMENT 2

MONTHLY OPERATING REPORT FORM
AND
NUTRIENT ANALYSIS REPORT

This and the following page have been left blank to reserve page numbers for the MOR form you will be editing for the WPCF.

Nutrient Analysis Report

for compliance with NPDES permit

Greater New Haven WPAF Permit # CT0100366 Flow Rate _____ mgd Sampling Date __/__/__

Parameter	Raw Influent		Primary Effluent		Final Effluent		Plant Efficiency
	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	%
Ammonia							
Nitrite							
Nitrate							
TKN							
Total Nitrogen = TKN + nitrite + nitrate							
Orthophosphates							
Total Phosphorus							

Notes: lbs/day = 8.34 x flow (mgd) x mg/l of pollutant
Flow = Total daily flow on sampling date (mgd)
Plant Efficiency = 100% x (raw influent – final effluent) / raw influent

ATTACHMENT 3

ACTIVE CSO LOCATIONS

GNHWPCA - NPDES Status CSO OUTFALLS

NPDES #	Regulator Location	Receiving Water	Latitude	Longitude	Current Status
003	E.T. Grasso Boulevard @ Orange Av	West River	41°17'50.171"N	72°57'1.984"W	Active
004	E.T. Grasso Boulevard @ Legion Av	West River	41°18'20.067"N	72°57'13.518"W	Active
005	E.T. Grasso Boulevard @ Derby Av	West River	41°18'36.579"N	72°57'15.769"W	Active
005 (A)	University Place	West River	41°18'36.579"N	72°57'15.769"W	Active
005 (B)	Elm/University Place	West River	41°18'36.579"N	72°57'15.769"W	Active
006	Whalley Av @ Fitch St	West River	41°19'30.292"N	72°57'26.302"W	Active
008	Munson St @ Orchard St	Mill River	41°19'28.364"N	72°56'15.601"W	Active
009	Grande Av @ James St	Mill River	41°18'30.553"N	72°54'21.301"W	Active
010	East St @ I-91 (2 Weirs/2 Regulators)	Mill River	41°18'51.599"N	72°54'31.317"W	Active
010 (A)	East St @ I-91 (2 Weirs/2 Regulators)	Mill River	41°18'51.779"N	72°54'33.15"W	Active
011	Humphrey St @ I-91	Mill River	41°18'47.975"N	72°54'26.313"W	Active
012	Mitchell Dr east of Nicoll St	Mill River	41°19'21.732"N	72°54'21.829"W	Active
013	Everitt St @ East Rock Rd	Mill River	41°19'49.392"N	72°54'32.936"W	Active
013(A)	East Rock Rd @ Everitt St	Mill River	41°19'49.683"N	72°54'33.789"W	Active
014	Trumbull St @ Orange St	Mill River	41°18'47.975"N	72°54'26.313"W	Active
015	James St Siphon	Quinnipiac River	41°18'3.559"N	72°54'7.658"W	Active
016	Poplar St @ River St	Quinnipiac River	41°18'6.472"N	72°53'45.738"W	Active
019	Pine St @ North Front St	Quinnipiac River	41°18'47.941"N	72°53'14.377"W	Active
020	Quinnipiac Av @ Clifton St	Quinnipiac River	41°18'35.997"N	72°53'8.299"W	Active
021	East St Pump Station	New Haven Harbor	41°17'49.235"N	72°54'38.727"W	Active
021 (A)	Chapel/Hamilton	New Haven Harbor	41°17'49.235"N	72°54'38.727"W	Active
024	Boulevard Pump Station (Sea St)	New Haven Harbor	41°16'58.072"N	72°55'30.522"W	Active
025	Union Pump Station (Union & State St)	New Haven Harbor	41°17'45.066"N	72°54'58.338"W	Active
025 (A)	Elm/University Place	New Haven Harbor	41°17'45.063"N	72°54'58.333"W	Active
025 (B)	Grove/Whitney	New Haven Harbor	41°17'45.063"N	72°54'58.333"W	Active
026	Humphrey Pump Station	Mill River	41°18'48.153"N	72°54'29.399"W	Active
027	East/Ives	Mill River	41°18'19.535"N	72°54'28.408"W	Active
028	Mitchell Pump Station	Mill River	41°19'22.381"N	72°54'23.908"W	Active
031	S. Frontage/Davenport	New Haven Harbor	41°17'45.066"N	72°54'58.338"W	+ Active
032	Port Sea/Liberty	New Haven Harbor	41°17'45.066"N	72°54'58.338"W	+ Active
033	Carlisle/Liberty	New Haven Harbor	41°17'45.066"N	72°54'58.338"W	+ Active
034	George/Temple	New Haven Harbor	41°17'45.066"N	72°54'58.338"W	Active
	Greene St	New Haven Harbor	41°17'48.7"N	72°54'48.022"W	Active
	Middletown/Front	Quinnipiac River	41°19'15.21"N	72°53'25.754"W	Active

NOTES:
- All Latitudes and Longitudes are given where the pipe meets the receiving waters.
- The final conveyance pipe at point of discharge may be considered a storm drain or a sanitary pipe.
- The ultimate outfall pipe may also have a separate storm drain outfall NPDES number associated with it.
+ Active - These Cross Connections are believed to be closed. Performing Inspections & obtaining documentation.

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Greater New Haven WPCA **PAMS Company ID**: 095252

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: CT0100366 **APPLICATION #:** 200602542 **FACILITY ID.** 093-001

Mailing Address:	Location Address:
Street: 260 East St	Street: 345 East Shore Parkway
City: New Haven ST: CT Zip: 06511	City: New Haven ST: CT Zip: 06512
Contact Name: Gary Zrelak	Contact Name: Gary Zrelak
Phone No.: (203) 466-5285	Phone No.: (203)466-5285

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_X
POLLUTION PREVENTION __ TREATMENT REQUIREMENT__
WATER QUALITY REQUIREMENT __ OTHER ___

OWNERSHIP CODE
Private __ Federal __ State __ Municipal (town only) __ Other public X_

DEP STAFF ENGINEER Iliana Ayala

PERMIT FEES

Discharge Code	DSN Number	Annual Fee
111000g	001	$3,320

FOR NPDES DISCHARGES
Drainage Basin Code: 5000 Present/Future Water Quality Standard:SD/SB

NATURE OF BUSINESS GENERATING DISCHARGE
Municipal Sanitary Sewage Treatment

PROCESS AND TREATMENT DESCRIPTION (by DSN)
Secondary activated sludge with biological nitrogen removal with chlorine disinfection. Effluent flows above 60 MGD may include CSO chemically enhanced primary treated flows re-combined with secondary effluent prior to chlorine disinfection.

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*

__ *Anti-degradation Policy*

__ *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)*

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

__ *In order to meet in-stream water quality (See General Comments)*

__ *Anti-degradation policy*

GENERAL COMMENTS

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

Permit is a reissuance with no significant changes with the exception of control requirements for Combined Sewer Overflows. During wet weather flows when the flow at the WPAF exceeds 60 MGD the permittee is authorized to discharge chemically enhanced primary treated flows re-combined with secondary effluent prior to disinfection through outfall 001-1. During wet weather flows, the permittee is authorized to discharge stormwater/wastewater from combined sewer outfalls listed in Attachment 3.

WATER QUALITY LIMIT CALCULATIONS
See attached