DISCLAIMER

The full text of certain NPDES permits and the associated fact sheets has been made available to provide online access to this public information. EPA is making permits and fact sheets available electronically to provide convenient access for interested public parties and as a reference for permit writers. The ownership of these documents lies with the permitting authority, typically a State with an authorized NPDES program.

While EPA makes every effort to ensure that this web site remains current and contains the final version of the active permit, we cannot guarantee it is so. For example, there may be some delay in posting modifications made after a permit is issued. Also note that not all active permits are currently available electronically. Only permits and fact sheets for which the full text has been provided to Headquarters by the permitting authority may be made available. Headquarters has requested the full text only for permits as they are issued or reissued, beginning November 1, 2002.

Please contact the appropriate permitting authority (either a State or EPA Regional office) prior to acting on this information to ensure you have the most up-to-date permit and/or fact sheet. EPA recognizes the official version of a permit or fact sheet to be the version designated as such and appropriately stored by the respective permitting authority.

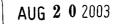
The documents are gathered from all permitting authorities, and all documents thus obtained are made available electronically, with no screening for completeness or quality. Thus, availability on the website does not constitute endorsement by EPA.



STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

MUNICIPAL NPDES PERMIT





Permittee:

City of Danbury 155 Deer Hill Road Danbury, Connecticut 06810

Facility ID: 034-001

Permit ID: CT0100145

Location Address: City of Danbury WPCF Newtown Road

Danbury, Connecticut 06810

Permit Expires: February 13, 2008

Design Flow Rate: 15.5 MGD

SECTION 1: GENERAL PROVISIONS

Receiving Stream: Limekiln Brook

(A) This permit is issued 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 Danbury, ("permittee"), shall comply with all conditions of this permit including the following sections of the RCSA which have been adopted pursuant to Section 22a-430 of the CGS and are hereby incorporated into this permit. Your attention is especially drawn to the notification requirements of subsection (i)(2), (i)(3), (j)(1), (j)(6), (j)(8), (j)(9)(C), (j)(10)(C), (j)(11)(C), (D), (E), and (F), (k)(3) and (4) and (I)(2) of Section 22a-430-3. To the extent this permit imposes conditions which are more stringent than those found in the regulations, this permit shall apply.

Section 22a-430-3 General Conditions

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

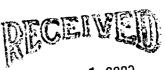
Section 22a-430-4 Procedures and Criteria

- (a) Duty to Apply
- (b) Duty to Reapply
- (c) Application Requirements
- (d) Preliminary Review
- (e) Tentative Determination
- (f) Draft Permits, Fact Sheets
- (g) Public Notice, Notice of Hearing

(Printed on Recycled Paper)

79 Elm Street • Hartford, CT 06106 - 5127

http://dep.state.ct.us
An Equal Opportunity Employer



FEB 2 1 2003

CT STATE PHUGNAM UNIT

- (h) Public Comments
- (i) Final Determination
- (j) Public Hearings
- (k) Submission of Plans and Specifications. Approval.
- (I) Establishing Effluent Limitations and Conditions
- (m) Case by Case Determinations
- (n) Permit Issuance or Renewal
- (o) Permit or Application Transfer
- (p) Permit Revocation, Denial or Modification
- (q) Variances
- (r) Secondary Treatment Requirements
- (s) Treatment Requirements
- (t) Discharges to POTWs Prohibitions
- (C) Violations of any of the terms, conditions, or limitations contained in this permit may subject the permittee to enforcement action including, but not limited to, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA.
- (D) Any false statement in any information submitted pursuant to this Section of the permit may be punishable as a criminal offense under Section 22a-438 or 22a-131a of the CGS or in accordance with Section 22a-6, under Section 53a-157b of the CGS.
- (E) The permittee shall comply with Section 22a-416-1 through Section 22a-416-10 of the RCSA concerning operator certification.
- (F) No provision of this permit and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by the permittee pursuant to this permit will result in compliance or prevent or abate pollution.
- (G) Nothing in this permit shall relieve the permittee of other obligations under applicable federal, state and local law.
- (H) An annual fee shall be paid for each year this permit is in effect as set forth in Section 22a-430-7 of the RCSA. As of July 2000 the annual fee is \$1920.

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", "No Observable Acute Effect Level (NOAEL)" and "Grab Sample Average" 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
 - "Annual" in the context of any sampling frequency found in Attachment 1, means the sample must be collected in the month of July.
 - "Average Monthly Limit" means the maximum allowable "Average Monthly Concentration" as defined in Section 22a-430-3(a) of the RCSA when expressed as a concentration (e.g. mg/l); otherwise, it means "Average Monthly Discharge Limitation" as defined in Section 22a-430-3(a) of the RCSA.
 - "Bi-Weekly" means once every two weeks.
 - "Composite" or "(C)" means a sample consisting of a minimum of eight aliquot samples collected at equal intervals of no less than 30 minutes and no more than 60 minutes and combined proportionally to flow over the sampling period provided that during the sampling period the peak hourly flow is experienced.
 - "Critical Test Concentration" or "(CTC)" means the specified effluent dilution at which the permittee is to conduct a single-concentration Aquatic Toxicity Test.

- "Daily Composite Sample" 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.
- "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 a sampling frequency, means sampling is required in the months of January, April, July and October.
- "Range During Sampling" or "(RDS)" as a sample type means the maximum and minimum of all values recorded as a result of analyzing each grab sample of; 1) a Composite Sample, or, 2) a Grab Sample Average. For those permittees with pH meters that provide continuous monitoring and recording, Range During Sampling means the maximum and minimum readings recorded with the continuous monitoring device during the Composite or Grab Sample Average sample collection.
- "Range During Month" or "(RDM)" as a sample type means the lowest and the highest values of all of the monitoring data for the reporting month.
- "MGD" means million gallons per day.
- "Sanitary Sewage" means wastewaters from residential, commercial and industrial sources introduced by direct connection to the sewage collection system tributary to the treatment works including non-excessive inflow/infiltration sources.

"Semi-Annual" in the context of a sampling frequency, means the sample must be collected in the months of January and July.

"Twice per Month" when used as a sample frequency shall 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 that modification of the existing system or installation of a new system would protect the waters of the state from pollution. The Commissioner's decision is based on application #199300515 for permit reissuance received on September 7, 1993 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 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 may be authorized by the permittee until the discharger has registered the discharge under the general permit for domestic sewage issued by the Commissioner on June 11, 1992 pursuant to Section 22a-430b of the CGS.
- (C) The permittee shall maintain a system of user charges 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 or floating solids; or cause visible discoloration or foaming in the receiving stream.
- (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 sewage 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 BOD5, and Total Suspended Solids, for all daily composite samples taken in any calendar month.
- (I) Any new or increased amount of domestic 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

PERMIT # CT0100145

- (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 domestic sewage sludge more stringent than existing federal and state regulations is promulgated under Section 405(d) of the Clean Water Act (CWA), this permit shall be modified or revoked and reissued to conform to the promulgated regulations.
- (3) The permittee shall give prior notice to the Commissioner of any change(s) planned in the permittee's sludge use or disposal practice. A change in the permittee's sludge use or disposal practice may be a cause for modification of the permit.
- (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 to have exceeded permit limits will be considered non-compliant.
- (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 for the review of the Commissioner within one year, 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 BOD5, 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 in accordance with the manufacturers' 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. The permittee shall operate all process equipment at all times in such a manner as to reduce discharges to the maximum extent possible. 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 equipment or processes without the written approval of the Commissioner.
- (P) On or before 2.5 years from issuance each anaerobic digester unit shall be sampled, in a manner approved in writing by the Commissioner, to determine the amount of grit and depth of scum blanket. The results of the sampling shall be maintained at the POTW and, upon request, the permittee shall submit to the Commissioner a copy of the sampling data.
- (Q) The permittee is hereby authorized to accept septage at the treatment facility; or other locations as approved by the Commissioner.
- (R) The temperature of any discharge shall not increase the temperature of the receiving stream above 85°F, or, in any case, raise the normal temperature of the receiving stream more than 4°F.

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 the tables A through G which are incorporated in this permit

Page 5

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, Tables A and B, respectively.

SECTION 6: SAMPLE COLLECTION, HANDLING and ANALYTICAL TECHNIQUES

(A) Chemical Analysis

- (1) Chemical analyses to determine compliance with effluent limits and conditions established in this permit, shall be performed using the methods approved pursuant to the Code of Federal Regulations, Part 136 of title 40 (40 CFR 136) unless an alternative method has been approved in writing pursuant to 40 CFR 136.4 or as provided in Section 22a-430-3-(j)(7) of the RCSA. Chemicals which do not have methods of analysis defined in 40 CFR 136 or the RCSA shall be analyzed in accordance with methods specified in this permit.
- (2) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal, as defined in 40 CFR 136 unless otherwise specified.
- (3) Grab samples shall be taken during the period of the day when the peak hourly flow is normally experienced.
- (4) Samples collected for bacteriological examination shall be collected between the hours of 11 a.m. and 3 p.m. or at that time of day when the peak hourly flow is normally experienced. A chlorine residual sample must be taken at the same time and the results recorded.
- (5) The Minimum Levels specified below represent the concentrations at which quantification must be achieved and verified during the chemical analyses for the parameters identified in Attachment 1, Table(s) A, B, and D. 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
Ammonia Nitrogen	0.010 mg/l
Arsenic, Total	0.005 mg/l
Beryllium, Total	0.001 mg/l
Cadmium, Total	0.0005 mg/l
Chlorine, Total Residual	0.050 mg/l
Chromium, Total Hexavalent	0.010 mg/l
Copper, Total	0.005 mg/l
Cyanide, Total	0.010 mg/l
Lead, Total	0.005 mg/l
Mercury, Total	0.0002 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 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/600/4-90/027F).
 - (a) Daily Composite samples shall be chilled as they are collected. Grab samples shall be chilled immediately following collection. Samples shall be held at 4°C until Aquatic Toxicity testing is initiated.
 - (b) Samples shall be taken after dechlorination for Aquatic Toxicity unless otherwise approved in writing by the Commissioner for monitoring at this facility.
 - (c) Chemical analyses of the parameters identified in Attachment 1, Table B shall be conducted on an aliquot of the same sample tested for Aquatic Toxicity.
 - (i) At a minimum, pH, total alkalinity, total hardness, and total residual chlorine shall be measured in the effluent sample and, during 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. 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.
 - (d) Tests for Aquatic Toxicity shall be initiated within 36 hours of sample collection.
- (2) Monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (invertebrate) shall be conducted for 48 hours utilizing neonatal (less than 24 hours old) Daphnia pulex.
- (3) Monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (vertebrate) shall be conducted for 48 hours utilizing larval (1 to 14-days old with no more than 24 hours range in age) Pimephales promelas.
- (4) Tests for Aquatic Toxicity shall be conducted as prescribed for static non-renewal acute tests in "Methods for measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/600/4-90/027F), except as specified below.
 - (a) For 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, except that five replicates of undiluted effluent and five replicates of effluent diluted to the CTC shall be included.
 - (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 CaCO₃ 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 Aquatic Toxicity Test indicate 90% or greater survival in the effluent sample at the CTC (100%).
- (C) Chronic Aquatic Toxicity Test
 - (1) Chronic toxicity testing of the discharge shall be conducted annually during July, August, or September of each year.
 - (2) Chronic 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-600-4-91-002) as referenced in 40 CFR 136 for *Ceriodaphnia* survival and reproduction and Fathead minnow larval survival and growth.
 - (a) Chronic 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) Limekiln Brook water collected immediately upstream of the area influenced by the discharge shall be used as control (0% effluent) and dilution water in the toxicity tests.
- (c) A laboratory water control consisting of synthetic freshwater prepared in accordance with EPA-600-4-91-002 at a hardness of 50+/-5 mg/l shall be used as a second control (0% effluent) on the toxicity tests.
- (d) Daily composite samples of the discharge (final effluent following disinfection) and grab samples of Limekiln Brook for use as site water control and dilution water shall be collected on day 0 for test solution renewal on day 1 and day 2 of the test, day 2, for test solution renewal on day 3 and day 4 of the test; and day 4, for test solution renewal for the remainder of the test. Samples shall not be pH or hardness adjusted, or chemically altered in any way.
- (3) All samples of the discharge and Limekiln Brook water used in the chronic 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 Management at the following address. 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 Management, Planning and Standards Division 79 Elm Street Hartford, CT 06106-5127

- (B) Complete and accurate test data, including percent survival of test organisms in each replicate test chamber, LC₅₀ 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 Management 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, respectively, and reported to the Bureau of Water Management at the following address. The MOR report shall also be accompanied by a detailed explanation of any violations of the limitations specified. As long as the Municipality contracts Stamford WPCF lab for nutrient analyses and Stamford supplies the DEP with the NAR for such Municipality, the Municipality need not submit an additional NAR themselves. The MOR and NAR must be received at the following address by the 15th day of the month following the month in which the data and samples are collected.

Bureau of Water Management Planning and Standards Division Municipal Facilities Section Connecticut Department of Environmental Protection 79 Elm St. Hartford, CT. 06106-5127

(D) A complete and thorough report of the results of the chronic toxicity monitoring outlined in Section 6(C) shall be prepared as

PERMIT # CT0100145 Page 8

outlined in Section 10 of EPA-600-4-91-002 and submitted to the Department for review on or before December 31 of each calendar year to the address specified in Section 7 (A) of this permit.

SECTION 8: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS

- (A) If any 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 Aquatic Toxicity and associated chemical parameters, as described above in Section 5 and Section 6, and the results reported to the Bureau of Water Management (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 months 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 test results or any three test results in a twelve month period indicates that the 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 Management (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 Management, Planning and Standards Division (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 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 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 Management, Planning and Standards Division, Municipal Facilities Section within five days 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.
- (D) Section 22a-430-3(j) 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 Management, Planning and Standards Division 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.
- (E) Section 22a-430-3(j) of the RCSA shall apply in all instances of monitoring equipment failures. In the event of any failure of the monitoring equipment including, but not limited to, loss of refrigeration 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 Management, Planning and Standards Division 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.
- (F) In addition to the reporting requirements contained in Section 22a-430-3(i), (j), and (k) of the Regulations of Connecticut State

PERMIT # CT0100145

Agencies, the permittee shall notify in the same manner as in paragraph C of this Section, the Department of Environmental Protection, Bureau of Water Management, Planning and Standards Division, Municipal Facilities Section (860) 424-3704 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. If the failure 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 learning of the event to the Emergency Response Unit at (860) 424-3338 and the Department of Public Health at (860) 509-8000.

SECTION 9: COMPLIANCE SCHEDULES

- (A) The permittee shall achieve the final water quality-based effluent limits for Metals for DSN 001 established in Section 5 of this permit, in accordance with the following:
 - (1) On or before 150 days after the date of issuance of this permit, submit for the Commissioner's review and written approval, a report detailing a system-wide mass balance analysis which evaluates the relative loading of pollutants for which water quality-based effluent limits have been established in Section 5 from industrial, commercial and residential sources including consideration of the public water supply and distribution system. Also, submit for the Commissioner's review and written approval, an evaluation which determines the need to retain a consultant to perform the actions required.
 - On or before 120 days after the date of completion of step A (1) above, and if determined necessary on the basis of the evaluation performed in step A (1) above, the permittee shall retain one or more qualified consultants acceptable to the Commissioner to prepare the documents and implement or oversee the actions required by this permit and shall, by that date, notify the Commissioner in writing of the identity of such consultants. The municipality shall retain one or more qualified consultants acceptable to the Commissioner until this permit is fully complied with, and, within ten days after retaining any consultant other than the one originally identified under this paragraph, the municipality shall notify the Commissioner in writing of the identity of such other consultant. The consultant(s) retained shall be a qualified professional engineer licensed to practice in Connecticut. The permittee shall submit to the Commissioner a description of a consultant's education, experience and training which is relevant to the work required by this permit within ten days after a request for such a description. Nothing in this paragraph shall preclude the Commissioner from finding a previously acceptable consultant unacceptable.
 - On or before one year after the completion of step A (2) above, the permittee shall submit for the Commissioner's review and written approval a comprehensive and thorough engineering report which describes and evaluates alternative actions to achieve compliance with the Metals limitations in Section 5 of this permit. Such report shall:
 - (a) Evaluate alternative actions to achieve compliance including but not limited to imposing additional pretreatment requirements on industrial users, modification of potable water treatment practices and operational changes to improve removal efficiencies at the permittee's facility.
 - (b) State in detail the most expeditious schedule for performing each alternative.
 - (c) List all permits and approvals required for each alternative, including but not limited to any permits required under Sections 22a-32, 22a-42a, 22a-361, 22a-368 or 22a-430 of the CGS;
 - (d) Propose a preferred alternative or combination of alternatives with supporting justification therefor; and
 - (e) Propose a detailed program and schedule to perform all actions required to implement the preferred alternative, including but not limited to a schedule for submission of engineering plans and specifications for any new equipment, the start and completion of any construction activities and applying for and obtaining all permits and approvals required for such actions.
 - (4) Unless another deadline is specified in writing by the Commissioner, on or before 270 days after approval of the engineering report, the permittee shall (1) submit for the Commissioner's review and written approval, contract plans and specifications for the approved remedial actions, a revised list of all permits and approvals required for such actions and a revised schedule for applying for and obtaining such permits and approvals; and (2) submit applications for all permits and approvals required under Sections 22a-430 and 22a-416 of the CGS. The permittee shall obtain all required permits and approvals.

- (B) The permittee shall submit to the Commissioner semi-annual status reports beginning sixty days after the date of approval of the report referenced in Section A (3) 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 (4) of this Section.
- (C) 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 4 years and 349 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.
- (D) 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.
- (E) <u>Dates.</u> 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.
- 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.
- (G) 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.
- (H) <u>Submission of documents</u>. 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:

Roy Fredricksen, Engineer
Department of Environmental Protection
Bureau of Water Management
79 Elm Street
Hartford, CT 06106-5127

This permit is hereby issued on the 13th day of February, 2003.

Arthur Locque, Jr.
Commissioner

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): 3.15 cfs

In-stream Waste Concentration (IWC): 88.4%

		FLOW/I	TIME BAS	ED MONIT	ORING		TANEOUS TORING		REPORT FORM	Minimum Level	
PARAMETER	Units	Average Monthly Limit	Maximum Daily Limit	Sample Freq.	Sample Type	InstantaneousLimit or Required Range	Sample Freq.	Sample Type		Analysis See Section 6	
Alkalinity	mg/l	NA	NA	NR	NA		Monthly	Grab	MOR		
Biochemical Oxygen Demand (5 day) October 1st through June 30th	mg/l	30 mg/l and 15% of Influent 1	50	3/week	Daily Composite	NA	NR	NA	DMR/MOR		
Biochemical Oxygen Demand (5 day) July 1st through September 30th	mg/l	20 mg/l and 15% of Influent 1	30	3/week	Daily Composite	NA	NR	NA	DMR/MOR		
Chlorine, Total Residual May 1st through September 30th	mg/l	0.013	0.023	4/workday	Grab	≤0.04	4/workday	Grab	DMR/MOR	•	
Copper, Total ⁴	mg/l	0.048	0.072	Weekly	Daily Composite	NA	NR	NA	DMR/MOR	•	
Copper, Total ⁵	mg/l	0.019	0.029	Weekly	Daily Composite	NA	NR	NA	DMR/MOR	•	
Fecal Coliform May 1st through September 30th	per100 ml	NA	NA	NR	NA	see remarks (B) and (C) below	3/week	Grab	DMR/MOR		
Flow, Average Daily	MGD	15.5		Continuous ²	Metered	NA	NR	NA	DMR/MOR		
Nitrogen, Ammonia (total as N) November through April	mg/l	4.0		3/week	Daily Composite	NA	NR	NA	DMR/MOR/NAR]
Nitrogen, Ammonia (total as N) May and October	mg/l	1.9		3/week	Daily Composite	NA	NR	NA	DMR/MOR/NAR]
Nitrogen, Ammonia (total as N) June	mg/l	1.7		3/week	Daily Composite	NA	NR	NA	DMR/MOR/NAR]/
Nitrogen, Ammonia (total as N) July through September	mg/l	1.5		3/week	Daily Composite	NA	NR	NA	DMR/MOR/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	≥6.0	Workday	Grab	DMR/MOR		
pH	S.U.	NA	NA	NR	NA	6-9	Workday	Grab	DMR/MOR		
Phosphate, Ortho May 1st through September 30th (see remark E)	mg/l			Daily	Daily Composite	NA	NR	NA	MOR/NAR		

Phosphate, Ortho October 1st through April 30th	mg/l		*****	Monthly	Daily Composite	NA	NR	NA	NAR	
Phosphorus, Total May 1st through September 30th	mg/l	1.0	1.5	3/week	Daily Composite	NA	NR	NA	DMR/MOR/NAR	
Phosphorus, Total October 1st through April 30th	mg/l			Monthly	Daily Composite	NA	NR	NA	NAR	
Solids, Settleable	ml/l	NA	NA	NA	NA		Workday	Grab	MOR	
Solids, Total Suspended	mg/l	30 mg/l and 15% of Influent ¹	50	3/week	Daily Composite	NA	NR	NA	DMR/MOR	
Temperature	°F	NA	NA	NR	NA		Workday	Grab	MOR	
Turbidity	NTU	NA	NA	NA	NA		Workday	Grab	MOR	
Zinc, Total ⁴	mg/l	0.137	0.207	Weekly	Daily Composite	NA	NR	NA	DMR/MOR	*
Zinc, Total ⁵	mg/l	0.053	0.080	Weekly	Daily Composite	NA	NR	NA	DMR/MOR	*

TABLE A - FOOTNOTES AND REMARKS

Footnotes:

- The discharge shall meet the more stringent of 30 mg/l or 15% of the average monthly influent BOD5 from October 1st through June 30th and 20 mg/l or 15% of the average monthly influent BOD5 from July 1st through September 30th. The discharge shall meet the more stringent of 30 mg/l or 15% of the average monthly influent suspended solids (Table D, Monitoring Location G).
- ² The permittee shall record and report on the MOR the minimum, maximum, 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 for each sampling month.
- The Maximum Daily Concentration to be reported shall be determined by mathematically averaging the results of the four grab samples required above. The Average Monthly Concentration shall be determined by mathematically averaging the results of the Maximum Daily Concentrations required above.
- ⁴ During the period beginning at the date of issuance of this permit and lasting until the completion of construction of the improvements to the Water Pollution Control Facility, the discharge shall not exceed and shall otherwise conform to specific terms and conditions listed.
- ⁵ During the period beginning after the completion of construction of the improvements to the Water Pollution Control Facility but no later than 4 years and 349 days after permit issuance, lasting until expiration, the discharge shall also not exceed and shall otherwise conform to the specific terms and conditions listed.

Remarks:

- (A) The use of chlorine for disinfection shall be discontinued from October 1st through April 30th except that chlorination and dechlorination equipment may be started and tested no earlier than April 15th, and any residual chlorine gas or liquid may be used up until, but no later than, October 15th. During these times in April and October the total residual chlorine of the effluent shall not be greater than 0.04 mg/l, as an instantaneous limit, and 0.02 mg/l, as a maximum daily limit. The analytical results shall be reported as an attachment to the DMR for the months of April and October. No monitoring is required for Fecal Coliform or Total Residual Chlorine from October 16th through April 14th.
- (B) The geometric mean of the fecal Coliform bacteria values for the effluent samples collected in a period of thirty (30) consecutive days during the period from May 1st through September 30th shall not exceed 200 per 100 milliliters.
- (C) The geometric mean of the fecal Coliform bacteria values for the effluent samples collected in a period of seven (7) consecutive days during the period from May 1st through September 30th shall not exceed 400 per 100 milliliters.
- (D) The Average Weekly discharge Limitation for BOD5 and Total Suspended Solids shall be 1.5 times the Average Monthly Limit listed above.
- (E) Ortho-phosphate shall be tested for daily, during the period from May 1st to September 30th of each calendar year, using a simplified test procedure acceptable to the Commissioner, for the purpose of operational control.

TABLE B

Discharge Serial Number (DSN): 001-1				Monitoring Location: T		
Wastewater Description: Sanitar	y Sewage					
Monitoring Location Description: Final E	Muent after	dechlorination				
Allocated Zone of Influence (ZOI): 3.25cfs		T	In stream Wast	e Concentration (TWC): 88.	4%	
PARAMETER	Units	Maximum Daily Limit	Sampling Frequency	Sample Type	Reporting form	Minimum Level Analysis See Section (
Antimony, Total	mg/l		Quarterly	Daily Composite	ATMR	
Aquatic Toxicity, Daphnia pulex 1	%	NOAEL=100%	Quarterly	Daily Composite	ATMR/DMR	
Aquatic Toxicity, Pimephales promelas	%	NOAEL=100%	Quarterly	Daily Composite	ATMR/DMR	
Arsenic, Total	mg/l		Quarterly	Daily Composite	ATMR	*
Beryllium, Total	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/i		Quarterly	Daily Composite	ATMR	*
Silver, Total	mg/i		Quarterly	Daily Composite	ATMR	*
Thallium, Total	mg/l		Quarterly	Daily Composite	ATMR	*
Zinc, Total	mg/l		Quarterly	Daily Composite	ATMR	*

Remarks: 1 The results of the Toxicity Tests are recorded in % survival, however, the permittee shall report pass/fail 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:	Secondary treatment		-	
Monitoring Location Description:	Each Aeration Unit			
	INSTANTANEOU	S MONITORING	REPORTING FORM	
PARAMETER	Sample Frequency	Sample Type		
Oxygen, Dissolved	4/WorkDay	Grab	MOR	
Sludge Volume Index	1/WorkDay	Grab	MOR	
Mixed Liquor Suspended Solids	1/WorkDay	MOR		

TABLE D

Discharge Serial Number:	001-1		Monitoring	Location: G			
Wastewater Description:	Sanitary S	Sewage					
Monitoring Location Description:	Influent						
PARAMETER	Units	DMR REPORTING FORMAT	FLOW/TIME E	BASED MONITORING	INSTANTA MONITO		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, TKN	mg/l		Monthly	Daily Composite	NA	NA	NAR
Nitrogen, Total	mg/l		- Monthly	Daily Composite	NA	NA	NAR
Solids, Total Suspended	mg/l	Monthly average	3/week	Daily Composite	NA	NA	DMR/MOR

TABLE E

Discharge Serial Number:	001-1		Monitoring Location:	P		
Wastewater Description:	Primary Effluent					
Monitoring Location Description:	Primary Sedimentat	ion Basin Efflu	ent			
			FLOW BASED NITORING	INSTANTA MONITO		REPORTING FORM
PARAMETER	Units	Sample Frequency	Sample Type	Sample Frequency	Sample type	
Alkalinity, Total	mg/l	Monthly	Daily Composite	NA	NA	MOR
Biochemical Oxygen Demand (5 day)	mg/l	Weekly	Daily Composite	NA	NA	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, TKN	mg/l	Monthly	Daily Composite	NA	NA	NAR
Nitrogen, Total	mg/l	Monthly	Daily Composite	NA	NA	NAR
pH	S.U.	NA	NA	Workday	Grab	MOR
Solids, Total Suspended	mg/l	Weekly	Daily Composite	NA	NA	MOR

TABLE F

Discharge Serial Number: 001-1	Monitoring Location: S		
Wastewater Description: dewatere	ed sludge		
Monitoring Location Description: dewater	red sludge		
PARAMETER	INSTANTAN	EOUS 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	+
Nitrogen, Nitrate (total as N) *	mg/kg	Bi-monthly	*
Nitrogen, Organic *	mg/kg	Bi-monthly	*
Nitrogen, Nitrite (total as N) *	mg/kg	Bi-monthly	*
Nitrogen, Total *	mg/kg	Bi-monthly	*
pH *	S.U.	Bi-monthly	*
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 applicati	on only		

TABLE G

Discharge Serial Number: 001-1	Monitoring Location: L		
Wastewater Description: digest	ted sludge		
Monitoring Location Description:	each anaerobic digestion u	nit	
	INSTANTANEOU	S MONITORING	REPORTING FORM
PARAMETER	Sample Frequency	Sample Type	
Temperature	Weekly	Grab	MOR
Alkalinity	Weekly	Grab _	MOR
Volatile Acids	Weckly	Grab	MOR
pH	Weekly	Grab	MOR

ATTACHMENT 2

MONTHLY OPERATING REPORT FORM AND NUTRIENT ANALYSIS REPORT

Danbury WPCF

Facility Id: 034-001

Chief Plant Operator:

Page 1 of MOR for permit # CT0100145 Date received: (stamped)

Sample month/year.

Phone:

j		aily Flo		Prir	nary S	ludge		ration		1	Ae	ration 1	Γank #	2	Aen	ation Ta	ank #3		Aera	ation Ta	nk #4		Trickling	Return sludge		Waste	Dry s	olids	Was	ste
									high	low	MLSS		high	low	ļ		high	low			high	low	Filter			sludge			ассер	
	Max.		Total		%	wt.	MLSS	SVI	D.O.	D.O.	MLSS	SVI	D.O.	D.O.	MLSS	SVI	D.O.	D.O.	MLSS	SVI	D.O.	D.O.		%flow	%solids	lbs	in		septic	
Units		mgd			solids vork da			4	mg 4 h mg	9/1	work da		My 46vor	g/l	work	day	4byor	kday	work	day			% return work day	work	k day	work	work	dav	gai	gal day
Freq		daily		V	VOIK GE	y	WORK	day	4/WOI	Kday	WORK O	ду	4/₩0	Nuay	WOIN	uay	/-WOI	Nuay	WOIK	day	""	Rouy	work day	****	· uuy	day				
1	-	T	T			Ī																								
2	:																													
3																														
4								•••																						
5																														
6																														
7																														
8																														
9																														
10			1			1																								
11		1																										<u> </u>		
12																	<u> </u>												!	
13												1																		
14																					ļ	<u> </u>						ļ		
15						Ĭ																ļ	<u> </u>		ļ					
16											<u> </u>		ļ				<u> </u>			ļ <u> </u>	<u> </u>	<u> </u>		ļ					<u> </u>	
17										<u> </u>					<u> </u>		<u> </u>			ļ	ļ	<u> </u>								
18											<u> </u>		<u> </u>				<u> </u>		ļ	ļ	<u> </u>	ļ						ļ	ļ!	
19							<u> </u>		<u> </u>		<u> </u>		<u> </u>	ļ			<u> </u>		ļ	<u> </u>		ļ								
20									<u> </u>				ļ	<u> </u>	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>							<u> </u>	
21							<u> </u>		<u> </u>				<u> </u>	<u> </u>	ļ	<u> </u>	<u> </u>	<u> </u>			ļ	L				<u> </u>				
22								ļ	<u> </u>		<u> </u>	<u> </u>		<u> </u>	<u> </u>		<u> </u>	<u> </u>		<u> </u>	<u> </u>	ļ]		ļ	 	
23						<u> </u>	<u> </u>	ļ	<u> </u>		<u> </u>	L	<u> </u>	ļ	<u> </u>	ļ		_	ļ	<u> </u>	<u> </u>	 						-	 	
24		<u> </u>	<u> </u>			<u> </u>	<u> </u>			<u> </u>			<u> </u>	ļ	<u> </u>	ļ				<u> </u>	-	ļ						-	 	
25				L	ļ	<u> </u>	<u> </u>	<u> </u>		ļ	<u> </u>		ļ		 	<u> </u>		<u> </u>	ļ	ļ	 	ļ					<u> </u>	-	 	
26						ļ	<u> </u>	<u> </u>		<u> </u>	<u> </u>		<u> </u>	ļ	 	ļ	-			<u> </u>	ļ	 			ļ		ļ	 	<u> </u>	
27			<u> </u>	<u> </u>	1		<u> </u>	ļ	<u> </u>		<u> </u>	ļ	<u> </u>	ļ	<u> </u>	ļ	<u> </u>		<u> </u>	 	-	-		<u> </u>	 	ļ	ļ	ļ	<u> </u>	
28		1		<u> </u>		ļ	ļ	<u> </u>	<u> </u>		 		<u> </u>	_	 	ļ	<u> </u>	<u> </u>		<u> </u>	ļ	ļ			ļ		<u> </u>	 	 	
29		$oldsymbol{ol}}}}}}}}}}}}}}}}}$				1	<u> </u>			$oxed{oldsymbol{oldsymbol{oldsymbol{eta}}}}$	 		1	_	 	 	<u> </u>		 	<u> </u>	<u> </u>	 		ļ			ļ	_	<u> </u>	
30		1			<u> </u>		<u> </u>		<u> </u>	_	1		<u> </u>	 	 	ļ	<u> </u>		ļ	1	<u> </u>	<u> </u>		 		ļ	<u> </u>	ļ	 	
31				<u> </u>			1	ļ		$oxed{oxed}$		ļ	_			<u> </u>	1	ļ	ļ	<u> </u>	ļ	<u> </u>		<u> </u>	<u> </u>		_	ļ	<u> </u>	
Total								<u> </u>	<u> </u>	ļ	<u> </u>	<u> </u>		_	1	ļ		ļ	ļ	ļ		<u> </u>		ļ	ļ		ļ		 	
Ave	1										<u> </u>	l	<u></u>			<u> </u>	<u></u>	<u> </u>			1	<u></u>			<u> </u>		<u> </u>		L	

Page 2 of MOR for permit # CT0100145

Γ.	Pri	imanı	Anger	obic D	ioesta				Sec	ondan	/ Anae	embic	Digest	er		В	OD (5-	day)	Suspe	nded So	olids	Settleable	Turbidity	Chlo	orine	Chlo	orine	Fecal		Ammon	ia	D.O.
prim	sec	prim	sec	prim	sec	prim	sec	prim	sec	prim	sec	prim	sec	prim	sec	Inf.	Prim.	Final	Inf.	Prim.	Final	Solids	l aroloky		ose	Resi		Coliform				5.0.
рН	pН	Alk.	Alk.	temp	temp	V.A.	V.A.	pН	pH	Alk.	Alk.	temp	temp	V.A.	V.A.	l	Eff.	Eff.		Eff.	Eff.	Eff.	Eff.			high	low		Inf.	Prim.	Eff.	Eff.
S.U.	S.U.	mg/l	mg/l	•F	•F	mg/l	mg/l	S.U.	S.U.	mg/l	mg/l	•F	°F	mg/l	mg/l		mg/l			mg/l		ml/l	NTU	lbs	mg/l		ng/l	#/100 ml		mg/l		mg/l
		_	we	ekly			·				we	ekly				3 per	weekly	3 per	3 per	weekly	3 per	3/week	work	Di	aily		vork	3/week				work-
	,	,	,			,	,						r			week	ļ	week	week		week		day			d	ay		week	month	week	day
<u> </u>												<u> </u>				<u> </u>		ļ					<u> </u>	<u> </u>		L	<u> </u>					
																	L		<u> </u>				<u> </u>	<u> </u>							Ĺ	
																	1				<u> </u>											
				 		-							<u> </u>						t		 			l								\Box
		├─		-		 	 					-	<u> </u>				<u> </u>	 -	 						\vdash	 						
	<u> </u>		-	 						<u> </u>		 	 		-	 	 	-	 		ļ. <u>.</u>					 						\vdash
	<u> </u>		<u> </u>	 		<u> </u>			ļ	-					├	<u> </u>		 	├	<u> </u>	-			 	 	 					 	
	<u> </u>		 			ļ			ļ		ļ	<u> </u>	ļ		 	ļ	ļ	 	<u> </u>					<u> </u>					<u> </u>		 	
											<u> </u>	 						ļ			ļ		ļ	L	<u> </u>							igsquare
			1							<u> </u>									ļ		<u> </u>											
												l		<u> </u>					l							l						1
			l											,																		
				 	,				<u> </u>	ļ —					1				<u> </u>		<u> </u>			<u> </u>								
	 		 	 			-	l		 	-			 	1	 	 	 					<u> </u>			1		·				
 	-		-	 	 				 						 		 	 	 		ļ	 			 -	 	ļ <u> </u>		 			
├─			 	 				 	├	 	-		-	 	\vdash	-	<u> </u>	-	 		 	-		-	\vdash	\vdash				-		
-		ļ <u>-</u> .	<u> </u>		-			 -	├	-	ļ	 	ļ	_	-	ļ	 	 	-		 	 	<u> </u>	-		 						\vdash
<u> </u>			-	├—	 -		_	 	├	ļ			<u> </u>		├		 	 			 	 	<u> </u>	 	 	├	 					
			ļ	 	ļ			<u> </u>	<u> </u>		ļ	<u> </u>		ļ	 		ļ	 -	<u> </u>		<u> </u>			-	<u> </u>	 —	├	ļ	<u> </u>	i	<u> </u>	<u> </u>
			<u> </u>					<u> </u>	ļ						<u> </u>		ļ	ļ	<u> </u>		ļ	ļ		ļ	ļ	ļ	ļ					
			<u> </u>												<u> </u>	<u> </u>	<u> </u>	ļ	<u> </u>		ļ		ļ		ļ	<u> </u>	ļ			<u> </u>		└
						'							<u> </u>	<u> </u>	<u> </u>			<u> </u>	<u> </u>	<u> </u>							<u> </u>					<u> </u>
													<u> </u>				<u> </u>		<u> </u>		<u></u>			ļ								
								<u> </u>																								
													1								T						<u> </u>					
				 	 	ļ					 					<u> </u>	1	 	†							—	<u> </u>		l			
	<u> </u>	\vdash	\vdash	\vdash	 	 		\vdash	 	†		 	 		\vdash	 	\dagger	1	†		1	 			 		<u> </u>		-	†		
			\vdash	\vdash		_		-	 	 	-		 		 		+	 	 		 			 	\vdash	 	\vdash		 			\vdash
	<u> </u>		 	├	 		 	_	\vdash			 	├		 	 		+	-	 	-	-	 	-	\vdash	 	 	 	<u> </u>			
	<u> </u>	_	-	<u> </u>			 	ļ	!	ऻ—	ļ	<u> </u>		ļ	 	 	 -	-			-		 					.	<u> </u>			
<u> </u>			<u> </u>			ļ	<u> </u>		<u> </u>	ļ		ļ	 		-	 	<u> </u>				ļ		ļ			<u> </u>			<u> </u>	$\vdash \vdash$		
				<u> </u>	<u> </u>		<u> </u>		<u> </u>	<u> </u>		<u> </u>			 	ļ	<u> </u>	ļ			ļ	ļ		ļ		<u> </u>					ļ	ļl
L	<u> </u>					<u> </u>				<u>L</u>	<u></u>	<u> </u>	<u> </u>			<u> </u>	<u> </u>		1			<u> </u>		<u> </u>		<u> </u>						





рН	Total P	OrthoP	Total P	OrthoP	Temp	Zinc	Copper
P. Eff Eff.	Eff.	Eff.	Eff.	Eff.	Eff.	Eff.	Eff.
S.U.	mg/l	mg∖i	mg/l	mg∖l		mg/l	mg/t
work day	May 1-				work-		
	3/week	daily			day		
 	 		<u> </u>				
	L						
				1			
 							
		7					
							
 							
				ļ			
	 				—		
	<u></u>		l	L		L	

Oldage	e disposal location:
Please	e return forms to:
DEP -	Bureau of Water Management
ATTN:	: Municipal Wastewater Monitoring Coordinator
Munic	ipal Facilities
79 Eln	n Street
Hartfo	rd, CT 06106-5127
Staten	nent of Acknowledgement
I certif	y under penalty of law that this document
and al	l attachments were prepared under my
direction	on or supervision in accordance with a
systen	n designed to assure that qualified
persor	nnel properly gather and evaluate the
inform	ation submitted. Based on my inquiry
of the	person or persons who manage the
systen	n, or those persons directly responsible
for gat	thering the information, the information
submi	tted is, to the best of my knowledge and
belief,	true, accurate, and complete. I am aware
that th	ere are significant penalties for submitting
false ir	nformation including the possibility of fine
and im	prisonment for knowing violations.
Author	rized Official:
Title:	Superintendent

Date:

TABLE B

Nutrient Analysis Report for compliance with NPDES permit Flow Rate

Danbury WPCF Perm	at # C101001	45 Flow	Rate	mgd Samp	ling Date	//		
	Raw Influent		Primary Effluent		Final Effluent		Plant Efficiency	
Parameter	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	%	
Ammonia								
Nitrite								
Nitrate								
TKN								
Total Nitrogen = TKN + nitrite + nitrate								
Orthophosphates							1	
Total Phosphorus								

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