STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

MUNICIPAL NPDES PERMIT

issued to

Permittee:
The Metropolitan District
P.O. Box 800
Hartford, Connecticut 06142-0800

Location Address:
Hartford WPCF
240 Brainard Road
Hartford, Connecticut 06114

Facility ID: 064-001 **Permit ID:** CT0100251 **Permit Expires:** October 24, 2010

Receiving Stream: Connecticut River **Design Flow Rate:** 80 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 Metropolitan District, ("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 (l)(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
- **(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.

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 "sewage", 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(s) and ATMR.

"Annual" in the context of any sampling frequency found in Attachment 1, means the sample must be collected in the month of June.

"Average Monthly Limit" means the maximum allowable "Average Monthly Concentration" as defined in Section 22a-430-3(a) of the RCSA when expressed as a concentration (e.g. mg/l); otherwise, it means "Average Monthly Discharge Limitation" as defined in Section 22a-430-3(a) of the RCSA.

"Composite" or **"(C)"** means a sample consisting of a minimum of eight aliquot samples, collected at equal intervals of no less than 30 minutes and no more than 60 minutes, and combined proportionally to flow over the sampling period provided that during the sampling period the peak hourly flow is normally 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.

"Domestic Sewage" means sewage that consists of water and human excretions or other water-borne wastes incidental to the occupancy of a residential building or a non-residential building but not including manufacturing process water, cooling water, wastewater from water softening equipment, commercial laundry wastewater, blowdown from heating or cooling equipment, water from cellar or floor drains or surface water from roofs, paved surfaces or yard drains.

"Geometric Mean" is the "n^{th}" root of the product of "n" observations.

"Grab Sample Average" means the arithmetic average of all grab sample analyses.

"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.

"MGD" means million gallons per day.

"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 March, June, September, and December.

"Sanitary Sewage" means wastewaters from residential, commercial and industrial sources introduced by direct connection to the sewerage collection system tributary to the treatment works including non-excessive inflow/infiltration sources.

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

"Septage" means any water or material withdrawn from a septic tank which is used to treat domestic sewage.

"Sewage" means human and animal excretions and all domestic and such manufacturing wastes as may tend to be detrimental to the public health. For purposes of this permit, sewage also includes excessive infiltration and inflow.

"Sludge" means solid, semi-solid or liquid residue generated from municipal, residential, commercial or industrial wastewater treatment processes exclusive of the treated effluent, including water treatment wastewater sludges.

"Transported" means trucked or hauled wastewater sludge taken to dedicated receiving facilities at the POTW.

"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 official MDC 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 #199500128 for permit reissuance, received on June 29, 1990 and the addendum/update received on March 5, 2003 and on March 17, 2003; and the administrative record established in the processing of that application.

(B) The Commissioner and Permittee have entered into Consent Order No. WC5365 on October 21, 2002. This Consent Order requires the Permittee to prepare and implement a Long-Term Combined Sewer Overflow Control Plan to address discharges from combined sewer overflows.

(C) The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit.

(D) 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 sewerage 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 and approved by the Commissioner 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 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 or dedicated taxes or other fees 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 from these permitted sources shall cause acute or chronic toxicity in the receiving water body beyond the Zone Of Influence (ZOI) specifically allocated to any 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 percent of the average monthly influent concentration for $CBOD_5$ and Total Suspended Solids. The 15 percent provision will be calculated using data from days where the facility experienced flows below an instantaneous flow rate of 90 MGD and stated as such on the DMR and MOR.

(I) Any new or increased amount of sanitary sewage discharge to the sewer system is prohibited where it will cause a 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 180 consecutive calendar days exceeds 90% of the design flow rate, the Permittee shall develop and submit for the review of the Commissioner within one year of the 180th day, 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 $CBOD_5$ or TSS loading into the POTW for 180 consecutive calendar days exceeds 90% of the design load rate, the Permittee shall develop and submit for the review of the Commissioner within one year of the 180th day, 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 and/or standard operating procedures for the purposes of the optimal removal of pollutants. 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. The Permittee shall not bypass or fail to operate any of the approved equipment or processes 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 from this permitted source 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 beyond the ZOI for thermal impact.

SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(A) The discharge 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 F 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. 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 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
Antimony, Total	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	0.005 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
Nickel, Total	0.005 mg/l
Selenium, Total	0.005 mg/l
Silver, Total	0.002 mg/l
Thallium, Total	0.010 mg/l
Zinc, Total	0.020 mg/l

(6) The value of each parameter for which monitoring is required under this permit shall be reported to the maximum level of accuracy and precision possible consistent with the requirements of this Section of the permit.

(7) Effluent analyses for which quantification was verified during the analysis at or below the minimum levels specified in this Section and which indicate that a parameter was not detected shall be reported as "less than x" where 'x' is the numerical value equivalent to the analytical method detection limit for that analysis.

(8) Results of effluent analyses which indicate that a parameter was not present at a concentration greater than or equal to the Minimum Level specified for that analysis shall be considered equivalent to zero (0.0) for purposes of determining compliance with effluent limitations or conditions specified in this permit.

(B) Acute Aquatic Toxicity Test

(1) Samples for monitoring of Acute Aquatic Toxicity shall be collected and handled as prescribed in "Methods for Measuring the Acute Aquatic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA-821-R-02-012).

(a) Composite samples shall be chilled as they are collected. Grab samples shall be chilled immediately following collection. Samples shall be held at 0-6^{0}C until Acute Aquatic Toxicity testing is initiated.

(b) Samples shall be taken prior to chlorination for Acute Aquatic Toxicity until such time as the Permittee has achieved compliance with final limits on chlorine. After compliance with final limits on chlorine has been achieved, samples shall be taken post-disinfection 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, specific conductance, 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. 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.

(d) 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-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-821-R-02-012), 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.

(b) Organisms shall not be fed during the tests.

(c) Synthetic freshwater prepared with deionized water adjusted to a hardness of 50$\pm$5 mg/l as $CaCO_3$ 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 Aquatic Toxicity Test indicates less than 90% survival in the effluent at the CTC (100%).

(C) Chronic Aquatic Toxicity Test

(1) Annual monitoring of the discharge for chronic aquatic toxicity shall be conducted 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) Connecticut River 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-821-R-02-013 at a hardness of 50±5 mg/l shall be used as an additional control (0% effluent) in the toxicity tests.

(d) Daily composite samples of the discharge (final effluent following disinfection) and grab samples of the Connecticut River, for use as site water control and dilution water, shall be collected on **(i)** day 0 for test solution renewal on day 1 and day 2 of the test; **(ii)** day 2, for test solution renewal on day 3 and day 4 of the test; **(iii)** and day 4, for test solution renewal for the remainder of the test. Samples shall not be pH or hardness adjusted. Samples shall be dechlorinated prior to initiation of chronic toxicity analysis.

(3) All samples of the discharge and Connecticut River water used in the chronic aquatic toxicity test shall, at a minimum, be analyzed and results reported in accordance with the provisions listed in Section 6(A) of this permit for the following parameters:

pH
Hardness
Alkalinity
Conductivity
Nitrogen, ammonia (total as N)
Solids, Total Suspended
Copper (total recoverable and dissolved)
Zinc (total recoverable and dissolved)
Total Residual Chlorine

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. 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.

Connecticut Department of Environmental Protection
Bureau of Water Management, Planning and Standards Division
ATTN: Municipal Wastewater Monitoring Coordinator
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 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, Tables A and B, respectively, and reported to the Bureau of Water Management. 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 aquatic 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

(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 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 month's DMR report pursuant to Section 7 (A). The results of all acute aquatic 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 acute aquatic toxicity, the Permittee shall immediately take all reasonable steps to eliminate acute aquatic 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 acute aquatic 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 sewerage 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 MDC learning of the incident by telephone during normal business hours and a written report 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. If the diversion or bypass occurs outside normal working hours (8:30 a.m. to 4:30 p.m. Monday through Friday), within two hours of MDC learning of the incident, notification shall be made to the Emergency Response Unit at (860) 424-3338 and the Department of Public Health at (860) 509-8000.

The written report shall contain:

(1) The nature and cause of the bypass,

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

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

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

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

(D) Section 22a-430-3(j) 11 (D) of the RCSA shall apply in the event of any noncompliance with a maximum daily limit and/or any noncompliance that is greater than two times any permit limit. The permittee shall notify in the same manner as in paragraph C of this Section, the Department of 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 after learning of the event.

(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 of 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 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 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 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.

SECTION 9: COMBINED SEWER OVERFLOWS (CSO)

(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 conveyance, 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

(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 CSOs shall not contain septage or holding tank wastes.

(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 120 days after the issuance date of this permit, the Permittee shall submit for the Commissioner's review and written approval a wastewater sludge screening, monitoring and reporting protocol for acceptance of wastewater sludges generated from outside sources other than MDC wastewater treatment facilities that will be transported to the Permittee's POTW for further processing and disposal by means of incineration. 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 Sewage Sludge Generators

(a) The Permittee shall monitor or cause each out of state 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 if available.

(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 of sewage sludge shall provide a description of the domestic, commercial and industrial components generating the biological sludge for the purpose of identifying any unusual characteristics of the sludge which may adversely impact the sludge incineration process.

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

(a) Prior to acceptance of any non-domestic sludge for incineration, the Permittee shall, as applicable, require the generator of such sludge to; (a) 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); (b) 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 (c) 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 (i.e. once every two months) of all the pollutants listed in Table F on a representative sample of dewatered sludge taken prior to incineration.

(b) The Permittee shall conduct annual monitoring of all the pollutants listed in Table F for each out of state municipal POTW sewage sludge generator and each out of state 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 thereafter, 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 Generators and All Out of State Privately Owned Sewage Sludge Generators to monitor its wastewater sludge in accordance with paragraph (1) (a).

(iii) A statement certifying that all generators of commercial and industrial (non-domestic) 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) On or before 180 days after the issuance of this permit, the permittee shall install an automatic sampler in the junction chamber at a point after chlorination and prior to mixing with the secondary treated effluent in order to sample wet weather events. Within fifteen days after completing such actions, the permittee shall certify to the Commissioner in writing that the actions have been completed as approved.

(B) The permittee shall achieve the final water quality-based effluent limits for Total Residual Chlorine for DSN 001 established in Section 5 of this permit, in accordance with the following:

(1) On or before 90 days after the date of issuance of this permit, 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 permittee shall retain one or more qualified consultants acceptable to the Commissioner until the actions required by this permit have been completed, and within ten days after retaining any consultant other than the one originally identified under this paragraph, the permittee shall notify the Commissioner in writing of the identity of such other consultant. The consultant(s) retained to perform the studies and oversee any remedial measures required pursuant to paragraph (B) 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.

(2) On or before 150 days after retaining the consultant(s) in paragraph (B)(1), the permittee shall submit for the Commissioner's review and written approval a comprehensive and thorough engineering report which describes and evaluates alternative actions which may be taken by the permittee to achieve compliance with the Total Residual Chlorine limitations in Section 5 of this permit. Such report shall:

(a) List all permits and approvals required for each alternative, including but not limited to any permits required under Sections 22a-32, 22a-42a, 22a-342, 22a-361, 22a-368 or 22a-430 of the CGS;

(b) Propose a preferred alternative or combination of alternatives with supporting justification thereof;

(c) State in detail the most expeditious schedule for performing each alternative; and

(d) 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.

(3) Unless another deadline is specified in writing by the Commissioner, on or before 300 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.

(4) The permittee shall submit to the Commissioner quarterly status reports beginning 120 days after the date of approval of the report referenced in Section B 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 (B) of this Section.

(5) 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 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:

Michael O'Brien
Department of Environmental Protection
Bureau of Water Management
79 Elm Street
Hartford, Connecticut 06106-5127

This permit is hereby issued on 10/25/05

Gina McCarthy
Commissioner

ATTACHMENT 1

Tables A through F

TABLE A

Discharge Serial Number (DSN): **001-1**	Monitoring Location: **1**
Wastewater Description: **Final Effluent**	
Monitoring Location Description: **Final Settling Tank Effluent**	
Allocated Zone of Influence (ZOI): **2,422.00 CFS**	In stream Waste Concentration (IWC): **4.9%**

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	Sample Freq.	Sample Type		
Alkalinity	mg/l	NA	NA	NR	NA	------	Monthly	Grab	MOR	
Carbonaceous Biochemical Oxygen Demand (5 day) See Remark (d) below	mg/l	25 mg/l and 15% of Influent [1]	50	3/Week[3]	Daily Composite	NA	NR	NA	DMR/MOR	
Chlorine, Total Residual, May 1st through September 30th See Remarks (a) and (e) below.	mg/l	NA	NA	NR	NA	0.2 - 1.5 See remarks (a) and (e) below	9/workday	Grab	DMR/MOR	
Fecal Coliform, May 1st through September 30th See Remarks (b) and (c) Below	per100 ml	NA	NA	NR	NA	See remarks (b) and (c) below	Workday	Grab	DMR/MOR	
Flow, Average Daily	MGD	80	------	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	------	Workday	Grab	MOR	
pH	S.U.	NA	NA	NR	NA	6 - 9	Workday	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	------	Workday	Grab	MOR	
Solids, Total Suspended, See Remark (d) below	mg/l	30 mg/l and 15% of Influent [1]	50	3/Week[3]	Daily Composite	NA	NA	NA	DMR/MOR	

Temperature	°F	NA	NA	NR	NA	-----	Workday	Grab	MOR	
Turbidity	NTU	NA	NA	NA	NA	-----	Workday	Grab	MOR	

TABLE A – CONDITIONS

Footnotes:

1 The discharge shall meet 25 mg/l and 15% of the average monthly influent $CBOD_5$ (Table D, Monitoring Location G) and 30 mg/l and 15% of the average monthly influent suspended solids (Table D, Monitoring Location G). The 15% provision and the Maximum Daily Limit of 50.0 mg/l CBOD 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 (generally when the influent flow to the wastewater treatment plant exceeds an instantaneous rate of 90 MGD). The 15% provision shall be calculated only using data points from days when the facility is not treating dilute influent due to storm induced flows. The Permittee shall state on the monthly Discharge Monitoring Reports and MORs 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 instantaneous rate, maximum instantaneous rate 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 the maximum daily flow for each sampling month.

3 During Wet Weather Storage Basin bypass events exceeding one hour (generally when influent flow to the wastewater treatment plant exceeds an instantaneous rate of 90 MGD), these parameters shall be sampled daily during the event in accordance with the normal daily composite sample period employed by this facility. The requirement to sample these parameters during overflow events shall supplant any internal analytical schedule. The permittee may opt to drop a sample from the normal schedule for the remainder of that week but must comply with the sample frequency for these parameters. 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. During short duration overflow events (less than one hour in duration) or during intermittent overflow events (with no one overflow exceeding one hour), this sampling requirement is waived. For overflow events exceeding one hour and terminating prior to midnight of that same day, a daily composite will be analyzed that encompasses the overflow period according to the measurement frequency specified and according to the facility's normal sampling schedule. If an overflow event covers more than one daily composite sample period, daily composites will be sampled and analyzed for all calendar days in which the overflow occurs excluding time periods mentioned above due to working hours or holding times. Samples shall be flow proportional.

Remarks:

(a) The use of chlorine for disinfection shall be discontinued from October 1st through April 30th except that chlorination 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 1.5 mg/l, as an instantaneous limit, and 1.5mg/l, as a maximum daily limit. The analytical results shall be reported on the MOR for the months of April and October.

(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 $CBOD_5$ and Total Suspended Solids shall be 1.5 times the Average Monthly Limit listed above.

(e) Interim Total Residual Chlorine Limits of 0.2 - 1.5 mg/l are granted for a period of not more than 4 years from the date of issuance of this permit. While interim limits are in effect, during April through October the total residual chlorine of the effluent shall not be greater than 1.5 mg/l, as an instantaneous limit, and 1.5 mg/l, as a maximum daily limit. Final Total Residual Chlorine Limits of 0.05 mg/l for the average monthly limit, 0.1 mg/l for the maximum daily limit (average of 9 samples), and 0.2 mg/l for the instantaneous limit shall be in effect four (4) years after the date of issuance of this permit.

TABLE A-1

Discharge Serial Number: **001-1**		Monitoring Location: **5**				
Wastewater Description Primary treated, seasonally chlorinated excess combined sewer wastewater						
Monitoring Location Description: Wet Weather Storage Basin Effluent						
PARAMETER	**Units**	**FLOW/TIME BASED MONITORING**		**INSTANTANEOUS MONITORING**		
		Sample Frequency	**Sample Type**	**Sample Frequency**	**Sample Type**	**Reporting form**
CBOD (5 day)	mg/l	Daily/event[1, 3]	Daily Composite	NA	NA	MOR
Chlorine Residual (TRC) (May 1st through Sept. 30th) See Remarks (d) and (e) below.	mg/l	NA	NA	Daily/event[1, 3]	Grab	MOR
Event Duration	Days, hours, minutes	Continuous[2]	Time	NA	NA	MOR
Fecal Coliform (May 1st through Sept. 30th)	per 100 ml	NA	NA	Daily/event[1, 3]	Grab	MOR
Flow	MGD	Continuous[2]	Daily Flow	NA	NA	MOR
Solids, Total Suspended	mg/l	Daily/event[1, 3]	Daily Composite	NA	NA	MOR

TABLE A-1 - CONDITIONS

Footnotes:

[1] Sampling shall be performed each calendar day of the bypass event according to the measurement frequency specified. For composite samples, sampling shall be initiated after the first hour of the bypass event and end at the completion of the bypass event or until midnight of that calendar day. For bypass events that last into the next calendar day(s), sampling shall be terminated at midnight of the first day (labeled as Day 1), re-initiated and continued until the end of the bypass event or midnight of the next calendar day (labeled as Day 2) and so on until the end of the bypass event. Samples shall be flow proportional. 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 (see Footnote 3). For grab samples, sampling shall occur once per calendar day during the bypass 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 (see Footnote 3). During short duration bypass events (less than one hour in duration) or during intermittent bypass events (with no one bypass exceeding one hour), all sampling requirements are waived.

[2] During bypass events (generally when influent flow to the wastewater treatment plant exceeds an instantaneous rate of 90 MGD) the permittee is authorized to discharge from outfall serial number 001-1 seasonally disinfected primary clarified combined sewer wastewater.

[3] Analysis for these parameters shall follow the normal working hours of the Facility's Laboratory and be consistent with holding times as specified in the most recently approved version of Standard Methods.

Remarks:

(a) The Permittee is required to calculate combined effluent characteristics for CBOD and TSS using the bypass event Wet Weather Storage Basin effluent sampling data and the secondary effluent sampling data collected during the day(s) of the bypass when the data is available. Calculations for composite samples shall be flow weighted using total daily flows. Permit compliance for the average weekly discharge limitation in accordance with Table A will be based upon the results of these calculations and the supporting data from Table A and Table A-1. This data shall be submitted as an addendum to the DMR and MOR.

(b) The Permittee shall make reasonable efforts to maximize the amount of flow receiving secondary treatment consistent with achieving NPDES effluent limits at the secondary effluent monitoring location as described in the Permit.

(c) There is no reporting required under Section 8(C) of this permit for discharges from the Wet Weather Storage Basin.

(d) The use of chlorine for disinfection shall be discontinued from October 1st through April 30th except that chlorination 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 1.5 mg/l, as an instantaneous limit, and 1.5mg/l, as a maximum daily limit. The analytical results shall be reported on the MOR for the months of April and October.

(e) Total Residual Chlorine Limits are 0.2 - 1.5 mg/l.

TABLE B

Discharge Serial Number (DSN): **001-1**					Monitoring Location: **T**	
Wastewater Description: **Secondary Treated Effluent**						
Monitoring Location Description: **Final Effluent Prior to Chlorination** (Samples shall be taken of the final effluent (post-disinfection) after permittee has achieved compliance with the final chlorine limits in Table A.)						
Allocated Zone of Influence (ZOI): **2,422.00 CFS**			In stream Waste Concentration (IWC): **4.9%**			
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]	%	-----	Quarterly	Daily Composite	ATMR/DMR	
Aquatic Toxicity, *Pimephales promelas* [1]	%	-----	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	
BOD (5 day)	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	
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: **Activated Sludge**				
Monitoring Location Description: **Each Aeration Tank Effluent**				
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	4/Workday	Grab	MOR
Mixed Liquor Suspended Solids	Workday	4/Workday	Grab	MOR

TABLE D

Discharge Serial Number: **001-1**			Monitoring Location: **G**				
Wastewater Description: **Sewage**							
Monitoring Location Description: **Influent After Preliminary Treatment**							
PARAMETER	**Units**	**DMR REPORTING FORMAT**	**FLOW/TIME BASED MONITORING**		**INSTANTANEOUS MONITORING**		**REPORTING FORM**
			Sample Frequency	**Sample Type**	**Sample Frequency**	**Sample Type**	
Carbonaceous 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
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 Settling Tank 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
Carbonaceous BOD (5 day)	mg/l	Monthly average	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, Total Kjeldahl	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	Weekly	Daily Composite	NA	NA	MOR

TABLE F

Discharge Serial Number: **001-1**		Monitoring Location: **S**
Wastewater Description: **Primary and Waste Activated Sludge**		
Monitoring Location Description: **Primary Sludge Pumps and Waste Activated Sludge Pumps**		
PARAMETER	**INSTANTANEOUS MONITORING**	**REPORTING FORM**
	Units	**Grab Sample Freq.**
Arsenic, Total	mg/kg	monthly	DMR
Beryllium, Total	mg/kg	monthly	DMR
Cadmium, Total	mg/kg	monthly	DMR
Chromium, Total	mg/kg	monthly	DMR
Copper, Total	mg/kg	monthly	DMR
Lead, Total	mg/kg	monthly	DMR
Mercury, Total	mg/kg	monthly	DMR
Nickel, Total	mg/kg	monthly	DMR
Polychlorinated Biphenyls	mg/kg	monthly	DMR
Solids, Fixed	%	monthly	DMR
Solids, Total	%	monthly	DMR
Solids, Volatile	%	monthly	DMR
Zinc, Total	mg/kg	monthly	DMR
A grab sample of primary sludge and waste activated sludge will be combined flow proportionally.		

ATTACHMENT 2

MONTHLY OPERATING REPORT FORM
AND
NUTRIENT ANALYSIS REPORT

MDC Hartford Facility ID: 064-001 Chief Plant Operator: Date received: (stamped)

Sample month/year: Phone:

Page 1 of MOR for permit # CT0100251 Permit expiration date:

	Daily Flow			Primary Sludge			Aeration Tank #1				Aeration Tank #2				Aeration Tank #3				Aeration Tank #4				Aeration Tank #5			
									HI	LO			HI	LO			HI	LO			HI	LO			HI	LO
	Max.	Min.	Total	Vol.	%	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.	MLSS	SVI	D.O.	D.O.
Units	mgd			gal.	solids	lbs.			mg/l				mg/l				mg/l				mg/l				mg/l	
Freq	daily			work day			workday				workday				workday				workday				workday			
1																										
2																										
3																										
4																										
5																										
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29																										
30																										
31																										
Total																										
Ave																										

Aeration Tank #6				Return sludge		Waste sludge	Dry solids		Waste accepted		CBOD (5-day)			Suspended Solids			Settleable Solids	Turbidity	Chlorine Dose		Chlorine Residual		Fecal Coliform	D.O.	pH
		HI	LO								Inf.	Prim.	Final	Inf.	Prim.	Final									
MLSS	SVI	D.O.	D.O.	%flow	%solids	x1000	in	out	septic	indust		Eff.	Eff.		Eff.	Eff.	Eff.	Eff.			high	low	Eff	Eff.	Eff
		mg/l				lbs	tons		gal	gal	mg/l			mg/l			ml/l	NTU	lbs	mg/l	mg/l		#/100 ml	mg/l	S.U.
workday				work day		work day	work day		work day		3/week	weekly	3/week	3/week	weekly	3/week	work day	work day	Daily		9/work day		work day	work day	work day

Temp.		Alkalinity	
Inf.	Eff.	Eff	Prim Eff
°F		mg/l	
workday		monthly	

Sludge Disposal Location:

Please return forms to:
DEP - Water Management
ATTN: Municipal Wastewater Monitoring Coordinator
Municipal Facilities
79 Elm Street
Hartford, CT 06106-5127

Statement of Acknowledgement

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

Authorized Official:

Title:

Signature: ______________________________

Date: ___________________

Nutrient Analysis Report

Hartford WPCF (MDC) Permit # CT 0100251 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

REGULATORS AND DISCHARGE POINTS

MDC CSO REGULATORS AND NPDES DISCHARGE POINTS

NPDES DISCHARGE NUMBER	MDC REGULATOR NUMBER	REGULATOR LOCATION	RECEIVING WATER
002*	N-2	Granby St. @ Pembroke St.	North Branch Park River
003*	N-4	Granby St. South of Cornwall St.	North Branch Park River
005*	N-10	Girard Ave. North of Elizabeth St.	North Branch Park River
006*	N-9	Asylum Ave. Regulator Chamber	North Branch Park River
007	N-12	Oxford St. @ Cone St.	No. Br. Park River Conduit via Tremont St. Conduit North of Farmington Ave.
	N-14	Farmington Ave. @ Tremont St.	No. Br. Park River Conduit via Tremont St. Conduit North of Farmington Ave.
008	N-22	Farmington Ave. West of Woodland St.	No. Br. Park River Conduit
009	N-23	South Whitney @ Warrenton Ave.	No. Br. Park River Conduit via Tremont St. Conduit So.
	N-24	Warrenton Ave. West of So. Whitney St.	No. Br. Park River Conduit via Tremont St. Conduit So.
010	N-25	Hawthorne St. @ So. Marshall St.	No. Br. Park River Conduit
012	N-28A	Park St. @ Orange St.	So. Br. Park River Conduit via 66" High Level Drain
	N-28B	Park Street @ Francis Street	So. Br. Park River Conduit via 66" High Level Drain
046	N-29	Bartholomew Ave. @ Park St.	No. Br. Park River Conduit via 36" Low Level Drain
014*	S-3	Hamilton Street @ Brookfield St.	South Branch Park River
016*	S-8	New Park Ave.	Kane Brook
017*	S-10	Brookfield St. @ Saybrooke St.	South Branch Park River
018*	S-12	Brookfield St. @ Ward Place Ext.	South Branch Park River
	S-13	Wilson St. between Zion & Hillside	South Branch Park River
019	S-15	Flatbush Ave. West of Chandler St.	Cemetery Brook Conduit
020	S-14	Flatbush Ave. East of Chandler St.	Cemetery Brook Conduit
	S-16	Flatbush Ave. West of Chandler St.	Cemetery Brook Conduit
022*	S-19	Arlington St. @ Stone St.	South Branch Park River
	S-21	Natick St. @ Arlington St.	South Branch Park River
024*	S-23	Giddings St. @ New Britain Ave.	South Branch Park River via 48" Outfall from New Britain Avenue Storm Drain
	S-24	Nepaug St. @ New Britain Ave.	South Branch Park River via 48" Outfall from New Britain Avenue Storm Drain
	S-25	Wilbur St. @ New Britain Ave.	South Branch Park River via 48" Outfall from New Britain Avenue Storm Drain
	S-26	Goshen St. @ New Britain Ave.	South Branch Park River via 48" Outfall from New Britain Avenue Storm Drain
	S-27	Montrose St. @ New Britain Ave.	South Branch Park River via 48" Outfall from New Britain Avenue Storm Drain
	S-28	Grant St. @ New Britain Ave.	South Branch Park River via 48" Outfall from New Britain Avenue Storm Drain
	S-29	Roslyn St. @ New Britain Ave.	South Branch Park River via 48" Outfall from New Britain Avenue Storm Drain
	S-30	New Britain Ave. @ Roslyn St.	South Branch Park River via 48" Outfall from New Britain Avenue Storm Drain
025	G-20	Spruce St. @ Church St.	Gully Brook Conduit
	G-2	Westland St.	Gully Brook Conduit
	G-8	Rockville Street	Gully Brook Conduit
	G-9	Capen St. West of Gully Brook	Gully Brook Conduit
	G-10	Capen St. East of Gully Brook	Gully Brook Conduit
	G-11	Mansfield Street (East)	Gully Brook Conduit
	G-12	Enfield Street	Gully Brook Conduit
	G-13W	Albany Ave. West of Brook St.	Gully Brook Conduit
	G-13E	Albany Ave. West of Brook St.	Gully Brook Conduit
	G-14	Garden St. North of Bedford St.	Gully Brook Conduit
	G-15	Brook St. North of Liberty St.	Gully Brook Conduit
	G-19	High St. @ Walnut St.	Gully Brook Conduit
	G-21	Asylum St. @ Garden St.	Gully Brook Conduit
	G-23	Vine St. @ Mansfield St.	Gully Brook Conduit

MDC CSO REGULATORS AND NPDES DISCHARGE POINTS

NPDES DISCHARGE NUMBER	MDC REGULATOR NUMBER	REGULATOR LOCATION	RECEIVING WATER
027	P-1	Commerce St. @ Sheldon St.	Park River Conduit
028	P-2	Main St. @ Sheldon St.	Park River Conduit
029	P-3	Main St. @ Arch St.	Park River Conduit
030	P-4	Pulaski Circle	Park River Conduit
031	P-5	Wells Street	Park River Conduit via Park River Storm Drain
	P-9	Jewell St. @ Ann St.	Park River Conduit via Park River Storm Drain
	P-10	Asylum St. @ High St.	Park River Conduit via Park River Storm Drain
	P-11	High St. North of Asylum St.	Park River Conduit via Park River Storm Drain
	P-12	Asylum St. @ Gully Brook (North)	Park River Conduit via Park River Storm Drain
	P-13	Asylum St. @ Gully Brook (South)	Park River Conduit via Park River Storm Drain
032	P-14	Capitol Ave. west of Hungerford St.	Park River Conduit
033	P-15	Broad St. South of Capitol Ave.	Park River Conduit
034	P-15A	Broad St. Capitol Ave.	Park River Conduit
	P-19	Capitol Ave. @ Flower St.	Park River Conduit via Southeast Storm Drain
	P-23	Capitol Ave. East of Columbia St.	Park River Conduit via Southeast Storm Drain
	P-24	Capitol Ave. @ Park Terrace	Park River Conduit via Southeast Storm Drain
035	P-16	Park St. and Broad St.	Park River Aux. Conduit
	P-16A	Park St. West of Broad St.	Park River Aux. Conduit
036	P-18	Flower St. North of Capitol Ave.	Park River Conduit via Southeast Storm Drain
038	P-26	Main St. @ Buckingham St.	Park River Conduit
047	P-29	Capitol Ave. @ Sigourney St.	Park River Conduit
039	F-26	Private lands opposite Tredeau St.	Folly Brook Conduit via Franklin Ave. Storm Drain
	F-27	Franklin Ave. at Cromwell St.	Folly Brook Conduit via Franklin Ave. Storm Drain
	F-28	Franklin Ave. at Hamner St.	Folly Brook Conduit via Franklin Ave. Storm Drain
	F-29	Franklin Ave. at Brown St.	Folly Brook Conduit via Franklin Ave. Storm Drain or Folly Brook via South Meadows Pressure Conduit
	F-30	Franklin Ave. at Bodwell St.	Folly Brook Conduit via Franklin Ave. Storm Drain or Folly Brook via South Meadows Pressure Conduit
	F-31	South St. at Hubbard Rd.	Folly Brook Conduit via Franklin Ave. Storm Drain or Folly Brook via South Meadows Pressure Conduit
	F-32	Franklin Ave. at Adelaide St.	Folly Brook Conduit via Franklin Ave. Storm Drain or Folly Brook via South Meadows Pressure Conduit
	F-33	West Preston at Broad St.	Folly Brook Conduit via Franklin Ave. Storm Drain or Folly Brook via South Meadows Pressure Conduit
040*	During certain river flood stages, flow from regulators F-29, F-30, F-31, F-32 and F-33 may discharge at this DSN.		
041	NM-2	Tower Ave. @ Main St.	No. Meadows Storage Pond via Tower Brook Conduit
	NM-3	Main St. @ Tower Ave.	No. Meadows Storage Pond via Tower Brook Conduit
	NM-4	Main St. South of Fishfry St.	No. Meadows Storage Pond via Tower Brook Conduit
042(a)	NM-5	Windsor St. @ Sanford St.	Connecticut River via Northeast Storm Drain
	NM-6	Bellevue St. @ Sanford St.	Connecticut River via Northeast Storm Drain
	NM-7	Sanford St. @ Main St.	Connecticut River via Northeast Storm Drain
043*	NM-10	Market St. @ Trumbull St.	Connecticut River via East Side Storm Drain, south of Grove St.
	NM-14	State St. East of Market St.	Connecticut River via East Side Storm Drain, south of Grove St.
043A(b)	NM-10	Market St. @ Trumbull St.	Connecticut River via East Side Storm Drain
044*	SM-2	Masseek St. @ Van Block Ave.	Connecticut River

NOTES : * Indicates NPDES discharge location which will be required to have an identification sign posted at the outfall location.
(a) If the flow from NM-5, 6 and 7 is large, it may also discharge from DSN 041.
(a) Under low flow conditions NM10 will discharge via 043; high flow conditions, 043A.

38 REMAINING NPDES DISCHARGE POINTS

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: The Metropolitan District **PAMS Company ID**: 95020

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #:CT0100251 **APPLICATION #:** 199500128 **FACILITY ID.** 064-001

Mailing Address: P.O. Box 800	Location Address:
Street:	Street: 240 Brainard Road
City: Hartford ST: CT Zip: 06142	City: Hartford ST: CT Zip: 06114
Contact Name: Richard J. Ludwig	Contact Name: Richard J. Ludwig
Phone No.: (860) 278-7850 (X3505)	Phone No.: (860) 278-7850 (X3505)

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 X NO
POLLUTION PREVENTION __ TREATMENT REQUIREMENT X
WATER QUALITY REQUIREMENT __ OTHER

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

DEP STAFF ENGINEER George Hicks

PERMIT FEES

Discharge Code	DSN Number	Annual Fee
111000F	001	$3,195.00

FOR NPDES DISCHARGES
Drainage basin Code: Present/Future Water Quality Standard: SC/SB

NATURE OF BUSINESS GENERATING DISCHARGE
Publicly Owned Treatment Works

PROCESS AND TREATMENT DESCRIPTION (by DSN)
Secondary biological treatment and seasonal 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

X *Case by Case Determination (See Other Comments)*

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

X *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, water quality based limits for chlorine is included in the permit at this time.

During dry weather, all wastewater will receive secondary treatment. During wet weather events when the wastewater flow to the treatment plant (plant) exceeds 90 MGD, the flow above 90 MGD will be diverted to the wet weather storage basin (WWSB). If the peak flow to the plant is short-term, the wastewater in the WWSB may be directed to the headworks of the plant for secondary treatment. For longer duration rain events, the wastewater in the WWSB will receive primary treatment and seasonal chorine disinfection before entering the outfall pipe that carries the secondary treated wastewater out to the Connecticut River. When the WWSB is discharging to the plant outfall pipe, monitoring of that discharge will occur and a calculation will be made to determine whether the blended flow (secondary treated wastewater plus WWSB wastewater) will meet secondary treatment standards for permit compliance.

WQB LIMITS: Hartford MDC WPCF

Discharger:	Hartford MDC WPCF		by: thaze, 1/16/2003, 11:46
Receiving Water:	Connecticut River	CURRENT CONDITIONS	
Design Flow:	80.000 MGD	Avg. Flow:	48.050 MGD
Allocated ZOI:	1114.00 CFS	Max. Flow:	58.980 MGD
Samples/Month:	4	IWC:	10.00 %

WQB Limits - Freshwater

Compound	C.V.	AML ug/l	MDL ug/l	AML kg/d	MDL kg/d	LIMIT? ML?
Ammonia	0.7	1.13E+04	2.45E+04	3.44E+03	7.41E+03	
Antimony	0.0	1.60E+04	1.60E+04	4.85E+03	4.85E+03	
Arsenic	0.4	1.40E-01	2.34E-01	4.24E-02	7.11E-02	ML
Beryllium	0.3	1.30E+00	1.95E+00	3.94E-01	5.91E-01	
Cadmium	0.9	4.63E+00	1.12E+01	1.40E+00	3.38E+00	ML
Chlorine	0.6	9.01E+01	1.81E+02	2.73E+01	5.48E+01	
Chromium (hex)	0.0	1.00E+02	1.00E+02	3.03E+01	3.03E+01	
Chromium (tri)	0.1	9.96E+02	1.15E+03	3.02E+02	3.49E+02	
Copper	0.5	4.80E+01	8.86E+01	1.45E+01	2.68E+01	
Cyanide	1.3	3.47E+01	9.61E+01	1.05E+01	2.91E+01	ML
Lead	0.0	1.20E+01	1.20E+01	3.64E+00	3.64E+00	
Mercury	0.5	1.01E-01	1.87E-01	3.07E-02	5.67E-02	ML
Nickel	0.4	7.69E+02	1.29E+03	2.33E+02	3.90E+02	
Phenol	1.9	1.48E+04	4.52E+04	4.49E+03	1.37E+04	
Selenium	0.3	4.52E+01	6.78E+01	1.37E+01	2.05E+01	
Silver	0.3	6.80E+00	1.02E+01	2.06E+00	3.09E+00	
Thallium	0.0	6.30E+01	6.30E+01	1.91E+01	1.91E+01	
Zinc	0.3	4.24E+02	6.36E+02	1.28E+02	1.93E+02	

Current Conditions

Compound	# DETECTS	AMC ug/l	MMC ug/l	AMM kg/d	MMM kg/d
Ammonia	20	3.88E+03	9.48E+03		
Antimony	0	3.00E+00	3.00E+00	5.46E-01	6.70E-01
Arsenic	0	7.10E+00	1.00E+01	1.29E+00	2.23E+00
Beryllium	0	5.00E-01	1.00E+00	9.10E-02	2.23E-01
Cadmium	0	2.70E+00	5.00E+00	4.91E-01	1.12E+00
Chlorine					
Chromium (hex)	0	1.00E+01	1.00E+01	1.82E+00	2.23E+00
Chromium (tri)	1	5.10E+00	7.00E+00	9.28E-01	1.56E+00
Copper	22	1.40E+01	4.20E+01	2.55E+00	9.38E+00
Cyanide	2	1.50E+01	1.00E+02	2.73E+00	2.23E+01
Lead	0	5.00E+00	5.00E+00	9.10E-01	1.12E+00
Mercury	0	3.00E-01	5.00E-01	5.46E-02	1.12E-01
Nickel	6	5.90E+00	1.40E+01	1.07E+00	3.13E+00
Phenol	2	1.04E+02	1.00E+03	1.88E+01	2.23E+02
Selenium	0	7.60E+00	1.00E+01	1.38E+00	2.23E+00
Silver	1	2.10E+00	5.00E+00	3.82E-01	1.12E+00
Thallium	0	1.00E+01	1.00E+01	1.82E+00	2.23E+00
Zinc	23	4.25E+01	6.40E+01	7.74E+00	1.43E+01

FINAL PERMIT CONDITIONS

Final WQB Limits

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

Interim WQB Limits

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

Minimum Levels

Mercury	0.0002 mg/L
Cyanide	0.010 mg/L
Cadmium	0.0005 mg/L
Arsenic	0.005 mg/L