Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

NPDES PERMIT

issued to

Permittee:
City of Bridgeport
999 Broad Street
Bridgeport, Connecticut 06604

Location Address:
Bridgeport West Side WPCF
205 Bostwick Avenue
Bridgeport, Connecticut 06607

Permit ID: CT0100056 **Design Flow Rate:** 30MGD **Effective Date: 07/01/2019**

Receiving Stream: Long Island Sound / Cedar Creek **Permit Expires: 06/30/2024**

SECTION 1: GENERAL PROVISIONS

(A) This permit is reissued in accordance with Section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), and Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended, and Section 402(b) of the Clean Water Act, as amended, 33 USC 1251, et. seq., and pursuant to an approval dated September 26, 1973, by the Administrator of the United States Environmental Protection Agency for the State of Connecticut to administer a N.P.D.E.S. permit program.

(B) The City of Bridgeport, ("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 more stringent than those found in the regulations, this permit shall apply.

Section 22a-430-3 General Conditions

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

Section 22a-430-4 Procedures and Criteria

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

(g) Public Notice, Notice of Hearing
(h) Public Comments
(i) Final Determination
(j) Public Hearings
(k) Submission of Plans and Specifications. Approval.
(l) Establishing Effluent Limitations and Conditions
(m) Case-by-Case Determinations
(n) Permit Issuance or Renewal
(o) Permit or Application Transfer
(p) Permit Revocation, Denial or Modification
(q) Variances
(r) Secondary Treatment Requirements
(s) Treatment Requirements
(t) Discharges to POTWs - Prohibitions

(C) Violations of any of the terms, conditions, or limitations contained in this permit may subject the Permittee to enforcement action including, but not limited to, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA.

(D) Any false statement in any information submitted pursuant to this Section of the permit may be punishable as a criminal offense under Section 22a-438 or 22a-131a of the CGS or in accordance with Section 22a-6, under Section 53a-157b of the CGS.

(E) The Permittee shall comply with Section 22a-416-1 through Section 22a-416-10 of the RCSA concerning operator certification.

(F) No provision of this permit and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by the Permittee pursuant to this permit will result in compliance or prevent or abate pollution.

(G) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.

(H) An annual fee shall be paid for each year this permit is in effect as set forth in Section 22a-430-7 of the RCSA. As of October 1, 2009 the annual fee is $3,320.00

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

(J) This permitted discharge is consistent with the applicable goals and policies of the Connecticut Coastal Management Act (Section 22a-92 of the CGS).

SECTION 2: DEFINITIONS

(A) The definitions of the terms used in this permit shall be the same as the definitions contained in Section 22a-423 of the CGS and Section 22a-430-3(a) and 22a-430-6 of the RCSA, except for "Composite" and "No Observable Acute Effect Level (NOAEL)" which are redefined below.

(B) In addition to the above, the following definitions shall apply to this permit:

"------" in the limits column on the monitoring tables in Attachment 1 means a limit is not specified but a value must be reported on the DMR, MOR, and/or the ATMR.

"Annual" in the context of any sampling frequency, shall mean the sample must be collected in the month of June except in the case of Chronic Toxicity when the samples must be collected in the months of July, August or September.

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

"Bi-Monthly" in the context of any sampling frequency, shall mean once every two months including the months of January, March, May, July, September and November.

"Bi-Weekly" in the context of any sampling frequency, shall mean 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" or **"(DC)"** means a composite sample taken over a full operating day consisting of grab samples collected at equal intervals of no more than sixty (60) minutes and combined proportionally to flow; or, a composite sample continuously collected over a full operating day proportionally to flow.

"Daily Concentration" means the concentration of a substance as measured in a daily composite sample, or, arithmetic average of all grab sample results defining a grab sample average.

"Daily Quantity" means the quantity of waste discharged during an operating day.

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

"Infiltration" means water other than wastewater that enters a sewer system (including sewer system and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.

"Inflow" means water other than wastewater that enters a sewer system (including sewer service connections) from sources such as, but not limited to, roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.

"Instantaneous Limit" means the highest allowable concentration of a substance as measured by a grab sample, or the highest allowable measurement of a parameter as obtained through instantaneous monitoring.

"In-stream Waste Concentration" or **"(IWC)"** means the concentration of a discharge in the receiving water after mixing has occurred in the allocated zone of influence.

"MGD" means million gallons per day.

"Maximum Daily Limit" means the maximum allowable "Daily Concentration" (defined above) when expressed as a concentration (e.g. mg/l), otherwise, it means the maximum allowable "Daily Quantity" as defined above, unless it is expressed as a flow quantity. If expressed as a flow quantity it means "Maximum Daily Flow" as defined in Section 22a-430-3(a) of the RCSA.

"Monthly Minimum Removal Efficiency" means the minimum reduction in the pollutant parameter specified when the effluent average monthly concentration for that parameter is compared to the influent average monthly concentration.

"NA" as a Monitoring Table abbreviation means "not applicable".

"NR" as a Monitoring Table abbreviation means "not required".

"No Observable Acute Effect Level" or **"(NOAEL)"** means any concentration equal to or less than the critical test concentration in a single concentration (pass/fail) toxicity test, conducted pursuant to Section 22a-430-3(j)(7)(A)(i) of the RCSA, demonstrating 90% or greater survival of test organisms at the CTC.

"Quarterly" in the context of any sampling frequency, shall mean sampling is required in the months of March, June, September and December.

"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 Permittee with pH meters that provide continuous monitoring and recording, Range During Sampling means the maximum and minimum readings recorded with the continuous monitoring device during the Composite or Grab Sample Average sample collection.

"Range During Month" or **"(RDM)"** as a sample type means the lowest and the highest values of all of the monitoring data for the reporting month.

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

"Twice per Month" in the context of any sampling frequency, mean two samples per calendar month collected no less than 12 days apart.

"ug/l" means micrograms per liter

"Work Day" in the context of a sampling frequency means, Monday through Friday excluding holidays.

SECTION 3: COMMISSIONER'S DECISION

(A) The Commissioner of Energy and Environmental Protection ("Commissioner") has issued a final decision and found continuance of the existing system to treat the discharge will protect the waters of the state from pollution. The Commissioner's decision is based on application #201710275 for permit reissuance received on November 27, 2017 and the administrative record established in the processing of that application.

(B) The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit, the above referenced application, and all approvals issued by the Commissioner or his authorized agent for the discharges and/or activities authorized by, or associated with, this permit.

(C) The Commissioner reserves the right to make appropriate revisions to the permit, if required after Public Notice, in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the Federal Clean Water Act or the CGS or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Federal Clean Water Act or CGS or regulations adopted thereunder which are then applicable.

SECTION 4: GENERAL LIMITATIONS AND OTHER CONDITIONS

(A) The Permittee shall not accept any new sources of non-domestic wastewater conveyed to its POTW through its sanitary sewerage system or by any means other than its sanitary sewage system unless the generator of such wastewater; (a) is authorized by a permit issued by the Commissioner under Section 22a-430 CGS (individual permit), or, (b) is authorized under Section 22a-430b (general permit), or, (c) has been issued an emergency or temporary authorization by the Commissioner under Section 22a-6k. All such non-domestic wastewaters shall be processed by the POTW via receiving facilities at a location and in a manner prescribed by the Permittee which are designed to contain and control any unplanned releases.

(B) No new discharge of domestic sewage from a single source to the POTW in excess of 50,000 gallons per day shall be allowed by the Permittee until the Permittee has notified in writing the Connecticut Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater Section, 79 Elm Street, Hartford, CT 06106-5127 of said new discharge.

(C) The Permittee shall maintain a system of user charges based on actual use sufficient to operate and maintain the POTW (including the collection system) and replace critical components.

(D) The Permittee shall maintain a sewer use ordinance that is consistent with the Model Sewer Ordinance for Connecticut Municipalities prepared by the Department of Energy and Environmental Protection. The Commissioner of Energy and Environmental Protection alone may authorize certain discharges which may not conform to the Model Sewer Ordinance.

(E) No sludge deposits-solid refuse-floating solids oils and grease-scum except for small amounts that may result from the discharge from a grease waste treatment facility providing appropriate treatment and none exceeding levels necessary to protect and maintain all designated uses.

(F) No color resulting in obvious discoloration of the surface water outside of any designated zone of influence.

(G) No suspended and settleable solids in concentrations or combinations which would impair the designated uses; none aesthetically objectionable; none which would significantly alter the physical or chemical composition of bottom sediments; none which would adversely impact organisms living in or on the bottom sediment.

(H) No silt or sand deposits other than of natural origin except as may result from normal road maintenance and construction activity provided all reasonable controls or Best Management Practices are used in such activities and all designated uses are protected and maintained.

(I) No turbidity other than of natural origin except as may result from normal agricultural, road maintenance, or construction activity, or discharge from a waste treatment facility providing appropriate treatment, dredging activity or discharge of dredged or fill materials provided all reasonable controls and Best Management Practices are used to control turbidity and none exceeding levels necessary to protect and maintain all designated uses.

(J) Taste and odor as naturally occurs and none that would impair any uses specifically assigned to this Class.

(K) No discharge from the permitted facility 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.

(L) 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.

(M) The average monthly effluent concentration shall not exceed 15% of the average monthly influent concentration for BOD_5 and Total Suspended Solids for all daily composite samples taken in any calendar month.

(N) Any new or increased amount of sanitary sewage discharge to the sewer system is prohibited where it will cause a dry weather overflow or exacerbate an existing dry weather overflow.

(O) 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 Permittee' sludge use or disposal practice. A change in the Permittee' 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.

(P) This permit becomes effective on the 1st day of the month following the date of signature of the Commissioner or designee.

(Q) When the arithmetic mean of the average daily flow from the POTW for the previous 180 days exceeds 90% of the design flow rate, the Permittee shall develop and submit within one year, for the review and approval of the Commissioner, a plan to accommodate future increases in flow to the plant. This plan shall include a schedule for completing any recommended improvements and a plan for financing the improvements.

(R) When the arithmetic mean of the average daily BOD_5 or TSS loading into the POTW for the previous 180 days exceeds 90% of the design load rate, the Permittee shall develop and submit for the review and approval 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.

(S) On or before July 31st of each calendar year the main flow meter shall be calibrated by an independent contractor in accordance with the manufacturer's specifications. The actual record of the calibration shall be retained onsite and, upon request, the Permittee shall submit to the Commissioner a copy of that record.

(T) The Permittee shall operate and maintain all processes as installed in accordance with the approved plans and specifications and as outlined in the associated operation and maintenance manual. This includes but is not limited to all preliminary treatment processes, primary treatment processes, recycle pumping processes, anaerobic treatment processes, anoxic treatment processes, aerobic treatment processes, flocculation processes, effluent filtration processes or any other processes necessary for the optimal removal of pollutants. The Permittee shall not bypass or fail to operate any of the aforementioned processes without the written approval of the Commissioner.

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

(V) The temperature of any discharge shall not increase the temperature of the receiving stream above 83°F, or, in any case, raise the temperature of the receiving stream by more than 4°F beyond the permitted zone of influence. The incremental temperature increase in coastal and marine waters is limited to 1.5°F during the period including July, August and September.

SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(A) The discharge(s) shall not exceed and shall otherwise conform to the specific terms and conditions listed in this permit. The discharge is restricted by, and shall be monitored in accordance with Tables **A** through **G** incorporated in this permit as Attachment 1.

(B) The Permittee shall monitor the performance of the treatment process in accordance with the Monthly Operating Report (MOR) incorporated in this permit as Attachment 2.

SECTION 6: SAMPLE COLLECTION, HANDLING and ANALYTICAL TECHNIQUES

(A) Chemical Analysis

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

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

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

(4) Samples collected for bacteriological examination shall be collected between the hours of 11 a.m. and 3 p.m. or at that time of day when the peak hourly flow is normally experienced. A chlorine residual sample must be taken at the same time and the results recorded.

(5) The Minimum Levels specified below represent the concentrations at which quantification must be achieved and verified during the chemical analyses for the parameters identified in Attachment 1, Tables A and C. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

Parameter	Minimum Level
Aluminum	0.050 mg/l
Antimony, Total	0.010 mg/l
Arsenic, Total	0.005 mg/l
Beryllium, Total	0.001 mg/l
Cadmium, Total	0.0005 mg/l
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
Iron, Total	0.040 mg/l
Lead, Total	0.005 mg/l
Mercury, Total	0.0002 mg/l
Nickel, Total	0.005 mg/l
Phosphorus, Total	0.10 mg/l
Selenium, Total	0.005 mg/l
Silver, Total	0.002 mg/l
Thallium, Total	0.005 mg/l
Zinc, Total	0.020 mg/l

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

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

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

(B) Acute Aquatic Toxicity Test

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

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

(b) Effluent samples shall not be dechlorinated, filtered, or, modified in any way, prior to testing for Acute Aquatic Toxicity unless specifically approved in writing by the Commissioner for monitoring at this facility. Facilities with effluent dechlorination and/or filtration designed as part of the treatment process are not required to obtain approval from the Commissioner.

(c) Samples shall be taken after dechlorination for Acute Aquatic Toxicity unless otherwise approved in writing by the Commissioner for monitoring at this facility.

(d) Chemical analyses of the parameters identified in Attachment 1, Table C shall be conducted on an aliquot of the same sample tested for Acute Aquatic Toxicity.

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

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

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

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

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

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

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

(c) Synthetic freshwater prepared with deionized water adjusted to a hardness of 50±5 mg/L as $CaCO_3$ shall be used as dilution water in the tests.

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

(5) For monitoring only conditions, toxicity shall be demonstrated when the results of a valid pass/fail Acute Aquatic Toxicity indicates less than 90% survival in the effluent at the CTC (100%).

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

(1) Chronic Aquatic Toxicity testing of the discharge shall be conducted annually during July, August, or September of each year.

(2) Chronic Aquatic Toxicity testing shall be performed on the discharge in accordance with the test methodology established in "Short-Term Methods for Estimating The Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms" (EPA-821-R-02-014) as referenced in 40 CFR 136 for sheepshead minnow, *Cyprinodon variegates,* survival and growth and mysid, *Mysidopsis bahia,* survival, growth and reproduction.

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

(b) Cedar Creek water collected immediately upstream of the area influenced by the discharge (with the outgoing tide) shall be used as control (0% effluent) and dilution water in the toxicity tests.

(c) A laboratory water control consisting of synthetic seawater prepared in accordance with EPA-821-R-02-014 shall be used as an additional control (0% effluent) in the toxicity tests.

(d) Daily composite samples of the discharge (final effluent following disinfection) and grab samples of the Cedar Creek, 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 Cedar Creek water used in the Chronic Aquatic Toxicity test shall, at a minimum, be analyzed and results reported in accordance with the provisions listed in Section 6(A) of this permit for the parameters listed in Attachment 1, Table C included herein, excluding Acute Aquatic Toxicity organism testing.

SECTION 7: RECORDING AND REPORTING REQUIREMENTS

(A) The Permittee and/or the Signatory Authority shall continue to report the results of chemical analyses and any aquatic toxicity test required above in Section 5 and the referenced Attachment 1 by electronic submission of DMRs under this permit to the Department using NetDMR in satisfaction of the DMR submission requirement of this permit. The report shall include a detailed explanation of any violations of the limitations specified. DMRs shall be submitted electronically to the Department no later than the 15th day of the month following the month in which samples are collected.

(1) For composite samples, from other than automatic samplers, the instantaneous flow and the time of each aliquot sample collection shall be recorded and maintained at the POTW.

(B) Complete and accurate test data, including percent survival of test organisms in each replicate test chamber, LC_{50} values and 95% confidence intervals for definitive test protocols, and all supporting chemical/physical measurements performed in association with any aquatic toxicity test, shall be entered on the Aquatic Toxicity Monitoring Report form (ATMR) and sent to the Bureau of Water Protection and Land Reuse at the address specified below by the 15th day of the month following the month in which samples are collected:

ATTN: Municipal Wastewater Monitoring Coordinator
Connecticut Department of Energy and Environmental Protection
Bureau of Water Protection and Land Reuse
Water Planning and Management Division
79 Elm Street
Hartford, Connecticut 06106-5127

(C) The results of the process monitoring required above in Section 5 shall be entered on the Monthly Operating Report (MOR) form, included herein as Attachment 2, and reported to the Bureau of Water Protection and Land Reuse. The MOR report shall also be accompanied by a detailed explanation of any violations of the limitations specified. The MOR must be received at the address specified above in Section 7 (B) of this permit by the 15th day of the month following the month in which the data and samples are collected.

(D) A complete and thorough report of the results of the chronic toxicity monitoring outlined in Section 6(C) shall be prepared as outlined in Section 10 of EPA-821-R-02-014 and submitted to the Department for review on or before December 31 of each calendar year to the address specified above in Section 7 (B) of this permit.

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

(A) If any Acute Aquatic Toxicity sample analysis indicates toxicity, or that the test was invalid, an additional sample of the effluent shall be collected and tested for Acute Aquatic Toxicity and associated chemical parameters, as described above in Section 5 and Section 6, and the results reported to the Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity) via the ATMR form (see Section 7 (B)) within 30 days of the previous test. These test results shall also be reported on the next month's DMR report pursuant to Section 7 (A). The results of all toxicity tests and associated chemical parameters, valid and invalid, shall be reported.

(B) If any two consecutive Acute Aquatic Toxicity test results or any three Acute Aquatic Toxicity test results in a twelve month period indicates toxicity, the Permittee shall immediately take all reasonable steps to eliminate toxicity wherever possible and shall submit a report, to the

Bureau of Water Protection and Land Reuse (Attn:.Aquatic Toxicity), for the review and written approval of the Commissioner in accordance with Section 22a-430-3(j)(10)(c) of the RCSA describing proposed steps to eliminate the toxic impact of the discharge on the receiving water body. Such a report shall include a proposed time schedule to accomplish toxicity reduction and the Permittee shall comply with any schedule approved by the Commissioner.

(C) Sewage Right-to-Know Electronic Bypass Reporting

(1) Section 22a-430-3(k) of the RCSA shall apply in all instances of bypass including a bypass of the treatment plant or a component of the sewage collection system planned during required maintenance. The Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater, the Department of Public Health, Water Supply Section and Recreation Section, and the local Director of Health shall be notified within 2 hours of the Permittee learning of the event via online reporting in a format approved by the Commissioner. A final incident report shall be submitted to the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater within five days of the Permittee learning of each occurrence of a discharge or bypass of untreated or partially treated sewage via online reporting in a format approved by the Commissioner.

If the online reporting system is nonfunctional, then the Permittee shall notify DEEP via telephone during normal business hours (8:00 a.m. to 4:30 p.m. Monday through Friday) at (860) 424-3704 or after hours to the DEEP Emergency Response Unit at (860) 424-3338 and the Department of Public Health at (860) 509-8000 with the final incident report being submitted online.

(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 (1) of this Section, the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater Section except, if the online reporting system is nonfunctional and the noncompliance occurs outside normal working hours (8:30 a.m. to 4:30 p.m. Monday through Friday) the Permittee may wait to make the verbal report until 10:30 am of the next business day after learning of the noncompliance.

(E) Section 22a-430-3(j) 8 of the RCSA shall apply in all instances of monitoring equipment failures that prevent meeting the requirements in this permit. In the event of any such failure of the monitoring equipment including, but not limited to, loss of refrigeration for an auto-sampler or lab refrigerator or loss of flow proportion sampling ability, the Permittee shall notify in the same manner as in paragraph C (1) of this Section, the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater Section except, if the online reporting system is nonfunctional and 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 (1) of this Section, the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater concerning the failure of any major component of the treatment facilities which the Permittee may have reason to believe would result in an effluent violation.

SECTION 9: COMBINED SEWER OVERFLOWS

(A) The Permittee shall continue to maintain Best Management Practices (BMPs) to reduce the impact of existing CSO's on the receiving waters. Detailed records of BMP activities shall be kept.

(1) The Permittee has identified **Stephen Walker** as operations and maintenance manager to be in responsible charge of the wastewater collection system and serve as the contact person for department personnel regarding combined sewer discharges. Within ten days after retaining anyone other than the one originally identified, the Permittee shall notify the Commissioner in writing of the identity of such other operations and maintenance manager.

(2) The Permittee shall use, to the maximum extent practicable, available sewerage system transportation capabilities for the conveyance of combined sewage to treatment facilities.

(3) The Permittee is authorized to discharge combined sewage flows from combined sewer overflow outfalls listed in Attachment **3** in response to wet weather flow, i.e. rainfall or snowmelt conditions, when total available transportation, treatment and storage capabilities are exceeded. 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.

(4) 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 effective date of this permit or the date the Permittee becomes aware of such information, whichever is earlier.

(5) When the WWTF influent flows exceed **58** MGD, in response to wet weather flow, i.e. rainfall or snowmelt conditions, the Permittee is authorized to discharge from outfall serial number 001-1 only those flows above **58** MGD, chlorine disinfected primary treated combined sewer wastewater.

(6) The discharge from CSO's, including outfall serial number 001-1, shall not contain septage or holding tank waste.

(7) Discharges from CSO's, including outfall serial number 001-1, shall not cause violations of State Water Quality Standards.

(8) Every calendar year, **on or before February 15th**, the Permittee shall submit a report on a form and in a manner prescribed by the Commissioner including the results of all monitoring from the previous calendar year for outfall serial number 001-1, and the following information:

(a) the date, time, and duration of each precipitation event;

(b) the date, time, duration, quality and volume for each discharge event for outfall serial number 001-1;

(9) On or before **December 31, 2019**, the Permittee shall submit an updated list of all historical CSO structures in the system that were sealed including name/designation, location, size of structure, their receiving waters, and date of sealing;

(10) The sewage system shall be inspected and maintained such that deposition of solids and/or other obstructions do not cause restrictions in flow resulting in unnecessary wet weather overflows and to ensure that dry weather discharges are not occurring.

(11) The Permittee shall reduce excessive infiltration/inflow to the sewer system.

(12) The Permittee shall review its existing Sewer Use Ordinance, to ensure the language required under Section 4 of this permit has been incorporated. A copy of ordinance shall be submitted to the Department for verification. If the ordinance is revised, a copy of the ordinance must be submitted to the Department within **60** days from the effective date of the change for verification, review and approval. The Sewer Use Ordinance shall:

(a) prohibit the construction of new combined sewers except in cases where repair or replacement of the existing system is approved in writing by the Commissioner, and

(b) prohibit the introduction of new inflow sources to the existing system.

(13) Monthly CSO inspection forms for all CSO structures/regulators, pumping stations and tidegates, which also verify the existence of identification signs for all combined sewer outfall structures as required by the Commissioner.

The signs shall be located at or near the combined sewer outfall structures so that they are easily readable by the public. These signs shall be a minimum of 12 x 18 inches in size, with white lettering against a green background, and shall contain the following information and image:

(PERMITTEE NAME)

WET WEATHER SEWAGE
DISCHARGE OUTFALL (discharge serial number)

Anyone observing a discharge from this outfall during dry weather conditions should call and report it to the Permittee at [_____], and to the Department of Energy and Environmental Protection at (860) 424-3704 or 424-3338.

(B) 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.

(C) Any document, other than a DMR, ATMR or MOR 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:

CSO Coordinator
Department of Energy and Environmental Protection
Bureau of Water Protection and Land Reuse
Water Planning and Management Division
Municipal Wastewater
79 Elm Street
Hartford, Connecticut 06106-5127

(D) Right-to-know Untreated CSO Discharge Reporting

(1) Initial CSO Discharge Report

(a) The Permittee shall notify the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater (DEEP) **within 2 hours** of the Permittee learning of an untreated combined sewer overflow via the online reporting system in a format approved by the Commissioner. If the online reporting system is unavailable, then the Permittee shall notify DEEP and via telephone during normal business hours (8:30 a.m. to 4:30 p.m. Monday through Friday) at (860) 424-3704 or after hours to DEEP Emergency Response Unit at (860) 424-3338.

(b) The Permittee shall notify the Department of Agriculture/Aquaculture Division (DoAg) per their Memorandum of Understanding within 2 hours of the Permittee leaning of an untreated combined sewer overflow. DoAg's contact information is (203) 874-0696 during regular hours and (203) 874-0696 after hours.

(2) Follow-Up Untreated CSO Discharge Written Report

A final incident report shall be submitted to the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater via the online reporting system in a format approved by the Commissioner **within five days** of the Permittee learning of each occurrence of a combined sewer overflow of untreated sewage.

SECTION 10: COMPLIANCE SCHEDULES

(A) CSO Monitoring Plan

Within **180 days** of the effective date of this permit, the Permittee shall submit to the Commissioner in writing an updated plan to strategically monitor combined sewer discharge(s) at all combined sewer outfalls within the permitted system with a schedule to implement the monitoring plan within one year of DEEP approval.

(B) Annual CSO Monitoring Report

After approval of a CSO Monitoring Plan, annually, on or before February 15th, the Permittee shall submit an Annual CSO Monitoring Report on a form and in a manner prescribed by the Commissioner, including the results of all monitoring from the previous calendar year for each combined sewer outfall.

The Annual CSO Monitoring Report shall include the following information:

(1) a list of open CSO structures in the system including name/designation, location, size of structure and their receiving waters;

(2) a list of CSO structures in the system that were sealed including name/designation, location, size of structure, their receiving waters, and the physical method used to seal that CSO which has been approved by the Commissioner;

(3) the date, time, and duration of each precipitation event;

(4) the date, time, duration, and estimation of volume for each discharge event for each CSO structure;

(5) monthly CSO inspection forms for all CSO structures/regulators, pumping stations and tidegates, which also verify the existence of identification signs for all combined sewer outfall structures as required by the Commissioner.

(6) a list of Best Management Practices (BMPs) that have been used to reduce the impact of existing CSO's on the receiving waters; and

(7) a summary of upcoming mitigation efforts for the next 5 years.

(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.

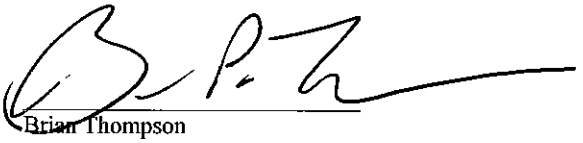
(E) Notification of noncompliance. In the event that the Permittee becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this Section of the permit or of any document required hereunder, the Permittee shall immediately notify the Commissioner and 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 or MOR 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:

Ann A. Straut, Sanitary Engineer 3
Department of Energy and Environmental Protection
Bureau of Water Protection and Land Reuse
Water Planning and Management Division
Municipal Wastewater Section
79 Elm Street
Hartford, Connecticut 06106-5127

This permit is hereby issued on 6/3/19



Brian Thompson
Acting Bureau Chief
Bureau of Water Protection and Land Reuse

ATTACHMENT 1

Tables A through G

TABLE A

Discharge Serial Number (DSN): **001-1**	Monitoring Location: **1**
Wastewater Description: **Sanitary Sewage**	
Monitoring Location Description: **Final Effluent**	
Allocated Zone of Influence (ZOI): **4575 cfs**	In-stream Waste Concentration (IWC): **1%** (allocated)

PARAMETER	Units	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			REPORT FORM	Minimum Level Analysis See Section 6
		Average Monthly Limit	Maximum Daily Limit	Sample Freq.	Sample type	Instantaneous Limit or Required Range[3]	Sample Freq.	Sample Type		
Alkalinity	mg/l	NA	NA	NR	NA	------	Monthly	Grab	MOR	
Biochemical Oxygen Demand (5 day) [1,5] See remarks C and D	mg/l	30	50	3/week	Daily Composite	NA	NR	NA	DMR/MOR	
Chlorine, Total Residual [5]	mg/l	0.05[4]	0.10[4]	4/ Work Day	Grab	0.20	4/ Work Day	Grab	DMR/MOR	*
Copper, Total	kg/d	NA	------	Monthly	Daily Composite	NA	NA	NA	DMR/MOR	*
Fecal coliform [5]	Colonies per100 ml	NA	NA	NR	NA	see remark (A) below	3/week	Grab	DMR/MOR	
Fecal coliform [5]	Percent of samples exceeding 260 colonies per100 ml	NA	NA	NR	NA	≤10	3/week	Grab	DMR/MOR	
Enterococci [5] see remark B below	Colonies per100 ml	NA	NA	NR	NA	500	3/week	Grab	DMR/MOR	
Flow	MGD	------	------	Continuous[2]	Average Daily Flow	NA	NR	NA	DMR/MOR	
Lead, Total	kg/d	NA	------	Monthly	Daily Composite	NA	NA	NA	DMR/MOR	*
Nickel, Total	kg/d	NA	------	Monthly	Daily Composite	NA	NA	NA	DMR/MOR	*
Nitrogen, Ammonia (total as N)	mg/l	NA	------	Monthly	Daily Composite	NA	NR	NA	MOR	
Nitrogen, Nitrate (total as N)	mg/l	NA	------	Monthly	Daily Composite	NA	NR	NA	MOR	
Nitrogen, Nitrite (total as N)	mg/l	NA	------	Monthly	Daily Composite	NA	NR	NA	MOR	
Nitrogen, Total Kjeldahl	mg/l	NA	------	Monthly	Daily Composite	NA	NR	NA	MOR	
Nitrogen, Total	mg/l	NA	------	Monthly	Daily Composite	NA	NR	NA	MOR	
Nitrogen, Total	lbs/day	NA	------	Monthly	Daily Composite	NA	NR	NA	MOR	

Oxygen, Dissolved	mg/l	NA	NA	NR	NA	------	Work Day	Grab	MOR	
pH	S.U.	NA	NA	NR	NA	6 - 9	Work Day	Grab	DMR/MOR	
Phosphate, Ortho	mg/l	NA	------	Monthly	Daily Composite	NA	NR	NA	MOR	
Phosphorus, Total	mg/l	NA	------	Monthly	Daily Composite	NA	NR	NA	DMR/MOR	*
Silver, Total	kg/d	NA	------	Monthly	Daily Composite	NA	NA	NA	DMR/MOR	*
Solids, Settleable	ml/l	NA	NA	NR	NA	------	Work Day	Grab	MOR	
Solids, Total Suspended[1, 5] See remarks C and D	mg/l	30	50	3/week	Daily Composite	NA	NA	NA	DMR/MOR	
Temperature	°F	NA	NA	NR	NA	------	Work Day	Grab	MOR	
Turbidity	NTU	NA	NA	NR	NA	------	Work Day	Grab	MOR	

TABLE A – CONDITIONS

Footnotes:

[1] The discharge shall not exceed an average monthly 30 mg/l or a maximum daily 50 mg/l. The Maximum Daily Limit of 50.0 mg/l BOD_5 and 50.0 mg/l Total Suspended Solids are waived during periods when the facility is treating dilute influent due to storm runoff collected by the Combined Sewer System causing influent flows to exceed 58 MGD. The Permittee shall state on the monthly Discharge Monitoring Reports and MOR's when exceedance is due to storm induced flows.

[2] The Permittee shall record and report on the monthly operating report the minimum, maximum and total flow for each day of discharge and the average daily flow for each sampling month. The Permittee shall report, on the discharge monitoring report, the average daily flow and maximum daily flow for each sampling month.

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

[4] 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.

[5] When the influent flows exceed 58 MGD due to storm events the Permittee may bypass secondary biological treatment only with those flows over 58 MGD. Those bypassed flows over 58 MGD shall be treated to a minimum of primary treatment and disinfection. In addition to Table A requirements, during bypass events these parameters shall be sampled daily during the event in accordance with Table A-1 below.

Remarks:

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

(B) The geometric mean of the Enterococci bacteria values for the effluent samples collected in a period of a calendar month shall not exceed 35 per 100 milliliters.

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

(D) In addition to the discharge limits included herein, the following conditions shall apply with the exception of during bypass events due to storm-induced flows exceeding 58 MGD:

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

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

(iii) Fecal Coliform content shall not exceed:

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

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

TABLE A-1

Discharge Serial Number: **001-1**				Monitoring Location: **8**		
Wastewater Description: **Final effluent during secondary treatment bypass events**						
Monitoring Location Description: **Final Effluent**						
PARAMETER	**Units**	**FLOW/TIME BASED MONITORING**		**INSTANTANEOUS MONITORING**		
		Sample Frequency	**Sample Type**	**Sample Frequency**	**Sample Type**	**Reporting form**
BOD (5 day)	mg/l	Daily/event[1, 3]	Daily Composite	NA	NA	DMR/MOR
Chlorine Residual (TRC) (May 1st through Sept. 30th)	mg/l	NA	NA	Daily/event[1, 3]	Grab	DMR/MOR
Event Duration	Days, hours, minutes	Continuous[2]	Time	NA	NA	DMR/MOR
Fecal Coliform	per 100 ml	NA	NA	Daily/event[1, 3]	Grab	DMR/MOR
Enterococci	per 100 ml	NA	NA	Daily/event[1, 3]	Grab	DMR/MOR
Flow	MGD	Continuous[2]	Daily Flow	NA	NA	DMR/MOR
Solids, Total Suspended	mg/l	Daily/event[1, 3]	Daily Composite	NA	NA	DMR/MOR

TABLE A-1 - CONDITIONS

Footnotes:

[1] For overflow events exceeding one calendar day in duration, sampling shall be performed each day of the event according to the measurement frequency specified. For example, for overflow events exceeding one hour and less than 24 hours in duration, sampling shall be initiated at the start of the overflow event and terminated at the end of the overflow event and analyzed according to the measurement frequency specified. If an overflow event exceeds 24 hours, the Permittee shall take daily composite samples for BOD_5 and TSS, initiating samples at the start of the overflow event and each subsequent 24-hour period and terminating samples at the end of the overflow event. For example, on an overflow event that lasts for 54 hours, sampling would consist of 2, 24 hour samples and 1, 6 hour sample over the course of 3 days. Samples shall be flow proportional.

[2] When the facility is treating dilute influent due to storm runoff collected by the Combined Sewer System causing influent flows to the wastewater treatment plant to exceed **58** MGD, the Permittee is authorized to allow only those flows above 58 MGD to bypass secondary treatment facilities and be discharged as disinfected primary treated combined sewer wastewater.

[3] 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.

Remarks - Apply to all of Table A-1:

(a)Sampling data during permitted bypass events shall be excluded from the DMRs and shall be recorded on the MORs.

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

(c) There is no reporting required under Section 8(C) of this permit for discharges during these events.

TABLE B

Discharge Serial Number (DSN): **001-1**		Monitoring Location: **K**			
Wastewater Description: **Sanitary Sewage**					
Monitoring Location Description: **Final Effluent**					
Allocated Zone of Influence (ZOI): **4575 cfs**		In-stream Waste Concentration (IWC): **1%** (allocated)			
PARAMETER	**Units**	**FLOW/TIME BASED MONITORING**			**REPORT FORM**
		Average Monthly Minimum	**Sample Freq.**	**Sample type**	
Biochemical Oxygen Demand (5 day) Percent Removal[1, 3]	% of Influent	85	3/week	Calculated[2]	DMR
Solids, Total Suspended Percent Removal[1, 3]	% of Influent	85	3/week	Calculated[2]	DMR

TABLE B – CONDITIONS

Footnotes:

[1] The discharge shall be less than or equal to 15% of the average monthly influent BOD_5 and total suspended solids (Table E, Monitoring Location G). The 15% provision is waived during periods when the facility is treating dilute influent due to storm runoff collected by the Combined Sewer System causing influent flows to exceed 58 MGD. The Permittee shall state on the monthly Discharge Monitoring Reports and MOR's when exceedance of the 15% provision is due to storm induced flows.

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

[3] When the influent flows exceed 58 MGD due to storm events the Permittee may bypass secondary biological treatment. During bypass events these parameters shall be sampled daily during the event. During short duration bypass events (less than one hour in duration) or during intermittent bypass events (with no one bypass exceeding one hour), this sampling requirement is waived. For bypass events exceeding one hour and less than 24 hours in duration, sampling shall be performed each day of the event according to the measurement frequency specified. If a bypass event covers all or part of three calendar days, the Permittee shall take three daily composite samples for BOD_5 and TSS, initiating samples at the start of the bypass event and each subsequent calendar day and terminating samples at the end of the calendar day or at the end of the bypass event. Samples shall be flow proportional.

TABLE C

Discharge Serial Number (DSN): **001-1**			Monitoring Location: **T**			
Wastewater Description: **Sanitary Sewage**						
Monitoring Location Description: **Final Effluent**						
Allocated Zone of Influence (ZOI): **4575 cfs**			In-stream Waste Concentration (IWC): **1% (allocated)**			
PARAMETER	**Units**	**Maximum Daily Limit**	**Sampling Frequency**	**Sample Type**	**Reporting form**	**Minimum Level Analysis See Section 6**
Aluminum, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Antimony, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
NOAEL Static 48Hr Acute D. Pulex[1]	% survival	≥90%	Quarterly	Daily Composite	ATMR/DMR	
NOAEL Static 48Hr Acute Pimephales[1]	% survival	≥90%	Quarterly	Daily Composite	ATMR/DMR	
Arsenic, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Beryllium, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
BOD_5	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	
Cadmium, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Chromium, Hexavalent	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Chromium, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Chlorine, Total Residual	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Copper, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Cyanide, Amenable	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	
Cyanide, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Iron, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Lead, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Mercury, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Nickel, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Nitrogen, Ammonia (total as N)	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	
Nitrogen, Nitrate, (total as N)	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	
Nitrogen, Nitrite, (total as N)	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	
Phenols, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	
Phosphorus, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	
Selenium, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Silver, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Suspended Solids, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	
Thallium, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*
Zinc, Total	mg/l	------	Quarterly	Daily Composite	ATMR/DMR	*

TABLE C - CONDITIONS

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

ATMR – Aquatic Toxicity Monitoring Report

TABLE D

Discharge Serial Number: **001-1**	Monitoring Location: **N**			
Wastewater Description: **Activated Sludge**				
Monitoring Location Description: **Each Aeration Unit**				
PARAMETER	**REPORTING FORMAT**	**INSTANTANEOUS MONITORING**		**REPORTING FORM**
		Sample Frequency	Sample Type	
Oxygen, Dissolved	High & low for each WorkDay	4/WorkDay	Grab	MOR
Sludge Volume Index	WorkDay	WorkDay	Grab	MOR
Mixed Liquor Suspended Solids	WorkDay	WorkDay	Grab	MOR

TABLE E

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

TABLE F

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

TABLE G

Discharge Serial Number: **001-1**	Monitoring Location: **SL**		
Wastewater Description: **Thickened/Dewatered Sludge**			
Monitoring Location Description: **At sludge draw off**			
PARAMETER	**INSTANTANEOUS MONITORING**		**REPORTING FORM**
	Units	**Grab Sample Freq.**	
Arsenic, Total	mg/kg	Bi-Monthly	DMR
Beryllium, Total	mg/kg	Bi-Monthly	DMR
Cadmium, Total	mg/kg	Bi-Monthly	DMR
Chromium, Total	mg/kg	Bi-Monthly	DMR
Copper, Total	mg/kg	Bi-Monthly	DMR
Lead, Total	mg/kg	Bi-Monthly	DMR
Mercury, Total	mg/kg	Bi-Monthly	DMR
Nickel, Total	mg/kg	Bi-Monthly	DMR
Nitrogen, Ammonia *	mg/kg	Bi-Monthly	DMR*
Nitrogen, Nitrate (total as N) *	mg/kg	Bi-Monthly	DMR*
Nitrogen, Organic *	mg/kg	Bi-Monthly	DMR*
Nitrogen, Nitrite (total as N) *	mg/kg	Bi-Monthly	DMR*
Nitrogen, Total *	mg/kg	Bi-Monthly	DMR*
pH *	S.U.	Bi-Monthly	DMR*
Polychlorinated Biphenyls	mg/kg	Bi-Monthly	DMR
Solids, Fixed	%	Bi-Monthly	DMR
Solids, Total	%	Bi-Monthly	DMR
Solids, Volatile	%	Bi-Monthly	DMR
Zinc, Total	mg/kg	Bi-Monthly	DMR
(*) required for composting or land application only Testing for inorganic pollutants shall follow "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846 as updated and/or revised.			

ATTACHMENT 2

MONTHLY OPERATING REPORT FORM

ATTACHMENT 3

CSO REGULATORS AND DISCHARGE POINTS

City of Bridgeport West Side NPDES Permitted Regulators as of October 2018
Permit ID: CT0100056

NPDES #	MNEUMONIC	LOCATION	RECEIVING WATER
91	DEW	State St. & Dewey St.	Ash Creek
38	SEAB	Brewster St & Seabright Ave	Black Rock Harbor
87	ANTH	St Stephens Rd & Anthony St	Burr Creek
40	WORD	Howard Ave & Wordin Ave	Cedar Creek
84	ARBOR	Admiral St & Harbor St	Cedar Creek
145	TIC	Henry St & Atlantic St	Bridgeport Harbor
207	STATE A&B	State St & Water St	Pequonnock River
49	WALL	John St - west of Water St	Pequonnock River
50	FAIR	Water St & Fairfield Ave	Pequonnock River
51	HILL	Water St & Golden Hill St	Pequonnock River
195	OVER	Congress St @ foot of Crescent St	Pequonnock River
80	CON	Congress St & Main St	Pequonnock River
79	EWAC	East Washington Ave & Housatonic Ave	Pequonnock River
78	YARD	Housatonic Ave & City Yard	Pequonnock River
77	GRAND	Housatonic Ave & Grand St	Pequonnock River
75	COND	Housatonic between Commercial & Grand	Pequonnock River
76	HOUS	Housatonic Ave & N. Washington Ave	Pequonnock River
33	HUNT	Huntington Rd & Vernon St	Pequonnock River
67 66	CREP/CREW	Pulaski St, Congress St & Crescent Ave	Pequonnock River
101	CAP	Main Street & Capitol Ave	Island Brook
196	FAIM	Main Street & Fairview Ave	Island Brook
48 47	TER N&S	Water St & Union Square	Pequonnock River
192	RAIL	Broad St & Railroad Ave	Bridgeport Harbor
93	CEM	Mt. Grove Cemetery & Dewey St.	Ash Creek

Bridgeport West Permit expiration date: Chief Plant Operator: Date received: (stamped)

Sample month/year: Page 1 of MOR for permit # CT0100056 Phone:

	Daily Flow			Primary Sludge			Anoxic Zone #1		Nitrate Pre-Anoxic Effluent	Aeration Tank #1				Internal recycle	Anoxic Zone #2		Nitrate Pre-Anoxic Effluent	Aeration Tank #2				Internal recycle	Anoxic Zone #3		Nitrate Pre-Anoxic Effluent	Aeration Tank #3			
												high D.O.	low D.O.							high D.O.	low D.O							high D.O.	low D.O.
	Max.	Min.	Total	Vol.	% solids	wt.	Hi DO	Lo DO		MLSS	SVI				Hi DO	Lo DO		MLSS	SVI				Hi DO	Lo DO		MLSS	SVI		
Units	mgd			gal.		lbs.	mg/l		mg/l			mg/l		%	mg/l		mg/l			mg/l		%	mg/l		mg/l			mg/l	
Freq	daily			work day			4/work day		weekly	Work day		4/work day		work day	4/work day		weekly	Work day		4/work day		work day	4/work day		weekly	Work day		4/work day	
1																													
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													
13																													
14																													
15																													
16																													
17																													
18																													
19																													
20																													
21																													
22																													
23																													
24																													
25																													
26																													
27																													
28																													
29																													
30																													
31																													
Total																													
Ave																													
Limit																													

Internal recycle	Anoxic Zone #4		Nitrate Pre-Anoxic Effluent	Aeration Tank #4				Internal recycle	Anoxic Zone #5		Nitrate Pre-Anoxic Effluent	Aeration Tank #5				Internal recycle	Anoxic Zone #6		Nitrate Pre-Anoxic Effluent	Aeration Tank #6				Internal recycle	Return sludge		Waste sludge	Waste accepted	
	Hi DO	Lo DO		MLSS	SVI	high D.O.	low D.O.		Hi DO	Lo DO		MLSS	SVI	high D.O.	low D.O.		Hi DO	Lo DO		MLSS	SVI	high D.O.	low D.O.		%flow	%solids		septic	indust
%	mg/l		mg/l			mg/l		%	mg/l		mg/l			mg/l		%	mg/l		mg/l			mg/l		%			lbs	gal	gal
work day	4/work day		weekly	Work day		4/work day		work day	4/work day		weekly	Work day		4/work day		work day	4/work day		weekly	Work day		4/work day		work day	work day		work day	work day	

BOD (5-day)			Suspended Solids			Settleable Solids	Turbidity	Chlorine Dose		Chlorine Residual		Chlorine Residual average	Fecal Coliform	Enterococci	Ammonia			Nitrite			Nitrate			TKN		
Inf.	Prim. Eff.	Final Eff.	Inf.	Prim. Eff.	Final Eff.	Eff.	Eff.			high	low				Inf.	Prim. Eff.	Final Eff.	Inf.	Prim. Eff.	Final Eff.	Inf.	Prim. Eff.	Final Eff.	Inf.	Prim. Eff.	Final Eff.
mg/l			mg/l			ml/l	NTU	lbs	mg/l	mg/l		mg/l	#/100 ml	#/100 ml	mg/l			mg/l			mg/l			mg/l		
3 per week	weekly	3 per week	3 per week	weekly	3 per week	work day	work day	Daily		4/work day		4/work day	3/week	3/week	Monthly			Monthly			Monthly			Monthly		

Total N			Total N	D.O.	pH		Total P	Total P	OrthoP	Temp.		Copper	Lead	Nickel	Silver	Bypass Flow	Bypass Hours	Rain	Alkalinity		
Inf.	Prim. Eff.	Final Eff.	Eff.	Eff.	Inf.	Eff.	Inf.	Eff.	Eff.	Inf.	Eff.	Eff.	Eff.	Eff.	Eff.	Eff.	Eff.		Inf.	Aer. Eff.	Eff.
mg/l			lb/d	mg/l	S.U.		mg/l	mg/l	mg\l	°F		kg/d	kg/d	kg/d	kg/d	MGD	mg/l	Inches	mg/l		
Monthly			monthly	workday	work day		monthly		monthly	work day						Per event	Per event	Per day	monthly		

Sludge Disposal Location:

Please return forms to:
DEEP - Water Bureau
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: __________

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: City of Bridgeport

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: CT0100056 **APPLICATION #:** 201710275 **FACILITY ID.** 015-001

Mailing Address:	Location Address:
Street: 695 Seaview Avenue	Street: 205 Bostwick Avenue
City: Bridgeport ST: CT Zip: 06607	City: Bridgeport ST: CT Zip: 06607
Contact Name: Stephen Walker Interim Acting General Manager	Contact Name: Stephen Walker
Phone No.: (203) 332-5604	Phone No.: (203) 332-5604
	DMR Contact email address: stephen.walker@bridgeportct.gov

PERMIT INFORMATION

DURATION 5 YEAR _X_ 10 YEAR ___ 30 YEAR ___

TYPE New _ Reissuance _X_ Modification ___

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

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

NPDES MAJOR**(MA)** _X_
NPDES SIGNIFICANT MINOR or PRETREAT SIU **(SI)** ___
NPDES or PRETREATMENT MINOR **(MI)** ___

COMPLIANCE SCHEDULE YES__ NO_X
POLLUTION PREVENTION __ TREATMENT REQUIREMENT__
WATER QUALITY REQUIREMENT __ OTHER ___

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

DEP STAFF ENGINEER Ann Straut **DATE DRAFTED:** March 12, 2018

PERMIT FEES

Discharge Code	DSN Number	Annual Fee
111000f	001-1	$3,320.00

APPLICATION FEE PAID: Paid on 11/27/2017
PROCESSING FEE PAID: Paid on 1/18/2018
ANNUAL FEE PAID: Paid on 6/14/2018

PUBLIC NOTICE
Date of Public Notice: _1/25/19___
Date Permit Cleared Public Notice: ___2/25/19____
Date Public Notice Fees Paid: __2/14/19_____

FOR NPDES DISCHARGES
Drainage Basin Code: 7003 Water Quality Classification Goal: SB
Segment: Cedar Creek (Black Rock Harbor) 01

NATURE OF BUSINESS GENERATING DISCHARGE
Municipal Sanitary Sewage Treatment

PROCESS AND TREATMENT DESCRIPTION (by DSN)
001-1 Activated sludge treatment with denitrification, chlorine disinfection and dechlorination

RESOURCES USED TO DRAFT PERMIT

_X_ *Federal Effluent Limitation Guideline 40CFR 133 Secondary Treatment Category*

__ *Performance Standards*

__ *Federal Development Document*
name of category

_X_ *Department File Information*

_X_ *Connecticut Water Quality Standards*

_X_ *Anti-degradation Policy*

_X_ *Coastal Management Consistency Review Form*

__ *Other - Explain*

BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS

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

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

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

__ *Anti-degradation policy*

GENERAL COMMENTS
The City of Bridgeport ("Permittee") operates a municipal water pollution control facility ("the facility") located at 205 Bostwick Avenue, Bridgeport. The facility is designed to treat and discharge up to 30 million gallons a day of effluent into Cedar Creek / Long Island Sound. The facility currently uses secondary treatment with denitrification and chlorine disinfection to treat effluent before being discharged. Pursuant to Conn. Gen. Stat. § 22a-430, the Department of Energy and Environmental Protection has issued the City of Bridgeport a permit for the discharge from this facility. The City of Bridgeport has submitted an application to renew its permit. The Department has made a tentative determination to approve the City of Bridgeport's application and has prepared a draft permit consistent with that determination.

The most significant changes from the current permit are the removal of the limits for and the addition of monitoring for copper, lead, nickel, and silver based on review of 5years of water quality data. Aluminum monitoring has been continued to be consistent with the most recent CT Water Quality Standards and Iron monitoring has been continued to be consistent with EPA's National Recommended Water Quality Criteria.

SUMMARY OF COMMENTS RECEIVED DURING THE PUBLIC NOTICE PERIOD AND THE DEPARTMENT'S RESPONSES

☐ *The Department has received no written comments on the proposed action. (REVIEW BY MANAGEMENT ONLY)*

X *Staff reviewed written comments and responded to the comments during a public informational meeting and a number of conference calls. The majority of the comments were concerning the zone of influence, a dye study and inclusion of the Long Term Control Plan into the permit even though it is already in an order. No significant changes have been made to the permit. (REVIEW BY SUPERVISOR AND MANAGEMENT ONLY)*

☐ *The Department has received and Staff has reviewed written comments on the proposed action and made significant changes as follows: (ADD COMMENTS, RESPONSES AND PERMIT CHANGES) (REVIEW BY PERMIT STAFF, SUPERVISOR AND MANAGEMENT)*

SPECIFIC REQUIREMENTS OR REVISIONS

The Department reviewed the application for consistency with Connecticut's Water Quality Standards and determined that with the limits in the draft permit, including those discussed below, that the draft permit is consistent with maintenance and protection of water quality in accordance with the Tier I Anti-degradation Evaluation and Implementation Review provisions of such Standards.

The need for inclusion of water quality based discharge limitations in this permit was evaluated consistent with Connecticut Water Quality Standards and criteria, pursuant to 40 CFR 122.44(d). Discharge monitoring data was evaluated for consistency with the available aquatic life criteria (acute and chronic) and human health (fish consumption only) criteria, considering the zone of influence allocated to the facility where appropriate. In addition to this review, the statistical procedures outlined in the EPA Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001) were employed to calculate the need for such limits. Comparison of the attached monitoring data and its inherent variability with the calculated water quality based limits indicates a low statistical probability of exceeding such limits. Therefore, no water quality based limits were included in the permit at this time.

WATER QUALITY LIMIT CALCULATIONS

See attached

Effluent Chemistry: BRIDGEPORT WEST WPCF

as of Monday, December 04, 2017 **Design Flow** 30 MGD **Avg. Monthly Flow :** MGD **Max. Monthly Flow :** MGD

Receiving Waterbody: LIS via Cedar Creek
Allocated ZOI: 100:1 cfs
Database IWC: 1% (allocated)

Date	BOD	TSS	NH3	NO2	NO3	CNt	CNa	Be	As	Cd	Cr6	Cr3	Cu	Pb	Th	Ni	Ag	Zn	Sb	Se	Phen	Hg	Al	P	Fe
12/6/2012	< 5.00	4.00	0.48	0.060	5.80	< 5.0	< 5.0	< 2.0	< 2.0	< 0.5	< 5.0	< 2.0	8.0	1.0	< 1.0	4.0	< 1.0	55.0	< 2.0	< 2.0	60.0	< 0.0			
3/6/2013	29.00	12.00	2.20	< 0.050	2.40	< 5.0	< 5.0	< 2.0	< 2.0	< 0.5	5.0	< 2.0	18.0	2.0	< 1.0	5.0	13.0	60.0	< 2.0	< 2.0	< 30.0	< 0.0			
6/18/2013	7.00	9.70	0.98	< 0.050	3.60	< 5.0	< 5.0	< 2.0	< 2.0	< 0.5	< 5.0	< 2.0	22.0	2.0	< 1.0	6.0	5.0	49.0	2.0	< 2.0	< 30.0	< 0.0			
9/22/2013	9.40	15.00	1.50	0.060	4.20	< 5.0	< 5.0	< 1.0	< 2.0	< 0.5	< 5.0	2.0	8.0	2.0	< 1.0	11.0	9.0	63.0	< 2.0	< 2.0	< 30.0	< 0.0	95.0	2.5	290.0
12/5/2013	< 5.00	4.60	0.79	0.080	7.20	< 5.0	< 5.0	< 1.0	< 2.0	< 0.5	< 5.0	11.0	9.0	3.0	< 1.0	8.0	20.0	10.0	< 2.0	< 2.0	< 30.0	< 0.0			
3/6/2014	6.50	7.50	0.32	0.150	1.00	6.0	< 7.0	< 1.0	< 2.0	< 0.5	< 5.0	< 2.0	9.0	6.0	< 1.0	5.0	< 1.0	82.0	< 2.0	< 2.0	< 30.0	< 0.0			
6/5/2014	6.30	5.80	1.40	0.090	5.20	< 5.0	< 5.0	< 2.0	< 2.0	< 0.5	< 5.0	< 2.0	7.0	2.0	< 1.0	7.0	1.0	47.0	< 2.0	< 2.0	< 30.0	< 0.0			
9/8/2014	< 5.00	5.00	1.40	0.140	2.70	< 5.0	< 5.0	< 1.0	< 2.0	< 0.5	< 5.0	< 2.0	4.0	0.7	< 1.0	8.0	< 1.0	43.0	< 2.0	< 2.0	< 30.0	< 0.0	24.0	2.0	150.0
9/17/2014	< 5.00	4.00	0.61	< 0.050	4.50	< 5.0	< 5.0	< 1.0	< 2.0	< 0.5	< 5.0	< 2.0	5.0	0.7	< 1.0	8.0	< 1.0	61.0	< 2.0	< 2.0	< 30.0	< 0.0	< 20.0		140.0
12/3/2014	6.00	3.60	2.70	0.170	4.60	< 5.0	< 5.0	< 1.0	< 2.0	< 0.5	< 5.0	< 2.0	5.0	0.6	< 1.0	9.0	< 1.0	63.0	< 2.0	< 2.0	< 30.0	< 0.0			
3/12/2015	6.00	6.90	0.74	< 0.050	4.90	< 5.0	< 5.0	< 1.0	< 2.0	< 0.5	< 5.0	< 2.0	9.0	1.0	< 1.0	3.0	2.0	75.0	< 2.0	< 2.0	< 30.0	< 0.0			
6/4/2015	40.00	17.00	8.80	0.060	0.71	< 5.0	< 5.0	< 1.0	< 2.0	0.6	< 5.0	15.0	110.0	18.0	< 1.0	9.0	7.0	230.0	2.0	< 2.0	30.0	<160.0			
9/2/2015	< 5.00	<	0.10	0.060	6.30	< 5.0	< 5.0	< 1.0	< 2.0	< 0.5	< 5.0	< 2.0	5.0	1.0	< 1.0	6.0	< 1.0	81.0	< 2.0	< 2.0	< 30.0	< 0.0			
9/4/2015	< 5.00	2.10	0.15	< 0.050	1.10	< 5.0	< 5.0	< 1.0	< 2.0	< 0.5	< 5.0	< 2.0	2.0	< 0.5	< 1.0	5.0	6.0	13.0	< 2.0	< 2.0	< 30.0	< 0.0	< 20.0		70.0
12/10/2015	< 5.00	2.80	0.98	< 0.050	4.60	< 5.0	< 5.0	< 1.0	< 2.0	< 0.5	< 5.0	< 2.0	8.0	0.9	< 1.0	4.0	< 1.0	84.0	< 2.0	< 2.0	< 30.0	< 0.0			

Date	BOD	TSS	NH3	NO2	NO3	CNt	CNa	Be	As	Cd	Cr6	Cr3	Cu	Pb	Th	Ni	Ag	Zn	Sb	Se	Phen	Hg	Al	P	Fe
3/10/2016	< 5.00	1.80	4.40	< 0.050	1.20	6.0	6.0	< 1.0	< 2.0	< 0.5	< 5.0	< 2.0	3.0	0.6	< 1.0	15.0	< 1.0	46.0	< 2.0	< 2.0	< 30.0	< 0.0			
6/2/2016	6.00	13.00	5.10	< 0.050	0.77	< 5.0	< 5.0	< 1.0	< 2.0	< 0.5	< 5.0	< 2.0	6.0	3.0	< 1.0	7.0	< 1.0	40.0	< 2.0	< 2.0	< 30.0	< 0.0			
9/7/2016	< 5.00	7.60	0.49	0.180	3.30	< 5.0	< 5.0	< 1.0	< 2.0	< 0.5	< 5.0	2.0	4.1	2.6	< 1.0	3.0	< 1.0	63.0	< 2.0	< 2.0	< 30.0	< 0.0			
12/8/2016	5.20	3.30	0.67	0.090	4.00	< 5.0	< 5.0	< 0.2	< 1.0	< 0.1	< 5.0	< 1.0	3.4	0.7	< 1.0	1.4	< 0.3	63.0	< 1.0	< 2.0	< 30.0	< 0.0	23.0	0.7	120.0
4/28/2017	4.80	< 5.00	3.73	0.118	0.32	< 10.0	< 10.0	< 1.0	< 2.0	< 0.1	< 10.0	2.0	5.0	< 0.3	< 1.0	3.0	< 1.0	38.0	< 3.0	< 5.0	< 15.0	< 0.2	68.0	0.5	255.0
9/6/2017	< 4.00	< 5.00	3.43	0.146	1.31	< 10.0	< 10.0	< 1.0	< 2.0	< 0.1	< 10.0	< 1.0	4.0	< 0.3	< 1.0	2.0	< 1.0	59.0	< 3.0	< 5.0	< 15.0	< 0.2	24.0	1.9	272.0

Text334:

	BOD	TSS	NH3	NO2	NO3	CNt	CNa	Be	As	Cd	Cr6	Cr3	Cu	Pb	Th	Ni	Ag	Zn	Sb	Se	Phen	Hg	Al	P	Fe
Count	21	20	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	7	5	7
# Detected	11	18	20	13	21	2	1	0	0	1	1	5	21	18	0	21	8	21	2	0	2	0	5	5	7
Average	8.34	6.79	1.95	0.086	3.32	5.6	5.6	1.2	2.0	0.4	5.5	3.0	12.1	2.3	1.0	6.2	3.6	63.1	2.0	2.3	30.0	7.6	39.1	1.5	185.3
Maximum	40.00	17.00	8.80	0.180	7.20	10.0	10.0	2.0	2.0	0.6	10.0	15.0	110.0	18.0	1.0	15.0	20.0	230.0	3.0	5.0	60.0	160.0	95.0	2.5	290.0
CV	1.1	0.6	1.1	0.5	0.6	0.3	0.3	0.4	0.1	0.3	0.3	1.2	1.9	1.6	0.0	0.5	1.4	0.7	0.2	0.4	0.3	4.6	0.8	0.6	0.5

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

Bridgeport West Side Treatment Plant

Discharger:	Bridgeport West Side Treatment Plant			by: Strauta, 12/4/2017, 13:43	
Receiving Water:	Lonf Island Sound, Cedar Cre	CURRENT CONDITIONS			
Design Flow:	30.000	MGD	Avg. Flow:	18.630	MGD
Allocated ZOI:	4575.00	CFS	Max. Flow:	78.100	MGD
Samples/Month:	4		IWC:	1.00	%

WQB Limits - **Saltwater**

Compound	C.V.	AML ug/l	MDL ug/l	AML kg/d	MDL kg/d	LIMIT? ML?
Aluminum	0.8	6.66E+03	1.53E+04	7.57E+02	1.73E+03	
Ammonia	1.1	5.26E+04	1.38E+05	5.98E+03	1.56E+04	
Antimony	0.2	2.79E+04	3.70E+04	3.17E+03	4.20E+03	
Arsenic	0.1	2.10E-02	2.43E-02	2.39E-03	2.76E-03	ML
Beryllium	0.4	1.29E+01	2.17E+01	1.47E+00	2.46E+00	
Cadmium	0.3	7.92E+02	1.19E+03	8.99E+01	1.35E+02	
Chlorine	0.6	6.11E+02	1.23E+03	6.95E+01	1.39E+02	
Chromium (hex)	0.3	4.50E+03	6.75E+03	5.11E+02	7.67E+02	
Chromium (tri)	1.2	1.01E+08	2.71E+08	1.14E+07	3.08E+07	
Copper	1.9	2.77E+02	8.43E+02	3.15E+01	9.58E+01	
Cyanide (amen)	0.3	6.64E+01	9.96E+01	7.54E+00	1.13E+01	
Lead	1.6	5.00E+02	1.47E+03	5.68E+01	1.67E+02	
Mercury	4.6	5.08E+00	1.74E+01	5.77E-01	1.98E+00	ML
Nickel	0.5	6.90E+02	1.27E+03	7.85E+01	1.45E+02	
Phenol	0.3	8.56E+07	1.28E+08	9.73E+06	1.46E+07	
Selenium	0.4	6.18E+03	1.03E+04	7.02E+02	1.18E+03	
Silver	1.4	6.68E+01	1.89E+02	7.59E+00	2.15E+01	
Thallium	0.0	4.68E+01	4.68E+01	5.32E+00	5.32E+00	
Zinc	0.7	7.11E+03	1.53E+04	8.08E+02	1.74E+03	

Current Conditions

Compound	# DETECTS	AMC ug/l	MMC ug/l	AMM kg/d	MMM kg/d
Aluminum	5	3.91E+01	9.50E+01	2.76E+00	2.81E+01
Ammonia	20	1.95E+03	8.80E+03	1.38E+02	2.60E+03
Antimony	2	2.00E+00	3.00E+00	1.41E-01	8.88E-01
Arsenic	0	2.00E+00	2.00E+00	1.41E-01	5.92E-01
Beryllium	0	1.20E+00	2.00E+00	8.47E-02	5.92E-01
Cadmium	1	4.00E-01	6.00E-01	2.82E-02	1.78E-01
Chlorine					
Chromium (hex)	1	5.50E+00	1.00E+01	3.88E-01	2.96E+00
Chromium (tri)	5	3.00E+00	1.50E+01	2.12E-01	4.44E+00
Copper	21	1.21E+01	1.10E+02	8.54E-01	3.25E+01
Cyanide (amen)	1	5.60E+00	1.00E+01	3.95E-01	2.96E+00
Lead	18	2.30E+00	1.80E+01	1.62E-01	5.33E+00
Mercury	0	7.60E+00	1.60E+02	5.36E-01	4.73E+01
Nickel	21	6.20E+00	1.50E+01	4.38E-01	4.44E+00
Phenol	2	3.00E+01	6.00E+01	2.12E+00	1.78E+01
Selenium	0	2.30E+00	5.00E+00	1.62E-01	1.48E+00
Silver	8	3.60E+00	2.00E+01	2.54E-01	5.92E+00
Thallium	0	1.00E+00	1.00E+00	7.06E-02	2.96E-01
Zinc	21	6.31E+01	2.30E+02	4.45E+00	6.80E+01

Final WQB Limits

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

Interim WQB Limits

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

Minimum Levels

Arsenic	0.005 mg/L
Mercury	0.0002 mg/L