STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

June 1, 2016

Mr. Peter Owen
Public Works Director, City of Bath
55 Front Street
Bath, ME. 04530
e-mail: powen@cityofbath.com

Mr. Chris Wallace
Superintendent, BWPCF
1 Town Landing
Bath, ME. 04530
e-mail: cwallace@cityofbath.com

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100021
Maine Waste Discharge License (WDL) #W002678-6D-K-R
Final Permit

Dear Mr. Owen & Mr. Wallace:

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL **renewal** which was approved by the Department of Environmental Protection. Please read this permit/license renewal and its attached conditions carefully. You must follow the conditions in the order to satisfy the requirements of law.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "*Appealing a Commissioner's Licensing Decision.*"

If you have any questions regarding the matter, please feel free to call me at 287-7693.

Sincerely,

Gregg Wood
Division of Water Quality Management
Bureau of Water Quality

Enc.
cc: Stuart Rose, DEP/SMRO Lori Mitchell, DEP/CMRO
Sandy Mojica, USEPA Olga Vergara, USEPA Marelyn Vega, USEPA

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

CITY OF BATH	)	MAINE POLLUTANT DISCHARGE
BATH, SAGADAHOC COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
#ME0100021	)	WASTE DISCHARGE LICENSE
#W002678-6D-K-R **APPROVAL**	)	**RENEWAL**

In compliance with the applicable provisions of *Pollution Control*, 38 M.R.S.A. §§ 411 – 424-B, *Water Classification Program*, 38 M.R.S.A. §§ 464 – 470 and *Federal Water Pollution Control Act*, Title 33 U.S.C. § 1251, and applicable rules of the Department of Environmental Protection (Department hereinafter), the Department has considered the application of the CITY OF BATH (City/permittee hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The City has submitted a timely and complete application to the Department to renew Maine Pollutant Discharge Elimination System (MEPDES) #ME0100021 /Waste Discharge License (WDL) #W002678-6D-G-R (permit hereinafter), which was issued by the Department on October 16, 2009, for a five-year term. The 10/16/09 permit authorized the monthly average discharge of 3.5 million gallons per day (MGD) of secondary treated sanitary wastewater, and allowed an unspecified quantity of primary treated wastewater from a secondary treatment bypass structure at the facility and an unspecified quantity of untreated excess combined sanitary and storm water from four (4) combined sewer overflow (CSO) outfalls during wet weather events to the Kennebec River, Class SB, in Bath, Maine.

Subsequent to the issuance of the permit, the Department issued two minor revisions; 1) On November 2, 2011, a permit revision was issued that established a Special Condition requiring the implementation of an Asset Management Program and a requirement to establish a repair and replacement reserve account; and 2) On December 3, 2012, a minor revision was issued to eliminate the two CSO projects in the October 19, 2009 permit and replace them with the two new projects.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the previous permitting action except it is:

1. *Secondary Treated Wastewater (Outfall #001A)*

    a. Establishing a waiver from the daily maximum technology based concentration limit of 50 mg/L for BOD_5 and TSS during CSO-related bypass events. This permit allows CSO-related bypasses of secondary treatment requirements via Outfall #001A when the instantaneous flow rate to the treatment facility has exceeded 4,861 gallons per minute (gpm) or 7.0 MGD.

PERMIT SUMMARY (cont'd)

1. *Secondary Treated Wastewater (Outfall #001A)*

   b. Incorporating the interim mercury limits established by the Department for this facility pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001);

   c. Revising the timing of the surveillance and screening level WET, priority pollutant, analytical chemistry testing during the 5-year permit cycle; and

   d. Revising the minimum monitoring frequency requirements for biochemical oxygen demand (BOD) and total suspended solids (TSS) from 3/Week to 2/Week, settleable solids from 1/Day to 4/Week and total residual chlorine from 2/Day to 1/Day based on a statistical evaluation of test results in the most recent 36 months that justify said reductions.

2. *CSO-Related Bypasses of Secondary Treatment (Outfall #002A)* - For the purposes of this permitting action, this term refers to an internal primary treated waste stream that bypasses the secondary treatment system when the instantaneous flow rate into the treatment facility exceeds 4,861 gpm (7.0 MGD).

   a. Eliminating the reporting requirements for BOD_5 and TSS percent removal rates and surface loading rate as the Department has made a determination that data collected for these parameters to date have not provided useful information as to the performance of the system.

   b. Eliminating the daily maximum numeric limitations for fecal coliform bacteria and total residual chlorine for Outfall #002A as limiting an internal waste stream is not necessary given compliance with limitations in the permit is determined after the primary treated and secondary treated waste streams are blended.

3. *Blended Effluent (Outfall #002B)*

   a. Establishing daily maximum, technology-based mass limitations of 8,206 lbs./day for BOD_5 and 18,423 lbs./day for TSS for the blended effluent that are protective of water quality standards. The limits were derived as a combination of technology based values on the secondary treated waste stream plus past demonstrated performance values for the primary treated waste stream (bypassing secondary treatment).

CONCLUSIONS

Based on the findings summarized in the attached Fact Sheet dated April 8, 2016, and subject to the special and standard conditions that follow, the Department makes the following CONCLUSIONS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.

2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.

3. The provisions of the State's antidegradation policy, *Classification of Maine waters*, 38 M.R.S.A. § 464(4)(F), will be met, in that:

   (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;

   (b) Where high quality waters of the State constitute an outstanding natural resource, that water quality will be maintained and protected;

   (c) Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

   (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and

   (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

4. The discharges will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of licenses*, 38 M.R.S.A. § 414-A(1)(D).

ACTION

Based on the findings and conclusions as stated above, the Department APPROVES the application of the CITY OF BATH to discharge a monthly average of 3.5 million gallons per day (MGD) of secondary treated sanitary wastewater, allows an unspecified quantity of primary treated wastewater from a secondary treatment bypass structure at the facility, and an unspecified quantity of untreated excess combined sanitary and storm water from four (4) combined sewer overflow (CSO) outfalls during wet weather events to the Kennebec River, Class SB, in Bath, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

1. *Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits*, revised July 1, 2002, copy attached.

2. The attached Special Conditions, including any effluent limitations and monitoring requirements.

3. This permit and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S.A. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (amended August 25, 2013)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS 1st DAY OF June 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Melanie Loyzim for
Paul Mercer, Commissioner

Date of initial receipt of application: August 13, 2014

Date of application acceptance: August 15, 2014

Filed
JUN 01 2016
State of Maine
Board of Environmental Protection

Date filed with Board of Environmental Protection _____

This Order prepared by Gregg Wood, BUREAU OF WATER QUALITY

ME0100021 2016 5/26/16

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **secondary treated municipal sanitary wastewater from Outfall #001A** to the Kennebec River. Such discharges are limited and must be monitored by the permittee as specified below[1]:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	Report MGD *[03]*	---	Report MGD *[03]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
Biochemical Oxygen Demand (BOD_5)[2a] *[00310]*	876 lbs/day *[26]*	1,314 lbs/day *[26]*	Report lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Week *[02/07]*	24-Hour Composite *[24]*
BOD_5[2a] *[00310]* ***(When bypass is active)***	---	---	Report lbs/Day *[26]*	---	---	Report mg/L *[19]*	2/Week *[02/07]*	Composite *[24]*
BOD_5 % Removal[2b] *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Total Suspended Solids (TSS)[2a] *[00530]*	876 lbs/day *[26]*	1,314 lbs/day *[26]*	Report lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Week *[02/07]*	24-Hour Composite *[24]*
TSS[2a] *[00530]* ***(When bypass is active)***	---	---	Report lbs/Day *[26]*	---	---	Report mg/L *[19]*	2/Week *[02/07]*	Composite *[24]*
TSS % Removal[2b] *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	4/Week *[04/07]*	Grab *[GR]*
Fecal Coliform Bacteria[3] (Year Round) *[74055]*	---	---	---	15/100 ml[4] *[13]*	---	50/100 ml *[13]*	3/Week *[03/07]*	Grab *[GR]*
Total Residual Chlorine[5] *[50060]*	---	---	---	0.1 mg/L *[19]*	---	0.3 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
pH (Std. Units) *[00400]*	---	---	---	---	---	6.0 – 9.0 SU *[12]*	1/Day *[01/01]*	Grab *[GR]*
Mercury (Total)[6] *[71900]*				30.9 ng/L *[3M]*		46.3 ng/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*

Footnotes: See Pages 8 through 11 of this permit for applicable footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

SECONDARY TREATED WASTE WATER (OUTFALL #001A)

SCREENING LEVEL TESTING - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement.

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity[7]						
Acute – NOEL						
Americamysis bahia [TDM3E] *(Mysid Shrimp)*	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Chronic – NOEL						
Arbacia punctulata [TBH3A] *(Sea urchin)*	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Analytical chemistry[8,10] [51477]	---	---	---	Report ug/L [28]	1/Quarter [01/90]	Composite/Grab [24]
Priority pollutant[9,10] [50008]	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/Grab [24]

Footnotes: **See Pages 8 through 11 of this permit for applicable footnotes.**

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

PRIMARY TREATED WASTE WATERS (OUTFALL #002A)

2. Consistent with CSO bypass regulations, this permit allows initiation of CSO-related bypasses of secondary treatment via Outfall #001A when the instantaneous flow rate to the treatment facility has exceeded 4,861 gpm (7.0 MGD). Allowance to bypass secondary treatment will be reviewed and may be modified or terminated pursuant to Special Condition P, *Reopening of Permit for Modification,* if there is substantial change in the volume or character of pollutants in the collection/treatment system. Also see supplemental report form, *DEP-49-CSO Form For Use With Dedicated CSO Primary Clarifier*, **Attachment D** of this permit. **Outfall 002A** (waste water receiving only primary treatment only) shall be monitored as follows:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Overflow Use, Occurrences(11) [74062]	---	---	Report (# of days) [93]	---	1/When discharging [01/DH]	Record Total [RT]
Influent Flow Rate Minimum [00058]	---	Report (gpm) (12) [78]	---	---	Instantaneous [91/99]	Recorder [RC]
Flow [50050]	Report (Total MG) [3R]	Report (MGD) [03]	---	---	Continuous [99/99]	Recorder [RC]
BOD5 [00310]	---	Report lbs/day [26]	---	Report mg/L [19]	2/Week(13) [02/07]	Composite [24]
TSS [00530]	---	Report lbs/day [26]	---	Report mg/L [19]	2/Week(13) [02/07]	Composite [24]
Fecal coliform Bacteria [74055] *(Year round)*	---	---	---	Report col/100 ml [13]	3/Week(13) [03/07]	Grab [GR]
Total Residual Chlorine [50060]	---	---	--	Report mg/L [19]	1/Day(13) [01/01]	Grab [GR]

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

BLENDED EFFLUENT (OUTFALL #002B)

3. Consistent with CSO bypass regulations, the permittee is allowed to discharge primary and secondary treated waste water **(blended effluent)** from **Outfall #002B** (administrative outfall) to the Kennebec River. These limitations and monitoring requirements apply after blending, when the instantaneous flow rate to the treatment facility has exceeded 4,861 gpm (7.0 MGD). Allowance to bypass secondary treatment will be reviewed and may be modified or terminated pursuant to Special Condition P, *Reopening of Permit for Modification,* if there is substantial change in the volume or character of pollutants in the collection/treatment system. Also see supplemental report form, *DEP-49-CSO Form For Use With Dedicated CSO Primary Clarifier*, **Attachment D** of this permit. **Outfall 002B** shall be limited and monitored as follows:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	---	Report (MGD) *[03]*	---	---	1/When discharging *[01/DH]*	Calculate *[CA]*
BOD5 *[00310]*	---	8,206 lbs/day *[26]*	---	Report mg/L(14) *[19]*	2/Week(13) *[02/07]*	Calculate *[CA]*
TSS *[00530]*	---	18,423 lbs/day *[26]*	---	Report mg/L(14) *[19]*	2/Week(13) *[02/07]*	Calculate *[CA]*
Fecal coliform bacteria (2a) *[74055]* *(Year round)*	---	---	---	200 col/100 ml(14) *[13]*	3/Week(13) *[03/07]*	Calculate *[CA]*
Total Residual Chlorine(4) *[50060]*	---	---	–	1.0 mg/L(14) *[19]*	1/Day(13) *[01/01]*	Calculate *[CA]*

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Footnotes

1. **Sampling Locations:**

Influent sampling for BOD_5 and TSS must be sampled at the discharge of the headworks, after screening but before de-gritting.

Effluent receiving secondary treatment (Outfall #001A) must be collected at the drop box prior to discharge to the river. Fecal coliform bacteria may be sampled after chlorination but before dechlorination.

Effluent receiving primary treatment (Outfall #002A) must be collected at the end of the CSO structure, after dechlorination, but prior to combining with the final effluent. Fecal coliform bacteria may be sampled after chlorination but before dechlorination.

Blended effluent – (Outfall #002B) - This permit allows the permittee to mathematically combine the results of the primary treated and secondary treated waste streams to determine compliance with the limitations for the discharge of blended effluent.

Any change in sampling location(s) must be reviewed and approved by the Department in writing.

Sampling – Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. Samples that are sent to a POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under \ 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

OUTFALL #001A – Secondary treated waste water

2. **BOD & TSS**

a. **Outfall #001A** – Limitations for Outfall #001A remain in effect at all times with the exception of daily maximum concentration limits of 50 mg/L for BOD and TSS on any day when the bypass of secondary treatment is active and any sample results obtained on these days are not to be included in calculations to determine compliance with monthly or weekly average limitations.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Footnotes

OUTFALL #001A – Secondary treated waste water

b. **Percent removal** - The treatment facility shall maintain a minimum of 85 percent removal of both BOD_5 and TSS for all waste waters receiving a secondary level of treatment. The percent removal shall be based on a monthly average calculation using influent and effluent concentrations. The percent removal shall be waived when the monthly average influent concentration is less than 200 mg/L. For instances when this occurs, the facility may report "*N-9*" on the monthly Discharge Monitoring Report.

3. **Bacteria Limits** – Fecal coliform bacteria limits and monitoring requirements are in effect year-round at the request of the Maine Department of Marine Resources in order to protect local shellfish resources.

4. **Bacteria Reporting** – The monthly average fecal coliform bacteria limitation is a geometric mean limitation and sample results must be reported as such.

5. **TRC monitoring** –Limitations and monitoring requirements are in effect any time elemental chlorine or chlorine-based compounds are utilized to disinfect the discharge(s). The permittee must utilize a USEPA-approved test method capable of bracketing the TRC limitations specified in this permitting action. Monitoring for TRC is only required when elemental chlorine or chlorine-based compounds are in use for effluent disinfection. For instances when a facility has not disinfected with chlorine-based compounds for an entire reporting period, the facility must report "NODI-9" for this parameter on the monthly DMR or "N9" if the submittal is an electronic DMR.

6. **Mercury** – The permittee must conduct all mercury sampling required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the USEPA's "clean sampling techniques" found in USEPA Method 1669, *Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels.* All mercury analysis must be conducted in accordance with USEPA Method 1631E, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry.* See **Attachment A** for a Department report form for mercury test results. Compliance with the monthly average limitation established in Special Condition A.1 of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Footnotes

OUTFALL #001A – Secondary treated waste water

7. **Whole effluent toxicity (WET) testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 2.9% and 0.35% respectively), which provides an estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points. The critical acute and chronic thresholds were derived as the mathematical inverse of the applicable acute and chronic dilution factors of 34:1 and 284:1, respectively.

   a. **Surveillance level testing** – Waived pursuant to 06-096 CMR Chapter 530(2)(D)(3)(b).

   b. **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level acute and chronic WET testing at a minimum frequency of once per year (1/Year) for both species. Acute tests must be conducted on the mysid shrimp (*Americamysis bahia)* and chronic tests conducted on the sea urchin (*Arbacia punctulata*), once per year (1/Year) in any calendar quarter provided the sample is representative of the discharge and any seasonal or other variations in effluent quality.

   WET test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedances of the critical acute and chronic water quality thresholds of 2.9% and 0.35%, respectively.

   Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following USEPA methods manuals.

   a. U.S. Environmental Protection Agency, 2002. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third edition, October 2002, EPA 821-R002-014.

   b. U.S. Environmental Protection Agency, 2002. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth edition, October 2002, EPA 821-R-02-012.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Footnotes

OUTFALL #001A – Secondary treated waste water

Results of WET tests must be reported on the "Whole Effluent Toxicity Report Marine Waters" form included as **Attachment B** of this permit each time a WET test is performed. The permittee is required to analyze the effluent for the analytical chemistry parameters specified on the "WET and Chemical Specific Data Report Form" form included as **Attachment C** of this permit each time a WET test is performed.

8. **Analytical Chemistry** – Refers to those pollutants listed under "Analytical Chemistry" on the form included as **Attachment C** of this permit.

   a. **Surveillance level testing** – Waived pursuant to 06-096 CMR Chapter 530(2)(D)(3)(b).

   b. **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level analytical chemistry testing at a minimum frequency of four times per year (4/Year) in successive calendar quarters.

9. **Priority Pollutant Testing** – Refers to those pollutants listed under "Priority Pollutants" on the form included as **Attachment C** of this permit.

   a. **Surveillance level testing** – Not required pursuant 06-096 CMR Chapter 530(2)(D)(3)(b).

   b. **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year) in any calendar quarter provided the sample is representative of the discharge and any seasonal or other variations in effluent quality.

10. **Priority Pollutant and Analytical Chemistry Testing** – This testing must be conducted on samples collected at the same time as those collected for whole effluent toxicity tests when applicable. Priority pollutant and analytical chemistry testing must be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve minimum reporting levels of detection as specified by the Department.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Footnotes

OUTFALL #001A – Secondary treated waste water

Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department, possible exceedances of the acute, chronic or human health AWQC as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (last amended July 29, 2012). For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "N9" monitoring not required this period.

OUTFALL #002A – Primary treated waste water and OUTFALL #002B – Blended effluent

11. **Overflow Occurrence** – An overflow occurrence, whereby a portion of the flow entering the treatment plant bypasses secondary treatment, is allowed when the instantaneous flow rate to the treatment plant has exceeded 4,861 gpm (7.0 MGD). A reportable overflow occurrence is defined as a discharge from the storm flow chlorine contact tank for greater than 60 minutes continuously or greater than 120 minutes intermittently during a 24-hour period. Overflow occurrences are reported in discharge days. Multiple intermittent overflow occurrences in one discharge day are reported as one overflow occurrence and are sampled according to the measurement frequency specified.

12. **Minimum instantaneous influent flow** – The permittee must record the minimum instantaneous influent flow rate to the treatment plant at the initiation of each overflow occurrence and report the minimum value for each month. This reporting is not required if there are no overflow occurrences during the month.

13. **BOD, TSS, TRC and fecal coliform bacteria** – Sampling for BOD, TSS, total residual chlorine and fecal coliform bacteria are only required for reportable overflow occurrences as defined in footnote #11 above. Multiple intermittent overflow occurrences in one discharge day are reported as one overflow occurrence and are sampled according to the measurement frequency specified. One composite sample for BOD5 and TSS and one grab sample for fecal coliform bacteria and total residual chlorine each must be collected per overflow occurrence that meets the timeframes specified above. Sampling of an overflow occurrence is only required if the overflow occurrence coincides with the regularly scheduled sampling days of the secondary treated waste stream. Composite samples must be flow proportioned from all intermittent overflows during that 24-hour period.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Footnotes

OUTFALL #002B – Blended effluent

14. **BOD, TSS, Total residual chlorine & Fecal coliform bacteria** - To fulfill the daily maximum reporting concentration and count requirements for BOD, TSS, total residual and fecal coliform bacteria when the secondary bypass has been active, the permittee shall report the daily maximum flow weight average concentration/count for each month in accordance with the following equation:

    (Daily BOD/TSS/TRC/bacteria concentration/count of Outfall #001A for each bypass event) x (Daily flow of Outfall #001A for each bypass event) + (Daily BOD/TSS/TRC/bacteria concentration/count of Outfall #002A for each bypass event) x (Daily flow of Outfall #002A for each bypass event) ÷ [(Daily flow for Outfall #001A each bypass event) + (Daily flow for Outfall #002A for each bypass event)] = Weighted concentration.

    Report the highest weighted average concentration/count of the blended effluent for each month.

B. TREATMENT PLANT OPERATOR

The person who has the management responsibility over the treatment facility must be a person holding a Maine **Grade IV** certificate (or Registered Maine Professional Engineer) pursuant to *Sewerage Treatment Operators*, Title 32 M.R.S.A., Sections 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 CMR 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

SPECIAL CONDITIONS

C. NARRATIVE EFFLUENT LIMITATIONS

1. The permittee must not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the usages designated for the classification of the receiving waters.

2. The permittee must not discharge effluent that contains materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated for the classification of the receiving waters.

3. The permittee must not discharge wastewater that causes visible discoloration or turbidity in the receiving waters that causes those waters to be unsuitable for the designated uses and characteristics ascribed to their class.

4. The permittee must not discharge effluent that lowers the quality of any classified body of water below such classification, or lowers the existing quality of any body of water if the existing quality is higher than the classification.

D. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the wastewater collection and treatment system by a non-domestic source (user) must not pass through or interfere with the operation of the treatment system. The permittee must conduct an Industrial Waste Survey (IWS) any time a new industrial user proposes to discharge within its jurisdiction; an existing user proposes to make a significant change in its discharge; or at an alternative minimum, once every permit cycle and submit the results to the Department. The IWS must identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of the federal Clean Water Act, 40 CFR Part 403 (general pretreatment regulations) or *Pretreatment Program*, 06-096 CMR 528 (last amended March 17, 2008).

E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on August 15, 2014; 2) the terms and conditions of this permit; and 3) only from Outfall #001A, and the four (4) CSOs listed in Special Condition J, *Combined Sewer Overflows (CSOs)* of this permit. Discharges of wastewater from any other point source(s) are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit.

SPECIAL CONDITIONS

F. NOTIFICATION REQUIREMENT

In accordance with Standard Condition D, the permittee must notify the Department of the following:

1. Any introduction of pollutants into the wastewater collection and treatment system from an indirect discharger in a primary industrial category discharging process wastewater; and

2. Any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants to the system at the time of permit issuance. For the purposes of this section, notice regarding substantial change must include information on:

   a. the quality and quantity of wastewater introduced to the wastewater collection and treatment system; and

   b. any anticipated impact caused by the change in the quantity or quality of the wastewater to be discharged from the treatment system.

G.WET WEATHER FLOW MANAGEMENT PLAN

The permittee must maintain an approved Wet Weather Flow Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall. A specific objective of the plan must be to maximize the volume of wastewater receiving secondary treatment under all operating conditions. The revised plan must include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events.

The permittee must review their plan at least annually and record any necessary changes to keep the plan up to date. The Department may require review and update of the plan as it is determined to be necessary.

H. OPERATIONS AND MAINTENANCE (O&M) PLAN

The permittee must maintain a current written comprehensive Operation & Maintenance (O&M) Plan for the facility. The plan must provide a systematic approach by which the permittee must at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.

By December 31 of each year, or within 90 days of any process changes or minor equipment upgrades, the permittee must evaluate and modify the O&M Plan including site plan(s) and schematic(s) for the wastewater treatment facility to ensure that it is up-to-date. The O&M Plan must be kept on-site at all times and made available to Department and USEPA personnel upon request.

SPECIAL CONDITIONS

H. OPERATIONS AND MAINTENANCE (O&M) PLAN (cont'd)

Within 90 days of completion of new and or substantial upgrades of the wastewater treatment facility, the permittee must submit the updated O&M Plan to their Department inspector for review and comment.

I. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

Pursuant to this permit and *Standards for the Addition of Transported Wastes to Wastewater Treatment Facilities,* 06-096 CMR 555 (effective March 9, 2009), during the effective period of this permit, the permittee is authorized to receive into the treatment process or solids handling stream up to **a daily maximum of 10,000 gallons per day (gpd)** of transported wastes, subject to the following terms and conditions.

1. "Transported wastes" means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.

2. Of the 10,000 GPD authorized by this permit, the permittee is authorized to receive and introduce into the treatment process or solids handling stream up to a daily maximum of 10,000 GPD of septage wastes.

3. The character and handling of all transported wastes received must be consistent with the information and management plans provided in application materials submitted to the Department.

4. The permittee must ensure that at no time the addition of transported wastes causes or contributes to effluent quality violations. The permittee must ensure that transported wastes do not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility. Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. The permittee must ensure that odors and traffic from the handling of transported wastes do not result in adverse impacts to the surrounding community. If any adverse effects exist, the permittee must suspended the receipt or introduction of transported wastes into the treatment process or solids handling stream until there is no further risk of adverse effects.

SPECIAL CONDITIONS

I. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

5. The permittee must maintain records for each load of transported wastes in a daily log which must include at a minimum the following.
   (a) The date;
   (b) The volume of transported wastes received;
   (b) The source of the transported wastes;
   (d) The person transporting the transported wastes;
   (e) The results of inspections or testing conducted;
   (f) The volumes of transported wastes added to each treatment stream; and
   (g) The information in (a) through (d) for any transported wastes refused for acceptance.
   The permittee must maintain these records at the treatment facility for a minimum of five years.

6. The permittee must ensure that the addition of transported wastes into the treatment process or solids handling stream do not cause the treatment facility's design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, the permittee must ensure that introduction of transported wastes into the treatment process or solids handling stream are reduced or terminated in order to eliminate the overload condition.

7. The permittee must not record holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added as transported wastes, but must report this waste stream in the treatment facility's influent flow.

8. During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current high flow management plan approved by the Department that provides for full treatment of transported wastes without adverse impacts.

9. In consultation with the Department, chemical analysis is required prior to receiving transported wastes from new sources that are not of the same nature as wastes previously received. The analysis must be specific to the type of source and designed to identify concentrations of pollutants that may pass through, upset or otherwise interfere with the facility's operation.

10. Access to transported waste receiving facilities may be permitted only during the times specified in the application materials and under the control and supervision of the person responsible for the wastewater treatment facility or his/her designated representative.

11. The authorization in this Special Condition is subject to annual review and, with notice to the permittee and other interested parties of record, may be suspended or reduced by the Department as necessary to ensure full compliance with 06-096 CMR 555 and the terms and conditions of this permit.

SPECIAL CONDITIONS

J. EFFLUENT LIMITATIONS AND CONDITIONS FOR COMBINED SEWER OVERFLOWS (CSOs)

Pursuant to *Combined Sewer Overflow Abatement,* 06-096 CMR 570 (effective date February 5, 2000), the permittee is authorized to discharge from the following locations of CSOs (stormwater and sanitary wastewater) subject to the conditions and requirements herein.

1. CSO Locations

Outfall #	Location	Receiving Water & Class
003	Rose Street Pump Station	Kennebec River, Class SB
004	Pleasant Street Pump Station	Kennebec River, Class SB
005	Commercial Street Pump Station	Kennebec River, Class SB
008	Harward Street	Kennebec River, Class SB

2. Prohibited Discharges

   a. The discharge of dry weather flows is prohibited.

   b. No discharge may occur as a result of mechanical failure, improper design or inadequate operation or maintenance.

   c. No discharges may occur at flow rates below the maximum design capacities of the wastewater treatment facility, pumping stations or sewerage system.

   d. Any discharge prohibited by this section must be reported to the Department in accordance with Standard Condition D (1) of this permit.

3. Narrative Effluent Limitations

   a. The effluent must not contain a visible oil sheen, settled substances, foam, or floating solids at any time that impair the characteristics and designated uses ascribed to the classification of the receiving waters.

   b. The effluent must not contain materials in concentrations or combinations that are hazardous or toxic to aquatic life; or which would impair the usage designated by the classification of the receiving waters.

   c. The discharge must not impart color, turbidity, toxicity, radioactivity or other properties that cause the receiving waters to be unsuitable for the designated uses and other characteristics ascribed to their class.

SPECIAL CONDITIONS

J. EFFLUENT LIMITATIONS AND CONDITIONS FOR COMBINED SEWER OVERFLOWS (CSOs)

4. CSO Master Plan [see 06-096 CMR 570(3) and 06-096 CMR 570(4)]
The permittee must implement CSO control projects in accordance with the most current approved CSO Master Plan and abatement schedule. The CSO Master Plan entitled, *"City of Bath – Revised 2006 Combined Sewer Overflow Master Plan Update,"* In addition there have been three revision letters (2008, 2011 and 2015) submitted to the Department updating the scope of work and schedules for selected projects.

   Key milestones approved in the most recent abatement schedule or agreed to by the permittee and Department that the permittee is required to comply with are:

   On or before December 31, 2016, ***(ICIS Code CSO10)*** the permittee shall complete construction which results in elimination of the catch basins identified on School Street that are contributing wet weather flows to the Commercial Street pump station (Project #41)

   On or before December 31, 2017, ***(ICIS Code 75305),*** the permittee shall complete construction of projects which results in elimination of catch basins and rehabilitation of leaking sewer lines contributing wet weather flows to the Rose Street Pump Station (Project #41).

   On or before December 31, 2019, ***(ICIS Code 75305),*** the permittee shall complete storm water construction projects which results in separation of identified catch basins at the Fisher Mitchell School which contribute wet weather flows to the Pleasant Street Pump Station.

   On or before December 31, 2020, ***(ICIS Code 81699),*** the permittee shall submit an updated CSO Master Plan to the Department for review and approval.

   To modify the dates and or projects specified above (but not dates in the Master Plan), the permittee must file an application with the Department to formally modify this permit. The work items identified in the abatement schedule may be amended from time to time based upon approval by the Department. The permittee must notify the Department in writing prior to any proposed changes to the implementation schedule.

SPECIAL CONDITIONS

J. EFFLUENT LIMITATIONS AND CONDITIONS FOR COMBINED SEWER OVERFLOWS (CSOs) (cont'd)

5. Nine Minimum Controls (NMC) [see 06-096 CMR 570(5)]

   The permittee must implement and follow the Nine Minimum Control documentation as approved by USEPA on May 29, 1997. Work performed on the Nine Minimum Controls during the year must be included in the annual *CSO Progress Report* (see below).

6. CSO Compliance Monitoring Program [see 06-096 CMR 570(6)]

   The permittee must conduct block testing or flow monitoring according to an approved *Compliance Monitoring Program* on all CSO points, as part of the CSO Master Plan. Annual flow volumes for all CSO locations must be determined by actual flow monitoring, or by estimation using a model such as USEPA's Storm Water Management Model (SWMM). **Results must be submitted annually** as part of the annual *CSO Progress Report* (see below), and must include annual precipitation, CSO volumes (actual or estimated) and any block test data required. Any abnormalities during CSO monitoring must also be reported. The results must be reported on the Department form "CSO Activity and Volumes" (**Attachment E** of this permit) or similar format and submitted electronically to the Department.

   CSO control projects that have been completed must be monitored for volume and frequency of overflow to determine the effectiveness of the project toward CSO abatement. This requirement does not apply to those areas where complete separation has been completed and CSO outfalls have been eliminated.

7. Addition of New Wastewater [see 06-096 CMR 570(8)]

   06-096 CMR 570(8) lists requirements relating to any proposed addition of wastewater to the combined sewer system. Documentation of the new wastewater additions to the system and associated mitigating measures must be included in the annual *CSO Progress Report* (see below). Reports must contain the volumes and characteristics of the wastewater added or authorized for addition and descriptions of the sewer system improvements and estimated effectiveness.

8. Annual CSO Progress Reports [see 06-096 CMR 570(7)]

   By March 1 of each year *[ICIS Code 11099]* the permittee must submit *CSO Progress Reports* covering the previous calendar year (January 1 to December 31). The CSO Progress Report must include, but is not necessarily limited to, the following topics as further described in 06-096 CMR 570: CSO abatement projects, schedule comparison, progress on inflow sources, costs, flow monitoring results, CSO activity and volumes, nine minimum controls update, sewer extensions, and new commercial or industrial flows.

SPECIAL CONDITIONS

J. EFFLUENT LIMITATIONS AND CONDITIONS FOR COMBINED SEWER OVERFLOWS (CSOs) (cont'd)

The CSO Progress Reports must be completed on a standard form entitled "*Annual CSO Progress Report*", furnished by the Department, and submitted in electronic form, if possible, to the following address:

CSO Coordinator
Department of Environmental Protection
Bureau of Water Quality
17 State House Station
Augusta, Maine 04333
e-mail: CSOCoordinator@maine.gov

9. Signs

If not already installed, the permittee must install and maintain an identification sign at each CSO location as notification to the public that intermittent discharges of untreated sanitary wastewater occur. The sign must be located at or near the outfall and be easily readable by the public. The sign must be a minimum of 12" x 18" in size with white lettering against a green background and must contain the following information:

CITY OF BATH
WET WEATHER
SEWAGE DISCHARGE
CSO # AND NAME

10. Definitions

For the purposes of this permitting action, the following terms are defined as follows:

a. Combined Sewer Overflow - a discharge of excess waste water from a municipal or quasi-municipal sewerage system that conveys both sanitary wastes and stormwater in a single pipe system and that is in direct response to a storm event or snowmelt.

b. Dry Weather Flows - flow in a sewerage system that occurs as a result of non-storm events or are caused solely by ground water infiltration.

c. Wet Weather Flows - flow in a sewerage system that occurs as a direct result of a storm event, or snowmelt in combination with dry weather flows.

SPECIAL CONDITIONS

K. 06-096 CMR 530(2)(D)(4) STATEMENT FOR REDUCED/WAIVED TOXICS TESTING

By December 31 of each calendar year, the permittee must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit *[ICIS Code 96299]*. See **Attachment F** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

a. Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;

b. Changes in the operation of the treatment works that may increase the toxicity of the discharge;

c. Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge;

d. Changes in stormwater collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge; and

e. Increases in the type or volume of transported (hauled) wastes accepted by the facility.

The Department may require that annual toxicity testing be re-instated if it determines that there have been changes in the character of the discharge or if annual certifications described above are not submitted.

L. REPAIR AND REPLACEMENT RESERVE ACCOUNT

Beginning September 14, 2016, and every year thereafter through September 14, 2017, the permittee must fund a Repair and Replacement Reserve Account in the amount recommended in the permittee's Asset Management Plan or at a minimum of 2% of the permittee's total yearly waste water operation and maintenance budget.

On or before September 14, 2016, and every year thereafter through September 14, 2017 and *(ICIS Code 75305)* the permittee must submit a certification to the Department indicating a Repair and Replacement Reserve Account has been fully funded as required above. See **Attachment F** of this permit for a copy of the certification form. The permittee must attach copies of yearly audit reports to the annual certification forms showing funds in the reserve account for each year for the two years and, if funds were expended, what the funds were used for. This requirement to annually fund a Repair And Replacement Reserve Account will sunset upon receipt of the final certification by the Department (on or before September 14, 2017).

SPECIAL CONDITIONS

M. ASSET MANAGEMENT PROGRAM (AMP)

The permittee must maintain a current written AMP in accordance with Department guidance entitled, *Maine Department of Environmental Protection, Clean Water State Revolving Fund (CWSRF) Guidance for Minimum Requirements for an Asset Management Program and Reserve Account In Order to Qualify for CWSRF Principal Forgiveness*, DEPLW1190C-2014. The AMP shall be reviewed and updated as necessary at least annually. The AMP must be kept on-site at the permittee's office and made available to Department staff for review during normal business hours. This requirement to maintain a current written AMP will sunset upon receipt of the final certification by the Department to annually fund a Repair And Replacement Reserve Account (on or before September 14, 2017).

N. MONITORING AND REPORTING

Monitoring results obtained during the previous month must be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office such that the DMRs are received by the Department on or before the fifteenth (15th) day of the month following the completed reporting period. A signed copy of the DMR and all other reports required herein must be submitted to the Department assigned inspector (unless otherwise specified by the Department) at the following address:

Department of Environmental Protection
Southern Maine Regional Office
Bureau of Water Quality
Division of Water Quality Management
312 Canco Road
Portland, Maine 04103

Alternatively, if the permittee submits an electronic DMR (DMR), the completed DMR must be electronically submitted to the Department by a facility authorized DMR Signatory not later than close of business on the 15th day of the month following the completed reporting period. Hard copy documentation submitted in support of the DMR must be postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office such that it is received by the Department on or before the fifteenth (15th) day of the month following the completed reporting period. Electronic documentation in support of the DMR must be submitted not later than close of business on the 15th day of the month following the completed reporting period.

SPECIAL CONDITIONS

O. REPORTING DISCHARGES NOT RECEIVING SECONDARY TREATMENT

Pursuant to *Classification of Maine waters*, 38 M.R.S.A. § 464(1)(C) and *Standards for classification of estuarine and marine waters*, 38 M.R.S.A. § 465-B, which contain standards to achieve Maine's water quality goals for the designated uses of fishing, aquaculture, and propagation and harvesting of shellfish, the permittee must report all occurrences of secondary wastewater treatment system bypasses, upsets, disinfection system malfunctions, combined sewer overflows, and discharges resulting from sanitary sewer overflows, pump stations or broken sewer pipes immediately upon becoming aware of such a condition.

Reporting must be provided through the Maine Department of Marine Resources' website at http://www.maine.gov/dmr/rm/public_health/rain/rptevent.htm or by calling the Maine Department of Marine Resources' Pollution Event Reporting Hotline at 207-633-9564.

On or before, August 1, 2016, the permittee must have a written approved Emergency Response Plan prepared in conjunction with the Maine Department of Marine Resources, to prevent or minimize conditions that may endanger health or the environment. **On or before August 15, 2016**, the permittee shall submit a copy of the approved Emergency Response Plan to the Department's compliance inspector at the address in Special Condition N, *Monitoring and Reporting*, of this permit. The permittee must report the event in accordance with the Emergency Response Plan between the permittee and the Maine Department of Marine Resources and provide the following information at the time the report is made:

1. Name of facility/individual reporting event;
2. Contact phone number and e-mail address;
3. Location of event (physical address or description);
4. Pollution event type (for example, bypass, CSO, sewer line break);
5. Pollution event quantity (for example approximate number of gallons discharged);
6. Date and time event began;
7. Date and time event ended, or state that the event is on-going;
8. Additional comments;
9. First and last name of person reporting event; and
10. Authorization code.

The immediate reporting requirements by this Special Condition are in addition to Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit, which contains reporting requirements to the Department for conditions that may endanger health or the environment.

SPECIAL CONDITIONS

P. REOPENING OF PERMIT FOR MODIFICATION

In accordance with 38 M.R.S.A. § 414-A(5) and upon evaluation of the tests results or monitoring requirements specified in Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at any time and with notice to the permittee, modify this permit to: 1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded, (2) require additional monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

Q. SEVERABILITY

In the event that any provision(s), or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit must remain in full force and effect, and must be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

CONTENTS

A. GENERAL PROVISIONS

1. **General compliance.** All discharges shall be consistent with the terms and conditions of this permit; any changes in production capacity or process modifications which result in changes in the quantity or the characteristics of the discharge must be authorized by an additional license or by modifications of this permit; it shall be a violation of the terms and conditions of this permit to discharge any pollutant not identified and authorized herein or to discharge in excess of the rates or quantities authorized herein or to violate any other conditions of this permit.

2. **Other materials.** Other materials ordinarily produced or used in the operation of this facility, which have been specifically identified in the application, may be discharged at the maximum frequency and maximum level identified in the application, provided:

(a) They are not

(i) Designated as toxic or hazardous under the provisions of Sections 307 and 311, respectively, of the Federal Water Pollution Control Act; Title 38, Section 420, Maine Revised Statutes; or other applicable State Law; or
(ii) Known to be hazardous or toxic by the licensee.

(b) The discharge of such materials will not violate applicable water quality standards.

3. **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of State law and the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

(a) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act, and 38 MRSA, §420 or Chapter 530.5 for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
(b) Any person who violates any provision of the laws administered by the Department, including without limitation, a violation of the terms of any order, rule license, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.

4. **Duty to provide information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

5. **Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

6. **Reopener clause.** The Department reserves the right to make appropriate revisions to this permit in order to establish any appropriate effluent limitations, schedule of compliance or other provisions which may be authorized under 38 MRSA, §414-A(5).

7. Oil and hazardous substances. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under section 311 of the Federal Clean Water Act; section 106 of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980; or 38 MRSA §§ 1301, et. seq.

8. Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

9. Confidentiality of records. 38 MRSA §414(6) reads as follows. "Any records, reports or information obtained under this subchapter is available to the public, except that upon a showing satisfactory to the department by any person that any records, reports or information, or particular part or any record, report or information, other than the names and addresses of applicants, license applications, licenses, and effluent data, to which the department has access under this subchapter would, if made public, divulge methods or processes that are entitled to protection as trade secrets, these records, reports or information must be confidential and not available for public inspection or examination. Any records, reports or information may be disclosed to employees or authorized representatives of the State or the United States concerned with carrying out this subchapter or any applicable federal law, and to any party to a hearing held under this section on terms the commissioner may prescribe in order to protect these confidential records, reports and information, as long as this disclosure is material and relevant to any issue under consideration by the department."

10. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

11. Other laws. The issuance of this permit does not authorize any injury to persons or property or invasion of other property rights, nor does it relieve the permittee if its obligation to comply with other applicable Federal, State or local laws and regulations.

12. Inspection and entry. The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), upon presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
(d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

(a) The permittee shall collect all waste flows designated by the Department as requiring treatment and discharge them into an approved waste treatment facility in such a manner as to

maximize removal of pollutants unless authorization to the contrary is obtained from the Department.

(b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.

(c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.

(d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.

(e) The permittee shall install flow measuring facilities of a design approved by the Department.

(f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.

2. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

3. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Bypasses.

(a) Definitions.

(i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

(ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.

(c) Notice.

(i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D(1)(f), below. (24-hour notice).

(d) Prohibition of bypass.

(i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
(C) The permittee submitted notices as required under paragraph (c) of this section.

(ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (d)(i) of this section.

6. Upsets.

(a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;
(ii) The permitted facility was at the time being properly operated; and
(iii) The permittee submitted notice of the upset as required in paragraph D(1)(f) , below. (24 hour notice).
(iv) The permittee complied with any remedial measures required under paragraph B(4).

(d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

C. MONITORING AND RECORDS

1. General Requirements. This permit shall be subject to such monitoring requirements as may be reasonably required by the Department including the installation, use and maintenance of monitoring equipment or methods (including, where appropriate, biological monitoring methods). The permittee shall provide the Department with periodic reports on the proper Department reporting form of monitoring results obtained pursuant to the monitoring requirements contained herein.

2. Representative sampling. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. If effluent limitations are based wholly or partially on quantities of a product processed, the permittee shall ensure samples are representative of times when production is taking place. Where discharge monitoring is required when production is less than 50%, the resulting data shall be reported as a daily measurement but not included in computation of averages, unless specifically authorized by the Department.

3. Monitoring and records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

(c) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;
(ii) The individual(s) who performed the sampling or measurements;
(iii) The date(s) analyses were performed;
(iv) The individual(s) who performed the analyses;
(v) The analytical techniques or methods used; and
(vi) The results of such analyses.

(d) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit.

(e) State law provides that any person who tampers with or renders inaccurate any monitoring devices or method required by any provision of law, or any order, rule license, permit approval or decision is subject to the penalties set forth in 38 MRSA, §349.

D. REPORTING REQUIREMENTS

1. Reporting requirements.

(a) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).

(iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

(b) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Transfers. This permit is not transferable to any person except upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.

(d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

(e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(f) Twenty-four hour reporting.

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance

has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(ii) The following shall be included as information which must be reported within 24 hours under this paragraph.

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit.
(B) Any upset which exceeds any effluent limitation in the permit.
(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

(iii) The Department may waive the written report on a case-by-case basis for reports under paragraph (f)(ii) of this section if the oral report has been received within 24 hours.

(g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this section.

(h) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

2. Signatory requirement. All applications, reports, or information submitted to the Department shall be signed and certified as required by Chapter 521, Section 5 of the Department's rules. State law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan or other document filed or required to be maintained by any order, rule, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.

3. Availability of reports. Except for data determined to be confidential under A(9), above, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by State law, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal sanctions as provided by law.

4. Existing manufacturing, commercial, mining, and silvicultural dischargers. In addition to the reporting requirements under this Section, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Department as soon as they know or have reason to believe:

(a) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(i) One hundred micrograms per liter (100 ug/l);
(ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

(b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following ``notification levels":

(i) Five hundred micrograms per liter (500 ug/l);
(ii) One milligram per liter (1 mg/l) for antimony;
(iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

5. Publicly owned treatment works.

(a) All POTWs must provide adequate notice to the Department of the following:

(i) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA or Chapter 528 if it were directly discharging those pollutants.
(ii) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
(iii) For purposes of this paragraph, adequate notice shall include information on (A) the quality and quantity of effluent introduced into the POTW, and (B) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(b) When the effluent discharged by a POTW for a period of three consecutive months exceeds 80 percent of the permitted flow, the permittee shall submit to the Department a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

E. OTHER REQUIREMENTS

1. Emergency action - power failure. Within thirty days after the effective date of this permit, the permittee shall notify the Department of facilities and plans to be used in the event the primary source of power to its wastewater pumping and treatment facilities fails as follows.

(a) For municipal sources. During power failure, all wastewaters which are normally treated shall receive a minimum of primary treatment and disinfection. Unless otherwise approved, alternate power supplies shall be provided for pumping stations and treatment facilities. Alternate power supplies shall be on-site generating units or an outside power source which is separate and independent from sources used for normal operation of the wastewater facilities.

(b) For industrial and commercial sources. The permittee shall either maintain an alternative power source sufficient to operate the wastewater pumping and treatment facilities or halt, reduce or otherwise control production and or all discharges upon reduction or loss of power to the wastewater pumping or treatment facilities.

2. **Spill prevention.** (applicable only to industrial sources) Within six months of the effective date of this permit, the permittee shall submit to the Department for review and approval, with or without conditions, a spill prevention plan. The plan shall delineate methods and measures to be taken to prevent and or contain any spills of pulp, chemicals, oils or other contaminates and shall specify means of disposal and or treatment to be used.

3. **Removed substances.** Solids, sludges trash rack cleanings, filter backwash, or other pollutants removed from or resulting from the treatment or control of waste waters shall be disposed of in a manner approved by the Department.

4. **Connection to municipal sewer.** (applicable only to industrial and commercial sources) All wastewaters designated by the Department as treatable in a municipal treatment system will be cosigned to that system when it is available. This permit will expire 90 days after the municipal treatment facility becomes available, unless this time is extended by the Department in writing.

F. DEFINITIONS. For the purposes of this permit, the following definitions shall apply. Other definitions applicable to this permit may be found in Chapters 520 through 529 of the Department's rules

Average means the arithmetic mean of values taken at the frequency required for each parameter over the specified period. For bacteria, the average shall be the geometric mean.

Average monthly discharge limitation means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. Except, however, bacteriological tests may be calculated as a geometric mean.

Average weekly discharge limitation means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best management practices ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Composite sample means a sample consisting of a minimum of eight grab samples collected at equal intervals during a 24 hour period (or a lesser period as specified in the section on monitoring and reporting) and combined proportional to the flow over that same time period.

Continuous discharge means a discharge which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities.

Daily discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

Discharge Monitoring Report ("DMR") means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by approved States as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the State Agency name, address, logo, and other similar information, as appropriate, in place of EPA's.

Flow weighted composite sample means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.

Grab sample means an individual sample collected in a period of less than 15 minutes.

Interference means a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

(1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
(2) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Maximum daily discharge limitation means the highest allowable daily discharge.

New source means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

(a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or
(b) After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.

Pass through means a discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

Permit means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of 40 CFR parts 122, 123 and 124. Permit includes an NPDES general permit (Chapter 529). Permit does not include any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit.

Person means an individual, firm, corporation, municipality, quasi-municipal corporation, state agency, federal agency or other legal entity.

Point source means any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft, from which pollutants are or may be discharged.

Pollutant means dredged spoil, solid waste, junk, incinerator residue, sewage, refuse, effluent, garbage, sewage sludge, munitions, chemicals, biological or radiological materials, oil, petroleum products or byproducts, heat, wrecked or discarded equipment, rock, sand, dirt and industrial, municipal, domestic, commercial or agricultural wastes of any kind.

Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Publicly owned treatment works ("POTW") means any facility for the treatment of pollutants owned by the State or any political subdivision thereof, any municipality, district, quasi-municipal corporation or other public entity.

Septage means, for the purposes of this permit, any waste, refuse, effluent sludge or other material removed from a septic tank, cesspool, vault privy or similar source which concentrates wastes or to which chemicals have been added. Septage does not include wastes from a holding tank.

Time weighted composite means a composite sample consisting of a mixture of equal volume aliquots collected over a constant time interval.

Toxic pollutant includes any pollutant listed as toxic under section 307(a)(1) or, in the case of sludge use or disposal practices, any pollutant identified in regulations implementing section 405(d) of the CWA. Toxic pollutant also includes those substances or combination of substances, including disease causing agents, which after discharge or upon exposure, ingestion, inhalation or assimilation into any organism, including humans either directly through the environment or indirectly through ingestion through food chains, will, on the basis of information available to the board either alone or in combination with other substances already in the receiving waters or the discharge, cause death, disease, abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in such organism or their offspring.

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Whole effluent toxicity means the aggregate toxic effect of an effluent measured directly by a toxicity test.

ATTACHMENT A

Maine Department of Environmental Protection

Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____

Pipe # _____

Purpose of this test: ☐ Initial limit determination
☐ Compliance monitoring for: year _____ calendar quarter _____
☐ Supplemental or extra test

SAMPLE COLLECTION INFORMATION

Sampling Date: ___ ___ _____ (mm dd yy) Sampling time: _____ AM/PM

Sampling Location:

Weather Conditions: _____

Please describe any unusual conditions with the influent or at the facility during or preceding the time of sample collection:

Optional test - not required but recommended where possible to allow for the most meaningful evaluation of mercury results:

Suspended Solids _____ mg/L Sample type: _____ Grab (recommended) or
_____ Composite

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

Date of analysis: _____ **Result:** _____ **ng/L (PPT)**

Please Enter Effluent Limits for your facility

Effluent Limits: **Average =** _____ ng/L **Maximum =** _____ ng/L

Please attach any remarks or comments from the laboratory that may have a bearing on the results or their interpretation. If duplicate samples were taken at the same time please report the average.

CERTIFICATION

I certifiy that to the best of my knowledge the foregoing information is correct and representative of conditions at the time of sample collection. The sample for mercury was collected and analyzed using EPA Methods 1669 (clean sampling) and 1631 (trace level analysis) in accordance with instructions from the DEP.

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT B

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WHOLE EFFLUENT TOXICITY REPORT
MARINE WATERS

Facility Name _____ MEPDES Permit # _____

Pipe # _____

Facility Representative _____ Signature _____

By signing this form, I attest that to the best of my knowledge that the information provided is true, accurate, and complete.

Facility Telephone # _____ Date Collected _____ Date Tested _____

mm/dd/yy mm/dd/yy

Chlorinated? _____ Dechlorinated? _____

Results **% effluent**

	mysid shrimp	sea urchin
A-NOEL		
C-NOEL		

Effluent Limitations

A-NOEL	
C-NOEL	

Data summary

	mysid shrimp % survival	sea urchin % fertilized
QC standard	>90	>70
lab control		
receiving water control		
conc. 1 (%)		
conc. 2 (%)		
conc. 3 (%)		
conc. 4 (%)		
conc. 5 (%)		
conc. 6 (%)		
stat test used		

Salinity Adjustment

brine	
sea salt	
other	

place * next to values statistically different from controls

Reference toxicant

	mysid shrimp A-NOEL	sea urchin C-NOEL
toxicant / date		
limits (mg/L)		
results (mg/L)		

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

Report WET chemistry on DEP Form "ToxSheet (Marine Version), March 2007."

ATTACHMENT C

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

Facility Name _____ MEPDES # _____ Pipe # _____ Facility Representative Signature _____
To the best of my knowledge this information is true, accurate and complete.

Licensed Flow (MGD)	
Acute dilution factor	
Chronic dilution factor	
Human health dilution factor	
Criteria type: M(arine) or F(resh)	m

Flow for Day (MGD)[1] _____ Flow Avg. for Month (MGD)[2] _____
Date Sample Collected _____ Date Sample Analyzed _____
Laboratory _____ Telephone _____
Address _____
Lab Contact _____ Lab ID # _____

Last Revision - April 24, 2014

ERROR WARNING ! Essential facility information is missing. Please check required entries in bold above.

MARINE AND ESTUARY VERSION

Please see the footnotes on the last page.

			Effluent Limits, %			Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)		Possible Exceedence [7]		
	WHOLE EFFLUENT TOXICITY		Acute	Chronic			WET Result, % Do not enter % sign	Reporting Limit Check	Acute	Chronic	
	Mysid Shrimp										
	Sea Urchin										
	WET CHEMISTRY										
	pH (S.U.) (9)										
	Total Organic Carbon (mg/L)					NA					
	Total Solids (mg/L)					NA					
	Total Suspended Solids (mg/L)					NA					
	Salinity (ppt.)										
	ANALYTICAL CHEMISTRY [3]										
	Also do these tests on the effluent with WET. Testing on the receiving water is optional	Reporting Limit	Effluent Limits, ug/L Acute[6]	Chronic[6]	Health[5]			Reporting Limit Check	Possible Exceedence [7] Acute	Chronic	Health
	TOTAL RESIDUAL CHLORINE (mg/L) (9)	0.05				NA					
	AMMONIA	NA				(8)					
M	ALUMINUM	NA				(8)					
M	ARSENIC	5				(8)					
M	CADMIUM	1				(8)					
M	CHROMIUM	10				(8)					
M	COPPER	3				(8)					
M	CYANIDE, TOTAL	5				(8)					
	CYANIDE, AVAILABLE [3a]	5				(8)					
M	LEAD	3				(8)					
M	NICKEL	5				(8)					
M	SILVER	1				(8)					
M	ZINC	5				(8)					

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form
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	PRIORITY POLLUTANTS [4]		Effluent Limits					Reporting Limit Check	Possible Exceedence [7]		
		Reporting Limit	Acute[6]	Chronic[6]	Health[6]				Acute	Chronic	Health
M	ANTIMONY	5									
M	BERYLLIUM	2									
M	MERCURY (5)	0.2									
M	SELENIUM	5									
M	THALLIUM	4									
A	2,4,6-TRICHLOROPHENOL	5									
A	2,4-DICHLOROPHENOL	5									
A	2,4-DIMETHYLPHENOL	5									
A	2,4-DINITROPHENOL	45									
A	2-CHLOROPHENOL	5									
A	2-NITROPHENOL	5									
A	4,6 DINITRO-O-CRESOL (2-Methyl-4,6-dinitrophenol)	25									
A	4-NITROPHENOL	20									
A	P-CHLORO-M-CRESOL (3-methyl-4-chlorophenol)+B80	5									
A	PENTACHLOROPHENOL	20									
A	PHENOL	5									
BN	1,2,4-TRICHLOROBENZENE	5									
BN	1,2-(O)DICHLOROBENZENE	5									
BN	1,2-DIPHENYLHYDRAZINE	20									
BN	1,3-(M)DICHLOROBENZENE	5									
BN	1,4-(P)DICHLOROBENZENE	5									
BN	2,4-DINITROTOLUENE	6									
BN	2,6-DINITROTOLUENE	5									
BN	2-CHLORONAPHTHALENE	5									
BN	3,3'-DICHLOROBENZIDINE	16.5									
BN	3,4-BENZO(B)FLUORANTHENE	5									
BN	4-BROMOPHENYLPHENYL ETHER	5									
BN	4-CHLOROPHENYL PHENYL ETHER	5									
BN	ACENAPHTHENE	5									
BN	ACENAPHTHYLENE	5									
BN	ANTHRACENE	5									
BN	BENZIDINE	45									
BN	BENZO(A)ANTHRACENE	8									
BN	BENZO(A)PYRENE	5									
BN	BENZO(G,H,I)PERYLENE	5									
BN	BENZO(K)FLUORANTHENE	5									
BN	BIS(2-CHLOROETHOXY)METHANE	5									
BN	BIS(2-CHLOROETHYL)ETHER	6									
BN	BIS(2-CHLOROISOPROPYL)ETHER	6									
BN	BIS(2-ETHYLHEXYL)PHTHALATE	10									
BN	BUTYLBENZYL PHTHALATE	5									
BN	CHRYSENE	5									
BN	DI-N-BUTYL PHTHALATE	5									
BN	DI-N-OCTYL PHTHALATE	5									
BN	DIBENZO(A,H)ANTHRACENE	5									
BN	DIETHYL PHTHALATE	5									
BN	DIMETHYL PHTHALATE	5									

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

BN	FLUORANTHENE	5									
BN	FLUORENE	5									
BN	HEXACHLOROBENZENE	5									
BN	HEXACHLOROBUTADIENE	5									
BN	HEXACHLOROCYCLOPENTADIENE	10									
BN	HEXACHLOROETHANE	5									
BN	INDENO(1,2,3-CD)PYRENE	5									
BN	ISOPHORONE	5									
BN	N-NITROSODI-N-PROPYLAMINE	10									
BN	N-NITROSODIMETHYLAMINE	5									
BN	N-NITROSODIPHENYLAMINE	5									
BN	NAPHTHALENE	5									
BN	NITROBENZENE	5									
BN	PHENANTHRENE	5									
BN	PYRENE	5									
P	4,4'-DDD	0.05									
P	4,4'-DDE	0.05									
P	4,4'-DDT	0.05									
P	A-BHC	0.2									
P	A-ENDOSULFAN	0.05									
P	ALDRIN	0.15									
P	B-BHC	0.05									
P	B-ENDOSULFAN	0.05									
P	CHLORDANE	0.1									
P	D-BHC	0.05									
P	DIELDRIN	0.05									
P	ENDOSULFAN SULFATE	0.1									
P	ENDRIN	0.05									
P	ENDRIN ALDEHYDE	0.05									
P	G-BHC	0.15									
P	HEPTACHLOR	0.15									
P	HEPTACHLOR EPOXIDE	0.1									
P	PCB-1016	0.3									
P	PCB-1221	0.3									
P	PCB-1232	0.3									
P	PCB-1242	0.3									
P	PCB-1248	0.3									
P	PCB-1254	0.3									
P	PCB-1260	0.2									
P	TOXAPHENE	1									
V	1,1,1-TRICHLOROETHANE	5									
V	1,1,2,2-TETRACHLOROETHANE	7									
V	1,1,2-TRICHLOROETHANE	5									
V	1,1-DICHLOROETHANE	5									
V	1,1-DICHLOROETHYLENE (1,1-dichloroethene)	3									
V	1,2-DICHLOROETHANE	3									
V	1,2-DICHLOROPROPANE	6									
V	1,2-TRANS-DICHLOROETHYLENE (1,2-trans-dichloroethene)	5									
V	1,3-DICHLOROPROPYLENE (1,3-dichloropropene)	5									
V	2-CHLOROETHYLVINYL ETHER	20									

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

V	ACROLEIN	NA									
V	ACRYLONITRILE	NA									
V	BENZENE	5									
V	BROMOFORM	5									
V	CARBON TETRACHLORIDE	5									
V	CHLOROBENZENE	6									
V	CHLORODIBROMOMETHANE	3									
V	CHLOROETHANE	5									
V	CHLOROFORM	5									
V	DICHLOROBROMOMETHANE	3									
V	ETHYLBENZENE	10									
V	METHYL BROMIDE (Bromomethane)	5									
V	METHYL CHLORIDE (Chloromethane)	5									
V	METHYLENE CHLORIDE	5									
V	TETRACHLOROETHYLENE (Perchloroethylene or Tetrachloroethene)	5									
V	TOLUENE	5									
V	TRICHLOROETHYLENE (Trichloroethene)	3									
V	VINYL CHLORIDE	5									

Notes:

(1) Flow average for day pertains to WET/PP composite sample day.

(2) Flow average for month is for month in which WET/PP sample was taken.

(3) Analytical chemistry parameters must be done as part of the WET test chemistry.

(3a) Cyanide, Available (Cyanide Amenable to Chlorination) is not an analytical chemistry parameter, but may be required by certain discharge permits .

(4) Priority Pollutants should be reported in micrograms per liter (ug/L).

(5) Mercury is often reported in nanograms per liter (ng/L) by the contract laboratory, so be sure to convert to micrograms per liter on this spreadsheet.

(6) Effluent Limits are calculated based on dilution factor, background allocation (10%) and water quality reserves (15% - to allow for new or changed discharges or non-point sources).

(7) Possible Exceedence determinations are done for a single sample only on a mass basis using the actual pounds discharged. This analysis does not consider watershed wide allocations for fresh water discharges.

(8) These tests are optional for the receiving water. However, where possible samples of the receiving water should be preserved and saved for the duration of the WET test. In the event of questions about the receiving water's possible effect on the WET results, chemistry tests should then be conducted.

(9) pH and Total Residual Chlorine must be conducted at the time of sample collection. Tests for Total Residual Chlorine need be conducted only when an effluent has been chlorinated or residual chlorine is believed to be present for any other reason.

ATTACHMENT D

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP-49-CSO FORM FOR USE WITH DEDICATED CSO PRIMARY CLARIFIERS

WET WEATHER BYPASS OPERATIONS REPORT FOR _____ State License No. _____ MEPDES/NPDES Permit No. _____ SIGNED BY: _____ DATE: _____

Doc Num: DEPLW0463
DEP-49-CSO-Dedicated.xls (rev. 12/12/01)

DATE	SECONDARY BYPASS FLOW DATA						CL RESIDUALS				BACTERIA								BOD5					TSS					WEATHER				
MONTH ____ YEAR ____	TREATED PRIMARY FLOW BYPASSED TO SECONDARY	SECONDARY BYPASS CLARIFIER SURFACE AREA	BYPASS DURATION	BYPASS CLARIFIER SURFACE LOADING RATE	SECONDARY FLOW TREATED	TRUE CSO BYPASS AROUND PRIMARY	MAX CHLORINE DOSE	CALCULATED RESIDUAL IN PRIMARY EFFLUENT	CALCULATED RESIDUAL IN SECONDARY EFFLUENT	CALCULATED BLENDED EFFLUENT	E.COLI/FECAL IN PRIMARY EFFLUENT	E.COLI/FECAL IN PRIMARY EFFLUENT	E.COLI/FECAL IN PRIMARY EFFLUENT	E.COLI/FECAL IN PRIMARY EFFLUENT	E.COLI/FECAL IN SECONDARY EFFLUENT	CALCULATED BLENDED EFFLUENT	pH	SETTLEABLE SOLIDS IN SEWAGE EFFLUENT	PRIMARY INFLUENT	PRIMARY EFFLUENT	PERCENT REMOVAL	SECONDARY EFFLUENT	CALCULATED BLENDED EFFLUENT	PRIMARY INFLUENT	PRIMARY EFFLUENT	PERCENT REMOVAL	SECONDARY EFFLUENT	CALCULATED BLENDED EFFLUENT	CONDITIONS	TEMPERATURE	PRECIPITATION	STORM DURATION	COMMENTS
	MG	SF	hrs	gpd/SF	MG	MG	mg/L	mg/L	mg/L	mg/L	#/100	#/100	#/100	#/100	#/100			ml/L	mg/L	mg/L	%	mg/L	mg/L	mg/L	mg/L	%	mg/L	mg/L		°F	In	Hrs	
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Total																																
Avr																																
Max																																

Number of discharge days

Avr																																
Max																																

ATTACHMENT E

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
CSO ACTIVITY AND VOLUMES

MUNICIPALITY OR DISTRICT	MEPDES / NPDES PERMIT NO.
REPORTING YEAR	SIGNED BY:
YEARLY TOTAL PRECIPITATION INCHES	DATE:

CSO EVENT NO.	START DATE OF STORM	PRECIP. DATA		FLOW DATA (GALLONS PER DAY) OR BLOCK ACTIVITY("1")							
		TOTAL INCHES	MAX. HR. INCHES	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	EVENT OVERFLOW GALLONS	EVENT DURATION HRS
1											
2											
3											
4											
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24											
25											
	TOTALS										

Note 1: Flow data should be listed as gallons per day. Storms lasting more than one day should show total flow for each day.

Note 2: Block activity should be shown as a "1" if the block floated away.

ATTACHMENT F

CLEAN WATER STATE REVOLVING FUND

REPAIR AND REPLACEMENT RESERVE ACCOUNT CERTIFICATION

I _____ representing the _____
(print name of cognizant official) *(print name of permittee)*

hereby certify to the Maine Department of Environmental Protection that as of (end of fiscal year date)_____
(date)

a *Clean Water State Revolving Fund (CWSRF) Repair and Replacement Reserve Account* has been established and is fully funded in accordance with Department Guidance entitled, *Maine Department of Environmental Protection, Clean Water State Revolving Fund (CWSRF) Guidance for Minimum Requirements for an Asset Management Program and Reserve Account In Order to Qualify for CWSRF Principal Forgiveness*, DEPLW1190C-2014; and

That our total yearly wastewater operation and maintenance budget for the previous fiscal year was $_____; and

That the amount recommended in our asset management plan, or as a minimum, 2% of our total yearly wastewater operation and maintenance budget was $_____; and

That $_____ was deposited to the Repair and Replacement Reserve Account last fiscal year; and

That $_____ was expended from this account last fiscal year in accordance with the Department Guidance; and

That the current end of fiscal year balance of the Repair and Replacement Reserve Account is $_____.

Signature _____ Date _____

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: **April 8, 2016**

PERMIT NUMBER: **ME0100021**

WASTE DISCHARGE LICENSE: **W002678-6D-K-R**

NAME AND ADDRESS OF APPLICANT:

CITY OF BATH
1 Town Landing Road
Bath, ME. 04530

COUNTY: **Sagadahoc**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):

Town Landing Road
Bath, ME. 04530

RECEIVING WATER CLASSIFICATION: **Kennebec River/Class SB**

COGNIZANT OFFICIAL CONTACT INFORMATION:

Mr. Chris Wallace
(207) 443-8348
cwallace@cityofbath.com

1. APPLICATION SUMMARY

a. Application: The City of Bath (City/permittee hereinafter) has submitted a timely and complete application to the Department to renew Maine Pollutant Discharge Elimination System (MEPDES) #ME0100021 /Waste Discharge License (WDL) #W002678-6D-G-R (permit hereinafter), which was issued by the Department on October 16, 2009, for a five-year term. The 10/16/09 permit authorized the monthly average discharge of 3.5 million gallons per day (MGD) of secondary treated sanitary wastewater, and allowed an unspecified quantity of primary treated wastewater from a secondary treatment bypass structure at the facility and an unspecified quantity of untreated excess combined sanitary and storm water from four (4) combined sewer overflow (CSO) outfalls during wet weather events to the Kennebec River, Class SB, in Bath, Maine.

Subsequent to the issuance of the permit, the Department issued two minor revisions; 1) On November 2, 2011, a permit revision was issued that established a Special Condition requiring the implementation of an Asset Management Program and a requirement to establish a repair and replacement reserve account; and 2) On December 3, 2012, a minor revision was issued to eliminate the two CSO projects in the October 19, 2009 permit and replace them with the two new projects.

1. APPLICATION SUMMARY (cont'd)

b. Source Description: The City operates a municipal wastewater treatment facility located on Town Landing Road in Bath for the treatment of domestic, industrial and commercial waste waters generated by users within the City of Bath. There are no significant industrial users contributing flows greater than 10% of the volume of wastewater received by the treatment facility. The City receives industrial wastes from Bath Iron Works (BIW), which is monitored by BIW and the City.

The City's sewer collection system is approximately 11.5 miles in length and is a combined (sanitary and storm water) system. The CITY currently maintains thirteen (13) pump stations, of which seven (7) are currently equipped with a back-up power supply. There are currently four (4) remaining combined sewer overflow (CSO) points associated with the collection system, which are identified in Special Condition J, *Conditions For Combined Sewer Overflows (CSOs),* of this permit. A map showing the location of the treatment facility is included as Fact Sheet **Attachment A.**

c. Wastewater Treatment: The City provides a secondary level of treatment via an activated sludge treatment process. Screenings and grit are removed at the headworks by means of an automatic climbing rake and swirl grit chamber with grit screw apparatus. Two secondary clarifiers were retrofitted in 1999 and now serve as primary treatment clarifiers. Each clarifier measures 50 feet in diameter and has a capacity of 157,000 gallons. Reaction is accomplished by two separate aeration trains (2 basins each) and secondary clarification of wastewater is accomplished using three 180-foot by 12-foot rectangular clarifiers that each has a capacity of 137,000 gallons. Sludge dewatering is accomplished by means of two (2) two-meter belt filter presses. Dewatered sludge is transported offsite for disposal in the City's landfill. Secondary treated waste water is disinfected using sodium hypochlorite and dechlorinated using sodium bisulfite in detention tanks prior to being discharged to the Kennebec River via a 36-inch diameter outfall pipe that is fitted with a diffuser to enhance mixing with the receiving waters. The end of the outfall pipe is submerged to a depth of approximately 24 feet below the surface of the river at mean low water.

The previous permitting action authorized the City to accept and introduce into the waste water treatment facility up to 10,000 gallons per day of septage from local septage haulers. The permittee has requested to carry forward authorization for said quantity and has submitted an up-to-date transported waste management plan to the Department.

A process flow diagram submitted by the permittee is included as Fact Sheet **Attachment B.**

2. PERMIT SUMMARY

a. Terms and conditions - This permitting action is carrying forward all the terms and conditions of the previous permitting action except it is:

Secondary Treated Wastewater (Outfall #001A)

1. Establishing a waiver from the daily maximum technology based concentration limit of 50 mg/L for BOD_5 and TSS during CSO-related bypass events. This permit allows CSO-related bypasses of secondary treatment requirements via Outfall #001A when the instantaneous flow rate to the treatment facility exceeds 4,861 gallons per minute (gpm) or 7.0 MGD.

2. Incorporating the interim mercury limits established by the Department for this facility pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001);

3. Revising the timing of the surveillance and screening level WET, priority pollutant, analytical chemistry testing during the 5-year permit cycle; and

4. Revising the minimum monitoring frequency requirements for biochemical oxygen demand (BOD) and total suspended solids (TSS) from 3/Week to 2/Week, settleable solids from 1/Day to 4/Week and total residual chlorine from 2/Day to 1/Day based on a statistical evaluation of test results in the most recent 36 months that justify said reductions.

CSO-Related Bypasses of Secondary Treatment (Outfall #002A) - For the purposes of this permitting action, this term refers to an internal primary treated waste stream that bypasses the secondary treatment system when the instantaneous flow rate into the treatment facility exceeds 4,861 gpm (7.0 MGD).

5. Eliminating the reporting requirements for BOD_5 and TSS percent removal rates and surface loading rate as the Department has made a determination that data collected for these parameters to date have not provided useful data as to the performance of the system.

6. Eliminating the daily maximum numeric limitations for fecal coliform bacteria and total residual chlorine for Outfall #002A as limiting an internal waste stream is not necessary given compliance with limitations in the permit is determined after the primary treated and secondary treated waste streams are blended.

Blended Effluent (Outfall #002B)

7. Establishing daily maximum, technology-based mass limitations of 8,206 lbs./day for BOD_5 and 18,423 lbs./day for TSS for the blended effluent that are protective of water quality standards. The limits were derived as a combination of technology based values on the secondary treated waste stream plus past demonstrated performance values for the primary treated waste stream (bypassing secondary treatment).

2. PERMIT SUMMARY (cont'd)

b. History: The most current relevant regulatory actions include:

January 9, 1992 – The State of Maine entered into a Consent Agreement and Enforcement Order with the City, which established a compliance schedule to evaluate and eliminate combined sewer overflows (CSO's) through the development of a CSO abatement Master Plan and associated programs.

September 1995 – A Master Plan document prepared by EER, Inc. and entitled, "Supplemental Combined Sewer Overflow Facilities Plan Study" was submitted to the Department and the USEPA for review and approval.

October 1, 1999 – The CSO Master Plan was approved by the Department and the EPA.

October 27, 1999 – The Department issued WDL #W002678-5L-D-R for a five-year term.

July 12, 2000 – The Department administratively modified WDL #W002678-5L-D-R by establishing interim average and maximum concentration limits for the discharge of mercury.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permitting program in Maine, excluding areas of special interest to Maine Indian Tribes. From this point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program, and MEPDES permit #ME0100021 has been utilized for this facility.

December 27, 2001 – The Department administratively modified WDL #W002678-5L-D-R through the issuance of combination MEPDES permit #ME0100021/WDL modification #W002678-5L-E-M to the City. This modification incorporated the terms and conditions of the MEPDES permit program, established a requirement for a minimum of 85% removal of BOD5 and TSS, and revised the pH range limitation from 6.0 – 8.5 SU to 6.0 – 9.0 SU.

February 19, 2003 – The Department issued a Notice of Violation (NOV) to the City for chronic violations of numeric limitations established in the 12/27/01 permitting action.

September 22, 2004 – The USEPA issued an Administrative Order ("AO") (AO Docket No. 04-56) to the City for violations permit conditions established in the 12/27/01 MEPDES permit #ME0100021.

October 26, 2004 – The Department issued combination MEPDES permit #ME0100021/ WDL#W002678-5L-F-R for a five-year term.

February 20, 2008 – The Department approved an updated CSO Master Plan for the City.

October 16, 2009 – The Department issued combination MEPDES permit #ME0100021/ WDL#W002678-6D-G-R for a five-year term.

2. PERMIT SUMMARY (cont'd)

November 2, 2011 – The Department issued permit modification #ME0100021/WDL #W002678-5L-H-R to incorporate Special Conditions to establish and implement an Asset Management Program and establish a repair and replacement reserve account.

February 6, 2012 – The Department issued permit modification #ME0100021/WDL#W002678-5M-I-M to incorporate the average and maximum concentration limits for total mercury.

December 3, 2012 – The Department issued permit modification #ME0100021/WDL#W002678-5M-J-M to eliminate the two CSO projects in the October 19, 2009, permit and replace them with the two new projects.

August 13, 2014 – The City submitted a timely and complete General Application to the Department for renewal of the October 16, 2009 MEPDES permit. The application was accepted for processing on August 15, 2014, and was assigned WDL #W002678-6D-K-R / MEPDES #ME0100021.

3. CONDITIONS OF PERMIT

Conditions of licenses, 38 M.R.S.A. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S.A. § 420 and 06-096 CMR 530 require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (last amended July 29, 2012), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classification of estuarine and marine waters, 38 M.R.S.A. § 469(5) classifies the tidewaters of the Kennebec River as a Class SB water. *Standards for classification of estuarine and marine waters,* 38 M.R.S.A. § 465-B(2) describes the standards for classification of Class SB waterways as follows

Class SB waters must be of such quality that they are suitable for the designated uses of recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation and as habitat for fish and other estuarine and marine life. The habitat must be characterized as unimpaired.

The dissolved oxygen content of Class SB waters must be not less than 85% of saturation. Between May 15th and September 30th, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 8 per 100 milliliters or an instantaneous level of 54 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures. The numbers of total coliform bacteria or other specified indicator organisms in samples representative of the waters in shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish Sanitation Program, United States Food and Drug Administration.

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

Discharges to Class SB waters may not cause adverse impact to estuarine and marine life in that the receiving waters must be of sufficient quality to support all estuarine and marine species indigenous to the receiving water without detrimental changes in the resident biological community. There may be no new discharge to Class SB waters that would cause closure of open shellfish areas by the Department of Marine Resources. For the purpose of allowing the discharge of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety, the department may find that the discharged effluent will not cause adverse impact to estuarine and marine life as long as the materials and methods used provide protection for nontarget species. When the department issues a license for the discharge of aquatic pesticides authorized under this paragraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report (Report), prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the Kennebec River Estuary in Bath as, "*Category 4-A: Estuarine and Marine Waters with Impaired Use, TMDL Completed.*" Sampling conducted in calendar year 2009 the Kennebec River Estuary in Bath (waterbody ID #710-03) is impaired by bacteria. The Department completed the TMDL in 2009 and it was approved by USEPA on September 28, 2009.

In addition, all estuarine and marine waters are listed in *Category 5-D, "Estuarine and Marine Waters Impaired by Legacy Pollutants."* The Category 5-D waters partially support fishing ("shellfish consumption") due to elevated levels of PCBs and other persistent, bioaccumulating substances in lobster tomalley.

Currently, the Maine Department of Marine Resources shellfish harvesting Area #20 is closed to the harvesting of shellfish due to insufficient (limited) ambient water quality data to meet the standards in the National Shellfish Sanitation Program. Compliance with the year-round fecal coliform bacteria limits in this permitting action ensures that the discharge from the City will not cause or contribute to the shellfish harvesting closure. The shellfish closure area is identified on the map included as Fact Sheet **Attachment C.**

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

OUTFALL #001A – Secondary treated waste water

a. Flow: The Fact Sheet associated with the previous permitting action stated, "*The previous permitting action established a monthly average discharge flow limitation of 3.5 MGD based on the dry weather design capacity of the treatment works. During extended wet weather events (weeks or months), the permittee has violated the monthly average flow limitation. Therefore, the Department is changing the monthly average limit to a reporting requirement. Regulating the discharge in this manner in no way shall be construed to represent any change to design loading criteria of the waste water treatment facility.*" This permitting action is carrying forward the same reporting requirements.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

OUTFALL #001A – Secondary treated waste water

The review of the Discharge Monitoring Reports (DMRs) submitted to the Department for the period January 2013 – December 2015 indicates values have been reported as follows:

Flow (n=36)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	Report	0.74 – 3.62	1.82
Daily Maximum	Report	1.10 – 7.59	4.37

b. Dilution Factors: 06-096 CMR 530(4)(A)(2)(a) states that, *"For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model."* Based on plan and profile information submitted by the permittee, and calculations based on interpretation of the CORMIX model, the Department has determined that the dilution factors associated with the discharge are as follows:

Acute = 34:1 Chronic = 284:1 Harmonic mean[1] = 852:1

c. Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS): The previous permitting action established, and this permitting action is carrying forward, monthly average and weekly average technology-based concentration limits of 30 mg/L and 45 mg/L, respectively, for BOD_5 and TSS based on the secondary treatment requirements specified at *Effluent Guidelines and Standards*, 06-096 CMR 525(3)(III) (effective January 12, 2001), and a daily maximum concentration limit of 50 mg/L, which is based on a Department best professional judgment of best practicable treatment for secondary treated wastewater. The previous permitting action established and this permitting action is carrying forward, monthly average and weekly average mass limits of 876 lbs./day and 1,314 lbs./day, respectively. To encourage the treatment facility to maximize use of its secondary treatment process during wet weather events, this permitting action is carrying forward a report only requirement for the daily maximum BOD_5 and TSS mass values.

Mass limitations, the monthly average and weekly average and daily maximum technology-based mass limitations are being carried forward in this permitting action and are based on a monthly average dry weather design capacity of 3.5 MGD. The mass limits were derived as follows:

Monthly average: (3.5 MGD)(8.34)(30 mg/L) = 876 lbs/day
Weekly average: (3.5 MGD)(8.34)(45 mg/L) = 1,314 lbs/day

[1] The harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3). This multiplying factor is based on guidelines for estimation of human health dilution presented in the U.S. EPA publication, *"Technical Support Document for Water Quality-Based Toxics Control"* (Office of Water; EPA/505/2-90-001, page 88), and represents an estimation of harmonic mean flow on which human health dilutions are based in a riverine 7Q10 flow situation.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

OUTFALL #001A – Secondary treated waste water

The review of the DMRs submitted to the Department for the period January 2013 – December 2015 indicates values have been reported as follows:

BOD_5 mass (n=36)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	876	54 - 347	165
Weekly Average	1,314	113 - 822	386
Daily Maximum	Report	147 – 1,597	729

BOD_5 concentration (n=36)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	6 - 19	13
Weekly Average	45	8 - 43	21
Daily Maximum	50	10 - 64	33

It is noted that the only BOD violation occurred in July 2014 with a daily maximum concentration value of 64 mg/L.

TSS mass (n=36)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	876	46 - 293	146
Weekly Average	1,314	73 - 664	282
Daily Maximum	Report	125 – 1,368	713

TSS concentration (n=36)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	4 - 19	11
Weekly Average	45	8 - 32	20
Daily Maximum	50	11 - 66	33

It is noted that the only TSS violation occurred in October 2015 with a daily maximum concentration value of 66 mg/L.

Minimum monitoring frequency requirements in MEPDES permits are prescribed by 06-096 CMR Chapter 523§5(i). The USEPA has published guidance entitled, *Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies* (USEPA Guidance April 1996). In addition, the Department has supplemented the EPA guidance with its own guidance entitled, *Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996* (Maine DEP May 22, 2014). Both documents are being utilized to evaluate the compliance history for each parameter regulated by the previous permit to determine if a reduction in the monitoring frequencies is justified.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

OUTFALL #001A – Secondary treated waste water

Although EPA's 1996 Guidance recommends evaluation of the most current two years of effluent data for a parameter, the Department is considering 36 months of data (October 2012 – September 2015). A review of the mass monitoring data for BOD & TSS indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as 19% for BOD and 17% for TSS. According to Table I of the EPA Guidance and Department Guidance, a 3/Week monitoring requirement can be reduced to 2/Week. Therefore, this permitting action is reducing the monitoring frequencies for BOD and TSS from 3/Week to 2/Week.

Should the facility experience operational problems resulting in significant non-compliance, or subsequent enforcement, then the Department reserves the right to reopen the permit and revoke the testing reductions that have been granted.

This permitting action is carrying forward a monthly average percent removal requirement of 85 percent for BOD_5 and TSS as required pursuant to 06-096 CMR 525(3)(III)(a&b)(3) for all flows receiving secondary treatment. A requirement to achieve 85% removal at all times at facilities with combined sewers is not attainable due to the complexity of the sewer systems and the highly variable influent concentration. The Department is carrying forward a waiver on the percent removal requirement when the monthly average influent strength is less than 200 mg/L.

A reviewed of the monthly DMRs data for the period January 2013 – December 2015 indicates values have been reported as follows:

BOD % Removal (DMRs=36)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	86 – 96	92

TSS % Removal (DMRs=36)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	87 – 99	94

d. Settleable Solids: The previous permitting action established, and this permitting action is carrying forward, a technology-based daily maximum concentration limit of 0.3 ml/L for settleable solids, which is considered a best practicable treatment limitation for secondary treated wastewater.

A review of the monthly DMRs data for the period January 2013 – December 2015 indicates values have been reported as follows:

Settleable solids concentration (DMRs=36)

Value	Limit (ml/L)	Range (ml/L)	Average (ml/L)
Daily Maximum	0.3	0.10 – 0.30	0.14

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

OUTFALL #001A – Secondary treated waste water

A review of the monitoring data for settleable solids indicates the ratios (expressed in percent) of the long term effluent average to the daily maximum limit can be calculated as 46%. According to Table I of the EPA Guidance and Department Guidance, a 1/Day monitoring requirement can be reduced to 4/Week. Therefore, this permitting action is reducing the monitoring frequency for settleable solids to 4/Week.

e. Fecal Coliform Bacteria – The previous permitting action established, and this permitting action is carrying forward, year-round monthly average and daily maximum concentration limits of 15 colonies/100 ml and 50 colonies/100 ml, respectively, for fecal coliform bacteria, which are consistent with the National Shellfish Sanitation Program. This permitting action is carrying forward both water quality-based concentration limits and the minimum monitoring frequency requirement of three times per week (3/Week) based on Department guidance for POTWs permitted to discharge between 1.5 and 5.0 MGD. Pursuant to a written request from the Maine Department of Marine Resources, disinfection is required year-round in order to ensure compliance with fecal coliform bacteria limits and thereby providing for the protection of local shellfish resources.

A review of the monthly DMRs data for the period January 2013 – December 2015 indicates values have been reported as follows:

Fecal coliform bacteria (n=36)

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	15	1 - 11	5
Daily Maximum	50	5 - 50	34

According to Department Guidance, parameters with water quality based limitations are not eligible for monitoring frequency reductions. Therefore the monitoring frequency of 3/Week established in the previous permit is being carried forward in this permit.

f. Total Residual Chlorine (TRC): The previous permitting action established technology-based monthly average and daily maximum concentration limits of 0.1 mg/L and 0.3 mg/L, respectively, for TRC along with a 2/Day monitoring requirement. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department permitting actions impose the more stringent of either a water quality-based or BPT-based limit. With dilution factors as determined above, end-of-pipe (EOP) water quality-based concentration thresholds for TRC may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	A & C Dilution Factors	Calculated Acute Threshold	Chronic Threshold
0.013 mg/L	0.0075 mg/L	34:1 (A) 284:1 (C)	0.44 mg/L	2.13 mg/L

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

OUTFALL #001A – Secondary treated waste water

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that need to dechlorinate the discharge in order to meet water quality-based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. The City must dechlorinate the effluent prior to discharge in order to achieve compliance with the water quality-based thresholds. The daily maximum technology-based standard of 0.3 mg/L is more stringent than the calculated acute water quality-based threshold of 0.44 mg/L and is therefore being carried forward in this permitting action. The monthly average technology-based standard of 0.1 mg/L is more stringent than the calculated chronic water quality-based threshold of 2.13 mg/L and is therefore being carried forward in this permitting action.

A review of the monthly DMRs data for the period January 2013 – December 2015 indicates values have been reported as follows:

Total residual chlorine

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	0.1	0.01 – 0.04	0.02
Daily Maximum	0.3	0.030 – 0.21	0.07

A review of the monitoring data for TRC indicates the ratios (expressed in percent) of the long term effluent average to the daily maximum limit can be calculated as 33%. According to Table I of the EPA Guidance and Department Guidance, a 2/Day monitoring requirement can be reduced to 1/Day. Therefore, this permitting action is reducing the monitoring frequency for TRC to 1/Day.

g. pH: The previous permitting action established, and this permitting action is carrying forward, a technology-based pH limit of 6.0 – 9.0 standard units (SU), which is based on 06-096 CMR 525(3)(III), and a minimum monitoring frequency requirement of once per day (1/Day) based on Department guidance for POTWs permitted to discharge between 1.5 and 5.0 MGD, which are being carried forward in this permitting action. A review of the monthly DMRs data for the period January 2013 – December 2015 indicates values have been reported as follows:

pH (n=36)

Value	Limit (SU)	Minimum (SU)	Maximum (SU)
Range	6.0 – 9.0	6.20	7.90

h. Mercury: Pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001), the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL W002678-5M-E-R by establishing interim monthly average and daily maximum effluent concentration limits of 30.9 parts per trillion (ppt) and 46.3 ppt, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury. It is noted the limitations have been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

OUTFALL #001A – Secondary treated waste water

38 M.R.S.A. § 420(1-B)(B)(1) provides that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department. A review of the Department's data base for the period January 2011 through December 2015 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows:

Mercury (n=10)

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average	30.9	1.60 – 9.25	4.34
Daily Maximum	46.3		

Pursuant to 38 M.R.S.A. §420(1-B)(F), the Department issued a minor revision on February 6, 2012 to the October 16, 2009 permit thereby revising the minimum monitoring frequency requirement from four times per year to once per year given the permittee has maintained at least 5 years of mercury testing data. In fact, the permittee has been monitoring mercury since June 2000 or 11 years. Pursuant to 38 M.R.S.A. §420(1-B)(F), this permitting action is carrying forward the 1/Year monitoring frequency established in the February 6, 2012, permit modification.

h. Total Nitrogen: The permittee conducted total nitrogen testing on the discharge during the summer of 2015. The total nitrogen values were as follows:

Total nitrogen (DMRs=5)

Parameter	Range (mg/L)	Average (mg/L)
Total nitrogen	11.6 – 17.1	13.2

The USEPA requested the Department evaluate the reasonable potential for the discharge of total nitrogen to cause or contribute to non-attainment of applicable water quality standards in marine waters, namely dissolved oxygen (DO) deficiencies and cultural eutrophication caused by algal blooms or impacts to eelgrass beds.

As of the date of this permitting action, the State of Maine has not promulgated numeric ambient water quality criteria for any of the nitrogen compounds. According to several studies in EPA's Region I, numeric nutrient criteria have been established for relatively few estuaries but the criteria that have been set typically fall between 0.35 mg N/L and 0.50 mg N/L to protect aquatic life in marine waters using dissolved oxygen as the indicator and to control cultural eutrophication effects namely diurnal DO swings and supersaturated DO levels. While the thresholds are site-specific many of the nitrogen thresholds set for the protection of eelgrass habitat are similar and fall between 0.30 mg N/L and 0.39 mg N/L.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

OUTFALL #001A – Secondary treated waste water

Based on studies in EPA Region I and the Department's best professional judgment of thresholds that are protective of Maine water quality standards, the Department is utilizing a threshold of 0.45 mg/L for the protection of aquatic life in marine waters using dissolved oxygen as the indicator and 0.32 mg/L for the protection of eelgrass beds in the vicinity of discharge outfalls. There are no eelgrass beds present in the vicinity of the permittees outfall pipe and therefore, the threshold value of 0.45 mg/L will be used for reasonable potential calculations.

Except for ammonia other nitrogen species are not acutely toxic. The Department is considering a far-field dilution to be more appropriate when evaluating impacts of total nitrogen to a marine environment. The permittee's facility has a chronic near field dilution factor of 284:1. Far field dilutions are significantly higher than the near-field dilution, ranging from 100 – 10,000 times higher depending on the location of the outfall pipe. With outfalls located in protected coves or small embayments without significant flushing, the far field dilutions factors would tend to be on the order of 100 times higher. With open ocean discharges, far field dilutions would tend to be 1,000 – 10,000 times higher. The discharge from the permittee's facility is not considered an open ocean setting as it discharges to the Kennebec River thus, the far field dilution would likely be not more than 100 times higher. Using the most protective far field dilution multiplier of 100 times, the near field dilution factor results in the far-field dilution factor of 28,400:1. By this analysis, the increase in the ambient total nitrogen due to the permittee's effluent discharge is as follows:

Mean total nitrogen concentrations in effluent = 13.2 mg/L (n=5, data collected in 2015)
Near field dilution factor: 284:1
Far field dilution factor = 28,400:1

Near field in-stream concentration after dilution: $\frac{13.2\ mg/L}{284} = 0.047\ mg/L$

Far field in-stream concentration after dilution: $\frac{13.2\ mg/L}{28{,}400} = 0.00047\ mg/L$

The Department has been collecting ambient total nitrogen data in close proximity to the Maine coastline to support an effort to develop statewide nutrient criteria for marine waters. For the permittee's facility, the Department calculated a mean background concentration of 0.39 mg/l (n=22) based on ambient data collected in large riverine systems at similar locations relative to head of tide. As a result, after reasonable opportunity for far field mixing, the increase in the concentration of total nitrogen in the receiving water due to the discharge from the permittee's facility will not be measureable, thus the instream concentration of total nitrogen will remain at 0.39 mg/L in the far field and rise to 0.44 mg/L in the near field. These concentrations are lower than the Department's and EPA's best professional judgment of a critical threshold of 0.45 mg/L to protect aquatic life in the vicinity of the permittee's outfall pipe. Therefore, the Department is making a best professional judgment determination that the discharge of total nitrogen from the permittee's facility does not exhibit a reasonable potential to exceed applicable water quality standards for Class SB waters.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

OUTFALL #001A – Secondary treated waste water

i Whole Effluent Toxicity (WET) & Chemical-Specific Testing: Maine law, 38 M.R.S.A., Sections 414-A and 420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department Rules, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants* set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

WET, priority pollutant and analytical chemistry testing, as required by Chapter 530, is included in this permit in order to fully characterize the effluent. This permit also provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment and receiving water characteristics.

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on invertebrate and vertebrate species. Priority pollutant and analytical chemistry testing is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria as established in Chapter 584.

Chapter 530 establishes four categories of testing requirements based predominately on the chronic dilution factor. The categories are as follows:

1) Level I – chronic dilution factor of <20:1.
2) Level II – chronic dilution factor of ≥20:1 but <100:1.
3) Level III – chronic dilution factor ≥100:1 but <500:1 or >500:1 and Q ≥1.0 MGD
4) Level IV – chronic dilution factor >500:1 and Q ≤1.0 MGD

Department rule Chapter 530 (2)(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the Chapter 530 criteria, the Bath facility falls into the Level III frequency category as the facility has a chronic dilution factor ≥100:1 but <500:1. Chapter 530(2)(D)(1) specifies that surveillance and screening level testing requirements are as follows:

Screening level testing

Level	WET Testing	Priority pollutant testing	Analytical chemistry
III	1 per year	1 per year	4 per year

Surveillance level testing

Level	WET Testing	Priority pollutant testing	Analytical chemistry
III	1 per year	None required	1 per year

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

OUTFALL #001A – Secondary treated waste water

Department rule Chapter 530(D)(3)(b) states dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedances.

A review of the data on file with the Department for the District indicates that to date, they have fulfilled the WET and chemical-specific testing requirements of Chapter 530. See **Attachment D** of this Fact Sheet for the WET results and **Attachment E** for the chemical specific test dates.

On October 23, 2015, the Department conducted a statistical evaluation on the aforementioned WET and chemical-specific tests results in accordance with the statistical approach outlined in the Section 3.3.2 and Table 3-2 of USEPA's "Technical Support Document for Water Quality-Based Toxics Control" (USEPA Publication 505/2-90-001, March, 1991, EPA, Office of Water, Washington, D.C.). The statistical evaluation indicates the discharge from the City's waste water treatment facility does not exceed or have a reasonable potential to exceed the critical acute (2.9%) or chronic (0.35%) water quality thresholds for any of the WET species tested to date. In addition, the 10/23/15 statistical evaluation indicates the discharge does not exceed or have a reasonable potential to exceed any acute, chronic or human health AWQC for any of the chemicals tested to date. Therefore, no numeric limitations for any WET species or chemicals tested to date are being established in this permitting action.

As for testing frequencies Chapter 530(2)(D)(3)(b) states in part that for Level III facilities "… may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3(E). Based on the results of the 10/23/15 statistical evaluation, the City qualifies for the testing waiver. Therefore, this permit action establishes a screening level testing requirements as follows:

Screening Level Testing

Level	WET Testing	Priority pollutant testing	Analytical chemistry
III	1 per year	1 per year	4 per year

It is noted however that if future WET or other chemical specific test results indicates the discharge exceeds critical water quality thresholds or AWQC, this permit will be reopened pursuant to Special Condition O, *Reopening of Permit For Modification*, of this permit to establish applicable limitations and monitoring requirements.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

j. Transported Wastes - The previous permitting action authorized the permittee to receive and introduce up to 10,000 gpd of transported wastes into the wastewater treatment process or solids handling stream. Department rule Chapter 555, *Standards For The Addition of Transported Wastes to Wastewater Treatment Facilities*, limits the quantity of transported wastes received at a facility to 1% of the design capacity of the treatment facility if the facility utilizes a side stream or storage method of introduction into the influent flow, or 0.5% of the design capacity of the facility if the facility does not utilize the side stream or storage method of introduction into the influent flow. A facility may receive more than 1% of the design capacity on a case-by-case basis. The permittee has requested the Department carry forward the daily quantity of 10,000 gpd of transported wastes that it is authorized to receive and treat as it utilizes the side stream/storage method of metering transported wastes into the facility's influent flow. With a design capacity of 3.5 MGD, 10,000 gpd represents 0.28% of said capacity.

The Department has determined that under normal operating conditions, the receipt and treatment of 10,000 gpd of transported wastes to the facility will not cause or contribute to upset conditions of the treatment process.

OUTFALL #002A - Primary treated waste water

k. Overflow Occurrences: The previous permitting action established, and this permitting action is carrying forward, a reporting requirement for the total number of overflow occurrences during each calendar month.

A review of the DMRs that were submitted for the period January 2013 – August 2015 indicates the following:

Overflow occurrences/month (n=25)

Value	Limit (# of days)	Range (# of days)	Total (# of days)
Daily Maximum	Report	---	---
2013	---	1 - 5	23
2014	---	1 - 7	35
2015 (Jan – Aug)	---	1 - 4	10

l. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average and a daily maximum discharge flow reporting requirement. A review of the DMRs that were submitted for the period January 2013 – August 2015 indicates the following:

Flow (n=25)

Value	Limit (MG)	Range (MG)	Total (MG)
Total gallons/month	Report	0.35 - 13.8 (2013) 0.23 – 14.9 (2014) 0.17 – 6.03 (2015)	42.9 (2013) 62.2 (2014) 9.5 (2015)
Daily Maximum	Report	0.12 – 6.33 (2013) 0.18 – 5.11 (2014) 0.17 – 3.72 (2015)	n/a (2012) n/a (2013) n/a (2014)

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

OUTFALL #002A - Primary treated waste water

m. BOD_5 and TSS: The previous permitting action established, and this permitting action is carrying forward, a daily maximum concentration reporting requirement for BOD_5 and TSS.

A review of the DMRs that were submitted for the period January 2013 – August 2015 indicates the following:

BOD_5 Concentration (n=25)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	Report	38 - 166	100

TSS Concentration (n=25)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	Report	80 – 305	202

n. Fecal Coliform Bacteria: The previous permitting action established a daily maximum concentration limitation of 200 colonies/100 mL for fecal coliform bacteria. As a result of recent litigation, the EPA has instructed the Department to eliminate numeric limitations on internal waste streams. Therefore, the limitation is not being carried forward in this permit.

A review of the DMRs that were submitted for the period January 2013 – August 2015 indicates the following:

Fecal coliform bacteria (n=21)

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Daily Maximum	200	7 - 2420	166

o. Total Residual Chlorine (TRC): The previous permit established a daily maximum concentration limitation of 1.0 mg/L for TRC. As with fecal coliform bacteria, the numeric limitation is being removed on this internal waste stream. A review of the DMRs that were submitted for the period January 2013 – August 2015 indicates the following:

Total residual chlorine (n=25)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.0 - 1.0	0.3

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

CSO-Related Bypasses of Secondary Treatment

The permittee maintains a combined sewer system from which wet weather overflows occur. Section 402(q)(1) of the Clean Water Act requires that "each permit, order or decree issued pursuant to this chapter after December 21, 2000 for a discharge from a municipal combined storm and sanitary sewer shall conform to the Combined Sewer Overflow Control Policy signed by the Administrator on April 11, 1994 ....." 33 U.S.C. § 1342(q)(1). The Combined Sewer Overflow Control Policy (CSO Policy, 59 Fed. Reg. 18688-98), states that under USEPA's regulations the intentional diversion of waste streams from any portion of a treatment facility, including secondary treatment, is a bypass and that 40 CFR 122.41(m), allows for a facility to bypass some or all the flow from its treatment process under specified limited circumstances. Under the regulation, the permittee must show that the bypass was unavoidable to prevent loss of life, personal injury or severe property damage, that there was no feasible alternative to the bypass and that the permittee submitted the required notices. The CSO Policy also provides that, for some CSO-related permits, the study of feasible alternatives in the control plan may provide sufficient support for the permit record and for approval of a CSO-related bypass to be included in an NPDES permit.[1] Such approvals will be re-evaluated upon the reissuance of the permit, or when new information becomes available that would represent cause for modifying the permit.

The CSO Policy indicates that the feasible alternative threshold may be met if, among other things, "... the record shows the secondary treatment system is properly operated and maintained, that the system has been designed to meet secondary limits for flows greater than peak dry weather flow, plus an appropriate quantity of wet weather flow, and that it is either technically or financially infeasible to provide secondary treatment at the existing facilities for greater amounts of wet weather flow."[2]

USEPA's CSO Control Policy and CWA section 402(q)(1) provide that the CSO-related bypass provision in the permit should make it clear that all wet weather flows passing through the headworks of the POTW will receive at least primary clarification and solids and floatables removal and disposal, and disinfection, where necessary, and any other treatment that can reasonably be provided.[3] Under section 402(q)(1) of the CWA and as stated in the CSO Policy, in any case, the discharge must not violate applicable water quality standards.[4] The Department will evaluate and establish on a case-by-case basis effluent limitations for discharges that receive only a primary level of clarification prior to discharge and those bypasses that are blended with secondary treated effluent prior to discharge to ensure applicable water quality standards will be met.

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1 59 Fed. Reg. 18,688, at 18,693 and 40 CFR Part 122.41(m)(4) (April 19, 1994).

2 59 Fed. Reg. at 18,694.

3 59 Fed. Reg. at 18,693.

4 59 Fed. Reg. at 18694, col 1 (April 19, 1994).

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

CSO-Related Bypasses of Secondary Treatment

This permitting action allows a CSO-related bypass of secondary treatment at the permittees facility based on an evaluation of feasible alternatives, which indicates it is technically and financially infeasible at this time to provide secondary treatment at the existing facilities as summarized in the original CSO Master Plan. The permittee shall implement CSO control projects in accordance with the approved CSO Master Plan entitled *"City of Bath – Revised 2006 Combined Sewer Overflow Master Plan Update,"* In addition there have been three revision letters (2008, 2011 and 2015) submitted to the Department updating the scope of work and schedules for selected projects.

During wet weather events when flows to the treatment facility have exceeded an instantaneous flow rate of 4,861 gpm (7.0 MGD), secondary treatment of all wet weather flows is not practicable and a portion of the primary effluent is allowed to be bypassed around the aeration basins and secondary clarifiers, disinfected and then dechlorinated. The bypassed flow is recombined with the secondary clarifier effluent following chlorination and dechlorination of the secondary waste stream and the blended effluent is discharged to the river via the physical outfall designated as Outfall #001. This permitting action is establishing end-of-pipe limitations to comply with USEPA's CSO Control Policy and Clean Water Act section 402(q)(1).

The CSO Control Policy does not define specific design criteria or performance criteria for primary clarification. The Department and USEPA agree that existing primary treatment infrastructure was constructed to provide primary clarification. Therefore, the effluent quality from a properly designed, operated and maintained existing primary treatment system satisfies the requirements for primary clarification and solids removal.

For facilities that blend primary and secondary effluent prior to discharge, such as the permittee's facility, compliance must be evaluated at the point of discharge, unless impractical or infeasible.[1] Monitoring to assess compliance with limits based on secondary treatment and other applicable limits is to be conducted following recombination of flows at the point of discharge or, where not feasible, by mathematically combining analytical results for the two waste streams. Where a CSO-related bypass is directly discharged after primary settling and chlorination, monitoring will be at end of pipe if possible.

Due to the variability of CSO-related bypass treatment systems and wet weather related influent quality and quantity, a single technology-based standard cannot be developed for all of Maine's CSO-related bypass facilities[2]. To standardize how the Department will regulate these facilities to ensure compliance with the CSO Control Policy and Clean Water Act [3], the Department has determined that effluent limitations for the discharge of CSO-related bypass effluent that is combined with effluent from the secondary treatment system should be based on the more stringent of either the past demonstrated performance of the properly operated and maintained treatment system(s) or site-specific water quality-based limits derived from computer modeling or best professional judgment of Department water quality engineers of assimilative capacity of the receiving water.

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[1] 40 CFR 122.45(h).

[2] Maine currently has 16 permitted facilities with a CSO-related bypass.

[3] In other words, that any other treatment that can reasonably be provided is, in fact, provided.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

CSO-Related Bypasses of Secondary Treatment

The federal secondary treatment regulation does not contain daily maximum effluent limitations for BOD_5 and TSS. The Department has established a daily maximum concentration limit of 50 mg/L for secondary treated wastewater as best professional judgment of best practicable treatment. This standard was developed by the Department prior to NPDES delegation and promulgation of secondary treatment regulations into State rule that are consistent with the Clean Water Act. Following consultation with USEPA, the Department has chosen to waive the requirement to comply with numeric daily maximum concentration limitations for BOD_5 and TSS for days with CSO-related bypass events. This permitting action is eliminating the reporting requirements for primary clarifier BOD_5 and TSS percent removal and surface loading rate based on best professional judgment that these technology-based metrics have not been particularly useful in assessing primary treatment system performance and are not necessary to ensure water quality standards are met.

During CSO-related bypasses, secondary treated wastewater is combined with wastewater from the primary treatment system which is designed to provide primary clarification and solids and floatables removal and disposal, and disinfection. The permittee is not able to consistently achieve compliance with technology based effluent limits (TBELs) derived from the secondary treatment regulation during CSO-related bypasses. As part of its consideration of possible adverse effects resulting from the bypass, the Department must ensure that the bypass will not cause exceedance of water quality standards. CSO Control Policy at 59 Fed. Reg. 18694.

For the discharge of blended effluent to the Kennebec River via the main outfall (#001A), the Department is establishing daily maximum technology-based effluent limitations for BOD_5 and TSS. For data management purposes, this permitting action is designating an outfall identifier of Outfall #002B for discharges of blended wastewater when the instantaneous flow rate to the treatment facility exceeds 4,861 gpm (7.0 MGD). Discharges of blended effluent to the Kennebec River are only allowed when the instantaneous flow rate to the treatment facility exceeds 4,861 gpm (7.0 MGD).

p. Flow, BOD_5 and TSS: Given the configuration of the treatment plant, the permittee has measured, blended effluent values for flow, BOD and TSS. To be conservative, the Department has chosen the highest value for each parameter for the purposes of evaluating the potential impact to the Kennebec River during the wet weather events when blended effluent is being discharged. Based on a review of the DMR data for the period January 2013 – August 2015, the highest BOD and TSS loadings from the bypass waste stream occurred in May 2013. The values being utilized in calculations are as follows:

Flow: 4.73 MGD (May 2013)
BOD_5: 6,746 lbs./day, 171 mg/L (May 2013)
TSS: 16,963 lbs./day, 430 mg/L (May 2013)

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

CSO-Related Bypasses of Secondary Treatment

OUTFALL #002B - Blended effluent discharged to the Kennebec River

To determine if water quality standards are being met when bypassing secondary treatment, the Department has assessed the impact of permitted BOD and TSS loads and flow from the secondary treatment side of the facility (based on 3.5 MGD and 50 mg/L) plus the actual historic flow and loadings from the primary treated waste stream cited. The calculated values are as follows:

BOD: 1,460 lbs/day + 6,746 lbs/day = 8,206 lbs/day
(2°) (1°)

TSS: 1,460 lbs/day + 16,963 lbs/day = 18,423 lbs/day
(2°) (1°)

Flow: 3.5 MGD + 4.73 MGD = 8.23 MGD
(2°) (1°)

To determine if water quality standards (dissolved oxygen) are maintained during times when bypassing secondary treatment, one must calculate the increase in the BOD and TSS concentration in the receiving water when the facility is discharging blended effluent. The only remaining unknown variable is what flow does one use for the Kennebec River when the primary and secondary treatment systems are active?

The flow in the Kennebec River at Bath is comprised of flows from the Kennebec River and Androscoggin River. The two rivers converge in Merrymeeting Bay which is located downstream of Brunswick on the Androscoggin River and just downstream of Richmond on the Kennebec River. Merrymeeting Bay outlets at "the Chops" about 5 miles north of the City of Bath's discharge. The receiving water in Bath is also referred to as the Kennebec River. Without a gauging station on the Kennebec River after the Merrymeeting Bay outlet, the Department made a best professional judgment to approximate the flow at Bath by utilizing the two most downstream gauging stations on each river. For the Androscoggin River, the most downstream gauge is the USGS gauging station referred to as Near Auburn (station #01059000). For the Kennebec River, the most downstream gauging station is the USGS gauging station with flow data is referred to as North Sidney (station #01049265).

The Department chose the lowest river flows of 16,200 cfs (5/26/13) for the Androscoggin River and 21,000 cfs (5/26/13) for the Kennebec River for a total of 37,300 cfs (at the highest primary treated BOD and TSS loadings for 68 overflow occurrences between January 2013 and August 2015) to calculate the increase in BOD and TSS concentrations in the Kennebec River at Bath. The calculations are as follows:

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

CSO-Related Bypasses of Secondary Treatment

OUTFALL #002B - Blended effluent discharged to the Kennebec River

What are the BOD and TSS concentrations discharged from the facility when the blended effluent is discharged?

BOD: $\frac{8{,}206 \text{ lbs/day}}{(8.23 \text{ MGD})(8.34 \text{ lbs/gal})} = 120 \text{ mg/L}$

TSS: $\frac{18{,}423 \text{ lbs/day}}{(8.23 \text{ MGD})(8.34 \text{ lbs/gal})} = 268 \text{ mg/L}$

What is the increase in the BOD and TSS concentrations in the Kennebec River at Bath after rapid and complete mixing?

Dilution factor: $\frac{(37{,}300 \text{ cfs})(0.6464) + (8.23 \text{ MGD})}{(8.23 \text{ MGD})} = 2{,}931{:}1$

BOD: $\frac{120 \text{ mg/L}}{2{,}931} = 0.04 \text{ mg/L}$ (not measurable)

TSS: $\frac{268 \text{ mg/L}}{2{,}931} = 0.09 \text{ mg/L}$ (not measurable)

Based on the combined BOD_5 and TSS values (blended effluent) cited above, the Department has made a best professional judgment, maximum effluent discharge limitations of 8,206 lbs./day for BOD_5 and 18,423 lbs/day for TSS established in this permit provides reasonable assurance that the discharge will not cause or contribute to a violation of an applicable water quality standard in the Kennebec River and complies with the State's antidegradation policy at 38 M.R.S.A. § 464(4)(F).

These limitations are based on new information concerning treatment system performance data as well as a revised and corrected methodology for regulating CSO-related bypasses in Maine. As such, the Department concludes that the new daily maximum effluent limitations of 18,423 lbs/day for BOD_5 and 8,206 lbs/day for TSS for the discharge of primary and secondary blended effluents when the flow rate through secondary treatment has exceeded an instantaneous flow rate of 4,861 gpm (7.0 MGD) complies with the exceptions to antibacksliding at Section 402(o)(2)(B)(i) of the Clean Water Act. This permitting action is establishing monthly average and weekly average blended effluent concentration reporting requirements for BOD_5 and TSS to assist in comparing the effluent quality against secondary treatment technology based effluent limits.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

CSO-Related Bypasses of Secondary Treatment

OUTFALL #002B - Blended effluent discharged to the Kennebec River

q. Fecal Coliform Bacteria – This permitting action is establishing a daily maximum concentration limit of 50 colonies/100 ml for fecal coliform bacteria, which are consistent with the National Shellfish Sanitation Program. As with the secondary treated waste water, the Maine Department of Marine Resources, disinfection is required year-round in order to ensure compliance with fecal coliform bacteria limits and thereby providing for the protection of local shellfish resources. Given the primary and secondary treated waste streams are disinfected independently, the permittee will need to mathematical determine compliance with the daily maximum limitation.

r. Total residual chlorine - The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. Given the primary and secondary treated waste streams are disinfected independently, the permittee will need to mathematically determine compliance with the daily maximum limitation.

7. COMBINED SEWER OVERFLOWS

This permit does not contain effluent limitations on the individual CSO outfalls listed in the table below.

Outfall	Location	Receiving Water & Class
003	Rose Street Pump Station	Kennebec River, SB
004	Pleasant Street Pump Station	Kennebec River, SB
005	Commercial Street Pump Station	Kennebec River, SB
008	Harward Street	Kennebec River, SB

Combined Sewer Overflow Abatement 06-096 CMR 570 (last amended February 8, 1978) states that for discharges from overflows from combined municipal storm and sanitary sewer systems, the requirement of "best practicable treatment" specified in 38 M.R.S.A. 414-A(1)(D) may be met by agreement with the discharger, as a condition of its permit, through development of a plan within a time period specified by the Department. The City submitted to the Department a CSO Master Plan entitled, *City of Bath – Revised 2006 Combined Sewer Overflow Master Plan Update,"* In addition there have been three revision letters (2008, 2011 and 2015) submitted to the Department updating the scope of work and schedules for selected projects.

The City has been actively implementing the recommendations of the Master Plan and to date has significantly reduced the volume of untreated combined sewer overflows to the receiving water. Special Condition J, *Effluent Limitations and Conditions For Combined Sewer Overflows*, of the permit contains a schedule of compliance for items in the most current up-to-date abatement plan which must be completed.

The Department acknowledges that the elimination of the four remaining CSOs in the collection system of sanitary wastewater is a costly, long-term project. As the City's facility and the sewer collection system are upgraded and maintained in accordance with the CSO Master Plan and Nine Minimum Controls, there should be reductions in the frequency and volume of CSO activities and in the wastewater receiving primary treatment only at the treatment plant, and, over time, improvement in the quality of the wastewater discharged to the receiving waters.

8. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the water body to meet standards for Class SB classification.

9. PUBLIC COMMENTS

Public notice of this application was made in the *Times Record* newspaper on or about August 8, 2014. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses,* 06-096 CMR 522 (effective January 12, 2001).

10. DEPARTMENT CONTACTS

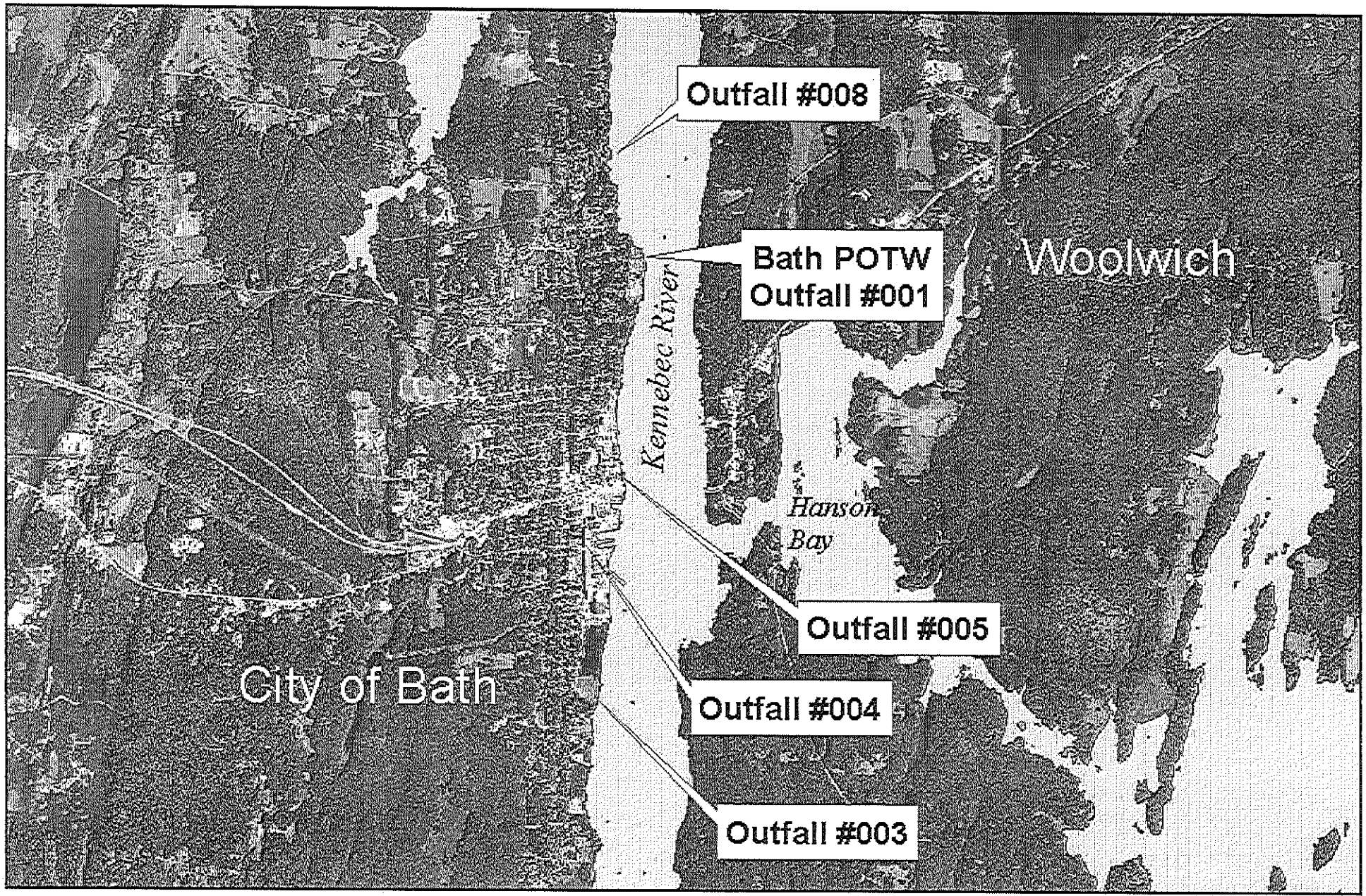
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Gregg Wood
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 287-7693
e-mail: gregg.wood@maine.gov

11. RESPONSE TO COMMENTS

During the period of April 8,2016, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department did not receive comments from the permittee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the permit. Therefore, the Department has not prepared a Response to Comments.

ATTACHMENT A

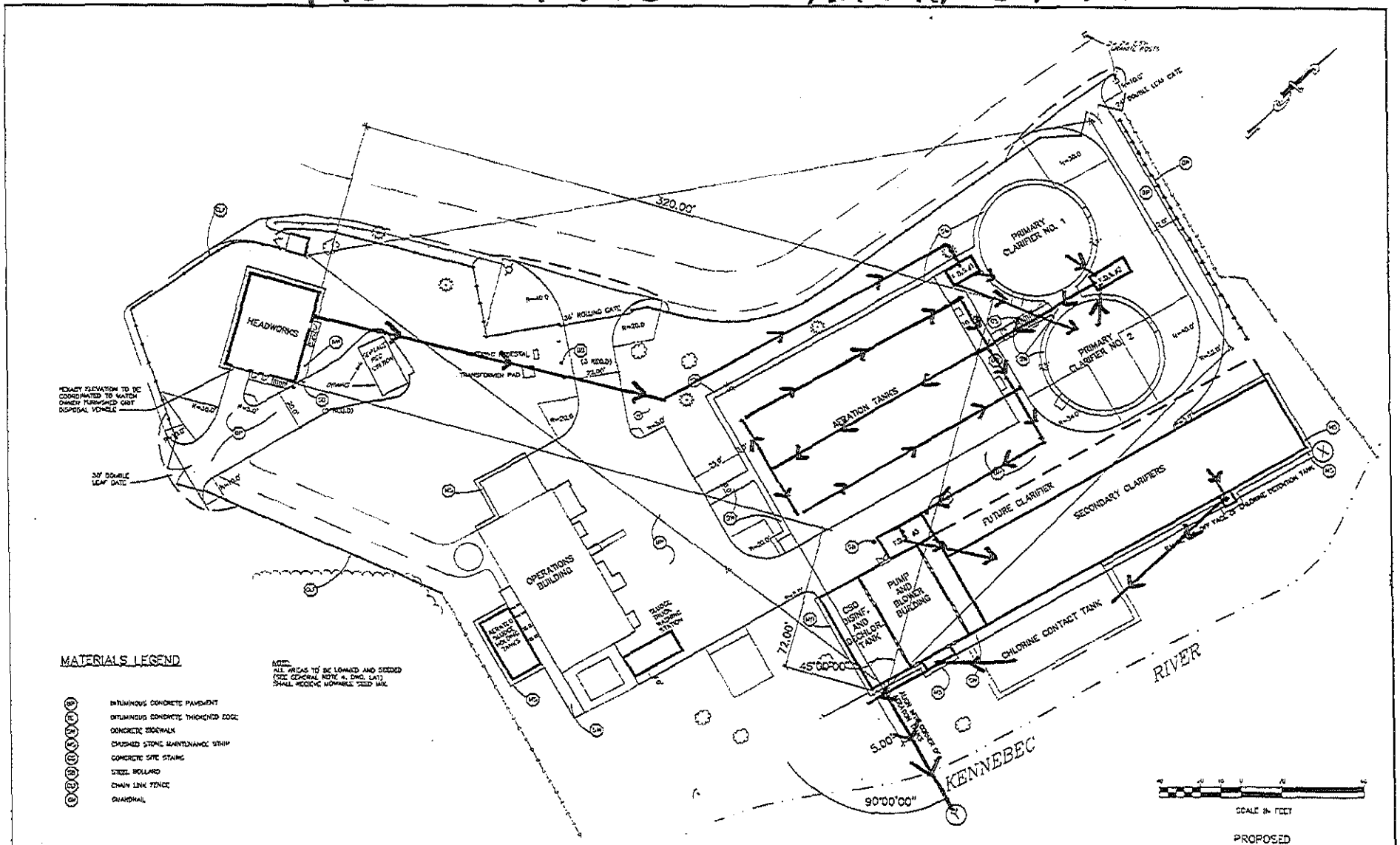


Bath Publicly Owned Treatment Works, Bath, Maine

Map Created by Maine DEP
July 30, 2014

ATTACHMENT B

NORMAL FLOWS ATTACHMENT #1



NOTE:
ALL AREAS TO BE LOAMED AND SEEDED (SEE GENERAL NOTE 4, DWG. LA1) SHALL RECEIVE MOWABLE SEED MIX.

PROPOSED
PHASE II
WWTF UPGRADE AND EXPANSION
CITY OF BATH, MAINE
LAYOUT AND MATERIALS PLAN

EARTH TECH
SOUTH PORTLAND, MAINE

ORIGINAL FULL SIZE DRAWING=4'
REPRODUCTIONS MAY BE REDUCED SIZE

DRAWING NO. LA-3
JOB NO. 95-043
CONTRACT NO. 97-1
SCALE: AS NOTED
DATE: JAN. 1997
SHEET 4 OF 69 SHEETS

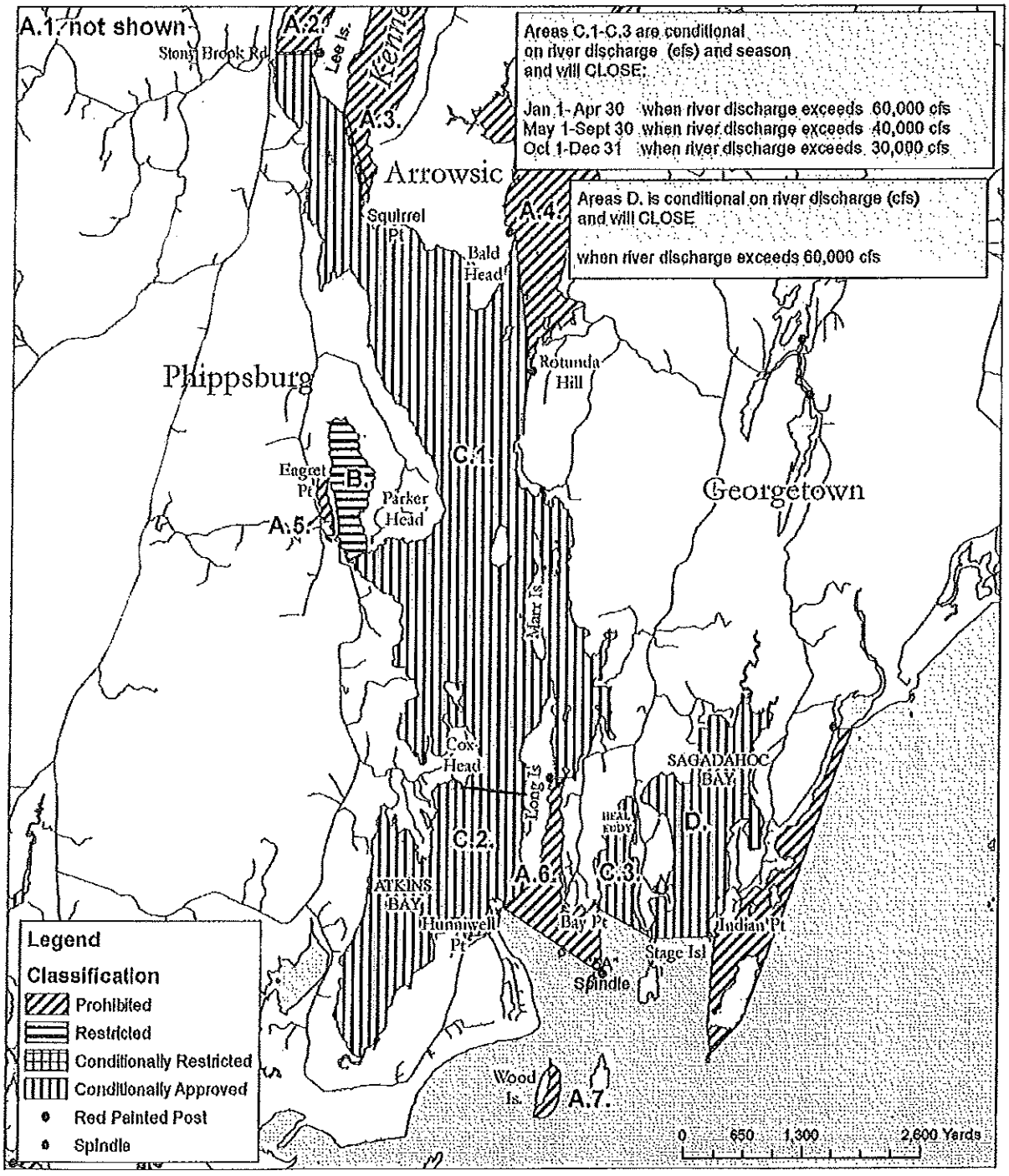
ATTACHMENT C

5/22/2014

Maine Department of Marine Resources

Pollution Area No. 20

Kennebec River and Tributaries



OFFICES AT 2 BEECH ST., BAKER BUILDING, HALLOWELL, MAINE
http://www.Maine.gov/dmr

PHONE: (207) 624-6550 FAX: (207) 624-6024

ATTACHMENT D

WET TEST REPORT

Data for tests conducted for the period

23/Oct/2010 - 23/Oct/2015

BATH NPDES= ME010002 Effluent Limit: Acute (%) = 2.941 Chronic (%) = 0.352

Species	Test	Percent	Sample date	Critical %	Exception	RP
MYSID SHRIMP	A_NOEL	10	02/17/2013	2.941		
MYSID SHRIMP	A_NOEL	100	06/23/2013	2.941		
MYSID SHRIMP	A_NOEL	50	07/28/2013	2.941		
SEA URCHIN	C_NOEL	50	02/17/2013	0.352		
SEA URCHIN	C_NOEL	50	06/23/2013	0.352		
SEA URCHIN	C_NOEL	10	07/28/2013	0.352		

ATTACHMENT E

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 23/Oct/2010 - 23/Oct/2015

Facility Name: **BATH** NPDES: **ME0100021**

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
02/17/2013	1.72	1.19	127	14	28	45	25	4	11	F	0
06/23/2013	2.22	1.50	16	10	0	0	0	6	0	F	0
07/28/2013	2.11	1.42	16	10	0	0	0	6	0	F	0
11/03/2013	1.20	1.06	16	10	0	0	0	6	0	F	0

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES#_____Facility Name_____

Since the effective date of your permit, have there been;		NO	YES Describe in comments section
1	Increases in the number, types, and flows of industrial, commercial, or domestic discharges to the facility that in the judgment of the Department may cause the receiving water to become toxic?	☐	☐
2	Changes in the condition or operations of the facility that may increase the toxicity of the discharge?	☐	☐
3	Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge?	☐	☐
4	Increases in the type or volume of hauled wastes accepted by the facility?	☐	☐

COMMENTS:

Name (printed): _____

Signature:_____Date: _____

This document must be signed by the permittee or their legal representative.

This form may be used to meet the requirements of Chapter 530.2(D)(4). This Chapter requires all dischargers having waived or reduced toxic testing to file a statement with the Department describing changes to the waste being contributed to their system as outlined above. As an alternative, the discharger may submit a signed letter containing the same information.

Scheduled Toxicity Testing for the next calendar year

Test Conducted	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
WET Testing	☐	☐	☐	☐
Priority Pollutant Testing	☐	☐	☐	☐
Analytical Chemistry	☐	☐	☐	☐
Other toxic parameters [1]	☐	☐	☐	☐

Please place an "X" in each of the boxes that apply to when you will be conducting any one of the three test types during the next calendar year.

[1] This only applies to parameters where testing is required at a rate less frequently than quarterly.

DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012 **Contact: (207) 287-2811**

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's ("DEP") Commissioner: (1) in an administrative process before the Board of Environmental Protection ("Board"); or (2) in a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S.A. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S.A. § 480-HH(1) or a general permit for a tidal energy demonstration project (38 M.R.S.A. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This INFORMATION SHEET, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S.A. §§ 341-D(4) & 346, the *Maine Administrative Procedure Act*, 5 M.R.S.A. § 11001, and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 CMR 2 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days of the date on which the Commissioner's decision was filed with the Board will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by the Board's receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner a copy of the appeal documents and if the person appealing is not the applicant in the license proceeding at issue the applicant must also be sent a copy of the appeal documents. All of the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time submitted:

1. *Aggrieved Status.* The appeal must explain how the person filing the appeal has standing to maintain an appeal. This requires an explanation of how the person filing the appeal may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing on the appeal is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
7. *New or additional evidence to be offered.* The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered by the Board in an appeal only when the evidence is relevant and material and that the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2.

Other Considerations in Appealing a Decision to the Board

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed the license normally remains in effect pending the processing of the appeal. A license holder may proceed with a project pending the outcome of an appeal but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

What to Expect Once You File a Timely Appeal with the Board

The Board will formally acknowledge receipt of an appeal, including the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, and any materials submitted in response to the appeal will be sent to Board members with a recommendation from DEP staff. Persons filing appeals and interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, a license holder, and interested persons of its decision.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2; 5 M.R.S.A. § 11001; & M.R. Civ. P 80C. A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. Failure to file a timely appeal will result in the Board's or the Commissioner's decision becoming final.

An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S.A. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452 or for judicial appeals contact the court clerk's office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.