STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

April 11, 2016

Mr. Clayton "Mac" Richardson
Lewiston-Auburn Water Pollution Control Authority
P.O. Box 1928
Lewiston, Maine 04241
crichardson@lawpca.org

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101478
Maine Waste Discharge License (WDL) Application #W000682-5M-K-R
Final Permit

Dear Mr. Richardson:

Enclosed, please find a copy of your **final** MEPDES permit and Maine WDL **renewal** which was approved by the Department of Environmental Protection.

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/CMRO
Sandy Mojica, USEPA
Olga Vergara, USEPA
Marelyn Vega, USEPA

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

DEPARTMENT ORDER

IN THE MATTER OF

LEWISTON-AUBURN WATER POLLUTION CONTROL AUTHORITY	)	MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
LEWISTON, ANDROSCOGGIN COUNTY, MAINE	)	
PUBLICLY OWNED TREATMENT WORKS	)	AND
ME0101478	)	WASTE DISCHARGE LICENSE
W000682-5M-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), has considered the application of the LEWISTON-AUBURN WATER POLLUTION CONTROL AUTHORITY (LAWPCA/permittee hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On March 12, 2013, LAWPCA submitted a timely and complete application to the Department for the renewal of Maine Waste Discharge License (WDL) #W000682-5M-G-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME00101478, which was issued by the Department on July 24, 2008, for a five-year term. The 7/24/08 permit authorized a monthly average discharge of 14.2 million gallons per day (MGD) of secondary treated municipal wastewaters from a publicly owned treatment works (POTW), allowed the use of a secondary treatment bypass structure at the facility as well as the discharge of an unspecified quantity of untreated combined sanitary and stormwater from one (1) combined sewer overflow (CSO) point to the Androscoggin River, Class C, in Lewiston, Maine.

It is noted that the Department issued two minor permit revisions to the 7/24/08 permit as follows; 1) December 3, 2010, a revision established and implemented an Asset Management Program and established a repair and replacement account to comply with the 2010 Clean Water State Revolving Fund requirements and 2) February 6, 2012, a revision modified the mercury monitoring frequency from 4/Year to 1/Year pursuant to Pursuant to 38 M.R.S.A. §420(1-B)(F).

PERMIT SUMMARY

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

Outfall 001C – (secondary treated or blended waste water)

1. Revising the minimum monitoring frequencies for Outfall #001C for biochemical oxygen demand (BOD_5), total suspended solids (TSS) and *E. coli* bacteria from 5/Week to 3/Week based on a statistical evaluation of test results for the most current 43 months.

PERMIT SUMMARY (cont'd)

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. Establishing monthly average and daily maximum water quality based mass limits for total aluminum based on a statistical evaluation of test results for the most current 60 months that indicates the discharge has a reasonable potential to exceed the acute and chronic ambient water quality criteria (AWQC) for total aluminum.

4. Establishing a more stringent daily maximum water quality based mass limit for total copper based on a statistical evaluation of test results for the most current 60 months indicates the discharge has a reasonable potential to exceed the acute AWQC for total copper.

5. Eliminating the daily maximum concentration limit for total copper pursuant to 06-096 CMR Chapter 530 §3(D)(1).

6. Establishing numeric daily maximum technology based mass limitations for BOD and TSS on the discharge of blended effluent to be consistent with the National CSO policy.

CONCLUSIONS

Based on the findings summarized in the attached Fact Sheet dated March 8, 2016, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

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

2. The discharges, either individually 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 national 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

CONCLUSIONS (cont'd)

(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 (including the one CSO point) will be subject to effluent limitations that require application of best practicable treatment as defined in 38 M.R.S.A. § 414-A(1)(D).

ACTION

Based on the findings and conclusions as stated above, the Department APPROVES the above noted application of the LEWISTON-AUBURN WATER POLLUTION CONTROL AUTHORITY to discharge a monthly average discharge of 14.2 million gallons per day (MGD) of secondary treated municipal wastewaters from a publicly owned treatment works (POTW), allows the use of a secondary treatment bypass structure at the facility as well the discharge of an unspecified quantity of excess combined sanitary and stormwater from one (1) combined sewer overflow (CSO) point to the Androscoggin River, Class C, in Lewiston, 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 October 19, 2015)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS 11th DAY OF April 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Kuhns
for Paul Mercer, Commissioner

Date of initial receipt of application: March 12, 2013
Date of application acceptance: March 13, 2013

Date filed with Board of Environmental Protection

Filed
APR 12 2016
State of Maine
Board of Environmental Protection

This Order prepared by Gregg Wood, BUREAU OF WATER QUALITY

SPECIAL CONDITIONS
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **secondary treated municipal wastewaters from Outfall #001C** and consistent with CSO bypass regulations, allowed to discharge **blended effluent** to the Androscoggin River. Bypassing secondary treatment is only allowed when the influent flow to the treatment facility has exceeded the instantaneous flow rate of 25.0 MGD (17,361 gallons per minute). Allowance to bypass secondary treatment will be reviewed and may be modified or terminated pursuant to Special Condition K, *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 a Non-Dedicated CSO Primary Clarifier*, **Attachment F** of this permit. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Quantity			Concentration				
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *(Secondary treated)* [50050]	Report MGD [03]	---	Report MGD [03]	---	---	---	Continuous [99/99]	Recorder [RC]
Influent Flow Rate Minimum [00058] ***(When bypass is active)***	---	---	Report (gpm) (1) [78]	---	---	---	Instantaneous [01/99]	Recorder [RC]
Flow *(Bypassing Secondary)* [50050]	Report (Total MGD) [03]	---	Report MGD [03]	---	---	---	1/Discharge Day (3,4) [01/DD]	Recorder [RC]
BOD_5 [00310]	3,553 lbs/day [26]	5,329 lbs/day [26]	Report lbs/day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L (2a) [19]	3/Week [03/07]	Composite [24]
BOD_5 [00310] ***(When bypass is active)***	---	---	15,894 lbs/Day [26]	---	---	Report mg/L [19]	3/Week [03/07]	Composite [24]
BOD_5 Percent Removal (2b) [81010]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]
TSS [00530]	3,553 lbs/day [26]	5,329 lbs/day [26]	Report lbs/day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L (2a) [19]	3/Week [03/07]	Composite [24]
TSS [00530] ***(When bypass is active)***	---	---	23,771 lbs/Day [26]	---	---	Report mg/L [19]	3/Week [03/07]	Composite [24]
TSS Percent Removal (2b) [81011]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]

Footnotes: See Pages 9 through 14 of this permit for the applicable footnotes

SPECIAL CONDITIONS

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

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Mass Limits			Concentration Limits				
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	1/Day *[01/01]*	Grab *[GR]*
Overflow Use, Occurrences(3) *[74062]* ***(When bypass is active)***	---	---	Report (# of days) *[93]*	---	---	---	1/Discharge Day(4) *[01/DD]*	Record Total *[RT]*
E. coli Bacteria(5a) *[31633]* *May 15–Sept 30*	---	---	---	126 col/100 ml (5) *[13]*	---	949 col/100 ml *[13]*	3/Week *[03/07]*	Grab *[GR]*
E. coli Bacteria (5b) *[31633]* *Oct. 1, 2016–April 30, 2017*	---	---	---	Report col/100 ml(6) *[13]*	---	Report col/100 ml *[13]*	1/Month *[01/30]*	Grab *[GR]*
Total Residual Chlorine(7) *[50060]*	---	---	---	0.1 mg/L *[19]*	---	0.24 mg/L *[19]*	2/Day *[02/01]*	Grab *[GR]*
pH *[00400]*	---	---	---	---	---	6.0-9.0 SU *[12]*	5/Week *[05/07]*	Grab *[GR]*
Aluminum (Total) *[01105]*	19 lbs/day *[26]*	---	40 lbs/day *[26]*	Report µg/L *[28]*	---	Report ug/L *[28]*	2/Year *[02/YR]*	Composite *[24]*
Copper (Total) *[01042]*	---	---	2.5 lbs/day *[26]*	---	---	Report ug/L *[28]*	2/Year *[02/YR]*	Composite *[24]*
Mercury (Total) (8) *[71900]*	---	---	---	6.5 ng/L *[3M]*	---	9.8 ng/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*

Footnotes: See Pages 9 through 14 of this permit for the applicable footnotes.

SPECIAL CONDITIONS

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

SURVEILLANCE LEVEL - Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit).

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity [9]						
Acute – NOEL						
Ceriodaphnia dubia (Water flea) *[TDA3B]*	---	---	---	Report % *[23]*	1/2 Years *[01/2Y]*	Composite *[24]*
Salvelinus fontinalis (Brook trout) *[TDA6F]*	---	---	---	Report % *[23]*	1/2 Years *[01/2Y]*	Composite *[24]*
Chronic – NOEL						
Ceriodaphnia dubia (Water flea) *[TBP3B]*	---	---	---	Report % *[23]*	1/2 Years *[01/2Y]*	Composite *[24]*
Salvelinus fontinalis (Brook trout) *[TBO6F]*	---	---	---	Report % *[23]*	1/2 Years *[01/2Y]*	Composite *[24]*
Analytical Chemistry [10,12] *[51477]*	---	---	---	Report ug/L *[28]*	1/2/Years *[01/2Y]*	Composite / Grab *[24/GR]*

Footnotes: **See Pages 9 through 14 of this permit for the applicable footnotes.**

SPECIAL CONDITIONS

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

SCREENING LEVEL - 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 [9]						
Acute – NOEL						
Ceriodaphnia dubia (Water flea) *[TDA3B]*	---	---	---	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Salvelinus fontinalis (Brook trout) *[TDA6F]*	---	---	---	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Chronic – NOEL						
Ceriodaphnia dubia (Water flea) *[TBP3B]*	---	---	---	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Salvelinus fontinalis (Brook trout) *[TBQ6F]*	---	---	---	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Analytical Chemistry [10,12] *[51477]*	---	---	---	Report ug/L *[28]*	1/ Quarter *[01/90]*	Composite / Grab *[24/GR]*
Priority Pollutant [11,12] *[50008]*	---	---	---	Report ug/L *[28]*	1/Year *[01/YR]*	Composite / Grab *[24/GR]*

Footnotes: See Pages 9 through 14 of this permit for the applicable footnotes.

SPECIAL CONDITIONS

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

Footnotes:

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 must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for waste water. 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 (effective 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 must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

Influent sampling for BOD_5 and TSS must be sampled at the Lewiston and Auburn Parshall flumes prior to the addition of transported wastes and prior to the bar racks. BOD_5 and TSS associated with the addition of transported waste may be included in calculations for percent removal.

Outfall #001C effluent monitoring for all parameters must be conducted from the effluent end of the chlorine contact chamber, except that effluent monitoring for *E. coli* bacteria may be conducted from the effluent end of the chlorine contact chamber or from the dechlorination manhole and all sampling for TRC must be conducted from the dechlorination manhole.

These monitoring locations may be changed only through written approval by the Department.

1. **Minimum instantaneous influent flow** – The permittee must report the minimum instantaneous influent flow rate entering the headworks of the plant at the time each bypass of secondary treatment is activated.

2. **BOD & TSS**

   a. **Daily maximum concentration** – Limitations 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:

b. **Percent removal** - The treatment facility must 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 must 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 *"N9"* on the monthly Discharge Monitoring Report.

3. **Overflow occurrence** – An overflow occurrence is defined as the period of time between initiation and cessation of flow through the secondary bypass system if a continuous overflow occurrence is greater than 60 minutes in duration or intermittent occurrences totaling 120 minutes 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.

4. **Discharge Day** - A discharge day is defined as a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

5. ***E. coli* bacteria**

   a. **(May 15 – September 30)** - Limits are seasonal and apply between May 15 and September 30 of each calendar year. The Department reserves the right to require disinfection on a year-round basis to protect the health and welfare of the public.

   b. **(Oct. 1, 2016–April 30, 2017)** – The permittee shall sample the effluent 1/month with at least two sampling events being wet weather events. For the purposes of this permit, a wet weather event is defined as an instantaneous influent flow rate of greater than or equal to 15,336 gpm or 10.65 MGD.

6. ***E. coli* bacteria** – The monthly average limitation is a geometric mean limitation and must be calculated and reported as such.

7. **Total residual chlorine (TRC)** – TRC limits and monitoring requirements are applicable whenever elemental chlorine or chlorine based compounds are being used to disinfect the discharge. The permittee must utilize approved test methods that are capable of bracketing the limitations in this permit.

SPECIAL CONDITIONS

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

Footnotes:

8. **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 USEPA Water Quality Criteria Levels.* All mercury analysis shall be conducted in accordance with USEPA Method 1631, *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.

9. **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 7.8% and 1.1%, respectively), which provides a point 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 or 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 12.8:1 and 90.1:1, respectively, for Outfall #001C.

   a. **Surveillance level testing** - Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee must initiate surveillance level acute and chronic WET testing at a minimum frequency of once every other year (1/2 Years) for both the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*). Testing must be conducted in a different calendar quarter each sampling event. The intent of this is that at least two WET tests will be conducted during years 1, 2, 3 & 5 of this permit.

   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 twice per year (2/Year) for both species. Acute and chronic tests must be conducted on both the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*). Testing must be conducted in a different calendar quarter each sampling event.

SPECIAL CONDITIONS

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

Footnotes:

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 7.8% and 1.1%, respectively. See **Attachment B** of this permit for WET reporting forms.

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 as modified by Department protocol for salmonids. See **Attachment C** of this permit for the Department protocol.

a. U.S. Environmental Protection Agency. 2002. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, 5th ed. USEPA 821-R-02-012. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the acute method manual).

b. U.S. Environmental Protection Agency. 2002. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, 4th ed. USEPA 821-R-02-013. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the freshwater chronic method manual).

10. **Analytical chemistry** –Refers to a suite of chemicals in **Attachment D** of the permit.

a. **Surveillance level testing** - Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee must conduct analytical chemistry testing at a minimum frequency of once every other year (1/2 Years). As with WET testing, testing must be conducted in a different calendar quarter of each year.

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.

SPECIAL CONDITIONS

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

Footnotes:

11. **Priority pollutant testing** – Refers to a suite of chemicals in **Attachment D** of the permit.

    a. **Surveillance level testing** is not required pursuant to 06-096 CMR 530.

    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 shall 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.

12. **Analytical Chemistry & Priority Pollutants** - Priority pollutant and analytical chemistry 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.

    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 laboratory 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 exceedences of the acute, chronic or human health AWQC as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005). For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "N-9" monitoring not required this period.

SPECIAL CONDITIONS

B. 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 effluent that causes visible discoloration or turbidity in the receiving waters or that impairs the usages designated for the classification of the receiving waters.

4. Notwithstanding specific conditions of this permit, 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.

C. TREATMENT PLANT OPERATOR

The person who has the management responsibility and exercises operational oversight over the treatment facility must be a person holding a minimum of a Maine **Grade V** 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.

D. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only: 1) in accordance with the permittee's General Application for Waste Discharge License, accepted for processing on March 13, 2013; 2) in accordance with the terms and conditions of this permit; 3) via Outfall #001C (secondary treated waste waters) and or blended effluent, and 4) via combined sewer overflow Outfall #002 ("Structure B"). Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit.

SPECIAL CONDITIONS

E. NOTIFICATION REQUIREMENTS

In accordance with Standard Condition 6, the permittee must notify the Department of the following:

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

2. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system.

3. For the purposes of this section, adequate notice must include information on:

   a. The quality or quantity of waste water introduced to the waste water collection and treatment system; and

   b. Any anticipated impact of the change in the quantity or quality of the waste water to be discharged from the treatment system.

F. 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 waste water 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.

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

SPECIAL CONDITIONS

G. WET WEATHER FLOW MANAGEMENT PLAN

The treatment facility staff must maintain a 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. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

Pursuant to this permit and *Standards for the Addition of Transported Wastes to Waste Water Treatment Facilities,* 06-096 CMR 555 (last amended February 5, 2009), during the effective period of this permit, the permittee is authorized to receive and introduce into the treatment process or solids handling stream up to **a daily maximum of 40,000 gallons per day** 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. 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.

3. At no time shall the addition of transported wastes cause or contribute to effluent quality violations. Transported wastes may 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. Odors and traffic from the handling of transported wastes may not result in adverse impacts to the surrounding community. If any adverse effects exist, the receipt or introduction of transported wastes into the treatment process or solids handling stream shall be suspended until there is no further risk of adverse effects.

SPECIAL CONDITIONS

H. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

4. The permittee must maintain records for each load of transported wastes in a daily log which shall include at a minimum the following.
   (a) The date;
   (b) The volume of transported wastes received;
   (c) 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.
   These records must be maintained at the treatment facility for a minimum of five years.

5. The addition of transported wastes into the treatment process or solids handling stream must not cause the treatment facilities design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of transported wastes into the treatment process or solids handling stream shall be reduced or terminated in order to eliminate the overload condition.

6. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added shall not be recorded as transported wastes but should be reported in the treatment facility's influent flow.

7. 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.

8. 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.

9. 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.

10. The authorization to receive and treat transported waste 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

I. EFFLUENT LIMITATIONS AND CONDITIONS FOR COMBINED SEWER OVERFLOWS

Pursuant to *Combined Sewer Overflow Abatement* 06-096 CMR 570 (last amended February 8, 1978), the permittee is authorized to discharge from the following locations of combined sewer overflows (CSOs) (storm water and sanitary wastewater) subject to the conditions and requirements herein.

1. CSO Locations

CSO Outfall #	Outfall Location	Receiving Water and Class
002	"Structure B" at the Treatment Plant	Androscoggin River, Class C

2. Prohibited Discharges

a) The discharge of dry weather flows is prohibited. All such discharges must be reported to the Department in accordance with Standard Condition D (1) of this permit.

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

c) No discharges shall occur at flow rates below the maximum design capacity of the wastewater treatment facility, pumping stations or sewerage system. The current pump station is designed with two influent pumps with a combined pumping capacity of 32 MGD and a third pump on stand-by.

LAWPCA is authorized to discharge combined sanitary and storm related water, through the CSO, in excess of what the facility can treat through secondary and primary treatment without violating permit limits for bypass conditions, but must treat an instantaneous minimum of 25 MGD through secondary and a minimum of 32 MGD through secondary and primary before activating the CSO. In situations where LAWPCA can treat greater than an instantaneous minimum of 25 MGD through secondary and/or more than 32 MGD through secondary and primary without violating license limits for bypass conditions, LAWPCA shall do so before activating the CSO.

3. Narrative Effluent Limitations

a) The permittee must not discharge wastewater that contains 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 permittee must not discharge wastewater that contains 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.

SPECIAL CONDITIONS

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

c) The permittee must not discharge wastewater that imparts 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.

d) Notwithstanding specific conditions of this permit, the effluent by itself or in combination with other discharges may not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

4. CSO Master Plan [see 06-096 CMR 570(2) and 06-096 CMR 570(3)]

The permittee must implement CSO control projects in accordance with the approved CSO Master Plan entitled, *Clean Water Act Master Plan, October 2000*, prepared by Metcalf & Eddy, an updated CSO Master Plan entitled, *Lewiston and Auburn, Maine and the Lewiston Auburn Water Pollution Control Authority – Clean Water Act Master Plan Five Year Update, May 2005*, prepared by Camp Dresser & McKee, that was approved by the Department on June 28, 2006 and a second update to the CSO Master Plan entitled, *City of Lewiston, Maine, Auburn Sewerage District, and the Lewiston Auburn Water Pollution Control Authority (LAWPCA) Clean Water Act Master Plan Ten Year Update, June 2010*, prepared by Camp Dresser & McKee and approved by the Department on June 20, 2013 and *City of Lewiston, Maine, Auburn Sewerage District, and the Lewiston Auburn Water Pollution Control Authority (LAWPCA) Clean Water Act Master Plan Ten Year Update, June 2015*, prepared by CDM Smith.

By December 31, 2019, ***[ICIS Code 81699]*** the permittee must submit to the Department for review and approval an Updated CSO Master Plan and implementation schedule.

To modify the date specified above, the permittee must file an application with the Department to formally modify the permit. The remaining work items identified in the abatement schedule may be amended from time to time based on mutual agreements between the permittee and the Department. The permittee must notify the Department in writing prior to any proposed changes to the implementation schedule.

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 the 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).

SPECIAL CONDITIONS

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

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

   The permittee must conduct 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 shall be reported on the Department form "CSO Activity and Volumes," included as **Attachment E** of this permit, or similar format and submitted to the Department in electronic form.

   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 shall not apply to those areas where complete separation has been completed and CSO outfalls have been eliminated.

7. Additions 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 CSO10],*** 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. 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 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

SPECIAL CONDITIONS

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

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:

LEWISTON-AUBURN WATER POLLUTION CONTROL AUTHORITY
WET WEATHER
SEWAGE DISCHARGE
CSO # AND NAME OF OUTFALL

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 storm water 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.

J. 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 (13^{th}) day of the month or hand-delivered to the Department's Regional Office such that the DMR's are received by the Department on or before the fifteenth (15^{th}) 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
Bureau of Water Quality
Division of Water Quality Management
312 Canco Road
Portland, Maine 04103

SPECIAL CONDITIONS

J. MONITORING AND REPORTING

Alternatively, if the permittee submits an electronic DMR (eDMR), the completed eDMR 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 eDMR 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 eDMR must be submitted not later than close of business on the 15th day of the month following the completed reporting period.

Additional monthly reporting requires submitting an electronic version of *"DEP-49-CSO Form For Use With Non-Dedicated CSO Primary Clarifiers"* (**Attachment F** of this permit) to the Department inspector at the address above and to the CSO Coordinator at the address below:

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

K. REOPENING OF PERMIT FOR MODIFICATION

Upon evaluation of the tests results in the 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 anytime 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.

SPECIAL CONDITIONS

L. 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 75305].* See **Attachment G** 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 storm water 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.

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

M. INDUSTRIAL PRETREATMENT PROGRAM

1. Pollutants introduced into POTWs by a non-domestic source (user) must not pass-through the publicly owned treatment works (POTW) or interfere with the operation or performance of the works.

   a. The permittee must develop and enforce specific effluent limits (local limits) or conditions (Best Management Practices) for Industrial User(s), and all other users, as appropriate, which together with appropriate changes in the POTW facilities or operation, are necessary to ensure continued compliance with the POTWs MEPDES permit or sludge use or disposal practices. Specific local limits must not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond.

   Within 180 days of the effective date of this permit, ***[ICIS code PR002]*** the permittee must prepare and submit a written technical evaluation to the Department analyzing the need to revise local limits. As part of this evaluation, the permittee must assess how the POTW performs with respect to influent and effluent of pollutants, water quality concerns, sludge quality, sludge processing concerns/inhibition, biomonitoring results, activated sludge inhibition, worker health and safety and collection system concerns. In preparing this evaluation, the permittee must

SPECIAL CONDITIONS

M. INDUSTRIAL PRETREATMENT PROGRAM (cont'd)

complete the "Re-Assessment of Technically Based Local Limits" form included as **Attachment G** of this permit with the technical evaluation to assist in determining whether existing local limits need to be revised. Justifications and conclusions should be based on actual plant data if available and should be included in the report. Should the evaluation reveal the need to revise local limits, the permittee must complete the revisions within 120 days of notification by the Department and submit the revisions to the Department for approval. The permittee must carry out the local limits revisions in accordance with USEPA's document entitled, *Local Limits Development Guidance (July 2004).*

2. The permittee must implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the permittee's approved Pretreatment Program, and the General Pretreatment Regulations, found at 40 CFR 403 and *Pretreatment Program*, 06-096 CMR 528 (effective January 12, 2001). At a minimum, the permittee must perform the following duties to properly implement the Industrial Pretreatment Program (IPP):

   a. Carry out inspection, surveillance, and monitoring procedures which will determine, independent of information supplied by the industrial user, whether the industrial user is in compliance with the Pretreatment Standards. At a minimum, all significant industrial users must be sampled and inspected at the frequency established in the approved IPP but in no case less than once per year and maintain adequate records.

   b. Issue or renew all necessary industrial user control mechanisms within 90 days of their expiration date or within 180 days after the industry has been determined to be a significant industrial user.

   c. Obtain appropriate remedies for noncompliance by an industrial user with any pretreatment standard and/or requirement.

   d. Maintain an adequate revenue structure for continued implementation of the Pretreatment Program.

   e. The permittee must provide the Department with an annual report describing the permittee's pretreatment program activities for the twelve-month period ending 60 days prior to the due date in accordance with federal regulation found at 40 CFR 403.12(i) and 06-096 CMR 528(12)(-i). **The annual report *[ICIS code 53199]* must be consistent with the format described in the "MEPDES Permit Requirements For Industrial Pretreatment Annual Report" form included as Attachment H of this permit and must be submitted no later than October 31st of each calendar year.**

SPECIAL CONDITIONS

M. INDUSTRIAL PRETREATMENT PROGRAM (cont'd)

f. The permittee must obtain approval from the Department prior to making any significant changes to the industrial pretreatment program in accordance with federal regulation found at 40 CFR 403.18(c) and 06-096 CMR 528(18).

g. The permittee must assure that applicable National Categorical Pretreatment Standards are met by all categorical industrial users of the POTW. These standards are published in the federal regulations found at 40 CFR 405-471.

h. The permittee must modify its pretreatment program to conform to all changes in the federal regulations and State rules that pertain to the implementation and enforcement of the industrial pretreatment program. **Within 180 days of the effective date of this permit,** ***[ICIS code 50799]*** the permittee must provide the Department in writing, proposed changes to the permittee's pretreatment program deemed necessary to assure conformity with current federal regulations and State rules. At a minimum, the permittee must address in its written submission the following areas: (1) Enforcement response plan; (2) revised sewer use ordinances; and (3) slug control evaluations. The permittee must implement these proposed changes pending the Department's approval under federal regulation 40 CFR 403.18 and 06-096 CMR 528(18). This submission is separate and distinct from any local limits analysis submission described in section 1(a) above.

N. 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 shall be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

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
FRESH WATERS

Facility Name _____ MEPDES Permit # _____

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 _____ (mm/dd/yy) Date Tested _____ (mm/dd/yy)

Chlorinated? _____ Dechlorinated? _____

Results — **% effluent**

	water flea	trout
A-NOEL		
C-NOEL		

Effluent Limitations

A-NOEL	
C-NOEL	

Data summary

	water flea			trout		
	% survival		no. young	% survival		final weight (mg)
QC standard	A>90	C>80	>15/female	A>90	C>80	> 2% increase
lab control						
receiving water control						
conc. 1 (%)						
conc. 2 (%)						
conc. 3 (%)						
conc. 4 (%)						
conc. 5 (%)						
conc. 6 (%)						
stat test used						

place * next to values statistically different from controls

for trout show final wt and % incr for both controls

Reference toxicant

	water flea		trout	
	A-NOEL	C-NOEL	A-NOEL	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 (Fresh Water Version), March 2007."

ATTACHMENT C

Salmonid Survival and Growth Test

The Salmonid survival and growth test must follow the procedures for the fathead minnow larval survival and growth tests detailed in USEPA's freshwater acute and chronic methods manuals with the following Department modifications:

Species - Brook Trout, *Salvelinus fontinalis*, or other salmonid approved by the Department.

Age - Less than six months old for the first test each year and less than twelve months for subsequent tests.

Size - The largest fish must not be greater than 150% of the smallest.

Loading Rate - < 0.5 g/l/day

Feeding rate - 5% of body weight 3 times daily (15%/day)

Temperature - 12° ± 1°C

Dissolved Oxygen - 6.5 mg/l ,aeration if needed with large bubbles (> 1 mm diameter) at a rate of <100/min

Dilution Water - Receiving water upstream of discharge (or other ambient water approved by the Department)

Dilution Series - A minimum of 5 effluent concentrations (including the instream waste concentrations bracketing acute and chronic dilutions calculated pursuant to Section D); a receiving water control; and control of known suitable water quality

Duration - Acute = 48 hours
- Chronic = 10 days minimum

Test acceptability - Acute = minimum of 90% survival in 2 days
- Chronic = minimum of 80% survival in 10 days; minimum growth of 20 mg/gm/d dry weight in controls, (individual fish weighed, dried at 100°C to constant weight and weighed to 3 significant figures)

ATTACHMENT D

Maine Department of Environmental Protection

WET and Chem

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)	f

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 - July 1, 2015

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

FRESH WATER VERSION

Please see the footnotes on the last page.

	WHOLE EFFLUENT TOXICITY		Effluent Limits, %			Receiving Water or Ambient	Effluent Concentration (ug/L or as noted) WET Result, % Do not enter % sign	Reporting Limit Check	Possible Exceedence [7]		
			Acute	Chronic					Acute	Chronic	
	Trout - Acute										
	Trout - Chronic										
	Water Flea - Acute										
	Water Flea - Chronic										
	WET CHEMISTRY										
	pH (S.U.) (9)										
	Total Organic Carbon (mg/L)					(8)					
	Total Solids (mg/L)										
	Total Suspended Solids (mg/L)										
	Alkalinity (mg/L)					(8)					
	Specific Conductance (umhos)										
	Total Hardness (mg/L)					(8)					
	Total Magnesium (mg/L)					(8)					
	Total Calcium (mg/L)					(8)					
	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[6]			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 Chem
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

	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								
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									
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.

Comments:

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											
5											
6											
7											
8											
9											
10											
11											
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22											
23											
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

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

Doc Num: DEPLW0464

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

DEP-49-CSO-Non-Dedicated.xls (rev. 12/12/01)

DATE	SECONDARY BYPASS FLOW DATA						CI RESIDUALS				BACTERIA							BOD5					TSS					WEATHER				
MONTH_____ YEAR_____	TREATED SECONDARY FLOW BYPASSED SECONDARY	PRIMARY CLARIFIER SURFACE AREA	BYPASS DURATION	SECONDARY CLARIFIER SURFACE LOADING RATE	SECONDARY FLOW TREATED	TRUE CSO BYPASS AROUND PRIMARY	MAX CHLORINE DOSE	CHLORINE RESIDUAL IN PRIMARY EFFLUENT	CHLORINE 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 PRIMARY EFFLUENT	PRIMARY EFFLUENT	PRIMARY EFFLUENT	PERCENT REMOVAL	SECONDARY EFFLUENT	CALCULATED BLENDED EFFLUENT	PRIMARY EFFLUENT	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	#/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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29																																
30																																
31																																
Total																																
Avr																																
Max																																

Number of discharge days

Avr																																
Max																																

ATTACHMENT G

MEPDES PERMIT REQUIREMENTS
FOR
INDUSTRIAL PRETREATMENT ANNUAL REPORT

The information described below shall be included in the pretreatment program annual reports:

1. An updated list of all industrial users by category, as set forth in federal regulation 40 CFR Part 403.8 and Department rule 06-096 CMR Chapter 528(9) indicating compliance or noncompliance with the following:

   - baseline monitoring reporting requirements for newly promulgated industries
   - compliance status reporting requirements for newly promulgated industries
   - periodic (semi-annual) monitoring reporting requirements,
   - categorical standards, and
   - local limit.

2. A summary of compliance and enforcement activities during the preceding year, including the number of:

   - significant industrial users inspected by POTW (include inspection dates for each industrial user);
   - significant industrial users sampled by POTW (include sampling dates for each industrial user);
   - compliance schedules issued (include list of subject users);
   - written notices of violations issued (include list of subject users);
   - administrative orders issued (include list of subject users),
   - criminal or civil suits filed (include list of subject users); and
   - penalties obtained (include list of subject users and penalty amounts).

3. A list of significantly violating industries required to be published in a local newspaper in accordance with federal regulation 40 CFR Part 403.8(f)(2)(viii) and Department rule 06-096 CMR Chapter 528(9)(f)(2)(vii).

4. A narrative description of program effectiveness including present and proposed changes to the program, such as funding, staffing, ordinances, regulations, rules and/or statutory authority.

5. A summary of all pollutant analytical results for influent, effluent, sludge and any toxicity or bioassay data from the wastewater treatment facility. The summary shall include a comparison of influent sampling results versus threshold inhibitory concentrations for the POTW and effluent sampling results versus water quality standards. Such a comparison shall be based on the sampling program described in the paragraph below or any similar sampling program described in this permit.

MEPDES PERMIT REQUIREMENTS
FOR
INDUSTRIAL PRETREATMENT ANNUAL REPORT

At a minimum, annual sampling and analysis of the influent and effluent of the POTW shall be conducted for the following pollutants:

a.) Total Cadmium	f.) Total Nickel
b.) Total Chromium	g.) Total Silver
c.) Total Copper	h.) Total Zinc
d.) Total Lead	i.) Total Cyanide
e.) Total Mercury	j.) Total Arsenic

The sampling program shall consist of one 24-hour, flow-proportioned, composite and at least one grab sample that is representative of the flows received by the POTW. The composite shall consist of hourly, flow-proportioned grab samples taken over a 24-hour period if the sample is collected manually, or shall consist of a minimum of 48 samples collected at 30-minute intervals if an automated sampler is used. Cyanide shall be taken as a grab sample during the same period as the composite sample. Sampling and preservation shall be consistent with federal regulation 40 CFR Part 136.

6. A detailed description of all interference and pass-through that occurred during the past year.

7. A thorough description of all investigations into interference and pass-through during the past year.

8. A description of monitoring, sewer inspections and evaluations which were done during the past year to detect interference and pass-through, specifying parameters and frequencies.

9. A description of actions being taken to reduce the incidence of significant violations by significant industrial users.

10. The date of the latest adoption of local limits and an indication as to whether or not the City is under a State or Federal compliance schedule that includes steps to be taken to revise local limits.

ATTACHMENT H

RE-ASSESSMENT OF TECHNICALLY BASED INDUSTRIAL DISCHARGE LIMITS

Pursuant to federal regulation 40 CFR Part 122.21(j)(4) and Department rule Chapter 528, all Publicly Owned Treatment Works (POTWs) with approved Industrial Pretreatment Programs (IPPs) shall provide the Department with a written evaluation of the need to revise local industrial discharge limits under federal regulation 40 CFR Part 403.5(c)(1) and Department rule 06-096 CMR Chapter 528(6).

Below is a form designed by the U.S. Environmental Protection Agency (EPA - New England) to assist POTWs with approved IPPs in evaluating whether their existing Technically Based Local Limits (TBLLs) need to be recalculated. The form allows the permittee and Department to evaluate and compare pertinent information used in previous TBLLs calculations against present conditions at the POTW. **Please read the directions below before filling out the attached form.**

ITEM I.

* In Column (1), list what your POTW's influent flow rate was when your existing TBLLs were calculated. In Column (2), list your POTW's present influent flow rate. Your current flow rate should be calculated using the POTW's average daily flow rate from the previous 12 months.

* In Column (1) list what your POTW's SIU flow rate was when your existing TBLLs were calculated. In Column (2), list your POTW's present SIU flow rate.

* In Column (1), list what dilution ratio and/or 7Q10 value was used in your previous MEPDES permit. In Column (2), list what dilution ration and/or 7Q10 value is presently being used in your reissued MEPDES permit.

  The 7Q10 value is the lowest seven day average flow rate, in the river, over a ten-year period. The 7Q10 value and/or dilution ratio used by the Department in your MEPDES permit can be found in your MEPDES permit "Fact Sheet."

* In Column (1), list the safety factor, if any, that was used when your existing TBLLs were calculated.

* In Column (1), note how your bio-solids were managed when your existing TBLLs were calculated. In Column (2), note how your POTW is presently disposing of its biosolids and how your POTW will be disposing of its biosolids in the future.

ITEM II.

* List what your existing TBLLs are - as they appear in your current Sewer Use Ordinance (SUO).

RE-ASSESSMENT OF TECHNICALLY BASED INDUSTRIAL DISCHARGE LIMITS

ITEM III.

* Identify how your existing TBLLs are allocated out to your industrial community. Some pollutants may be allocated differently than others, if so please explain.

ITEM IV.

* Since your existing TBLLs were calculated, identify the following in detail:

  (1) if your POTW has experienced any upsets, inhibition, interference or pass-through as a result of an industrial discharge.

  (2) if your POTW is presently violating any of its current MEPDES permit limitations - include toxicity.

ITEM V.

* Using current sampling data, list in Column (1) the average and maximum amount of pollutants (in pounds per day) received in the POTW's influent. Current sampling data is defined as data obtained over the last 24 month period.

  All influent data collected and analyzed must be in accordance with federal regulation 40 CFR Part 136. Sampling data collected should be analyzed using the lowest possible detection method(s), e.g. graphite furnace, or other approved method.

  Based on your existing TBLLs, as presented in Item II., list in Column (2) each Maximum Allowable Industrial Headworks Loading (MAIHL) value corresponding to each of the local limits derived from an applicable environmental criteria or standard, *e.g.* water quality, sludge, MEPDES permit, inhibition, etc. For each pollutant, the MAIHL equals the calculated Maximum Allowable Headwork Loading (MAHL) minus the POTW's domestic loading source(s). For more information, please see, *Local Limits Development Guidance (July 2004).*

ITEM VI.

* Using current sampling data, list in Column (1) the average and maximum amount of pollutants (in micrograms per liter) present your POTW's effluent. Current sampling data is defined as data obtained during the last 24 month period.

  All effluent data collected and analyzed must be in accordance with federal regulation 40 CFR Part 136. Sampling data collected should be analyzed using the lowest possible detection method(s), *e.g.* graphite furnace, or other approved method.

RE-ASSESSMENT OF TECHNICALLY BASED INDUSTRIAL DISCHARGE LIMITS

* List in Column (2A) what the Ambient Water Quality Criteria (AWQC) (found in Department rule Chapter 584 –*Surface Water Quality Criteria For Toxic Pollutants, Appendix A,* October 2005) were (in micrograms per liter) when your TBLLs were calculated. Please note what hardness value was used at that time. Hardness should be expressed in milligrams per liter of Calcium Carbonate. In the absence of a specific AWQC, control(s) adequate to protect the narrative water quality standards for the receiving water may be applied.

List in Column (2B) the current AWQC values for each pollutant multiplied by the dilution ratio used in your reissued MEPDES permit. For example, with a dilution ratio of 25:1 at a hardness of 20 mg/l - Calcium Carbonate (copper's chronic freshwater AWQC equals 2.36 ug/l) the chronic MEPDES permit limit for copper would equal 45 ug/l. Example calculation:

EOP concentration = [Dilution factor x 0.75 x AWQC] + [0.25 x AWQC]
Chronic AWQC = 2.36 ug/L

Chronic EOP = [25 x 0.75[(1)] x 2.36 ug/L] + [0.25 x 2.36 ug/L] = 45 ug/L

(1) Department rule Chapter 530, *Surface Water Toxics Control Program*, October 2005) requires that 10% of the AWQC be set aside for background that may be present in the receiving water and 15% of the AWQC be set aside as a reserve capacity for new dischargers or expansion of existing discharges.

ITEM VII.

* In Column (1), list all pollutants (in micrograms per liter) limited in your reissued MEPDES permit. In Column (2), list all pollutants limited in your previous MEPDES permit.

ITEM VIII.

* Using current sampling data, list in Column (1) the average and maximum amount of pollutants in your POTW's biosolids. Current data is defined as data obtained during the last 24-month period. Results are to be expressed as total dry weight.

All biosolids data collected and analyzed must be in accordance with federal 40 CFR Part 136.

In Column (2A), list current State and/or Federal sludge standards that your facility's biosolids must comply with. Also note how your POTW currently manages the disposal of its biosolids. If your POTW is planning on managing its biosolids differently, list in Column (2B) what your new biosolids criteria will be and method of disposal.

If you have any questions, please contact the State Pretreatment Coordinator at the Maine Department of Environmental Protection, Bureau of Land & Water Quality, Division of Water Quality Management, State House Station #17, Augusta, ME. 04333. The telephone number is (207) 287-8898, and the email address is james.r.crowley@maine.gov.

REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

POTW Name & Address : _____

MEDES Permit # : _____

Date EPA approved current TBLLs : _____

Date EPA approved current Sewer Use Ordinance : _____

ITEM I.

In Column (1) list the conditions that existed when your current TBLLs were calculated. In Column (2), list current conditions or expected conditions at your POTW.

	Column (1)	**Column (2)**
	EXISTING TBLLs	PRESENT CONDITIONS
POTW Flow (MGD)	_____	_____
SIU Flow (MGD)	_____	_____
Dilution Ratio or 7Q10 from the MEPDES Permit)	_____	_____
Safety Factor	_____	_____
Biosolids Disposal Method(s)	_____	_____

REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

ITEM II.

EXISTING TBLLs

POLLUTANT	NUMERICAL LIMIT (mg/l) or (lb/day)	POLLUTANT	NUMERICAL LIMIT (mg/l) or (lb/day)

ITEM III.

Note how your existing TBLLs, listed in Item II., are allocated to your Significant Industrial Users (SIUs), i.e. uniform concentration, contributory flow, mass proportioning, other. Please specify by circling.

ITEM IV.

Has your POTW experienced any upsets, inhibition, interference or pass-through from industrial sources since your existing TBLLs were calculated?

If yes, explain. _____

_____

Has your POTW violated any of its MEPDES permit limits and/or toxicity test requirements?

If yes, explain. _____

_____

REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

ITEM V.

Using current POTW influent sampling data fill in Column (1). In Column (2), list your Maximum Allowable Industrial Headwork Loading (MAIHL) values used to derive your TBLLs listed in Item II. In addition, please note the environmental criteria for which each MAIHL value was established, *i.e.* water quality, sludge, MEPDES, etc.

Pollutant	**Column (1)** Influent Data Analyses		**Column (2)** MAIHL Values	Criteria
	Maximum (lb/day)	Average (lb/day)	(lb/day)	
Arsenic				
Cadmium				
Chromium				
Copper				
Cyanide				
Lead				
Mercury				
Nickel				
Silver				
Zinc				
Other (List)				

REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

ITEM VI.

Using current POTW effluent sampling data, fill in Column (1). In Column (2A) list what the Ambient Water Quality Criteria (AWQC) were at the time your existing TBLLs were developed. List in Column (2B) current AWQC values multiplied by the dilution ratio used in your reissued MEPDES permit.

	Column (1) Effluent Data Analyses		**Columns (2A)** Water Quality Criteria (AWQC)	**(2B)**
	Maximum (ug/l)	Average (ug/l)	From TBLLs (ug/l)	Today (ug/l)
Pollutant				
Arsenic				
Cadmium*				
Chromium*				
Copper*				
Cyanide				
Lead*				
Mercury				
Nickel*				
Silver				
Zinc*				
Other (List)				

*Hardness Dependent (mg/l - CaCO3)

RE-ASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

ITEM VII.

In Column (1), identify all pollutants limited in your reissued MEPDES permit. In Column (2), identify all pollutants that were limited in your previous MEPDES permit.

Column (1) REISSUED PERMIT		**Column (2)** PREVIOUS PERMIT	
Pollutants	Limitations (ug/l)	Pollutants	Limitations (ug/l)

ITEM VIII.

Using current POTW biosolids data, fill in Column (1). In Column (2A), list the biosolids criteria that were used at the time your existing TBLLs were calculated. If your POTW is planning on managing its biosolids differently, list in Column (2B) what your new biosolids criteria would be and method of disposal.

	Column (1) Biosolids Data Analyses Average (mg/kg)	**Columns (2A)** Biosolids Criteria From TBLLs (mg/kg)	**(2B)** New (mg/kg)
Pollutant			
Arsenic			
Cadmium			
Chromium			
Copper			
Cyanide			
Lead			
Mercury			
Nickel			
Silver			
Zinc			
Molybdenum			
Selenium			
Other (List)			

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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
MAINE WASTE DISCHARGE LICENSE

INTERNAL DRAFT
FACT SHEET

DATE: **March 8, 2016**

PERMIT NUMBER: **ME010478**

WASTE DISCHARGE LICENSE: **W000682-5M-K-R**

APPLICANT INFORMATION:

LEWISTON-AUBURN WATER POLLUTION CONTROL AUTHORITY
P.O. Box 1928
Lewiston, Maine 04241

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

535 Lincoln Street
Lewiston, Maine 04241

RECEIVING WATER/CLASSIFICATION: **Androscoggin River/ Class C**

COGNIZANT OFFICIAL CONTACT INFORMATION:

Mr. Clayton Richardson, Superintendent
(207) 782-0917
e-mail: crichardson@lawpca.org

1. APPLICATION SUMMARY

a. Application: The Lewiston-Auburn Water Pollution Control Authority (LAWPCA) has submitted a timely and complete application to the Department for the renewal of combination Waste Discharge License (WDL) #W000682-5M-G-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME00101478, which was issued on July 24, 2008, and expired on July 24, 2013. The 7/24/08 permit authorized a monthly average discharge of 14.2 million gallons per day (MGD) of secondary treated municipal wastewaters from a publicly owned treatment works (POTW), allowed the use of a secondary treatment bypass structure at the facility as well as the discharge of an unspecified quantity of untreated combined sanitary and stormwater from one (1) combined sewer overflow (CSO) point to the Androscoggin River, Class C, in Lewiston, Maine.

1. **APPLICATION SUMMARY (cont'd)**

It is noted that the Department issued two minor permit revisions to the 7/24/08 permit as follows; 1) December 3, 2010, a revision established and implemented an Asset Management Program and established a repair and replacement account to comply with the 2010 Clean Water State Revolving Fund requirements and 2) February 6, 2012, a revision modified the mercury monitoring frequency from 4/Year to 1/Year pursuant to Pursuant to 38 M.R.S.A. §420(1-B)(F).

b. Source Description: LAWPCA owns and operates a wastewater treatment facility to provide wastewater treatment services for the Cities of Lewiston and Auburn. A map showing the location of the facility and discharge location is included as **Attachment A** of this fact sheet. Estimates of plants flows from the two cities indicate that approximately 20% of the sewers contributing to the plant are combined (storm water and sanitary wastewater) and 25% of the dry weather flow is from industrial or commercial sources. In 2012, the average flow from industries included in LAWPCA's industrial pretreatment program was estimated to be approximately 604,631 gallons per day, approximately 4.3% of the plant's average daily and permitted average flow.

Combined sewer overflows (CSOs) exist on both the Lewiston and Auburn sewer systems and are permitted by the Department separately (City of Lewiston #ME0100005 and Auburn Sewerage District #ME0100994) from the wastewater treatment facility. LAWPCA has one permitted CSO on its property on the Lewiston interceptor. This outfall is generally referred to as Outfall #002 or "Structure B". During periods of high flow the collection system may receive excess flows. To effectively operate during these periods the treatment facility staff maintains a Wet Weather Management Plan, last revised in February 2013.

LAWPCA is responsible for the industrial pretreatment program in both cities. Currently there are 21 Significant Industrial Users (SIU) involved in the Authority's industrial pretreatment program. LAWPCA's program was first approved by the USEPA on September 12, 1984 and LAWPCA's local limits were approved by USEPA on December 1, 1995.

LAWPCA is authorized to receive and introduce into the treatment process a daily maximum of up to 40,000 GPD of transported wastes in the form of septage in accordance with the terms and conditions of this permit and *Standards for the Addition of Transported Wastes to Waste Water Treatment Facilities,* 06-096 CMR 555 (last amended February 5, 2009). It is noted the facility also receives up to 40,000 gpd of digestor feedstock waste at the facility but the waste is not introduced into the headworks or the solids handling waste stream but are pumped directly to the anaerobic digestors to generate electricity. Any liquid waste from the digestor/energy cycle introduced into the waste water treatment process is similar to or has compatible chemical composition and strength to the influent typically received at the treatment facility. As a result, 06-096 CMR 555 does not apply to this waste stream.

1. APPLICATION SUMMARY (cont'd)

c. Wastewater Treatment: The wastewater treatment facility provides a secondary level of treatment using an activated sludge process that employs selector/contact stabilization modification of the activated sludge process in order to handle variations in influent flow and wastewater strength. A schematic of the treatment facility is included as **Attachment B** of this fact sheet. After metering flows from both cities independently, the flows are combined and conveyed through two bar screens for removal of large solids. The screened wastewater is pumped to two aerated grit chambers (37,700 gallons each) using three pumps with a pumping capacity of 32 MGD (with one of the three pumps off-line). Following grit removal, the wastewater flows by gravity through two primary sedimentation basins (409,000 gallons each) and to the secondary system (two aeration basins of 1,390,000 gallons each and two secondary clarifiers of 1,140,000 gallons each). The aeration basins and secondary clarifiers are generally operated in parallel as two separate and independent systems. When flows exceed the capacity of the secondary system, a portion of the primary effluent can be bypassed around the aeration basins and secondary clarifiers. The bypassed flow is recombined with the secondary clarifier effluent prior to chlorine injection. All flows are seasonally disinfected using sodium hypochlorite and then dechlorinated using sodium bisulfite prior to discharge. LAWPCA replaced the gas chlorine system with a liquid sodium hypochlorite prior to the start of the 2009 disinfection season.

Screenings are disposed of by the LAWPCA at a local incinerator. Grit and primary sedimentation basin scum and grease are disposed of by the LAWPCA via landfill disposal. Primary sludge is thickened in gravity thickeners and secondary sludge is thickened using two 2.0 Meter gravity belt thickeners prior to being pumped to the anaerobic digestion system. The digested sludge is then dewatered using two screw presses that will be installed in April 2016. The dewatered sludge may then be composted at LAWPCA's compost facility in Auburn, utilized on farm land or sent to a private composting facility.

Septage is received into LAWPCA's septage receiving facility consisting of a coarse bar screen, a 15,000-gallon tank (with aeration), ultrasonic level measurement and a motor driven PLC controlled pinch valve. The septic tank waste after coarse screening and aeration enters the waste stream just after the Parshall flumes used to measure plant flow and just upstream of the influent bar screens. In addition to septage, the facility is authorized to receive digestor feedstock waste in a separate 15,000 gallon tank to generate electricity at the facility.

The final effluent is discharged to the Androscoggin River via a 60-inch diameter reinforced concrete pipe extending approximately 265 feet out into the river. The single-port, 6-inch diameter Outfall #001C discharges vertically upward at right angles to the effluent conveyance pipe and is approximately 5 feet below the mean low water level.

2. PERMIT SUMMARY

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

Outfall #001C – Secondary treated or blended effluent

1. Revising the minimum monitoring frequencies for Outfall #001C for biochemical oxygen demand (BOD_5), total suspended solids (TSS) and *E. coli* bacteria from 5/Week to 3/Week based on a statistical evaluation of test results for the most current 43 months.

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. Establishing monthly average and daily maximum water quality based mass limits for total aluminum based on a statistical evaluation of test results for the most current 60 months that indicates the discharge has a reasonable potential to exceed the acute and chronic ambient water quality criteria (AWQC) for total aluminum.

4. Establishing a more stringent daily maximum water quality based mass limit for total copper based on a statistical evaluation of test results for the most current 60 months indicates the discharge has a reasonable potential to exceed the acute AWQC for total copper.

5. Eliminating the daily maximum concentration limit for total copper pursuant to 06-096 CMR Chapter 530 §3(D)(1).

6. Establishing numeric daily maximum water quality based mass limitations for BOD and TSS on the discharge of blended effluent to be consistent with National CSO Control Policy.

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

May 23, 2000 – The Department administratively modifying WDL #W000682-5T-F-R by establishing interim limits for the discharge of mercury.

January 12, 2001 – The Department received authorization from the U. S. Environmental Protection Agency (USEPA) to administer the National Pollutant Discharge Elimination System (NPDES) permitting program in Maine.

2. PERMIT SUMMARY (cont'd)

March 14, 2003 – The Department administratively modified the 12/31/02 permit to modify the sampling location for settleable solids for Outfall #001C.

July 15, 2003 – The Department administratively modified the 12/31/02 permit to eliminate the first five conditions specified in Special Condition K, Schedule of Compliance, based on Department approval of plans and specifications for a dechlorination and aeration basin improvement project.

November 18, 2005 – The Department administratively modified the 12/31/02 permit to correct two technical errors regarding bacteria and TRC limitations for Outfall #001D. The administrative modification eliminated the monthly average limitations for Escherichia coli bacteria and total residual chlorine.

July 24, 2008 – The Department issued combination WDL # W000682-5M-H-R MEPDES permit #ME 0101478 for a five-year term. The July 24, 2008 permit superseded previous WDLs issued on December 31, 2002, September 19, 2000, August 12, 1996, and September 16, 1986.

December 3, 2010 – The Department administratively modified the 7/24/08 permit to incorporate Special Conditions to establish and implement an Asset Management Program and establish a repair and replacement account to comply with the 2010 Clean Water State Revolving Fund requirements.

February 6, 2012 – The Department issued a minor revision of the 7/24/08 permit for reduction of mercury testing frequency from 4/Year to 1/Year based on Certain deposits and discharges prohibited, 38 M.R.S.A., § 420 sub-§1-B(F).

March 12, 2013 – The LAWPCA submitted a timely and complete General Application to the Department for renewal of the 7/24/08 MEPDES permit. The application was accepted for processing on March 13, 2013 and was assigned WDL #W000682-6D-K-R / MEPDES #ME0101478.

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 (effective October 9, 2005), 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 major river basins, 38 M.R.S.A. § 467(1)(A)(2) classifies the Androscoggin River, main stem, as Class C waters. *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465(4) describes the standards for Class C waters. Maine law, 38 M.R.S.A., Section 465(4) describes the standards for Class C waters as follows:

A. Class C waters must be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as a habitat for fish and other aquatic life.

B. The dissolved oxygen content of Class C water may be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained. In order to provide additional protection for the growth of indigenous fish, the following standards apply.

(1) The 30-day average dissolved oxygen criterion of a Class C water is 6.5 parts per million using a temperature of 22 degrees centigrade or the ambient temperature of the water body, whichever is less, if:

(a) A license or water quality certificate other than a general permit was issued prior to March 16, 2004 for the Class C water and was not based on a 6.5 parts per million 30-day average dissolved oxygen criterion; or

(b) A discharge or a hydropower project was in existence on March 16, 2005 and required but did not have a license or water quality certificate other than a general permit for the Class C water. This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004.

(2) In Class C waters not governed by subparagraph (1), dissolved oxygen may not be less than 6.5 parts per million as a 30-day average based upon a temperature of 24 degrees centigrade or the ambient temperature of the water body, whichever is less. This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004. The department may negotiate and enter into agreements with licensees and water quality certificate holders in order to provide further protection for the growth of indigenous fish. Agreements entered into under this paragraph are enforceable as department orders according to the provisions of sections 347-A to 349.

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

Between May 15th and September 30th, the number of Escherichia coli bacteria of human and domestic animal origin in Class C waters may not exceed a geometric mean of 126 per 100 milliliters or an instantaneous level of 236 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures. The board shall adopt rules governing the procedure for designation of spawning areas. Those rules must include provision for periodic review of designated spawning areas and consultation with affected persons prior to designation of a stretch of water as a spawning area.

C. *Discharges to Class C waters may cause some changes to aquatic life, except that the receiving waters must be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community. This paragraph does not apply to aquatic pesticide or chemical discharges approved by the department and conducted by the department, the Department of Inland Fisheries and Wildlife or an agent of either agency for the purpose of restoring biological communities affected by an invasive species.*

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists a 17.65-mile reach of the Androscoggin River main stem from the Little Androscoggin River to the Pejepscot Dam (Hydrologic Unit Code #ME0104000210 / Waterbody ID #425R_01) which falls under the following categories.

The Report lists all of Maine's fresh waters as, "*Category 4-A: Waters Impaired by Atmospheric Deposition of Mercury.*" Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, "All freshwaters are listed in Category 4A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Health and Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption.

Maine has already instituted statewide programs for removal and reduction of mercury sources." Pursuant to 38 M.R.S.A. § 420(1-B)(B), "a facility is not in violation of the ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413 subsection 11." The Department has established interim monthly average and daily maximum mercury concentration limits and reporting requirements for this facility pursuant to 06-096 CMR 519.

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

"Category 4-B: Rivers and Streams Impaired by Pollutants – Pollution Control Requirements Reasonably Expected to Result in Attainment." Impairment in this context refers to a statewide fish consumption advisory due to the presence of dioxin in fish tissue. The report indicates standards are expected to be met in 2020 give the imposition of dioxin limits in permits.

"Category 4-C: Rivers and Streams with Impairment not Caused by a Pollutant." Impairment in this context refers to the inadequate fish passage in Brunswick from Pejepscot Dam to the Brunswick Dam prohibiting migration of American Shad.

"Category 5-D: Rivers and Streams Impaired by Legacy Pollutants." Impairment in this context refers to polychlorinated biphenyls (PCBs). Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs.

The Department has no information at this time that the discharge from the LAWPCA facility will cause or contribute to the failure of the receiving water to meet the designated uses of its ascribed classification.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

Outfall #001C – Secondary Treated and Blended Waste Water

a. Flow: The monthly average dry weather design capacity of the treatment facility is 14.2 MGD. The previous permitting action established a monthly average and daily maximum discharge flow reporting requirement for Outfall #001C. The permit requires the permittee to convey a minimum of 25 MGD to the secondary treatment components of the plant before it is allowed to bypass secondary treatment. The facility is capable of providing secondary treatment for flows between 14.2 MGD and 25 MGD for extended periods of time. As a result, monthly average flows receiving secondary treatment would exceed the dry weather flow limit of 14.2 MGD if established in the permit and result in nuisance violations of the permit and possibly put the facility in the category of significant non-compliance. Therefore, reporting monthly average and daily maximum flow values are being carried forward in this permit.

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

Outfall #001C – Secondary Treated and Blended Waste Water

A review of the monthly Discharge Monitoring Reports (DMRs) for the period January 2012 – July 2015 indicates values have reported as follows:

Flow (n=43)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	Report	6.21 – 15.28	10.3
Daily Maximum	Report	6.82 – 30.8	20.8

b. Dilution Factors: Dilution factors associated with the permitted discharge flow of 14.2 MGD from the facility were derived in accordance with 06-096 CMR 530(4)(A) and were calculated as follows:

Mod. Acute: ¼ 1Q10 = 259 cfs $\Rightarrow \frac{(259 \text{ cfs})(0.6464) + 14.2 \text{ MGD}}{14.2 \text{ MGD}} = 12.8{:}1$

Acute: 1Q10 = 1,035 cfs $\Rightarrow \frac{(1{,}035 \text{ cfs})(0.6464) + 14.2 \text{ MGD}}{14.2 \text{ MGD}} = 48.1{:}1$

Chronic: 7Q10 = 1,958 cfs $\Rightarrow \frac{(1{,}958 \text{ cfs})(0.6464) + 14.2 \text{ MGD}}{14.2 \text{ MGD}} = 90.1{:}1$

Harmonic Mean = 4,180 cfs $\Rightarrow \frac{(4{,}180 \text{ cfs})(0.6464) + 14.2 \text{ MGD}}{14.2 \text{ MGD}} = 191.3{:}1$

06-096 CMR 530(4)(B)(1) states,

Analyses using numerical acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone and to ensure a zone of passage of at least 3/4 of the cross-sectional area of any stream as required by Chapter 581. Where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design flow, up to and including all of it, as long as the required zone of passage is maintained.

The Department's Division of Environmental Assessment (DEA) has determined that mixing of the effluent with the receiving water is not rapid and complete and recommends that acute evaluations be based on the default stream design flow of ¼ of the 1Q10 in accordance with 06-096 CMR 530(4)(B)(1).

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

Outfall #001C – Secondary Treated & Blended Waste Water

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 best professional judgment (BPJ) of best practicable treatment (BPT) for secondary treated municipal wastewater.

The technology-based monthly average and weekly average mass limits of 3,553 lbs/day 5,329 lbs/day, respectively, established in the previous permitting action for BOD_5 and TSS are also being carried forward in this permitting action. 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 limit of 14.2 MGD. The mass limits were derived as follows:

Monthly average: (14.2 MGD)(8.34)(30 mg/L) = 3,553 lbs/day
Weekly average: (14.2 MGD)(8.34)(45 mg/L) = 5,329 lbs/day

A reviewed of the monthly DMRs data for the period January 2012 – July 2015 indicates values have reported as follows:

BOD_5 Mass(n=43)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	3,553	570 – 3,210	1,213
Weekly Average	5,329	695 – 4,477	1,808
Daily Maximum	Report	1,528 – 13,094	4,249

BOD_5 Concentration(n=43)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	7.7 - 22	13
Weekly Average	45	8 - 43	17
Daily Maximum	50	13 - 163	32

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

Outfall #001C – Secondary Treated & Blended Waste Water

TSS mass(n=43)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	3,553	518 – 4,086	1,221
Weekly Average	5,329	638 – 7,953	1,980
Daily Maximum	Report	1,089 – 25,648	5,883

TSS concentration(n=43)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	7.2 - 30	13
Weekly Average	45	7 - 69	18
Daily Maximum	50	15 - 350	43

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.

Although EPA's 1996 Guidance recommends evaluation of the most current two years of effluent data for a parameter, the Department is considering 43 months of data (January 2012 – July 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 34% for both BOD and TSS. According to Table I of the EPA Guidance and Department Guidance, a 5/Week monitoring requirement can be reduced to 3/Week. Therefore, this permitting action is reducing the monitoring frequency for BOD and TSS from 5/Week to 3/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 given the collection system is still a combined sewer system with an active CSO outfall.

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

Outfall #001C – Secondary Treated and Blended Waste Water

A reviewed of the monthly DMRs data for the period January 2012 – July 2015 indicates values have reported as follows:

BOD % Removal (DMRs=43)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	92 - 98	95

TSS % Removal (DMRs=43)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	90 - 99	95

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 BPT for secondary treated wastewater.

A reviewed of the monthly DMRs data for the period January 2012 – July 2015 indicates values have reported as follows:

Settleable solids concentration (n=43)

Value	Limit (ml/L)	Range (ml/L)	Average (ml/L)
Daily Maximum	0.3	<0.1 – 77	2.8

Given the significant non-compliance between November 2013 and February 2014, the monitoring frequency for settleable solids of 1/Day is being carried forward in this permitting action.

e. *Escherichia coli* bacteria: The previous permitting established, and this permitting action carrying forward, seasonal (May 15-September 30 of each year) monthly average and daily maximum *E. coli* bacteria concentration limits of 126 colonies/100 ml and 949 colonies/100 ml, respectively. The monthly average concentration limit is based on Maine law, 38 M.R.S.A. § 465(4) which requires that the *E. coli* bacteria of human and domestic animal origin in Class C waters may not exceed a geometric mean of 126 colonies/100 ml or an instantaneous level of 236 colonies/100 ml. The Department has determined that end-of-pipe limitations for the instantaneous concentration standard of 236 colonies/100 ml will be achieved through available dilution of the effluent with the receiving waters and need not be revised in MEPDES permits for facilities with adequate dilution, such as that for LAWPCA.

Although *E. coli* bacteria limits are seasonal and apply between May 15 and September 30 of each year, the Department reserves the right to impose year-round bacteria limits if deemed necessary to protect the health, safety and welfare of the public.

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

Outfall #001C – Secondary Treated & Blended Waste Water

A reviewed of the monthly DMRs data for the period May 2012 – July 2015 indicates values have reported as follows:

***E. coli* bacteria (n=18)**

Value	Limit (col/100 ml)	Range (col/100 ml)	Average (col/100 ml)
Monthly Average	126	3 - 34	9
Daily Maximum	949	18 - >2,419	301

A review of the mass monitoring data for *E. coli* bacteria indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as 7%. According to Table I of the EPA Guidance and Department Guidance, a 5/Week monitoring requirement can be reduced to 3/Week. Therefore, this permitting action is reducing the monitoring frequency for *E. coli* bacteria from 5/Week to 3/Week.

The Department of Marine Resources (DMR) in collaboration with the Department of Environmental Protection is establishing *E. coli* bacteria testing at a frequency of 1/Month during the non-summer months for one year beginning in the winter of 2016 at waste water treatment plant (WWTP) outfalls in the upper Kennebec and Androscoggin Rivers. This monitoring is being established in an effort to eliminate these point sources of pollution as the cause of a public health risk to shellfish harvest in the lower river.

In 2001, the USFDA investigation of the Kennebec River Estuary concluded that high river flow due to rain events negatively impacts water quality (increased fecal coliform) in the lower river. Because of this, DMR was required to manage shellfish harvest based on a river flow management plan. There is significant soft-shell clam resource in the lower Kennebec River; in the most recent years this area supports eighty seven commercial shellfish licenses and contributes over $867,000 dollars to the Maine economy. This plan was implemented in 2009 by DMR and required that the river close to shellfish harvest for a minimum of fourteen days when flow exceeded 30K cubic feet per second (cfs). After implementation, closures based on the new plan resulted in an almost 50% reduction in shellfish harvest. In 2010 efforts began by the DMR in partnership with local, regional and state collaborators to collect additional data in the lower river after high flow events to make adjustments to the river flow management plan. Data collected from this effort significantly increased shellfish harvest; actual closures and the duration of closures times were both reduced. However, no change was made to the plan since 2009 during the fall and early winter months because of the persistent high levels of fecal pollution during high flow events greater than 30,000 cfs.

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

Outfall #001C – Secondary Treated & Blended Waste Water

These data collected in the lower river suggest that the major impacts associated with the water quality degradation are attributed to upriver pollution sources. There is a significant presence of both point and non-point pollution sources in the Kennebec and Androscoggin River watersheds, with the majority of the largest sources located north of Merrymeeting Bay. These pollution sources include eight municipal WWTPs and six with combined sewer overflows. It is unclear whether or not WWTP's that do not chlorinate year round and specifically in the fall season, contribute to the elevated and persistent high fecal scores in the lower river. DMR's request to sample for one year at each of the WWTP will allow them to assess the impacts and contributions of each WWTP (or lack thereof) and make recommendations for additional chlorination if it is necessary.

f. Total Residual Chlorine (TRC): The previous permitting action established a water quality-based monthly average concentration limit of 0.24 mg/L and a daily maximum technology based concentration limit of 0.1 mg/L for TRC. 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:

			Calculated	
Acute (A) Criterion	Chronic (C) Criterion	Mod. A & C Dilution Factors	Acute Threshold	Chronic Threshold
0.019 mg/L	0.011 mg/L	12.8:1 (Mod. A) 90.1:1 (C)	0.24 mg/L	1.0 mg/L

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 LAWPCA dechlorinates the effluent prior to discharge in order to achieve compliance with the water quality-based thresholds. The calculated acute water quality-based threshold of 0.24 mg/L is more stringent than the daily maximum technology-based standard of 0.3 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 1.0 mg/L and is therefore being carried forward in this permitting action.

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

Outfall #001C – Secondary Treated & Blended Waste Water

A reviewed of the monthly DMRs data for the period May 2012 – July 2015 indicates values have reported as follows:

Total residual chlorine

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	0.1	0.02 – 0.06	0.03
Daily Maximum	0.24	0.04 – 2.2	0.19

The Department's recently adopted policy on monitoring frequency reductions does not provide reductions for water quality-based limitations. Therefore, the monitoring frequency of 2/Day for total residual chlorine is being carried forward in this permitting action.

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, which is based on 06-096 CMR 525(3)(III).

A reviewed of the monthly DMRs data for the period January 2012 – July 2015 indicates values have reported as follows:

pH

Value	Limit (su)	Minimum (SU)	Maximum (su)
Range	6.0 – 9.0	6.5	7.5

This permit is carrying forward the 1/Day monitoring frequency from the previous permit.

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 #W000682-5T-F-R by establishing interim monthly average and daily maximum effluent concentration limits of 6.5 parts per trillion (ppt) and 9.8 ppt, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury. On February 6, 2012, the Department issued a minor revision to the July 24, 2008 permit thereby revising the minimum monitoring frequency requirement from four times per year to once per year pursuant to 38 M.R.S.A. § 420(1-B)(F). It is noted the limitations have been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit.

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.

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

Outfall #001C – Secondary Treated & Blended Waste Water

A reviewed of the data for the period November 2010 – June 2015 indicates values have reported as follows:

Mercury (n=11)

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Monthly Average	6.5	1.34 – 5.6	4.3
Daily Maximum	9.8		

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.

i. Total phosphorus –*Waste Discharge License Conditions,* 06-096 CMR 523 specifies that water quality based limits are necessary when it has been determined that a discharge has a reasonable potential to cause or contribute to an excursion above any State water quality standard including State narrative criteria.[1] In addition, 06-096 CMR 523 specifies that water quality based limits may be based upon criterion derived from a proposed State criterion, or an explicit State policy or regulation interpreting its narrative water quality criterion, supplemented with other relevant information which may include: EPA's Water Quality Standards Handbook, October 1983, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration, and current EPA criteria documents.[2]

USEPA's Quality Criteria for Water 1986 (Gold Book) puts forth an in-stream phosphorus concentration goal of less than 0.100 mg/L in streams or other flowing waters not discharging directly to lakes or impoundments, to prevent nuisance algal growth. The use of the 0.100 mg/L Gold Book goal is consistent with the requirements of 06-096 CMR 523 noted above for use in a reasonable potential (RP) calculation.

Based on the above rationale, the Department has chosen to utilize the Gold Book goal of 0.100 mg/L. It is the Department's intent to continue to make determinations of actual attainment or impairment based upon environmental response indicators in specific water bodies. The use of the Gold Book goal of 0.100 mg/L for use in the RP calculation will enable the Department to establish water quality based limits in a manner that is reasonable and that appropriately establishes the potential for impairment, while providing an opportunity to acquire environmental response indicator data, numeric nutrient indicator data, and facility data as needed to refine the establishment of site-specific water quality-based limits for phosphorus. Therefore, this permit may be reopened during the term of the permit to modify any reasonable potential calculation, phosphorus limits, or monitoring requirements based on site-specific data.

[1] *Waste Discharge License Conditions,* 06-096 CMR 523(5)(d)(1)(i) (effective date January 12, 2001)
[2] 06-096 CMR 523(5)(d)(1)(vi)(A)

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

Outfall #001C – Secondary Treated & Blended Waste Water

For the background concentration in the Androscoggin River just upstream of the LAWPCA discharge, the Department collected three test results during summer of 2014 and the highest result was 0.019 mg/L which is being utilized in reasonable potential calculations in this Fact Sheet.

To be conservative, the Department is utilizing the maximum background concentration in determining whether the discharge has a reasonable potential to exceed the AWQ goal of 0.100 mg/L and the mean effluent concentration of 0.97 mg/L.

Using the following calculation and criteria, the LAWPCA facility does not have a reasonable potential to exceed the EPA's Gold Book value of 0.100 mg/L for phosphorus or a reasonable potential to exceed the Department's 06-096 CMR Chapter 583 draft criteria of 0.033 mg/L for Class C waters. The calculations are as follows:

$$Cr = \frac{QeCe + QsCs}{Qr}$$

Qe = effluent flow i.e. facility design flow	=	14.2 MGD
Ce = effluent pollutant concentration	=	0.97 mg/L
Qs = 7Q10 flow of receiving water	=	1,266 MGD
Cs = upstream concentration	=	0.019 mg/L
Qr = receiving water flow	=	1,280 MGD
Cr = receiving water concentration	=	?

$$Cr = \frac{(14.2\ MGD \times 0.97\ mg/L) + (1{,}266\ MGD \times 0.019\ mg/L)}{1{,}280\ MGD} = 0.030\ mg/L$$

Cr = 0.030 mg/L < 0.100 mg/L⇒ **No Reasonable Potential**
Cr = 0.030 mg/L < 0.033 mg/L⇒ **No Reasonable Potential**

Therefore, no end-of-pipe limitations or monitoring requirements for total phosphorus are being established in this permit.

j. Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing

38 M.R.S.A. § 414-A and 38 M.R.S.A. § 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. 06-096 CMR 530 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. 06-096 CMR 584 sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

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

Outfall #001C – Secondary Treated & Blended Waste Water

WET, priority pollutant and analytical chemistry testing, as required by 06-096 CMR 530, is included in this permit in order to characterize the effluent. 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 water flea (*Ceriodaphnia dubia*) and vertebrate brook trout (*Salvelinus fontinalis*). Chemical-specific monitoring 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.

06-096 CMR 530(2)(A) specifies the dischargers subject to the rule as:

All licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedences of narrative or numerical water quality criteria.

The LAWPCA discharges municipal wastewater consisting of combined industrial process, commercial, and domestic waste waters to surface waters via Outfall #001C and is therefore subject to the testing requirements of the toxics rule.

This permit 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.

06-096 CMR 530(2)(B) categorizes dischargers subject to the toxics rule into one of four levels (Levels I through IV). Level II dischargers are those dischargers having a chronic dilution factor of greater than 20:1 but less than 100:1. The chronic dilution factor associated with the discharge from the LAWCA is 90.0:1; therefore, this facility is considered a Level II facility for purposes of toxics testing.

06-096 CMR 530(2)(D) specifies routine WET, priority pollutant, and analytical chemistry test schedules for Level II dischargers as follows:

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.

Level	WET Testing	Priority pollutant testing	Analytical chemistry
II	2 per year	1 per year	4 per year

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

Outfall #001C – Secondary Treated & Blended Waste Water

Surveillance level testing – Beginning upon issuance of this permit and lasting through 24 months prior to permit expiration (years 1-3 of the permit) and commencing again 12 months prior to permit expiration (year 5 of the permit).

Level	WET Testing	Priority pollutant testing	Analytical chemistry
II	1 per year	None required	2 per year

WET Evaluation:

06-096 CMR 530(3)(E) states *For effluent monitoring data and the variability of the pollutant in the effluent, the Department shall apply the statistical approach in 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, USEPA, Office of Water, Washington, D.C.) to data to determine whether water-quality based effluent limits must be included in a waste discharge license. Where it is determined through this approach that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedence of water quality criteria, appropriate water quality-based limits must be established in any licensing action.*

On October 17, 2015, the Department conducted a statistical evaluation on the most recent 60 months of WET tests on file with the Department for LAWPCA in accordance with the statistical analysis outlined above. The 10/17/15 statistical evaluation indicates the discharge from the LAWCA facility has not exceeded or demonstrated a reasonable potential to exceed critical acute or chronic ambient water quality thresholds for the water flea or brook trout. See **Attachment C** of this Fact Sheet for a summary of the WET test results.

Given the absence of exceedances or reasonable potential to exceed critical WET thresholds, this permitting action maintains the established reduced surveillance level testing for the water flea and brook trout of (1/2 Years) pursuant to 06-096 CMR 530 (2)(D)(3). Surveillance level testing begins upon issuance of this permit modification and lasts through 24 months prior to permit expiration (years 1-3 of the permit) and commencing again 12 months prior to permit expiration (year 5 of the permit). The intent of this is that at least two WET tests will be conducted during years 1, 2, 3 & 5 of this permit.

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

Outfall #001C – Secondary Treated & Blended Waste Water

06-096 CMR 530 (2)(D)(4) states *All dischargers having waived or reduced testing must file statements with the Department on or before December 31 of each year describing the following.*

(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; and

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

Special Condition J of the previous permit established, *Surface Waters Toxics Control Program Statement For Reduced Toxics Testing* pursuant to 06-096 CMR 530(2)(D)(4). The annual certification statement requirement is being carried forward in this permitting action but is now entitled, *06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing* and is Special Condition L in this permit. This permit provides for reconsideration of testing requirements, including the imposition of certain testing, in consideration of the nature of the wastewater discharged, existing wastewater treatment, receiving water characteristics, and results of testing.

Based on the Department's findings this permitting action maintains the established screening level testing for the water flea and brook trout of (2/Year) pursuant to 06-096 CMR 530 (2)(D)(1). Screening level testing begins 24 months prior to and lasting through 12 months prior to permit expiration (year 4 of the permit) and every five years thereafter.

Analytical Chemistry & Priority Pollutant Testing Evaluation:

Chapter 530 (promulgated on October 12, 2005) §4(C), states *"The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions. The Department shall use the same general methods as those in section 4(D) to determine background concentrations. For pollutants not listed by the Department, an assumed concentration of 10% of the applicable water quality criteria must be used in calculations."* The Department has limited information on the

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

Outfall #001C – Secondary Treated & Blended Waste Water

background levels of metals in the water column in the Androscoggin River in the vicinity of the permittee's outfall. Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

Chapter 530 4(E), states "*In allocating assimilative capacity for toxic pollutants, the Department shall hold a portion of the total capacity in an unallocated reserve to allow for new or changed discharges and non-point source contributions. The unallocated reserve must be reviewed and restored as necessary at intervals of not more than five years. The water quality reserve must be not less than 15% of the total assimilative quantity.*"

However, in May 2012, 38 M.R.S.A. §464(J) was enacted which states, *For the purpose of calculating waste discharge license limits for toxic substances, the department may use any unallocated assimilative capacity that the department has set aside for future growth if the use of that unallocated assimilative capacity would avoid an exceedance of applicable ambient water quality criteria or a determination by the department of a reasonable potential to exceed ambient water quality criteria.*

Chapter 530 §(3)(E) states *"... that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedance of water quality criteria, appropriate water quality-based limits must be established in any licensing action."*

Chapter 530 §4(F) states in part "*Where there is more than one discharge into the same fresh or estuarine receiving water or watershed, the Department shall consider the cumulative effects of those discharges when determining the need for and establishment of the level of effluent limits. The Department shall calculate the total allowable discharge quantity for specific pollutants, less the water quality reserve and background concentration, necessary to achieve or maintain water quality criteria at all points of discharge, and in the entire watershed. The total allowable discharge quantity for pollutants must be allocated consistent with the following principles.*

Evaluations must be done for individual pollutants of concern in each watershed or segment to assure that water quality criteria are met at all points in the watershed and, if appropriate, within tributaries of a larger river.

The total assimilative capacity, less the water quality reserve and background concentration, may be allocated among the discharges according to the past discharge quantities for each as a percentage of the total quantity of discharges, or another comparable method appropriate for a specific situation and pollutant. Past discharges of pollutants must be determined using the average concentration discharged during the past five years and the facility's licensed flow.

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

Outfall #001C – Secondary Treated & Blended Waste Water

The amount of allowable discharge quantity may be no more than the past discharge quantity calculated using the statistical approach referred to in section 3(E) [Section 3.3.2 and Table 3-2 of USEPA's "Technical Support Document for Water Quality-Based Toxics Control"] of the rule, but in no event may allocations cause the water quality reserve amount to fall below the minimum referred to in 4(E) [15% of the total assimilative capacity]. Any difference between the total allowable discharge quantity and that allocated to existing dischargers must be added to the reserve.

The Androscoggin River has multiple dischargers that are subject to the Department's Chapter 530 testing requirements above and below the permittee's facility. The Brunswick Landfill facility is the most downstream fresh water discharger in the watershed.

On July 15, 2015, the Department conducted statistical evaluations based on 15% of the ambient water quality criteria reserve being withheld (Report ID 782) and 0% of the reserve of the criteria being withheld (Report ID 793) to determine if the unallocated assimilative capacity would avoid an exceedance or avoid a reasonable potential to exceed applicable ambient water quality criteria for toxic pollutants. Report ID 793 indicates the LAWPCA facility would no longer have a reasonable potential to exceed the chronic ambient water quality criteria for copper. Therefore, the Department is utilizing the full 15% of the unallocated assimilative capacity in the statistical evaluation when establishing limits for toxic pollutants in waste discharge permits for facilities in the Androscoggin River watershed.

The 7/15/15 statistical evaluation indicates the discharge from the permittee's waste water treatment facility has test results that have a reasonable potential to exceed the both the acute and chronic AWQC for aluminum and the acute AWQC for copper established in 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*. See **Attachment D** of this Fact Sheet for test dates and results for the pollutants of concern.

The Department has prepared guidance that establishes protocols for establishing waste load allocations. See **Attachment E** of this Fact Sheet. The guidance states that the most protective of water quality becomes the facility's allocation. According to the 7/15/15 statistical evaluation, aluminum and copper are to be limited based on the segment allocation method.

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

Outfall #001C – Secondary Treated & Blended Waste Water

Chapter 530 §(3)(D)(1) states "*For specific chemicals, effluent limits must be expressed in total quantity that may be discharged and in effluent concentration. In establishing concentration, the Department may increase allowable values to reflect actual flows that are lower than permitted flows and/or provide opportunities for flow reductions and pollution prevention provided water quality criteria are not exceeded. With regard to concentration limits, the Department may review past and projected flows and set limits to reflect proper operation of the treatment facilities that will keep the discharge of pollutants to the minimum level practicable.*"

In May 2012, Maine law 38 M.R.S.A. §464, ¶¶ K was enacted which reads as follows, "*Unless otherwise required by an applicable effluent limitation guideline adopted by the department, any limitations for metals in a waste discharge license may be expressed only as mass-based limits.*" There are no applicable effluent limitation guidelines adopted by the Department or the USEPA for metals from a publicly owned treatment works.

Segment allocation methodology

For the segment allocation methodology, the historical average quantity (mass) for each pollutant of concern for each facility is calculated utilizing the arithmetic mean of the concentrated values reported for each pollutant, a conversion factor of 8.34 lbs/gallon and the monthly average permit limit for flow. The historical mass discharged for each pollutant for each facility is mathematically summed to determine the total mass discharged for each pollutant in the watershed. Based on the individual discharger's historical average, each discharger is assigned a percentage of the whole which is then utilized to determine the percent of the segment allocation for each pollutant for each facility. For the permittee's facility, the historical averages for aluminum and copper are calculated as follows:

Aluminum:

Mass limits

Mean concentration (n=13) = 142 ug/L or 0.142 mg/L
Permit flow limit = 14.2 MGD
Historical average mass = (0.142 mg/L)(8.34)(14.2 MGD) = 16.87 lbs/day

The 7/15/15 statistical evaluation indicates the historical average mass of aluminum discharged by the permittee's (16.87 lbs/day) is 2.68% of the aluminum discharged by facilities on the main stem of the Androscoggin River. The chronic assimilative capacity (AC) at Brunswick was calculated based on 90% of the applicable AWQC (taking into consideration the 10% reduction to account for background, 0% reduction for reserve, totaling 10%), critical low

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

Outfall #001C – Secondary Treated & Blended Waste Water

flows (7Q10 = 1,715 cfs) at Brunswick less the assimilative capacity allocated to Whitney Brook in Canton (critical low flow 7Q10 = 20 cfs), to Seven Mile Stream in Jay (critical low flow 7Q10 = 2 cfs) to the Little Androscoggin River in Mechanic Falls (critical low flow 7Q10 = 32.5 cfs) and the Sabattus River at Sabattus (critical low flow 7Q10 = 2.5 cfs). These critical low flows will be utilized in all calculations as they pertain to assessing chronic AWQC limitations. The calculation for aluminum is as follows:

Chronic:

7Q10 at Brunswick = 1,715 cfs or 1,109 MGD
7Q10 at Canton = 20 cfs or 12.9 MGD
7Q10 at Jay = 2 cfs or 1.29 MGD
7Q10 at Mechanic Falls= 32.5 cfs or 20.9 MGD
7Q10 at Sabattus = 2.5 cfs or 1.6 MGD

AWQC = 87 ug/L
87 ug/L(0.90) = 78.3 ug/L or 0.0783 mg/L

Chronic AC = 1,109 MGD – 12.9 MGD – 1.29 MGD – 20.9 MGD – 1.6 MGD = 1,072 MGD

(1,072 MGD)(8.34 lbs/gal)(0.0783 mg/L) = 700 lbs/day
Therefore, the chronic mass segment allocations for aluminum for the permittee can be calculated as follows:

Monthly average mass for aluminum:
(Chronic assimilative capacity mass)(% of total aluminum discharged)
(700 lbs/day)(0.0268) = 18.8 lbs/day or **19 lbs/day**

Acute:

The acute assimilative capacity (AC) at Brunswick was calculated based on 90% of the applicable AWQC (taking into consideration the 10% reduction to account for background, 0% reduction for reserve, totaling 10%), critical low flows (1Q10 = 451 cfs) at Brunswick less the assimilative capacity allocated to Whitney Brook in Canton (critical low flows 1Q10 = 20 cfs), to Seven Mile Stream in Jay (critical low flows 1Q10 = 2 cfs), to the Little Androscoggin River in Mechanic Falls (critical low flows 1Q10 = 15.3 cfs) and the Sabattus River at Sabattus (critical low flow 1Q10 = 2.5 cfs). These critical low flows will be utilized in all calculations as they pertain to assessing acute AWQC limitations. The calculation for aluminum is as follows:

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

Outfall #001C – Secondary Treated & Blended Waste Water

1Q10 at Brunswick = 451 cfs or 292 MGD
1Q10 at Canton = 20 cfs or 12.9 MGD
1Q10 at Jay = 2 cfs or 1.29 MGD
1Q10 at Mechanic Falls = 15.3 cfs or 9.89 MGD
1Q10 at Sabattus = 2.5 cfs or 1.6 MGD

AWQC = 750 ug/L
750 ug/L(0.90) = 675 ug/L or 0.675 mg/L

Acute AC = 292 MGD – 12.9 MGD – 1.29 MGD – 9.89 MGD – 1.6 MGD= 266 MGD

(266 MGD)(8.34 lbs/gal)(0.675 mg/L) = 1,497 lbs/day

Therefore, the acute mass segment allocations for aluminum for the permittee can be calculated as follows:

Daily maximum mass for aluminum:
(Acute assimilative capacity mass)(% of total aluminum discharged)
(1,497 lbs/day)(0.0268) = 40.1 lbs/day or **40 lbs/day**

Copper

Mean concentration = 12.5 ug/L or 0.0125 mg/L
Permit flow limit = 14.2 MGD
Historical average mass = (0.0125 mg/L)(8.34)(14.2 MGD) = 1.48 lbs/day

The 7/15/15 statistical evaluation (Report ID #793) indicates the historical average mass of copper discharged by the permittte (1.48 lbs/day) is 41.09 % of the copper discharged by facilities on the main stem of the Androscoggin River. The acute assimilative capacity (AC) at Brunswick was calculated based on 90% of the applicable AWQC (taking into consideration the 10% reduction to account for background, 0% reduction for reserve, totaling 10%), critical low flows (1Q10 = 451 cfs) at Brunswick less the assimilative capacity allocated to Whitney Brook in Canton, Seven Mile Stream in Jay, the Little Androscoggin River in Mechanic Falls and the Sabattus River at Sabattus . The calculation for copper is as follows:

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

Outfall #001C – Secondary Treated & Blended Waste Water

Acute:

AWQC = 3.07 ug/L
3.07 ug/L(0.90) = 2.76 ug/L or 0.00276 mg/L

Acute AC = 292 MGD – 12.9 MGD – 1.29 MGD – 9.89 MGD – 1.6 MGD= 266 MGD

(266 MGD)(8.34 lbs/gal)(0.00276 mg/L) = 6.12 lbs/day

Therefore, the acute mass segment allocations for copper for the permittee can be calculated as follows:

Daily maximum mass for copper:
(Acute assimilative capacity mass)(% of total copper discharged)
(6.12 lbs/day)(0.4109) = **2.5 lbs/day**

Chapter 530 does not establish monitoring frequencies for parameters that exceed or have a reasonable potential to exceed AWQC. Monitoring frequencies are established on case-by-case basis given the timing, severity and frequency of occurrences of the exceedances or reasonable potential to exceed applicable critical water quality thresholds. Therefore, this permitting action is making a best professional judgment to establish the monitoring frequencies for aluminum and copper at the routine surveillance level frequency of 2/Year specified in 06-096 CMR Chapter 530.

k. Transported Wastes - The previous permitting action authorized the permittee to receive and introduce up to 40,000 gpd and 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 total in this permit is 40,000 gpd of transported wastes that it is authorized to be received and treated as it utilizes the side streams/storage method of metering transported wastes into the facility's influent flow. With a design capacity of 14.2 MGD, 40,000 gpd represents 0.28% of said capacity.

The Department has determined that under normal operating conditions, the receipt and treatment of 40,000 gpd of transported wastes to the facility will not cause or contribute to upset conditions of the treatment process.

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

Outfall #001C – Secondary Treated & Blended Waste Water

CSO-Related Bypasses of Secondary Treatment

The current treatment facilities for this outfall consist of two bar screens and an aerated grit chamber for preliminary treatment and two primary sedimentation basins for primary treatment. Flows greater than 25 MGD that have received primary treatment can be bypassed around the two aeration basins (contact selector stabilization mode) and two secondary clarifiers through the secondary bypass structure. The structure discharges through a pipe measuring 60 inches in diameter to a chlorine mixing structure along with flow receiving secondary treatment. The combined flow then enters two chlorine contact chambers and is discharged out a 60 inch diameter pipe to the Androscoggin River.

A review of the DMR data for the period January 2012 – July 2015 indicates there have only been a total of six overflow occurrences with values reported as follows:

l. Overflow occurrences

Overflow occurrences/month

Value	Limit (# of days)	Total (# of days)
Daily Maximum	Report	---
2012	---	1
2013	---	0
2014	---	3
2015	---	2

m. Flow:

Flow

Value	Limit (MGD)	Range (MGD)	Total (MGD)
Total gallons/month	Report	0.212 (2012) 1.99 – 3.449 (2014) 2.581 (2015)	0.212 (2012) 5.439 (2014) 2.581 (2015)
Daily Maximum	Report	0.212 (2012) 3.449 (2014) 2.581 (2015)	n/a (2012) n/a (2014) n/a (2015)

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.

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 LAWPCA 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 and subsequent updates. The permittee shall implement CSO control projects in accordance with the approved CSO Master Plan entitled, *Clean Water Act Master Plan, October 2000*, prepared by Metcalf & Eddy, an updated CSO Master Plan entitled, *Lewiston and Auburn, Maine and the Lewiston Auburn Water Pollution Control Authority – Clean Water Act Master Plan Five Year Update, May 2005*, prepared by Camp Dresser & McKee, that was approved by the Department on June 28, 2006 and a second update to the CSO Master Plan entitled, *City of Lewiston, Maine, Auburn Sewerage District, and the Lewiston Auburn Water Pollution Control Authority (LAWPCA) Clean Water Act Master Plan Ten Year Update, June 2010*, prepared by Camp Dresser & McKee and approved by the Department on June 20, 2013 and a third updated plan entitled, *City of Lewiston, Maine Auburn Sewerage District and the Lewiston Auburn Water Pollution Control (LAWPCA) Clean Water Act Master Plan Ten Year Update, June 2015* prepared by CDM Smith.

During wet weather events when flows to the treatment facility has exceeded an instantaneous flow rate of 25.0 MGD (17,361 gallons per minute), secondary treatment of all wet weather flows is not practicable thus, a portion of the primary effluent can be bypassed around the aeration basins and secondary clarifiers. The bypassed flow is recombined with the secondary clarifier effluent prior to chlorination and dechlorination and then discharged to the river via the physical outfall designated as Outfall #001C. 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.

[1] 40 CFR 122.45(h).

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

CSO-Related Bypasses of Secondary Treatment

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[1]. To standardize how the Department will regulate these facilities to ensure compliance with the CSO Control Policy and Clean Water Act [2], 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 calculations or best professional judgment of Department water quality engineers of assimilative capacity of the receiving water.

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 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 Androscoggin River via the main outfall, the Department is establishing daily maximum technology-based effluent limitations for BOD_5 and TSS when the flow rate through secondary treatment has exceeded an instantaneous flow rate of 17,361 gallons per minute or 25 MGD.

Blended effluent discharged to the Androscoggin River

Discharges of blended effluent to the Androscoggin River are only allowed when the influent to the treatment facility has exceeded an instantaneous flow rate of 17,361 gpm or 25 MGD.

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

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

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

CSO-Related Bypasses of Secondary Treatment

n. Flow, BOD_5 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 Androscoggin River during the wet weather events when blended effluent is being discharged. Therefore, the Department evaluated the actual primary and secondary treated effluent values for BOD & TSS for the most current six overflow occurrences between 2012 and 2015. The actual discharge values being utilized in calculations are as follows:

Primary
Flow: 2.581 MGD (April 2015)
BOD_5: 2,800 lbs./day, 141 mg/L mg/L(April 2015)
TSS: 1,271 lbs./day, 64 mg/L (April 2015)

Secondary
Flow: 30.44 MGD (April 2015)
BOD_5: 13,094 lbs./day, 74 mg/L (April 2015)
TSS: 22,500 lbs./day, 128 mg/L (April 2015)

To determine if water quality standards (dissolved oxygen) are maintained during times when discharging blended effluent, 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 Androscoggin River when discharging blended effluent?

The Department evaluated the flows of the Androscoggin River recorded at USGS gauging station at Near Auburn (station #01059000) on each of the two days during April 2015 in which there was a bypass of secondary treatment. The Department chose the lowest river flow of 20,300 cfs (4/20/15) to calculate the increase in BOD and TSS concentrations in the Androscoggin River. The calculations are as follows:

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

$$\text{BOD} = \frac{(30.44\ \text{MGD})(74\ \text{mg/L}) + (2.581\ \text{MGD})(141\ \text{mg/L})}{33.021\ \text{MGD}} = 79\ \text{mg/L}$$

$$\text{TSS} = \frac{(30.44\ \text{MGD})(128\ \text{mg/L}) + (2.581\ \text{MGD})(64\ \text{mg/L})}{33.021\ \text{MGD}} = 123\ \text{mg/L}$$

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

CSO-Related Bypasses of Secondary Treatment

Blended effluent discharged to the Androscoggin River

What is the increase in the concentrations in the Androscoggin River after rapid and complete mixing?

Dilution factor: $\frac{(20{,}300 \text{ cfs})(0.6464) + (33.021 \text{ MGD})}{(33.021 \text{ MGD})} = 398{:}1$

BOD: $\frac{79 \text{ mg/L}}{398} = 0.20 \text{ mg/L}$ (not measurable)

TSS: $\frac{123 \text{ mg/L}}{398} = 0.31 \text{ mg/L}$ (not measurable)

Mass loadings of the blended effluent are as follows:

BOD: 13,094 lbs/day (2°) + 2,800 lbs/day (1°) = 15,894 lbs/day

TSS: 22,500 lbs/day (2°) + 1,271 lbs/day (1°) = 23,771 lbs/day

Based on the combined BOD_5 and TSS values (blended effluent) cited, the Department has made a best professional judgment, maximum effluent discharge limitations of 15,894 lbs./day for BOD_5 and 23,771 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 Androscoggin 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 15,894 lbs./day for BOD_5 and 23,771 lbs/day for TSS 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 25.0 MGD (17,361 gpm) 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 daily maximum blended effluent concentration reporting requirements for BOD_5 and TSS to assist in comparing the effluent quality against secondary treatment technology based effluent limits.

7. COMBINED SEWER OVERFLOWS

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

Outfall #	Description	Outfall Location	Receiving Water and Class
002	Untreated sanitary/storm water	Treatment Plant "Structure B"	Androscoggin River, Class C

LAWPCA submitted to the Department a CSO Master Plan entitled, *Clean Water Act Master Plan, October 2000*, prepared by Metcalf & Eddy, an update to the CSO Master Plan entitled, *Lewiston and Auburn, Maine and the Lewiston Auburn Water Pollution Control Authority – Clean Water Act Master Plan Five Year Update, May 2005*, prepared by Camp Dresser & McKee, that was approved by the Department on June 28, 2006 and a second update to the CSO Master Plan entitled, *City of Lewiston, Maine, Auburn Sewerage District, and the Lewiston Auburn Water Pollution Control Authority (LAWPCA) Clean Water Act Master Plan Ten Year Update, June 2010,* prepared by Camp Dresser & McKee and approved by the Department on June 20, 2013, and *City of Lewiston, Maine Auburn Sewerage District and the Lewiston Auburn Water Pollution Control (LAWPCA) Clean Water Act Master Plan Ten Year Update, June 2015* prepared by CDM Smith.

LAWPCA 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 I, *Conditions For Combined Sewer Overflows*, of this permit contains a schedule of compliance for items in the most current up-to-date abatement plan which must be completed.

8. PRETREATMENT

The permittee is required to administer a pretreatment program based on the authority granted under Federal regulations 40 CFR Part 122.44(j), 40 CFR Part 403, section 307 of the Federal Water Pollution Control Act (Clean Water Act), and *Pretreatment Program*, 06-096 CMR 528 (amended March 17, 2008). The permittee's pretreatment program received USEPA approval on July 19, 1985, and as a result, appropriate pretreatment program requirements were incorporated into the previous National Pollutant Discharge Elimination System (NPDES) permit that were consistent with that approval and federal pretreatment regulations in effect when the permit was issued. The State of Maine has been authorized by the USEPA to administer the federal pretreatment program as part of receiving authorization to administer the NPDES program.

Upon issuance of this permit, the permittee is obligated to modify (if applicable) its pretreatment program to be consistent with current federal regulations and State rules. Those activities that the permittee shall address include, but are not limited to, the following: (1) develop and enforce Department-approved specific effluent limits (technically-based local limits - last approved by the USEPA on May 13, 1999; (2) revise the local sewer-use ordinance or regulation, as appropriate, to

8. PRETREATMENT 9cont'd)

be consistent with federal regulations and State rules; (3) develop an enforcement response plan; (4) implement a slug control evaluation program; (5) track significant non-compliance for industrial users; and (6) establish a definition of and track significant industrial users. These requirements are necessary to ensure continued compliance with the POTWs MEPDES permit and its sludge use or disposal practices.

In addition to the requirements described above, this permit requires that **within 180 days prior to the expiration date of this permit,** the permittee must submit to the Department in writing, a description of proposed changes to permittee's pretreatment program deemed necessary to assure conformity with current federal and State pretreatment regulations and rules, respectively. These requirements are included in the permit to ensure that the pretreatment program is consistent and up-to-date with all pretreatment requirements in effect. **By October 31 of each calendar year,** the permittee shall submit a pretreatment annual report detailing the activities of the program for the twelve-month period ending 60 days prior to the due date.

9. 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 C classification.

10. PUBLIC COMMENTS

Public notice of this application was made in the Lewiston Sun Journal newspaper on or about March 9, 2013. 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 shall 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).

11. DEPARTMENT CONTACTS

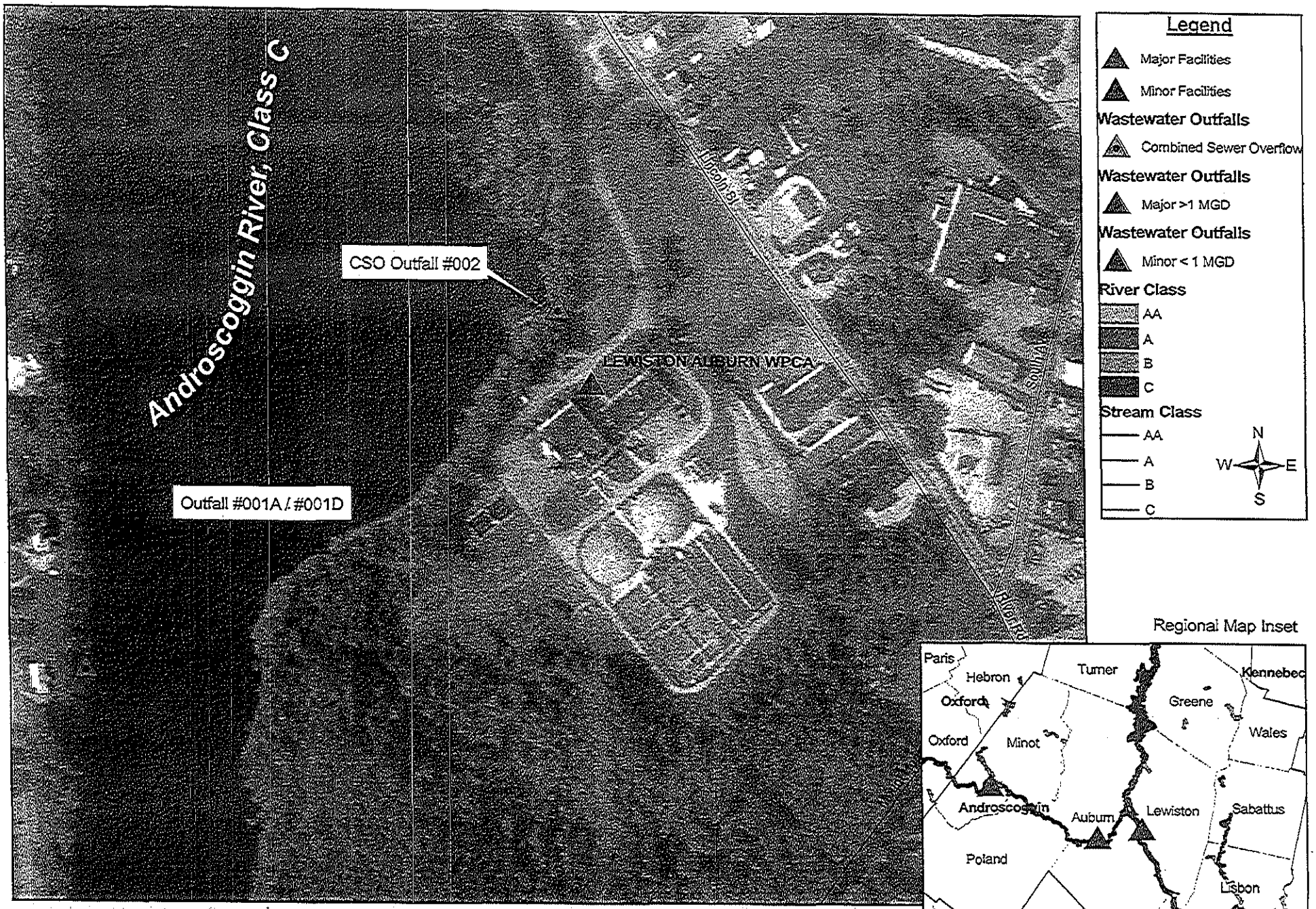
Additional information concerning this permitting action may be obtained from, and written comments sent to:

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 Fax: (207) 287-3435
e-mail: gregg.wood@maine.gov

12. RESPONSE TO COMMENTS

During the period of March 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



Legend

- Major Facilities
- Minor Facilities

Wastewater Outfalls

- Combined Sewer Overflow

Wastewater Outfalls

- Major >1 MGD

Wastewater Outfalls

- Minor < 1 MGD

River Class

- AA
- A
- B
- C

Stream Class

- AA
- A
- B
- C

N W E S

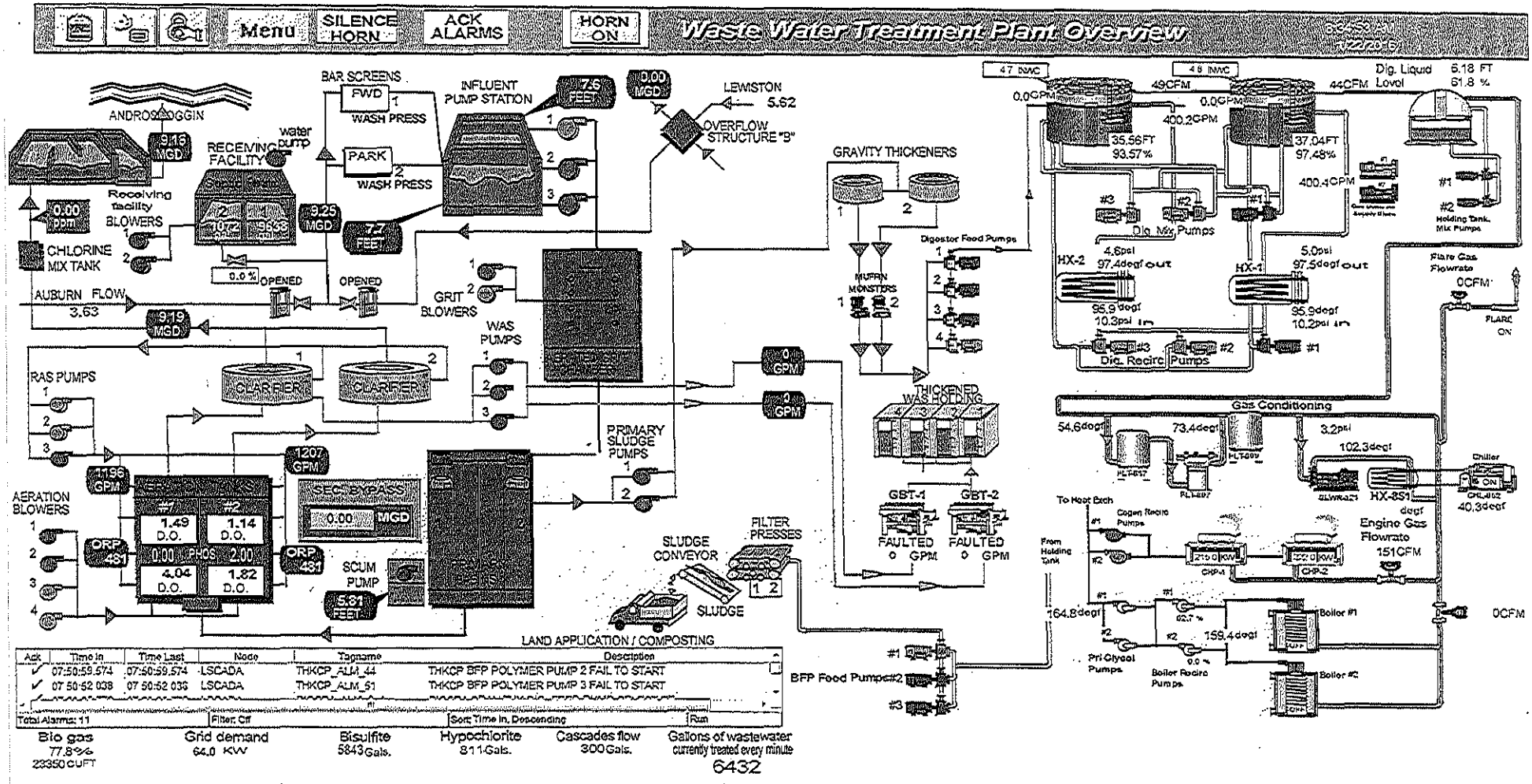
Regional Map Inset

0 250 500 1,000 Feet

Lewiston-Auburn Water Pollution Control Authority
Lewiston, Maine

Map created by Maine DEP
June 2008

ATTACHMENT B


Menu
SILENCE HORN
ACK ALARMS
HORN ON
Waste Water Treatment Plant Overview
ANDROSCOGGIN
BAR SCREENS
FWD
WASH PRESS
PARK
WASH PRESS
INFLUENT PUMP STATION
LEWISTON
5.62
OVERFLOW STRUCTURE "B"
RECEIVING FACILITY
water pump
Receiving facility
BLOWERS
CHLORINE MIX TANK
AUBURN FLOW
3.63
OPENED
OPENED
GRIT BLOWERS
WAS PUMPS
RAS PUMPS
CLARIFIER
CLARIFIER
PRIMARY SLUDGE PUMPS
AERATION BLOWERS
SEC. BYPASS
SCUM PUMP
SLUDGE CONVEYOR
FILTER PRESSES
SLUDGE
GRAVITY THICKENERS
MUFFIN MONSTERS
Digestor Feed Pumps
THICKENED WAS HOLDING
GBT-1
GBT-2
FAULTED
FAULTED
BFP Feed Pumps
Dig. Liquid
Level
Dig. Mix Pumps
Dig. Recirc Pumps
HX-2
HX-1
Gas Conditioning
Flare Gas Flowrate
Engine Gas Flowrate
To Heat Exch
From Holding Tank
Cogen Recirc Pumps
Pri Glycol Pumps
Boiler Recirc Pumps
Boiler #1
Boiler #2
LAND APPLICATION / COMPOSTING
Ack
Time In
Time Last
Node
Tagname
Description
07:50:59.574
07:50:59.574
LSCADA
THKCP_ALM_44
THKCP BFP POLYMER PUMP 2 FAIL TO START
07:50:52.038
07:50:52.038
LSCADA
THKCP_ALM_51
THKCP BFP POLYMER PUMP 3 FAIL TO START
Total Alarms: 11
Filter: Off
Sort: Time In, Descending
Run
Bio gas
77.8%
23350 CUFT
Grid demand
64.0 KW
Bisulfite
5843 Gals.
Hypochlorite
811 Gals.
Cascades flow
300 Gals.
Gallons of wastewater currently treated every minute
6432

ATTACHMENT C

WET TEST REPORT

Data for tests conducted for the period

04/Dec/2010 - 04/Dec/2015

LEWISTON/AUBURN NPDES= ME0010147 Effluent Limit: Acute (%) = 2.078 Chronic (%) = 1.109

Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	100	10/11/2011	2.078		
TROUT	A_NOEL	100	01/03/2012	2.078		
TROUT	A_NOEL	100	07/18/2012	2.078		
TROUT	A_NOEL	100	08/12/2014	2.078		
TROUT	C_NOEL	100	10/11/2011	1.109		
TROUT	C_NOEL	100	01/03/2012	1.109		
TROUT	C_NOEL	100	07/18/2012	1.109		
TROUT	C_NOEL	100	08/12/2014	1.109		
WATER FLEA	A_NOEL	100	10/11/2011	2.078		
WATER FLEA	A_NOEL	100	01/03/2012	2.078		
WATER FLEA	A_NOEL	100	07/18/2012	2.078		
WATER FLEA	A_NOEL	100	08/12/2014	2.078		
WATER FLEA	C_NOEL	100	10/11/2011	1.109		
WATER FLEA	C_NOEL	100	01/03/2012	1.109		
WATER FLEA	C_NOEL	100	07/18/2012	1.109		
WATER FLEA	C_NOEL	100	08/12/2014	1.109		

ATTACHMENT D

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 04/Dec/2010 - 04/Dec/2015

Facility Name: **LEWISTON/AUBURN** NPDES: **ME0101478**

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
01/06/2011	8.30	8.94	3	3	0	0	0	0	0	F	0
03/09/2011	18.40	17.17	100	14	28	46	0	1	11	F	0
09/21/2011	11.40	8.73	1	1	0	0	0	0	0	F	0
10/11/2011	13.73	10.09	21	10	0	0	0	11	0	F	0
01/03/2012	10.17	10.45	133	14	28	46	25	9	11	F	0
04/11/2012	10.80	8.46	11	10	0	0	0	1	0	F	0
07/18/2012	8.32	7.35	21	10	0	0	0	11	0	F	0
10/23/2012	9.16	8.46	11	10	0	0	0	1	0	F	0
04/03/2013	12.16	16.36	67	14	27	0	25	1	0	F	0
10/02/2013	7.66	7.18	9	9	0	0	0	0	0	F	0
04/15/2014	17.03	19.16	9	9	0	0	0	0	0	F	0
06/11/2014	8.74	7.70	97	14	27	44	0	1	11	F	0
08/12/2014	10.61	7.75	21	10	0	0	0	11	0	F	0

Key:

A = Acid O = Others P = Pesticides

BN = Base/Neutral M = Metals V = Volatiles

Date Range: 04/Dec/2010 - 04/Dec/2015

Facility Name: **LEWISTON/AUBURN** NPDES: **ME0101478**

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
05/06/2015	7.67	8.51	53	1	27	0	25	0	0	F	0

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

FACILITY PRIORITY POLLUTANT DATA REPORT

Data Date Range: 04/Dec/2010 - 04/Dec/2015

Facility name: **LEWISTON/AUBURN** Permit Number: **ME0101478**

Parameter: ALUMINUM	Test date	Result (ug/l)	Lsthan
	01/06/2011	75.000	N
	03/09/2011	300.000	Y
	10/11/2011	80.000	N
	01/03/2012	142.000	N
	04/11/2012	152.000	N
	07/18/2012	82.400	N
	10/23/2012	60.000	Y
	04/03/2013	109.000	N
	10/02/2013	131.000	N
	04/15/2014	288.000	N
	06/11/2014	98.800	N
	08/12/2014	93.300	N

Parameter: COPPER	Test date	Result (ug/l)	Lsthan
	03/09/2011	9.550	N
	09/21/2011	13.000	N
	10/11/2011	16.000	N
	01/03/2012	18.000	N
	04/11/2012	7.000	N
	07/18/2012	9.020	N
	10/23/2012	10.100	N
	04/03/2013	6.930	N
	10/02/2013	13.600	N
	04/15/2014	10.500	N
	06/11/2014	22.000	N
	08/12/2014	7.820	N
	05/06/2015	14.100	N

ATTACHMENT E

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

DATE: October 2008

TO: Interested Parties

FROM: Dennis Merrill, DEP

SUBJECT: DEP's system for evaluating toxicity from multiple discharges

****

Following the requirements of DEP's rules, Chapter 530, section 4(F), the Department is evaluating discharges of toxic pollutants into a freshwater river system in order to prevent cumulative impacts from multiple discharges. This is being through the use of a computer program known internally as "DeTox". The enclosed package of information is intended to introduce you to this system.

Briefly, the DeTox program evaluates each wastewater facility within a watershed in three different ways in order to characterize its effluent: 1) the facility's past history of discharges, 2) its potential toxicity at the point of discharge on an individual basis, and 3) the facility's contribution to cumulative toxicity within a river segment in conjunction with other facilities. The value that is most protective of water quality becomes the value that is held in the DeTox system as an allocation for the specific facility and pollutant.

The system is not static and uses a five-year "rolling" data window. This means that, over time, old test results drop off and newer ones are added. The intent of this process is to maintain current, uniform facility data to estimate contributions to a river's total allowable pollutant loading prior to each permit renewal.

Many facilities are required to do only a relatively small amount of pollutant testing on their effluent. This means, statistically, the fewer tests done, the greater the possibility of effluent limits being necessary based on the facility's small amount of data. To avoid this situation, most facilities, especially those with low dilution factors, should consider conducting more than the minimum number of tests required by the rules.

Attached you will find three documents with additional information on the DeTox system:

- Methods for evaluating the effects of multiple discharges of toxic pollutants
- Working definitions of terms used in the DeTox system
- Reviewing DeTox Reports
- Prototype facility and pollutant reports

If you have questions as you review these, please do not hesitate to contact me at Dennis.L.Merrill@maine.gov or 287-7788.

Maine Department of Environmental Protection

Methods for evaluating the effects of multiple discharges of toxic pollutants.

Reference: DEP Rules, Chapter 530, section 4(F)

To evaluate discharges of toxic pollutants into a freshwater river system and prevent cumulative impacts from multiple discharges, DEP uses a computer program called "DeTox that functions as a mathematical evaluation tool.

It uses physical information about discharge sources and river conditions on file with the Department, established water quality criteria and reported effluent test information to perform these evaluations. Each toxic pollutant and associated water quality criterion for acute, chronic and/or human health effects is evaluated separately.

Each facility in a river drainage area has an assigned position code. This "address" is used to locate the facility on the river segment and in relation to other facilities and tributary streams. All calculations are performed in pounds per day to allow analysis on a mass balance. Pollutants are considered to be conservative in that once in the receiving water they will not easily degrade and have the potential to accumulate.

The process begins with establishing an assimilative capacity for each pollutant and water quality criterion at the most downstream point in the river segment. This calculation includes set-aside amounts for background and reserve quantities and assumed values for receiving water pH, temperature and hardness. The resulting amount of assimilative capacity is available for allocation among facilities on the river.

Each facility is evaluated to characterize its past discharge quantities. The historical discharge, in pounds per day, is figured using the average reported concentration and the facility's permitted flow. As has been past practice, a reasonable potential (RP) factor is used as a tool to estimate the largest discharge that may occur with a certain degree of statistical certainty. The RP factor is multiplied by the historical average to determine an allocation based on past discharges. The RP factor is also multiplied by the single highest test to obtain a maximum day estimate. Finally, the direct average without RP adjustment is used to determine the facility's percent contribution to the river segment in comparison to the sum of all discharges of the pollutant. This percent multiplied by the total assimilative capacity becomes the facility's discharge allocation used in evaluations of the segment loadings.

Additionally, individual facility discharges are evaluated as single sources, as they have been in the past to determine if local conditions are more limiting than a segment evaluation.

With all of this information, facilities are evaluated in three ways. The methods are:

1. The facility's past history. This is the average quantity discharged during the past five years multiplied by the applicable RP factor. This method is often the basis for an allocation when the discharge quantity is relatively small in comparison to the water quality based allocation.
2. An individual evaluation. This assumes no other discharge sources are present and the allowable quantity is the total available assimilative capacity. This method may be used when a local condition such as river flow at the point of discharge is the limiting factor.
3. A segment wide evaluation. This involves allocating the available assimilative capacity within a river segment based on a facility's percent of total past discharges. This method would be used when multiple discharges of the same pollutant to the same segment and the available assimilative capacity is relatively limited.

The value that is most protective of water quality becomes the facility's allocation that is held in the system for the specific facility and pollutant. It is important to note that the method used for allocation is facility and pollutant specific and different facilities on the same segment for the same pollutant can have different methods used depending on their individual situations.

Discharge amounts are always allocated to all facilities having a history of discharging a particular pollutant. This does not mean that effluent limits will be established in a permit. Limits are only needed when past discharge amounts suggest a reasonable potential to exceed a water quality based allocation, either on an individual or segment basis. Similar to past practices for single discharge evaluations, the single highest test value is multiplied by a RP factor and if product is greater than the water quality allowance, an effluent limit is established. It is important to remember an allocation is "banking" some assimilative capacity for a facility even if effluent limits are not needed.

Evaluations are also done for each tributary segment with the sum of discharge quantities in tributaries becoming a "point source" to the next most significant segment. In cases where a facility does not use all of its assimilative capacity, usually due to a more limiting individual water quality criterion, the unused quantity is rolled downstream and made available to other facilities.

The system is not static and uses a five-year rolling data window. Over time, old tests drop off and newer ones are added on. These changes cause the allocations and the need for effluent limits to shift over time to remain current with present conditions. The intent is to update a facility's data and relative contribution to a river's total assimilative capacity prior to each permit renewal. Many facilities are required to do only minimal testing to characterize their effluents. This creates a greater degree of statistical uncertainty about the true long-term quantities. Accordingly, with fewer tests the RP factor will be larger and result in a greater possibility of effluent limits being necessary. To avoid this situation, most facilities, especially those with relatively low dilution factors, are encouraged to conduct more that a minimum number of tests. It is generally to a facility's long-term benefit to have more tests on file since their RP factor will be reduced.

Maine Department of Environmental Protection

Working Definitions of Terms Used in the DeTox System.

Allocation. The amount of pollutant loading set aside for a facility. Separate amounts are set for each *water quality criterion.* Each pollutant having a history of being discharged will receive an allocation, but not all allocations become *effluent limits.* Allocation may be made in three ways: *historical allocation, individual allocation* or *segment allocation.*

Assimilative capacity. The amount of a pollutant that river segment can safely accept from point source discharges. It is determined for the most downstream point in a river segment using the *water quality criterion* and river flow. Separate capacities are set for acute, chronic and human health criteria as applicable for each pollutant. Calculation of this capacity includes factors for *reserve* and *background* amounts.

Background. A concentration of a pollutant that is assumed to be present in a receiving water but not attributable to discharges. By rule, this is set as a rebuttable presumption at 10% of the applicable *water quality criterion.*

Effluent limit. A numeric limit in a discharge permit specifically restricting the amount of a pollutant that may be discharged. An effluent limit is set only when the highest discharge, including an adjustment for *reasonable potential,* is greater than a facility's water quality based *allocation* for a pollutant.

Historical allocation (or *RP history*). One of three ways of developing an *allocation.* The facility's average history of discharges, in pounds at design flow, is multiplied by the appropriate *reasonable potential* factor. An allocation using this method does not become an *effluent limit.*

Historical discharge percentage. For each pollutant, the average discharge concentration for each facility in a segment is multiplied by the permitted flow (without including a *reasonable potential* factor). The amounts for all facilities are added together and a percent of the total is figured for each facility. When a facility has no detectable concentrations, that pollutant is assumed to be not present and it receives no percentage.

Individual allocation. One of three ways of developing an *allocation.* The facility's single highest discharge on record multiplied by the appropriate *reasonable potential* factor is compared to a water quality based quantity with an assumption that the facility is the only point source to that receiving water. If the RP-adjusted amount is larger, the water quality amount may become an *effluent limit.*

Less than. A qualification on a laboratory report indicating the concentration of a pollutant was below a certain concentration. Such a result is evaluated as being one half of the Department's reporting limit in most calculations.

Reasonable potential (RP). A statistical method to determine the highest amount of a pollutant likely to be present at any time based on the available test results. The method produces a value or RP factor that is multiplied by test results. The method relies on an EPA guidance document, and considers the coefficient of variation and the number of tests. Generally, the fewer number of tests, the higher the RP factor.

Reserve. An assumed concentration of a pollutant that set aside to account for non-point source of a pollutant and to allow new discharges of a pollutant. By rule this is set at 15% of the applicable *water quality criterion.*

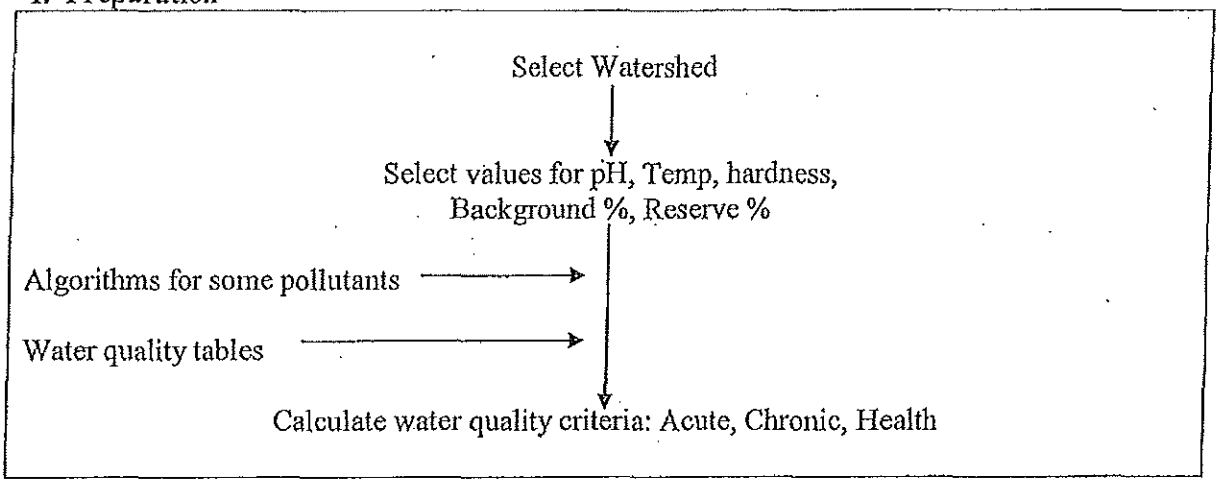
Segment allocation. One of three ways of developing an *allocation.* The amount is set by multiplying a facility's *historical discharge percentage* for a specific pollutant by the *assimilative capacity* for that pollutant and criterion. A facility will have different allocation percentages for each pollutant. This amount may become an *effluent limit.*

Tributary. A stream flowing into a larger one. A total pollutant load is set by adding the all facilities *allocations* on the tributary and treating this totaled amount as a "point source" to the next larger segment.

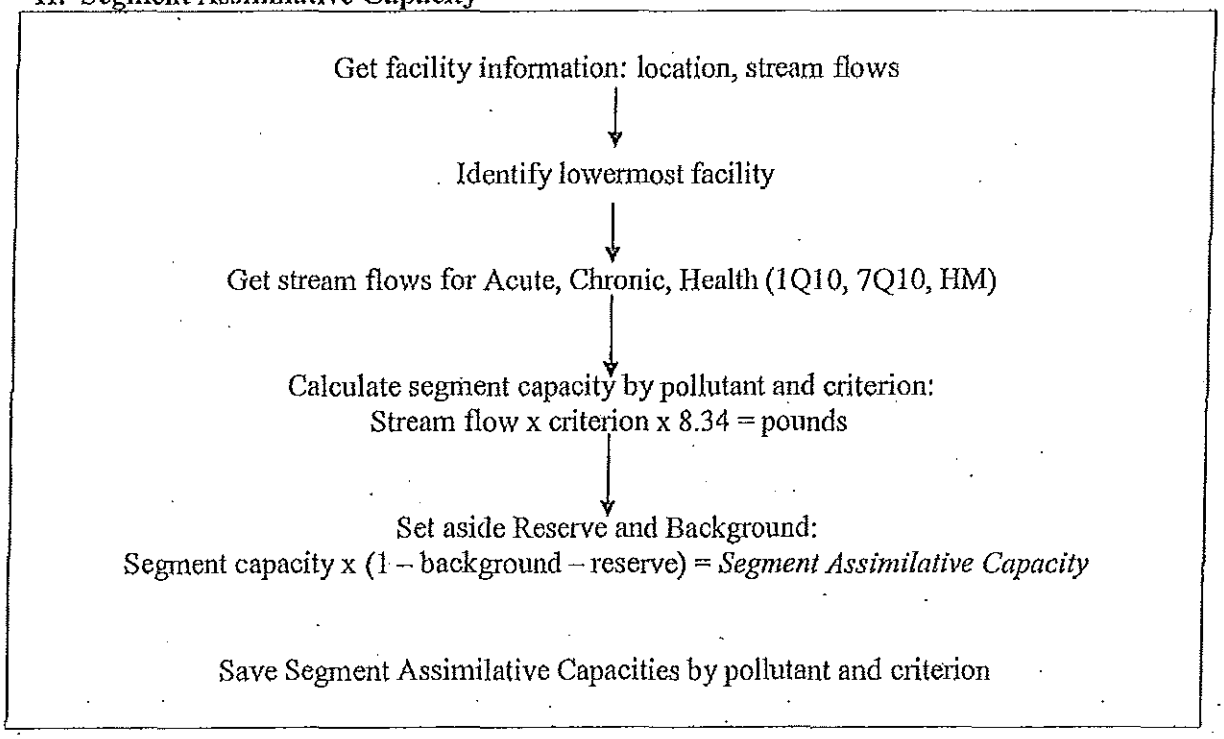
Water quality criteria. Standards for acceptable in-stream or ambient levels of pollutants. These are established in the Department's Chapter 584 and are expressed as concentrations in ug/L. There may be separate standards for acute and chronic protection aquatic life and/or human health. Each criterion becomes a separate standard. Different stream flows are used in the calculation of each.

Maine Department of Environmental Protection
General Processing Steps in "DeTox"

I. Preparation

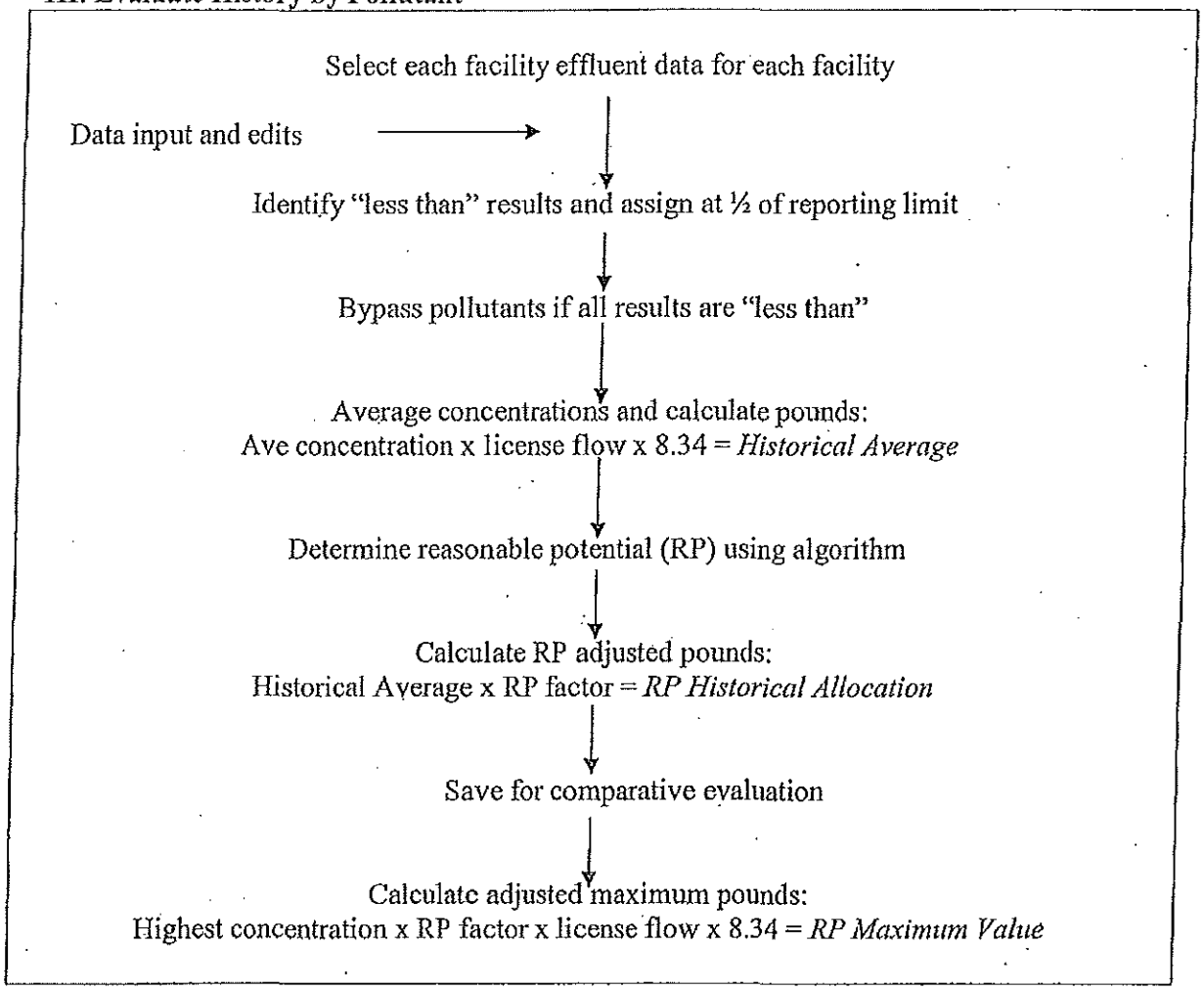


II. Segment Assimilative Capacity

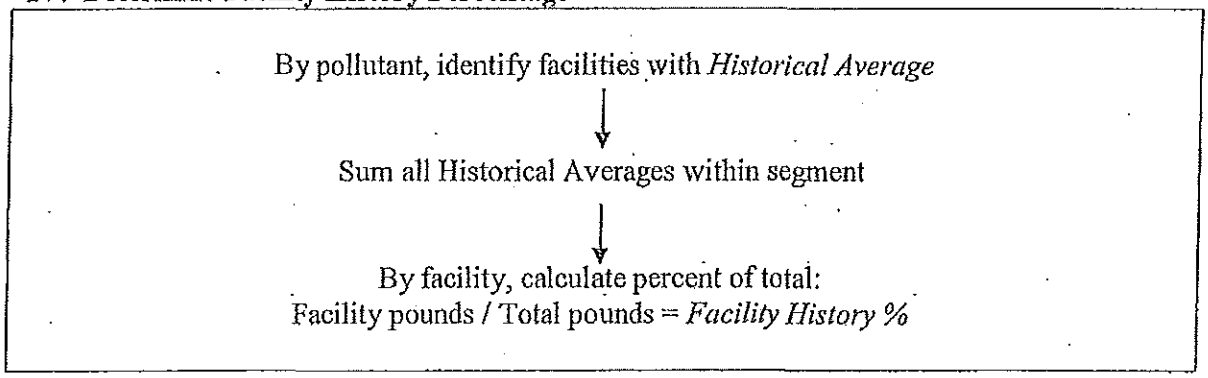


Maine Department of Environmental Protection
General Processing Steps in "DeTox"

III. Evaluate History by Pollutant



IV. Determine Facility History Percentage



Maine Department of Environmental Protection
General Processing Steps in "DeTox"

V. Segment Allocation

By pollutant and criterion, select *Segment Assimilative Capacity*

↓

Select individual *Facility History %*

↓

Determine facility allocation:
Assimilative Capacity x Facility History % = *Segment Allocation*

↓

Save for comparative evaluation

VI. Individual Allocation

Select individual facility and dilution factor (DF)

↓

Select pollutant and water quality criterion

↓

By pollutant and criterion, calculate individual allocations:
[DF x 0.75 x criterion] + [0.25 x criterion] = Individual Concentration

↓

Determine individual allocation:
Individual Concentration x license flow x 8.34 = *Individual Allocation*

↓

Save for comparative evaluation

VII. Make Initial Allocation

By facility, pollutant and criterion, get:
Individual Allocation, Segment Allocation, RP Historical Allocation

↓

Compare allocation and select the smallest

↓

Save as *Facility Allocation*

VIII. Evaluate Need for Effluent Limits

By facility, pollutant and criterion select
Segment Allocation, *Individual Allocation* and *RP Maximum value*

↓

If *RP Maximum value* is greater than either *Segment Allocation* or *Individual Allocation*, use lesser value as *Effluent Limit*

↓

Save *Effluent Limit* for comparison

IX. Reallocation of Assimilative Capacity

Starting at top of segment, get *Segment Allocation*, *Facility Allocation* and *Effluent Limit*

↓

If *Segment Allocation* equals *Effluent Limit*, move to next facility downstream

↓

If not, subtract *Facility Allocation* from *Segment Allocation*

↓

Save difference

↓

Select next facility downstream

↓

Figure remaining *Segment Assimilative Capacity* at and below facility, less tributaries

↓

Add saved difference to get an adjusted *Segment Assimilative Capacity*

↓

Reallocate *Segment Assimilative Capacity* among downstream facilities per step V

↓

Repeat process for each facility downstream in turn

ATTACHMENT F

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.