STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

AVERY T. DAY
ACTING COMMISSIONER

December 2, 2015

Mr. Stephen Aievoli
Town of Lisbon
744 Lisbon Road
Lisbon Falls, ME. 04252
e-mail: saievoli@lisbonme.org

RE: Maine Pollutant Discharge Elimination System Permit (MEPDES) ME0100307
Maine Waste Discharge License (WDL) Application W002725-6D-M-R
Final Permit

Dear Mr. Aievoli:

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL **renewal** which was approved by the Department of Environmental Protection. Please read this permit/license renewal and its attached conditions carefully. You must follow the conditions in the order to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State Law and is subject to enforcement action.

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: Denise Behr, 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

TOWN OF LISBON	)	MAINE POLLUTANT DISCHARGE
LISBON, ANDROSCGGIN COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
ME0100307	)	WASTE DISCHARGE LICENSE
W002725-6D-M-R **APPROVAL**	)	**RENEWAL**

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

APPLICATION SUMMARY

On March 13, 2015, the Town submitted a timely and complete application to the Department for the renewal of Waste Discharge License (WDL) #W002727-6D-I-R/Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100307 (permit hereinafter), which was issued by the Department on May 6, 2010, for a five-year term. The 5/6/10 permit authorized the Town to discharge a monthly average discharge of 2.025 MGD of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the Androscoggin River, Class C, in Lisbon, Maine.

It is noted that the Department made two permit revisions subsequent to the issuance the 5/6/10 permit. On March 23, 2011, the Department issued a minor permit revision to establish water quality based limitations for pollutants that exceeded or had a reasonable potential to exceed applicable ambient water quality criteria (AWQC) for inorganic arsenic, total aluminum, total lead, total copper and total zinc. On September 10, 2013, the permit was modified to remove the monthly average limitations, monitoring and reporting requirements and schedule of compliance for inorganic arsenic and total arsenic based on a revision to the AWQC for arsenic and the results of an updated statistical evaluation.

PERMIT SUMMARY

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

1. Establishes a 1/month monitoring and reporting requirement for *E coli* bacteria for the period December 2015 – April 2016 to assist the Maine Department of Marine Resources in its efforts to assess the impact of non-disinfected waste water being discharged from municipal waste water treatment facilities on shellfish harvesting areas at the mouth of the Kennebec River.

PERMIT SUMMARY (cont'd)

2. Revising the daily maximum water quality based mass limitations for aluminum, copper, lead and zinc based on a more recent statistical evaluation that indicates the discharge has a reasonable potential to exceed the acute AWQC for each parameter.

3. Eliminating the monthly average water quality based limitations for copper as a more recent statistical evaluation that indicates the discharge no longer has a reasonable potential to exceed the chronic AWQC for each parameter.

4. 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);

5. Revising the timing of the screening level whole effluent toxicity (WET), priority pollutant and analytical chemistry based on revision to 06-096 CMR Chapter 530.

6. Eliminating the waiver for percent removal requirements for BOD_5 and TSS when influent strength is less than 200 mg/L based a recent guidance from the U.S. Environmental Protection (EPA).

7. Reducing the monitoring frequencies for biochemical oxygen demand (BOD), total suspended solids (TSS) settleable solids and *E. coli.* bacteria from 3/Week to 2/Week based on a statistical evaluation of the most current 43 months of effluent data.

CONCLUSIONS

Based on the findings summarized in the attached Fact Sheet dated October 20, 2015, and subject to the special and standard conditions that follow, the Department makes the following CONCLUSIONS:

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

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

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

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

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

CONCLUSIONS (cont'd)

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

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

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

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

ACTION

Based on the findings and conclusions as stated above, the Department APPROVES the above noted application of the TOWN OF LISBON to discharge a monthly average of 2.025 MGD of secondary treated wastewater to the Androscoggin River, Class C in Lisbon, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

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

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

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

ACTION (cont'd)

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS 3RD DAY OF December 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Kuhn
for AVERY T. DAY, Acting Commissioner

Date of initial receipt of application: March 13, 2015

Date of application acceptance: March 17, 2015

Filed
DEC 0 3 2015
State of Maine
Board of Environmental Protection

Date filed with Board of Environmental Protection

This Order prepared by Gregg Wood, BUREAU OF WATER QUALITY

ME0100307 2015 11/23/15

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	2.025 MGD *[03]*	---	Report MGD *[03]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
Biochemical Oxygen Demand (BOD_5) *[00310]*	507 lbs./day *[26]*	760 lbs./day *[26]*	845 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Week *[02/07]*	Composite *[24]*
BOD_5 % Removal[2] *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Total Suspended Solids (TSS) *[00530]*	507 lbs./day *[26]*	760 lbs./day *[26]*	845 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Week *[02/07]*	Composite *[24]*
TSS % Removal[2] *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	5/Week *[05/07]*	Grab *[GR]*
E. coli Bacteria[3] (May 15 – Sept. 30) *[31633]*	---	---	---	126/100 ml[4] *[13]*	---	949/100 ml *[13]*	2/Week *[02/07]*	Grab *[GR]*
E. coli Bacteria ***(Oct. 1, 2015 – April 30, 2016)*** *[31633]*	---	---	---	Report/100 ml *[13]*	---	Report/100 ml *[13]*	1/Month[5] *[01/30]*	Grab *[GR]*
Total Residual Chlorine[6] *[50060]*	---	---	---	---	---	1.0 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
pH (Std. Units) *[00400]*	---	---	---	---	---	6.0 – 9.0 SU *[12]*	1/Day *[01/01]*	Grab *[GR]*
Mercury (Total)[7] *[71900]*	---	---	---	58.1 µg/L *[3M]*	---	87.1 µg/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*

The italicized numeric values bracketed in the table above and the tables that follow are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

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

SPECIAL CONDITIONS

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

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

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Total Aluminum *[01105]*	1.4 lbs./day *[26]*	3.0 lbs./day *[26]*	Report µg/L *[28]*	Report µg/L *[28]*	1/Year *[01/YR]*	Composite *[24]*
Total Copper *[01042]*	---	0.68 lbs./day *[26]*	---	Report µg/L *[28]*	1/Year *[01/YR]*	Composite *[24]*
Total Lead *[01051]*	0.13 lbs./day *[26]*	---	Report µg/L *[28]*	---	1/Year *[01/YR]*	Composite *[24]*
Total Zinc *[01092]*	---	3.5 lbs./day *[26]*	---	Report µg/L *[28]*	1/Year *[01/YR]*	Composite *[24]*

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

SPECIAL CONDITIONS

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

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

Effluent Characteristic	Daily Maximum	Minimum Frequency	Sample Type
Whole Effluent Toxicity[8] **Acute – NOEL**			
Ceriodaphnia dubia (Water flea) *[TBP3B]*	Report % *[23]*	1/ Year *[01/YR]*	Composite *[24]*
Salvelinus fontinalis (Brook trout) *[TBQ6F]*	Report % *[23]*	1/ Year *[01/YR]*	Composite *[24]*
Chronic – NOEL			
Ceriodaphnia dubia (Water flea) *[TBP3B]*	Report % *[23]*	1/ Year *[01/YR]*	Composite *[24]*
Salvelinus fontinalis (Brook trout) *[TBQ6F]*	Report % *[23]*	1/ Year *[01/YR]*	Composite *[24]*
Analytical Chemistry[9,11] *[51477]*	Report µg/L *[28]*	1/ Quarter *[01/90]*	Composite/Grab *[24]*
Priority Pollutant[10,11] *[50008]*	Report µg/L *[28]*	1/ Year *[01/YR]*	Composite/Grab *[24]*

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

SPECIAL CONDITIONS

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

Footnotes

1. **Sampling** – All effluent monitoring shall be conducted at a location following the last treatment unit in the treatment process as to be representative of end-of-pipe effluent characteristics. Any change in sampling location must be approved by the Department in writing. The permittee must conduct sampling and analysis 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 wastewater. 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.

2. **Percent Removal** - The permittee must achieve a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand for all flows receiving secondary treatment. The percent removal is calculated based on influent and effluent concentration values.

3. **Bacteria Limits** – *E. coli* bacteria limits and monitoring requirements are seasonal and apply between May 15 and September 30 of each year. The Department reserves the right to require year-round bacteria limits to protect the health, safety and welfare of the public.

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

5. ***E. coli* bacteria monitoring (December 1, 2015 – April 30, 2016)** – The permittee shall sample the effluent on a frequency of 1/Month with at least one wet weather event during the fall (December - February) and one wet weather event in the spring (March – April). For the purposes of this permit, a wet weather event is defined as an instantaneous influent flow rate of greater than or equal to 2,190 gpm or 1.52 MGD. If an event not meeting this criteria does not occur, the Town's routine sampling will be accepted by the Department.

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

SPECIAL CONDITIONS

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

7. **Mercury** – The permittee must conduct all mercury sampling required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the USEPA's "clean sampling techniques" found in USEPA Method 1669, *Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels.* All mercury analysis must be conducted in accordance with USEPA Method 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.

8. **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 1.2% and 0.16%, respectively), which provides an estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points. The critical acute and chronic thresholds were derived as the mathematical inverse of the applicable modified acute and chronic dilution factors of 84:1 and 638:1, respectively.

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

   b. **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level acute and chronic WET testing on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*) at a minimum frequency of once per year (1/Year).

   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 exceedences of the critical acute and chronic water quality thresholds of 1.2% and 0.16% respectively.

SPECIAL CONDITIONS

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

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 B** of this permit for the Department protocol.

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

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

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

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

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

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

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

    a. **Surveillance level testing** – Not required pursuant to 06-096 CMR Chapter 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 must conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year).

SPECIAL CONDITIONS

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

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

    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 exceedences of the acute, chronic or human health AWQC as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (last amended July 29, 2012). For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "N9" monitoring not required this period.

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 uses 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 uses designated for the classification of the receiving waters.

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

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

C. TREATMENT PLANT OPERATOR

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

SPECIAL CONDITIONS

D. LIMITATIONS FOR INDUSTRIAL USERS

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

E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on March 17, 2015; 2) the terms and conditions of this permit; and 3) only from Outfall #001. Discharges of wastewater from any other point source(s) are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), *Twenty four hour reporting*, of this permit.

F. NOTIFICATION REQUIREMENT

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

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

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

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

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

SPECIAL CONDITIONS

G. WET WEATHER FLOW MANAGEMENT PLAN

The treatment facility staff shall maintain a current written 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.

The plan shall conform to Department guidelines for such plans and shall 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 plan shall be kept on-site at all times and made available to Department and other regulatory personnel upon request. **The permittee shall review their plan annually** and record any necessary changes to keep the plan up to date.

H. OPERATION & MAINTENANCE (O&M) PLAN

The permittee shall maintain a current written comprehensive Operation & Maintenance (O&M) Plan. The plan shall provide a systematic approach by which the permittee shall at all times, properly operate and maintain the facility and all related 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 shall evaluate and modify the O&M Plan including site plan(s) and schematic(s) for the wastewater treatment facility to ensure that it is up-to-date. The O&M Plan shall be kept on-site at all times and made available to Department and other regulatory personnel upon request.

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

I. PUMP STATION EMERGENCY BYPASSES

Discharges from emergency bypass structures in pump stations are not authorized by this permit. The permittee shall monitor the pump stations listed below in accordance with an approved monitoring plan submitted to the Department on October 20, 2015, to determine the frequency and quantity (via measurement or estimation) of wastewater discharged from the bypass structures.

Discharges from the following pump stations shall be reported in accordance with Standard Condition B(5), *Bypasses,* and Special Condition E, *Authorized Discharges*, of this permit.

Outfall #	Location	**Receiving Water & Classification**
002	Davis Street Pump Station	Androscoggin River, Class C
003	Route 196 Pump Station	Sabattus River, Class B
004	Brook Street Pump Station	Sabattus River, Class B
005	D&B Street Pump Station	Sabattus River, Class B
006	Upland Road Pump Station	Sabattus River, Class B

SPECIAL CONDITIONS

J. 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 F** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

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

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

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

d. Changes in 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.

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

K. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

Pursuant to this permit and *Standards for the Addition of Transported Wastes to Wastewater Treatment Facilities,* 06-096 CMR 555 (effective March 9, 2009), during the effective period of this permit, the permittee is authorized to receive into the treatment process or solids handling stream up to **a daily maximum of 20,000 gpd** of transported wastes, subject to the following terms and conditions.

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

2. Of the 20,000 gpd of transported wastes authorized by this permit, the permittee may introduce into the treatment process a daily maximum of 20,000 gpd of septage wastes.

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

SPEICIAL CONDITIONS

K. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY (cont'd)

4. At no time must 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 must be suspended until there is no further risk of adverse effects.

5. The permittee must maintain records for each load of transported wastes in a daily log which must include at a minimum the following.
   (a) The date;
   (b) The volume of transported wastes received;
   (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.

6. 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 must be reduced or terminated in order to eliminate the overload condition.

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

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

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

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

SPEICIAL CONDITIONS

K. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY (cont'd)

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

L. MONITORING AND REPORTING

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

Department of Environmental Protection
Central Maine Regional Office
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333

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.

M. REOPENING OF PERMIT FOR MODIFICATION

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

SPECIAL CONDITIONS

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

ATTACHMENT A

Maine Department of Environmental Protection

Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____

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

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 C

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 _____ Date Tested _____

mm/dd/yy 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 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.

			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]		
	WHOLE EFFLUENT TOXICITY		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[5]	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:

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

FACT SHEET

DATE: **October 20, 2015**

PERMIT NUMBER: **ME0100307**

WASTE DISCHARGE LICENSE: **W002725-6D-M-R**

NAME AND ADDRESS OF APPLICANT: **TOWN OF LISBON**
300 Lisbon Street
Lisbon Falls, Maine 04252

COUNTY: **Androscoggin**

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

TOWN OF LISBON
744 Lisbon Street
Lisbon Falls, Maine 04250

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

COGNIZANT OFFICIAL CONTACT INFORMATION:
Mr. Stephen Aievoli, Operations Manager
(207) 353-3013
SAievoli@lisbonme.org

1. APPLICATION SUMMARY

a. Application: On March 13, 2015, the Town of Lisbon (Town/permittee hereinafter) submitted a timely and complete application to the Department for the renewal of Waste Discharge License (WDL) #W002725-6D-I-R/Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100307 (permit hereinafter), which was issued by the Department on May 6, 2010, for a five-year term. The 5/6/10 permit authorized the Town to discharge a monthly average discharge of 2.025 MGD of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the Androscoggin River, Class C, in Lisbon, Maine.

It is noted that the Department made two permit revisions subsequent to the issuance the 5/6/10 permit. On March 23, 2011, the Department issued a minor permit revision to establish water quality based limitations for the following toxic pollutants that exceeded or had a reasonable potential to exceed applicable ambient water quality criteria (AWQC) for inorganic arsenic, total aluminum, total lead, total copper and total zinc. On September 10, 2013, the permit was modified to remove the monthly average limitations, monitoring and reporting requirements and schedule of compliance for inorganic arsenic and total arsenic based on a revision to the AWQC for arsenic and the results of an updated statistical evaluation.

1. APPLICATION SUMMARY (cont'd)

b. Source Description: The Town of Lisbon operates a municipal wastewater treatment facility on Lisbon Road in Lisbon Falls, Maine for the treatment of sanitary wastewater generated by a total of approximately 5,000 residential and light commercial customers located within the Town of Lisbon. The previous permitting action authorized the Town to receive and introduce into the wastewater treatment process a maximum of up to 20,000 gallons per day (GPD) of transported wastes from local septage haulers based on an updated Transported Waste Management Plan submitted as an exhibit to its March 2015 application for permit renewal. All septic tank and holding tank wastes are introduced into the headworks of the facility consisting of a grit and screening apparatus. The sewer collection system is 100% separated (sanitary and storm water) and there are no combined sewer overflow (CSO) points associated with the system. The sanitary sewer collection system is approximately 35 miles in length and contains twelve (12) pump stations, including five (5) that currently have emergency overflow bypasses due to excessive inflow and infiltration (I/I) associated with older piping materials. Currently, three (3) of the 12 pump stations contain back-up power sources. A map showing the location of the wastewater treatment facility and the receiving waters is included as Fact Sheet **Attachment A.**

c. Wastewater Treatment: The Town of Lisbon Pollution Control Facility (PCF) has been online since January 1975 and provides a secondary level of wastewater treatment via a conventional activated sludge system. Influent flow is measured using ultrasonic flow meters and influent screening (primary treatment) is provided by way of a Lakeside® Auger System. Grit is collected in a hopper and hauled to a privately owned facility for final disposal via composting. Grease and rags are collected and hauled to the Lisbon transfer station for final disposal. Septage is introduced into the treatment system prior to the bar rack and grit removal structures in order to provide this waste stream with a primary level of treatment. Secondary treatment is provided through aeration and secondary clarification. The treatment system contains two (2) 310,500-gallon aeration basins fitted with diffused aeration. One of the basins is utilized for wastewater treatment while the other is utilized as an aerated sludge holding tank. Following aeration, the flow is conveyed to two (2) 2,376 square foot circular secondary clarifier basins fitted with interior weirs and surface skimmers. Scum is transferred to a hopper and from there to a biosolids holding tank. Secondary treated wastewater is conveyed to a 17,354-gallon disinfection tank measuring 29 feet long by 10 feet wide for disinfection using sodium hypochlorite. The Town does not maintain a dechlorination system at the facility.

Final effluent is conveyed for discharge to the Androscoggin River via a 16-inch diameter concrete outfall pipe that, based on information contained in the permittee's application, is submerged to a depth of approximately 3 feet below the surface of the water at mean low water. The outfall pipe is not fitted with diffusers or other mechanisms that would enhance mixing of the effluent with the receiving waters and the permittee has not provided information describing the mixing characteristics of the final effluent with the receiving waters.

Sludge handling equipment at the facility includes, but is not limited to, a 150,000-gallon capacity biosolids holding tank and a centrifuge. Sludge is currently conveyed to one of the 310,500-gallon aeration basins for additional treatment. Sludge is trucked and stored at a privately owned facility for mixing in the spring and is then composted in accordance with applicable rules and regulations and license/permit conditions. A process flow diagram submitted by the permittee is included as Fact Sheet **Attachment B.**

2. PERMIT SUMMARY

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

1. Establishes a 1/month monitoring and reporting requirement for *E coli* bacteria for the period December 2015 – April 2016 to assist the Maine Department of Marine Resources in its efforts to assess the impact of non-disinfected waste water being discharged from municipal waste water treatment facilities on shellfish harvesting areas at the mouth of the Kennebec River.

2. Revising the daily maximum water quality based mass limitations for aluminum, copper, lead and zinc based on a more recent statistical evaluation that indicates the discharge has a reasonable potential to exceed the acute AWQC for each parameter.

3. Eliminating the monthly average water quality based limitations for copper as a more recent statistical evaluation that indicates the discharge no longer has a reasonable potential to exceed the chronic AWQC for each parameter.

4. 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);

5. Revising the timing of the screening level whole effluent toxicity (WET), priority pollutant and analytical chemistry based on revision to 06-096 CMR Chapter 530.

6. Eliminating the waiver for percent removal requirements for BOD_5 and TSS when influent strength is less than 200 mg/L based a recent guidance from the U.S. Environmental Protection (EPA).

7. Reducing the monitoring frequencies for biochemical oxygen demand (BOD), total suspended solids (TSS) settleable solids and *E. coli.* bacteria from 3/Week to 2/Week based on a statistical evaluation of the most current 43 months of effluent data.

b. History: The most relevant regulatory actions include:

September 10, 1999 – The Department issued WDL# W002725-68-G-N, for a five-year term.

September 29, 1999 – The US Environmental Protection Agency (USEPA) issued NPDES permit #ME0100307 to the Town for the monthly average discharge of up to 2.025 MGD of secondary treated wastewater to the Androscoggin River. The 9/29/99 NPDES permit superseded the previous National Pollution Discharge Elimination System (NPDES) permit issued on September 22, 1995, and prior permits issued on September 28, 1990 (and associated permit modification issued on July 26, 1995), and June 27, 1985 (and associated permit modification issued on April 9, 1986).

January 27, 2000 – The Department issued WDL #W002725-5L-F-R, for a five-year term.

May 25, 2000 – The Department established interim effluent limits for mercury of 58.1 parts per trillion (ng/L) (average concentration) and 87.1 ng/L (maximum concentration).

2. PERMIT SUMMARY (cont'd)

January 12, 2001 – The Department received authorization from the USEP to administer the NPDES permitting program in Maine, excluding areas of special interest to Maine Indian Tribes. From this point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program, and MEPDES permit #ME0100307 has been utilized for this facility. On March 26, 2011, the USEPA authorized the Department to administer the MEPDES program in Indian territories of the Penobscot Nation and Passamaquoddy Tribe.

March 3, 2005 – The Town submitted a letter to the Department's Division of Engineering, Compliance and Technical Assistance (DECTA) requesting that the Town be removed from the combined sewer overflow (CSO) program on the basis that the Town had not experienced any wet weather related overflows in the five-year period leading up to March 2005.

March 21, 2005 – The Department's DECTA issued a letter to the Town advising that the Town had been removed from the CSO program based on a lack of wet weather related overflows, continued inflow/infiltration mitigation, and repairs and upgrades of existing pump stations.

May 18, 2005 – The Department issued combination WDL #W002725-5L-H-R/ MEPDES Permit #ME010030, for a five-year term.

April 10, 2006 – The Department amended the 5/18/05 WDL/MEPDES permit to incorporate testing requirements of 06-096 CMR 530.

May 6, 2010 – The Department issued combination WDL # W002725-6D-I-R /MEPDES Permit #ME0100307 for a five-year term.

March 23, 2011 – The Department issued a minor permit revision to establish water quality based limitations for the following toxic pollutants that exceed or have a reasonable potential to exceed applicable ambient water quality criteria; inorganic arsenic, total aluminum, total lead, total copper and total zinc.

September 10, 2013 – The Department issued a permit modification to remove the monthly average limitations, monitoring requirements, reporting requirements and schedule of compliance for inorganic arsenic and total arsenic from the permit subsequent to the revision of the arsenic criteria water quality standards and the results of a statistical evaluation on arsenic data conducted on July 19, 2013.

March 13, 2015 – The Town submitted a timely and complete General Application to the Department for renewal of the May 6, 2010, MEPDES permit. The application was accepted for processing on March 17, 2013, and was assigned WDL #W0002725-6D-M-R / MEPDES #ME0100307.

3. CONDITIONS OF PERMIT

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

4. RECEIVING WATER QUALITY STANDARDS

Classification of major river basins, 38 M.R.S.A. § 467(1)(A)(2) classifies the "Androscoggin River, from its confluence with the Ellis River to a line formed by the extension of the Bath-Brunswick boundary across Merrymeeting Bay in a northwesterly direction," which includes the river at the point of discharge, as Class C waters. *Standards for classification of fresh surface waters*, 38 M.R.S.A., § 465(3) describes the standards for Class C 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.

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

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.

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 (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 segment of the Androscoggin River main stem, from the Lower Androscoggin River to the Pejepscot Dam (ADB Assessment Unit ID ME0104000210_425R) as, *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 fish consumption advisory due to the presence of dioxin (including 2,3,7,8-TCDD). The Reports specifies that this section of the river is expected to attain standards by 2020.

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

The report also lists the Androscoggin River as "*Category 5-D: Rivers and Streams Impaired by Legacy Pollutants.*" Impairment in this context refers to a fish consumption advisory due to the presence of polychlorinated biphenyls (PCBs).

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 4-A (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.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

a. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limit of 2.025 MGD based on the design capacity for the treatment facility, and a daily maximum discharge flow reporting requirement.

A reviewed of 43 Discharge Monitoring Reports (DMRs) that were submitted for the period January 2012 – July 2015 indicates the following:

Flow

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	2.025	0.36 – 1.24	0.71
Daily Maximum	Report	0.63 – 2.8	1.3

b. Dilution Factors: The Department established applicable dilution factors for the discharge in accordance with freshwater protocols established in Department Rule Chapter 530, *Surface Water Toxics Control Program*, October 2005. With a monthly average discharge flow limit of 2.025 MGD, dilution factors associated with the discharge from the Town may be calculated as follows:

Acute: 1Q10 = 1,036 cfs $\Rightarrow \frac{(1{,}036 \text{ cfs})(0.6464) + 2.025 \text{ MGD}}{2.025 \text{ MGD}} = 332{:}1$

Modified Acute: ¼ 1Q10 = 259 cfs $\Rightarrow \frac{(259 \text{ cfs})(0.6464) + 2.025 \text{ MGD}}{2.025 \text{ MGD}} = 84{:}1$

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

Chronic: 7Q10 = 1,994 cfs $\Rightarrow \frac{(1{,}994 \text{ cfs})(0.6464) + 2.025 \text{ MGD}}{2.025 \text{ MGD}} = 638{:}1$

Harmonic Mean = 4,332 cfs $\Rightarrow \frac{(4{,}332 \text{ cfs})(0.6464) + 2.025 \text{ MGD}}{2.025 \text{ MGD}} = 1{,}384{:}1$

Department rule Chapter 530.5 states:

> *Analysis using numerical acute criteria for aquatic life must be based on ¼ of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone, according to EPA's Mixing Zone Policy and to ensure a Zone of Passage of at least ¾ of the cross-sectional area of any stream as required by Department rule. Where it can be demonstrated that a discharge achieves complete and rapid 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 Town has not submitted data to the Department demonstrating that the effluent achieves complete and rapid mixing with the receiving waters. Therefore, the Department is utilizing the default stream flow of ¼ 1Q10 in acute evaluations in accordance with Chapter 530.

c. Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS): The previous permitting action established monthly average and weekly average BOD_5 & TSS concentration limits of 30 mg/L and 45 mg/L, respectively, which were based on secondary treatment requirements as defined in Department rule, 06-096 CMR, Chapter 525(3)(III). The previous permitting action also established daily maximum BOD_5 & TSS concentration limits of 50 mg/L based on a Department best professional judgement (BPJ) of best practicable treatment (BPT), and a minimum monitoring frequency requirement of three times per week. All three technology-based concentration limits are being carried forward in this permitting action. Department rule Chapter 523(6)(f) states that all pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass. The previous permitting action established monthly average, weekly average and daily maximum technology-based mass limits of 507 lbs./day, 760 lbs./day, and 845 lbs./day, respectively, which are being carried forward in this permitting action and were derived as follows:

Monthly Average Mass Limit: (30 mg/L)(8.34 lbs./gallon)(2.025 MGD) = 507 lbs./day
Weekly Average Mass Limit: (45 mg/L)(8.34 lbs./day)(2.025 MGD) = 760 lbs./day
Daily Maximum Mass Limit: (50 mg/L)(8.34 lbs./day)(2.025 MGD) = 845 lbs./day

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

A reviewed of 43 DMRs that were submitted for the period January 2012 – July 2015 indicates the following:

BOD_5 mass

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	507	11 - 137	45
Daily Maximum	845	15 - 282	98

BOD_5 concentration

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	3.1 - 20	7.3
Daily Maximum	50	4.7 - 25	13

TSS mass

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	507	12 – 94	40
Daily Maximum	845	19 - 512	113

TSS concentration

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	2.7 - 14	6.5
Daily Maximum	50	4.2 - 41	15

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 monitoring data for BOD & TSS indicates the ratios (expressed in percent) of the long term effluent average to the monthly average mass limits can be calculated as 9% and 8% respectively. According to Table I of the EPA Guidance and Department Guidance a 3/Week monitoring requirement can be reduced to 2/Week. Therefore, this permitting action is reducing the monitoring frequency for BOD and TSS to 2/Week.

This permitting action is carrying forward a requirement for a minimum of 85% removal of BOD_5 & TSS pursuant to 06-096 CMR 525(3)(III)(a&b)(3).The Department is eliminating the waiver to achieve 85% removal of BOD5 and TSS when the monthly average influent is less than 200 mg/L as the secondary treatment regulations do not contain a provision for such a waiver.

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

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 BPT for secondary treated waste water.

A reviewed of 43 DMRs that were submitted for the period January 2012 – July 2015 indicates the following:

Settleable solids concentration

Value	Limit (ml/L)	Range (ml/L)	Mean (ml/L)
Daily Maximum	0.3	<0.02 – 0.2	0.02

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 monitoring data for settleable solids indicates the ratios (expressed in percent) of the long term effluent average to the daily maximum concentration limit 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. However, Department guidance limits monitoring frequency reductions to a one-time event. The May 2010 permit reduced the monitoring frequency for settleable solids from 1/Day to 5/Week. Therefore, the monitoring frequency remains at 5/Week.

e. *Escherichia coli* Bacteria: The previous permit established, and this permitting action is 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 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.

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.

A reviewed of 18 DMRs that were submitted for the period May 2012 – July 2015 indicates the following:

***E. coli* bacteria**

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	126	2 - 49	13
Daily Maximum	949	8.1 - 1533	298

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

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 monitoring data for *E. coli* bacteria indicates the ratios (expressed in percent) of the long term effluent average to the monthly average concentration limit can be calculated as 10%. According to Table I of the EPA Guidance and Department Guidance a 3/Week monitoring requirement can be reduced to 2/Week. Therefore, this permitting action is reducing the monitoring frequency for *E. coli* bacteria to 2/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 fall of 2015 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 be closed to shellfish harvest for a minimum of fourteen days when flow exceeded 30,000 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.

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 Rivers' 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. Our request to sample for one year at each of the WWTP will allow us to assess the impacts and contributions of each WWTP and make recommendations for additional chlorination if it is necessary.

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

f. Total Residual Chlorine (TRC): The previous permit established a daily maximum technology-based concentration limit of 1.0 mg/L for TRC and a minimum monitoring frequency requirement of once per day. 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 licensing/permitting actions impose the more stringent of either a water quality-based or BPT based limit. End-of-pipe water quality based concentration thresholds may be calculated as follows:

			Calculated	
Acute (A) Criterion	Chronic (C) Criterion	Modified A & C Dilution Factors	Acute Threshold	Chronic Threshold
0.019 mg/L	0.011 mg/L	84:1 (Mod. A) 638:1 (C)	1.6 mg/L	7.0 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. This permitting action is carrying forward the daily maximum technology-based concentration limit of 1.0 mg/L as it is more stringent than the calculated acute water quality-based concentration threshold of 1.6 mg/L. TRC monitoring must be performed during any period in which chlorine-based compounds are utilized for effluent disinfection. The permittee shall utilize approved test methods that are capable of bracketing the limitations in this permit.

A review of the DMR data for the period May 2012 – July 2015 indicates concentration values being reported as follows:

Total residual chlorine (DMRs=18)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.98 – 1.0	0.99

A review of the monitoring data for total residual chlorine indicates the ratios (expressed in percent) of the long term effluent average to the daily maximum concentration limit can be calculated as 99%. According to Table I of the EPA Guidance and Department Guidance a 1/Day monitoring requirement can not be reduced. Therefore, the monitoring requirement for total residual chlorine remains at 1/Day.

g. pH: The previous permitting action established, and this permitting action is carrying forward, a technology-based pH limit of 6.0 – 9.0 standard units (SU), which is based on 06-096 CMR 525(3)(III), and a minimum monitoring frequency requirement of once per day.

A review of the DMR data for the period May 2012 – July 2015 indicates values have been reported as follows:

pH

Value	Limit (SU)	Minimum (SU)	Maximum (SU)
Range	6.0 – 9.0	6.0	7.4

The minimum monitoring frequency requirement of once per day is being carried forward in this permit.

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

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 W002696-6B-F-R by establishing interim monthly average and daily maximum effluent concentration limits of 58.1 parts per trillion (ppt) and 87.1 ppt, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury. It is noted the limitations have been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit.

38 M.R.S.A. § 420(1-B)(B)(1) provides that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department. A review of the Department's data base for the period September 2010 through September 2014 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows:

Mercury

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average	58.1	1.4 - 12.6	4.1
Daily Maximum	87.1		

Pursuant to 38 M.R.S.A. §420(1-B)(F), on February 6, 2012, the Department issued a minor revision to the May 6, 2010 permit thereby revising the minimum monitoring frequency requirement from four times per year to once per year given the permittee has maintained at least 5 years of mercury testing data. In fact, the permittee has been monitoring mercury since June 2000 or 15 years. Pursuant to 38 M.R.S.A. §420(1-B)(F), this permitting action is carrying forward the 1/Year monitoring frequency established in the February 6, 2012 permit modification.

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.

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[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)

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 from 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.

For the background concentration in the Androscoggin River just upstream of the permittee's discharge, the permittee collected one test result during summer of 2014 and the result was 0.015 mg/L which is being utilized in reasonable potential calculations in this Fact Sheet. To get more current values of the total phosphorus being discharged from the permittee's facility, the Department requested the permittee and other major dischargers on the Androscoggin River conduct effluent testing during the summer of 2014. The permittee submitted one test result of 4.2 mg/L which is being utilized in reasonable potential calculations in this Fact Sheet.

Using the following calculation and criteria, the discharge from the permittee's facility does not exhibit a reasonable potential to exceed the EPA's Gold Book ambient water quality goal of 0.100 mg/L for phosphorus or the Department's 06-096 CMR 583 draft criteria of 33 ug/L.

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

Qe = effluent flow i.e. facility design flow	=	2.025 MGD
Ce = effluent pollutant concentration	=	4.2 mg/L
Qs = 7Q10 flow of receiving water	=	1,289 MGD
Cs = upstream concentration	=	0.015 mg/L
Qr = receiving water flow	=	1,291 MGD
Cr = receiving water concentration		

$$Cr = \frac{(2.025\ MGD \times 4.2\ mg/L) + (1{,}289\ MGD \times 0.015\ mg/L)}{1{,}291\ MGD} = 0.022\ mg/L$$

$Cr = 0.022\ mg/L < 0.100\ mg/L \Rightarrow$ **No Reasonable Potential**
$Cr = 0.022\ mg/L < 0.033\ mg/L \Rightarrow$ **No Reasonable Potential**

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

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

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

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

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

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

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

Department rule Chapter 530 (2)(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the Chapter 530 criteria, the permittee's facility falls into the Level III frequency category as the facility has a chronic dilution factor ≥100:1 but <500:1 and Q ≥1.0 MGD. Chapter 530(2)(D)(1) specifies that routine surveillance and screening level testing requirements are as follows:

Screening level testing

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

Surveillance level testing

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

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

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

A review of the data on file with the Department for the permittee indicates that to date, it has fulfilled the WET and chemical-specific testing requirements of Chapter 530. See **Attachment C** of this Fact Sheet for a summary of the WET test results and **Attachment D** of this Fact Sheet of the analytical chemistry and priority pollutant test dates and numeric results for parameters of concern.

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, EPA, 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 September 17, 2015, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department in accordance with the statistical approach outlined above. The 9/17/15 statistical evaluation indicates the discharge from the permittee's facility has not demonstrated a reasonable potential to exceed the critical modified acute or chronic ambient water quality thresholds of 1.2% and 0.16% respectively, for the water flea or the brook trout.

06-096 CMR 530(2)(D)(3)(c) states, in part, *"Dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E)."* Based on the provisions of 06-096 CMR 530, surveillance level WET testing is being waived. This permitting action is carrying forward the routine screening level WET testing requirements as specified in the table above and 06-096 CMR 530(2)(D).

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

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."

This permitting action is carrying forward the notification requirement in this permitting action as Special Condition J, pursuant to 06-096 CMR 530(2)(D)(4). 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.

Chemical specific evaluation

06-096 CMR 530 §3 states, "*In determining if effluent limits are required, the Department shall consider all information on file and effluent testing conducted during the preceding 60 months. However, testing done in the performance of a Toxicity Reduction Evaluation (TRE) approved by the Department may be excluded from such evaluations."*

06-096 CMR 530 §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 very limited information on the background levels of metals in the water column of the Androscoggin River. Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

06-096 CMR 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".*

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

06-096 CMR 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."*

06-096 CMR 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.

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 June 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 has 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.

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

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 chronic AWQC for aluminum and lead and a reasonable potential to exceed the acute AWQC for aluminum, copper and zinc established in 06-096 Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants.*

The Department's guidance that establishes protocols for establishing waste load allocations can be found in **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, segment allocation method of establishing water quality based mass limitations is applicable.

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 concentration 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, copper, lead and zinc were calculated as follows:

Aluminum

Mean concentration = 75 ug/L or 0.075 mg/L
Permit flow limit = 2.025 MGD
Historical average mass = (0.075 mg/L)(8.34)(2.025 MGD) = 1.26 lbs/day

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

The7/15/15 statistical evaluation (Report ID #793) indicates the historical average mass of aluminum discharged by the permittee (1.26 lbs/day) is 0.20 % 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 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). 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)(0.0020) = **1.4 lbs/day**

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). The calculation for aluminum is as follows:

Acute:

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

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

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)(0.0020) = **3.0 lbs/day**

Copper

Mean concentration = 23.7 ug/L or 0.0237 mg/L
Permit flow limit = 2.025 MGD
Historical average mass = (0.0237 mg/L)(8.34)(2.025 MGD) = 0.40 lbs/day

The 7/15/15 statistical evaluation (Report ID #793) indicates the historical average mass of copper discharged by the permittte (0.40 lbs/day) is 11.04 % 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 (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). The calculation for copper is as follows:

Acute:

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 = 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

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

Copper

Acute

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)(0.1104) = **0.68 lbs/day**

Lead

Mean concentration = 2.5 ug/L or 0.0025 mg/L
Permit flow limit = 2.025 MGD
Historical average mass = (0.0025 mg/L)(8.34)(2.025 MGD) = 0.043 lbs/day

The 7/15/15 statistical evaluation (Report ID #793) indicates the historical average mass of lead discharged by the permittee (0.043 lbs/day) is 3.98 % of the lead 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 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 to the Sabattus River at Sabattus (critical low flow 7Q10 = 2.5 cfs). The calculation for lead 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 = 0.41 ug/L
0.41 ug/L(0.90) = 0.37 ug/L or 0.00037 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)(0.00037 mg/L) = 3.31 lbs/day

Therefore, the chronic mass segment allocations for lead for the permittee can be calculated as follows:

Monthly average mass for lead:
(Chronic assimilative capacity mass)(% of total lead discharged)
(3.31 lbs/day)(0.0398) = **0.13 lbs/day**

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

Zinc

Mean concentration = 118 ug/L or 0.118 mg/L
Permit flow limit = 2.025 MGD
Historical average mass = (0.118 mg/L)(8.34)(2.025 MGD) = 2.0 lbs/day

The 7/15/15 statistical evaluation (Report ID #793) indicates the historical average mass of zinc discharged by the permittte (2.0 lbs/day) is 5.75 % of the zinc 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 (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 to the Sabattus River (critical low flow 1Q10 = 2.5 cfs). The calculation for zinc is as follows:

Acute:

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 = 30.6 ug/L
30.6 ug/L(0.90) = 27.5 ug/L or 0.0275 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)(0.0275 mg/L) = 61.0 lbs/day

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

Daily maximum mass for zinc:
(Acute assimilative capacity mass)(% of total zinc discharged)
(61.0 lbs/day)(0.0575) = **3.5 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 exceedences 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, copper, lead and zinc at the routine surveillance level frequency of 1/Year specified in 06-096 CMR Chapter 530.

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

06-096 CMR 530(2)(D)(3)(c) states, in part, *"Dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3(E)."* Based on the provisions of 06-096 CMR 530, surveillance level analytical chemistry testing is being waived. As with WET testing, this permitting action is carrying forward the notification requirement in this permitting action as Special Condition J, pursuant to 06-096 CMR 530(2)(D)(4). 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.

7. DISPOSAL OF SEPTAGE WASTE IN WASTEWATER TREATMENT FACILITY

The previous permitting action authorized the permittee to receive and introduce up to 20,000 gpd of transported wastes into the wastewater treatment process or solids handling stream. Department rule Chapter 555, *Standards For The Addition of Transported Wastes to Wastewater Treatment Facilities*, limits the quantity of transported wastes received at a facility to 1% of the design capacity of the treatment facility if the facility utilizes a side stream or storage method of introduction into the influent flow, or 0.5% of the design capacity of the facility if the facility does not utilize the side stream or storage method of introduction into the influent flow. A facility may receive more than 1% of the design capacity on a case-by-case basis. The permittee has requested the Department carry forward the daily quantity of 20,000 gpd of transported wastes that it is authorized to receive and treat as it utilizes the side stream/storage method of metering transported wastes into the facility's influent flow. With a design capacity of 2.025 MGD, 20,000 gpd represents 1.0% of said capacity.

The Department has determined that under normal operating conditions, the receipt and treatment of 20,000 gpd of transported wastes to the facility will not cause or contribute to upset conditions of the treatment process.

8. ANTI-BACKSLIDING

Federal regulation 40 CFR, §122(l) contains the criteria for what is often referred to as the anti-backsliding provisions of the Federal Water Pollution Control Act (Clean Water Act). In general, the regulation states that except for provisions specified in the regulation, effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards or conditions in the previous permit. Applicable exceptions include (1) material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation and (2) information is available which was not available at the time of the permit issuance (other than revised regulations, guidance or test methods) and which would justify the application of less stringent effluent limitations at the time of permit issuance.

This permitting action is establishing less stringent water quality based mass limitations for copper, lead and zinc based on new information provided by an updated statistical evaluation of chemical specific data generated pursuant to 06-096 CMR 530.

9. ANTI-DEGRADATION - IMPACT ON RECEIVING WATER QUALITY

Maine's anti-degradation policy is included in 38 M.R.S.A., Section 464(4)(F) and addressed in the *Conclusions* section of this permit. Pursuant to the policy, where a new or increased discharge is proposed, the Department shall determine whether the discharge will result in a significant lowering of existing water quality. Increased discharge means a discharge that would add one or more new pollutants to an existing effluent, increase existing levels of pollutants in an effluent, or cause an effluent to exceed one or more of its current licensed discharge flow or effluent limits, after the application of applicable best practicable treatment technology.

This permitting action revises previously established water quality based mass limitations for copper lead and zinc. The rationale for these actions is contained in Section 6 of this Fact Sheet. Based on the information provided in the referenced section, the Department has made the determination that the discharge approved by this permit will not result in a significant lowering of water quality. As permitted, the Department has determined the existing and designated water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the Androscoggin River 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 2, 2015. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses,* 06-096 CMR 522 (effective January 12, 2001).

11. DEPARTMENT CONTACTS

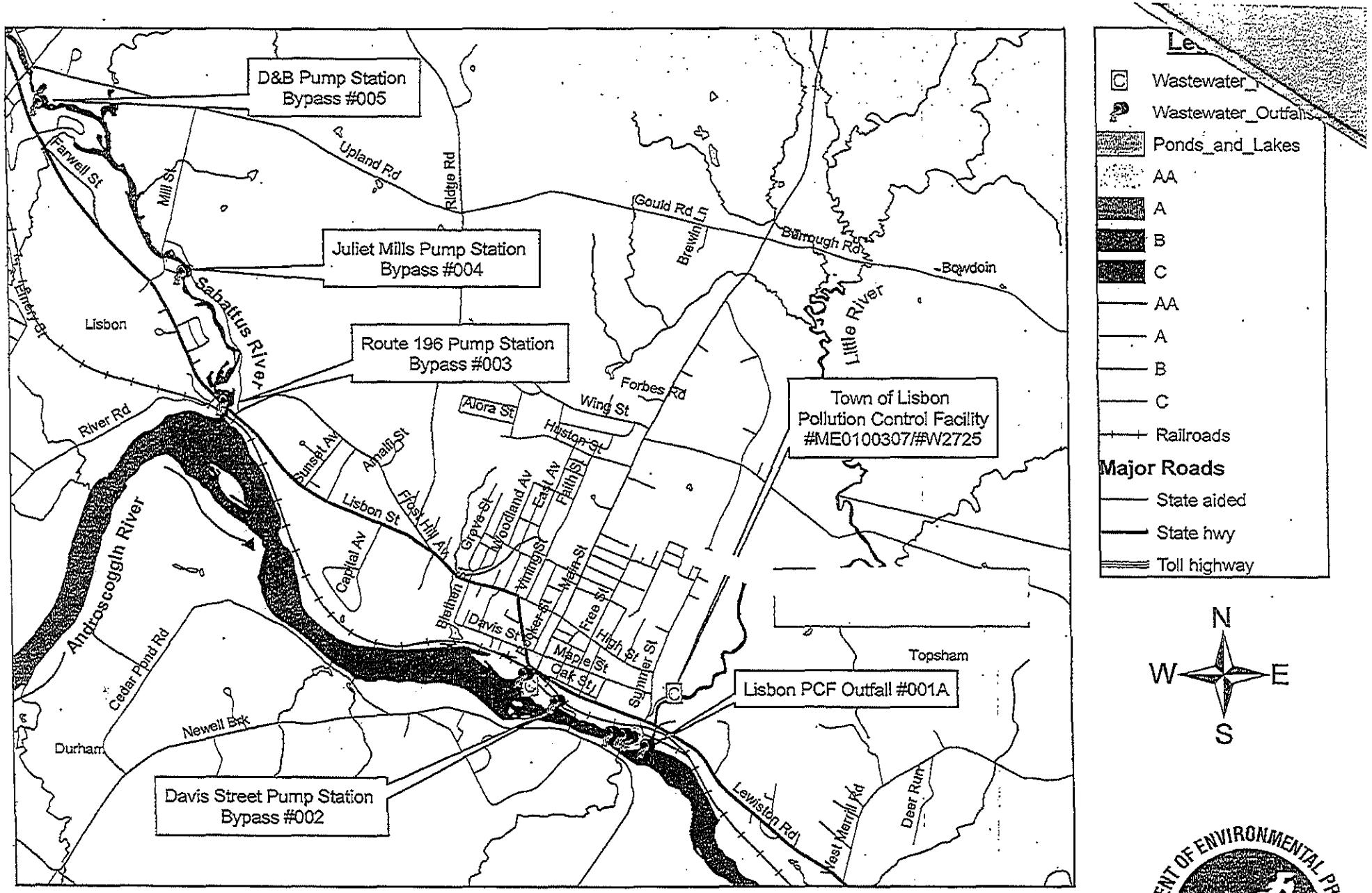
Additional information concerning this permitting action may be obtained from, and written comments sent to:

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) 215-1579
e-mail: gregg.wood@maine.gov

12. RESPONSE TO COMMENTS

During the period of October 21, 20105, 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 Lisbon 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



Lisbon, Maine

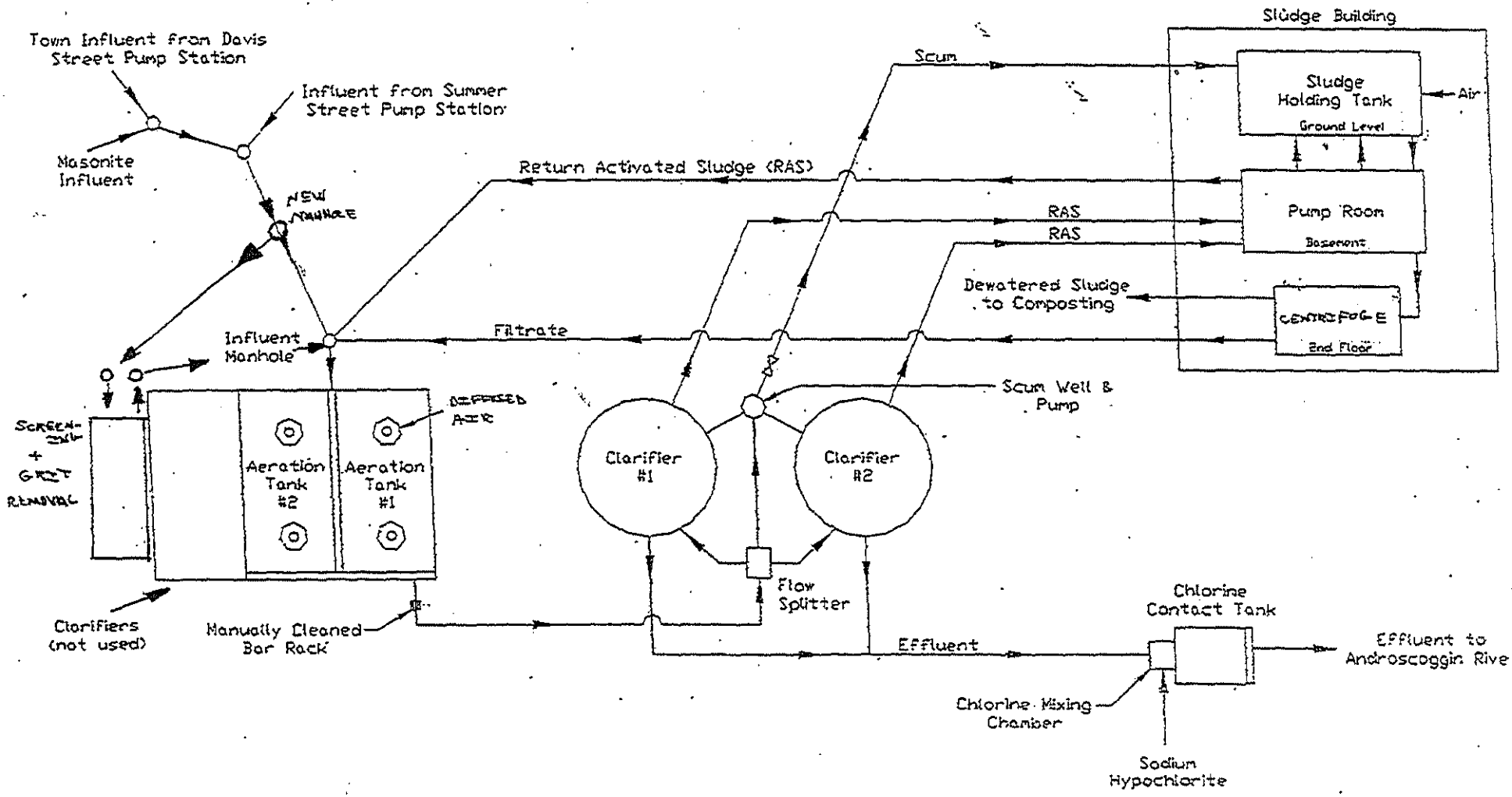
Map created by:
Bill Hinkel
Division of Water Resource Regulation
Maine Department of Environmental Protection
March 24, 2005

DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE OF MAINE

ATTACHMENT B

ATTACHMENT A

WWTF PROCESS FLOW SCHEMATIC
LISBON, MAINE WWTF



ATTACHMENT C

WET TEST REPORT

Data for tests conducted for the period

17/Sep/2010 - 17/Sep/2015

LISBON NPDES= ME010030 Effluent Limit: Acute (%) = 0.301 Chronic (%) = 0.157

Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	100	09/23/2014	0.301		
TROUT	C_NOEL	100	09/23/2014	0.157		
WATER FLEA	A_NOEL	100	09/23/2014	0.301		
WATER FLEA	C_NOEL	100	09/23/2014	0.157		

ATTACHMENT D

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 02/Oct/2010 - 02/Oct/2015

Facility Name: **LISBON** NPDES: **ME0100307**

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
10/27/2011	0.77	0.64	5	5	0	0	0	0	0	F	0
11/30/2011	0.77	1.05	1	1	0	0	0	0	0	F	0
03/15/2012	0.68	0.77	1	1	0	0	0	0	0	F	0
11/13/2012	0.58	0.66	5	5	0	0	0	0	0	F	0
11/03/2013	0.60	0.63	4	4	0	0	0	0	0	F	0
06/23/2014	0.68	0.59	11	10	0	0	0	1	0	F	0
09/23/2014	0.51	0.44	135	14	28	46	25	11	11	F	0
12/02/2014	1.17	0.88	12	10	0	1	0	1	0	F	0
02/18/2015	0.53	0.58	11	10	0	0	0	1	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: 02/Oct/2010 - 02/Oct/2015

Facility name: **LISBON** Permit Number: **ME0100307**

Parameter: ALUMINUM	Test date	Result (ug/l)	Lsthan
	10/27/2011	85.000	N
	11/13/2012	88.000	N
	11/03/2013	45.000	N
	06/23/2014	60.000	Y
	09/23/2014	130.000	N
	12/02/2014	60.000	Y
	02/18/2015	114.000	N

Parameter: COPPER	Test date	Result (ug/l)	Lsthan
	10/27/2011	38.000	N
	11/13/2012	21.000	N
	11/03/2013	15.000	N
	06/23/2014	18.500	N
	09/23/2014	27.700	N
	12/02/2014	10.700	N
	02/18/2015	34.000	N

Parameter: LEAD	Test date	Result (ug/l)	Lsthan
	10/27/2011	7.000	N
	11/13/2012	1.000	N
	11/03/2013	4.000	N
	06/23/2014	3.000	Y
	09/23/2014	3.000	Y
	12/02/2014	3.000	Y
	02/18/2015	3.000	Y

Parameter: ZINC	Test date	Result (ug/l)	Lsthan
	10/27/2011	160.000	N
	11/13/2012	185.000	N
	11/03/2013	105.000	N
	06/23/2014	94.600	N
	09/23/2014	128.000	N
	12/02/2014	70.900	N
	02/18/2015	90.400	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.*

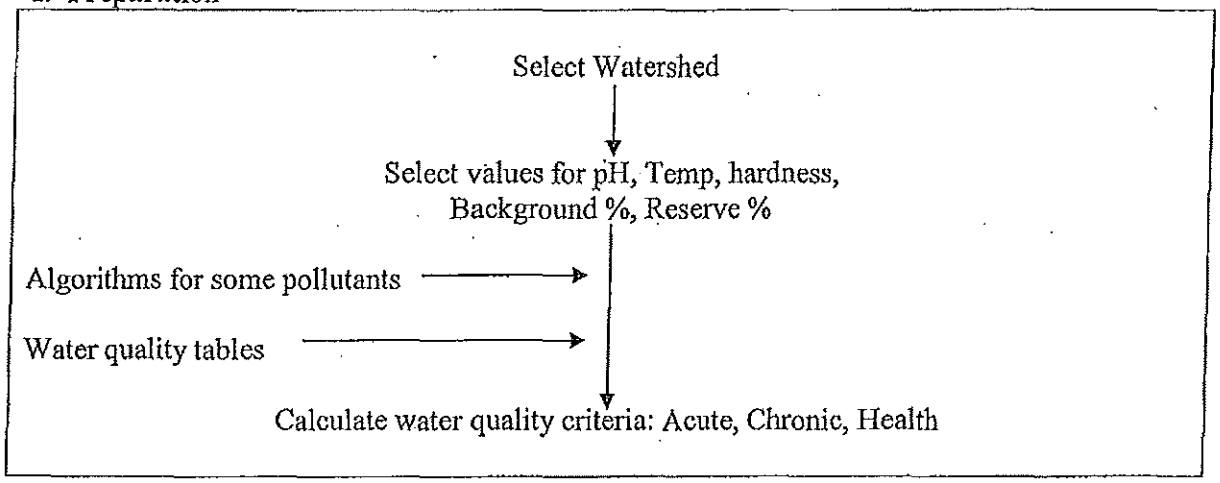
Segment allocation. One of three ways of developing an *allocation.* The amount is set by multiplying a facility's *historical discharge percentage* for a specific pollutant by the *assimilative capacity* for that pollutant and criterion. A facility will have different allocation percentages for each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

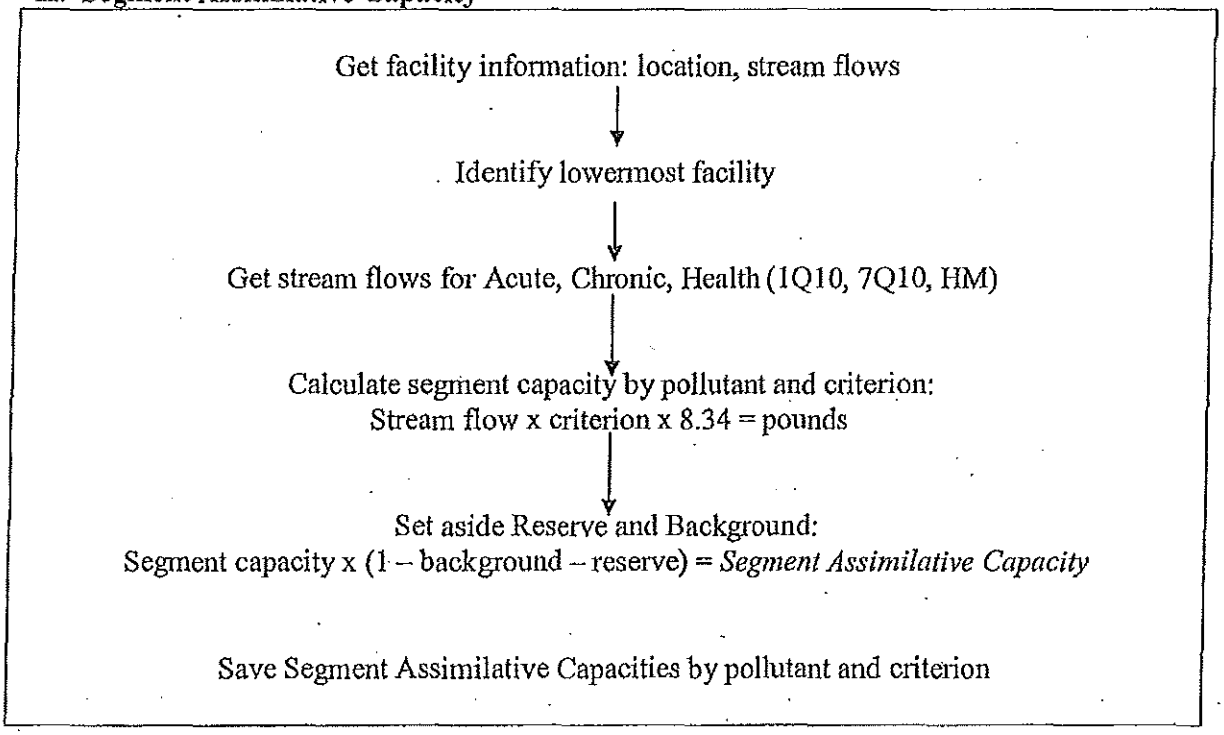
Water quality criteria. Standards for acceptable in-stream or ambient levels of pollutants. These are established in the Department's Chapter 584 and are expressed as concentrations in ug/L. There may be separate standards for acute and chronic protection aquatic life and/or human health. Each criterion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

Select each facility effluent data for each facility

Data input and edits →

Identify "less than" results and assign at ½ of reporting limit

Bypass pollutants if all results are "less than"

Average concentrations and calculate pounds:
Ave concentration x license flow x 8.34 = *Historical Average*

Determine reasonable potential (RP) using algorithm

Calculate RP adjusted pounds:
Historical Average x RP factor = *RP Historical Allocation*

Save for comparative evaluation

Calculate adjusted maximum pounds:
Highest concentration x RP factor x license flow x 8.34 = *RP Maximum Value*

IV. Determine Facility History Percentage

By pollutant, identify facilities with *Historical Average*

Sum all Historical Averages within segment

By facility, calculate percent of total:
Facility pounds / Total pounds = *Facility History %*

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.