



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE  
GOVERNOR

PATRICIA W. AHO  
COMMISSIONER

April 4, 2013

Mr. Mark Descoteaux  
Town of Hartland  
Hartland Pollution Control Facility  
P.O. Box 392  
Hartland, ME 04943  
[hartlandpotw@tds.net](mailto:hartlandpotw@tds.net)

*Sent via electronic mail  
Delivery confirmation requested*

**RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101443  
Maine Waste Discharge License (WDL) # W000678-5M-L-R  
Finalized MEPDES Permit Renewal**

Dear Mr. Descoteaux:

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

Sincerely,

Bill Hinkel  
Division of Water Quality Management  
Bureau of Land and Water Quality  
[bill.hinkel@maine.gov](mailto:bill.hinkel@maine.gov)  
ph: 207.485.2281

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AUGUSTA, MAINE 04333-0017  
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PRESQUE ISLE  
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PRESQUE ISLE, MAINE 04679-2094  
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Letter to Hartland PCF  
April 4, 2013  
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Enc.

cc: Stacie Beyer, MDEP  
Jim Crowley, MDEP  
Lori Mitchell, MDEP  
Sandy Mojica, USEPA



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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF HARTLAND	)	MAINE POLLUTANT DISCHARGE
HARTLAND, SOMERSET COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
#ME0101443	)	WASTE DISCHARGE LICENSE
#W000678-5M-L-R	)	RENEWAL
APPROVAL	)	

Pursuant to the provisions of the *Federal Water Pollution Control Act*, Title 33 USC §1251, *Conditions of licenses*, 38 M.R.S.A. § 414-A, and applicable regulations, the Department of Environmental Protection (Department) has considered the application of TOWN OF HARTLAND (TOWN), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The Town has submitted a timely and complete application to the Department for renewal of Waste Discharge License (WDL) #W000678-5M-H-R / Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101443, which was issued on December 6, 2007, and expired on December 6, 2012. The December 6, 2007 MEPDES permit authorized the monthly average discharge of 1.5 million gallons per day (MGD) of secondary treated sanitary and tannery process wastewater from the Hartland Pollution Control Facility, a publicly owned treatment works (POTW), to the Sebasticook River (West Branch of the main stem), Class C, in Hartland, Maine.

It is noted that the Department issued four minor permit revisions on April 16, 2010 (reduction in total residual chlorine monitoring frequency), October 4, 2010 (reduction in biochemical oxygen demand monitoring frequency), February 4, 2011 (revision of the monthly average concentration limit for total chromium), and February 6, 2012 (revision of the mercury monitoring frequency).

PERMIT SUMMARY

This permitting action is similar to the December 6, 2007 permitting action and four subsequent minor permit revisions in that it is:

1. Carrying forward the monthly average discharge flow limit of 1.5 MGD and the daily maximum discharge flow reporting requirement;
2. Carrying forward the monthly average and daily maximum water quality-based concentration and mass limitations for biochemical oxygen demand (BOD<sub>5</sub>);
3. Carrying forward the monthly average and daily maximum water quality-based concentration and mass limitations for total suspended solids (TSS);

**PERMIT SUMMARY (cont'd)**

4. Carrying forward the reporting requirements for the 30-day average percent removal rates for BOD<sub>5</sub> and TSS;
5. Carrying forward the daily maximum, technology-based concentration limitation of 0.3 ml/L for settleable solids;
6. Carrying forward the seasonal daily maximum concentration limit for *Escherichia coli* bacteria;
7. Carrying forward the technology-based, monthly average and daily maximum concentration limits for total residual chlorine (TRC);
8. Carrying forward the monthly average and daily maximum technology-based concentration and mass limits for oil and grease (O&G);
9. Carrying forward the pH range limit of 6.0 to 9.0 standard units (SU);
10. Carrying forward conditions and requirements for an Industrial Pretreatment Program (Special Condition M of this permit);
11. Carrying forward the water quality-based monthly average and the technology-based daily maximum mass limits for total chromium; and
12. Carrying forward Special Condition N, *Surface Water Toxics Control Program*.

**This permitting action is different from the December 6, 2007 permitting action and four subsequent minor permit revisions in that it is:**

1. Revising the seasonal monthly average concentration limit for *E. coli* bacteria based on changes to Maine's water quality standards for Class C waters;
2. Eliminating the seasonal monitoring and reporting requirements for total phosphorous (total-P) based on the results of facility testing;
3. Eliminating the chronic water quality limit of 5.5% for the water flea based on the results of facility testing;
4. Eliminating the water quality-based concentration and mass limits for 2,4,6-trichlorophenol, total aluminum, ammonia, B-BHC, bis(2-ethylhexyl) phthalate, chlorodibromomethane, chloroform, dichlorobromomethane, and total zinc based on the results of facility testing;
5. Establishing a water quality-based monthly average mass limit and concentration reporting requirement for inorganic arsenic and a monthly average mass and concentration reporting requirements for total arsenic based on the results of facility testing;
6. Establishing Special Condition I, *Schedule of Compliance*, for imposition of inorganic arsenic limits;

### PERMIT SUMMARY (cont'd)

7. Establishing a water quality-based monthly average mass limit and a concentration reporting requirement for cyanide, amenable to chlorination based on the results of facility testing;
8. 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);
9. Revising previous Special Condition H, now called *06-096 CMR 530(2)(D)(4) Statement for Reduced Waived Toxics Testing*, to include certification requirements for inflow/infiltration and transported wastes that may increase the toxicity of the discharge;
10. Revising previous Special Condition L, now called *Disposal of Transported Wastes in Wastewater Treatment Facility*, based on the revised rule, *Standards for the Addition of Transported Wastes to Waste Water Treatment Facilities*, 06-096 CMR 555 (last amended February 5, 2009); and
11. Revising the minimum monitoring frequency requirements for TSS and settleable solids based on the results of facility testing.

### CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated April 4, 2013, and subject to the Conditions listed below, 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 national resource, that water quality will be maintained and protected;
  - (c) The standards of classification of the receiving water body are met or, 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 discharge will be subject to effluent limitations that require application of best practicable treatment as defined in 38 M.R.S.A. § 414-A(1)(D).

## ACTION

THEREFORE, the Department APPROVES the above noted application of the TOWN OF HARTLAND to discharge a monthly average flow of 1.5 million gallons per day of secondary treated municipal wastewater from the Hartland Pollution Control Facility to the Sebasticook River (West Branch of the main stem), Class C, in Hartland, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

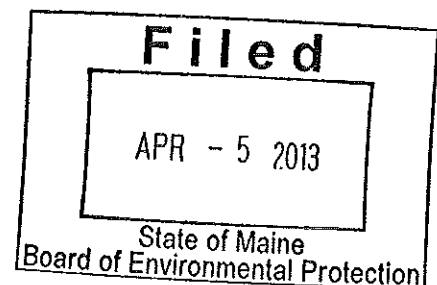
1. *Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits*, revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit and the authorization to discharge become effective 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) (effective April 1, 2003)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS 5<sup>th</sup> DAY OF April 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Keenan  
For PATRICIA W. AHO, Commissioner



Date filed with Board of Environmental Protection: \_\_\_\_\_

Date of initial receipt of application: September 24, 2012

Date of application acceptance: September 24, 2012

This Order prepared by Bill Hinkel, BUREAU OF LAND & WATER QUALITY

# A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge secondary treated municipal wastewater from Outfall #001A to the Sebasticook River (West Branch of the main stem) at Hartland. Such discharges are limited and shall be monitored by the permittee as specified below<sup>(1)</sup>.  
Minimum

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency
	as specified	as specified	as specified	as specified	as specified	as specified	as specified
Flow [50050]	1.5 MGD [03]	---	Report MGD [03]	---	---	---	Continuous [99/99]
BOD <sub>5</sub> [00310]	660 lbs./day [26]	---	1,320 lbs./day [26]	66 mg/L [19]	---	132 mg/L [19]	2/Week [02/07]
BOD <sub>5</sub> Percent Removal <sup>(2)</sup> [81010]	---	---	---	Report % [23]	---	---	1/Week [02/07]
TSS [00530]	1,028 lbs./day [26]	---	2,238 lbs./day [26]	103 mg/L [19]	---	224 mg/L [19]	24-Hour Composite [24]
TSS Percent Removal <sup>(2)</sup> [81011]	---	---	---	Report % [23]	---	---	Calculate [CA]
Settleable Solids [00545]	---	---	---	---	---	0.3 ml/L [25]	3/Week [03/07]
<i>E. coli</i> Bacteria <sup>(3)</sup> May 15 – September 30 [31633]	---	---	---	126/100 ml <sup>(4)</sup> [13]	---	949/100 ml [13]	3/Week [03/07]
Total Residual Chlorine <sup>(5)</sup> [50060]	---	---	---	0.1 mg/L [19]	---	0.3 mg/L [19]	1/Day [01/01]
Oil and Grease [00556]	188 lbs./day [26]	---	188 lbs./day [26]	15 mg/L [19]	---	15 mg/L [19]	1/Week [01/01]
pH [00400]	---	---	---	---	---	6.0 – 9.0 SU [12]	1/Day [01/01]

The italicized numeric values bracketed in the table and in subsequent text 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.**

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

2. The permittee is authorized to discharge secondary treated municipal wastewater from **Outfall #001A** to the Sebasticook River (West Branch of the main stem) at Hartland. Such discharges are limited and shall be monitored by the permittee as specified below (cont'd) <sup>(1)</sup>:

**Minimum**

Effluent Characteristic	Discharge Limitations				Monitoring Requirements			
	<u>Monthly Average</u> as specified	<u>Weekly Average</u> as specified	<u>Daily Maximum</u> as specified	<u>Monthly Average</u> as specified	<u>Weekly Average</u> as specified	<u>Daily Maximum</u> as specified	<u>Measurement Frequency</u> as specified	<u>Sample Type</u> as specified
<u>Arsenic (Total)</u> (6) [01002] (Upon permit issuance)	Report lbs./day [26]	---	---	Report µg/L [28]	---	---	1/Quarter [01/90]	24-Hour Composite [24]
<u>Arsenic (Inorganic)</u> (7) [01252] (Upon test method approval)	0.0038 lbs./day [26]	---	---	Report µg/L [28]	---	---	1/Year [01/YR]	24-Hour Composite [24]
<u>Chromium (Total)</u> [01034]	4.0 lbs./day [26]	---	34.0 lbs./day [26]	Report µg/L [28]	---	Report µg/L [28]	1/Month [01/30]	24-Hour Composite [24]
<u>Copper (Total)</u> [01042]	---	---	0.53 lbs./day [26]	---	---	Report µg/L [28]	1/Year [01/YR]	24-Hour Composite [24]
<u>Cyanide (Amenable to Chlorination)</u> [00722]	0.90 lbs./day [26]	---	---	Report µg/L [28]	---	---	1/Year [01/YR]	24-Hour Composite [24]
<u>Mercury (Total)</u> (8) [71900]	---	---	---	8.1 ng/L [3M]	---	12.1 ng/L [3M]	1/Year [01/YR]	Grab [GR]

The italicized numeric values bracketed in the table and in subsequent text 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)

3. ***SURVEILLANCE LEVEL*** - Beginning upon issuance and lasting until 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and resuming 12 months prior to permit expiration (Year 5 of the term of the permit)<sup>(1)</sup>.

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
<b>Whole Effluent Toxicity (9)</b> <b><u>Acute – NOEL</u></b> <i>Ceriodaphnia dubia</i> (Water flea) [TDA3B] <i>Salvelinus fontinalis</i> (Brook trout) [TDA6F]	---	---	---	Report % [23] Report % [23]	1/Year [01/YR] 1 Year [01/YR]	Composite [24] Composite [24]
	---	---	---	Report % [23] Report % [23]	1/Year [01/YR] 1 Year [01/YR]	Composite [24] Composite [24]
	---	---	---	Report µg/L [28] Report µg/L [28]	1 Year [01/YR]	Composite/Grab [24]

4. ***SCREENING LEVEL*** - Beginning 24 months prior to the expiration date of the permit and lasting through 12 months prior to permit expiration and every five years thereafter if a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit<sup>(1)</sup>.

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
<b>Whole Effluent Toxicity (9)</b> <b><u>Acute – NOEL</u></b> <i>Ceriodaphnia dubia</i> (Water flea) [TDA3B] <i>Salvelinus fontinalis</i> (Brook trout) [TDA6F]	---	---	---	Report % [23] Report % [23]	1/Quarter [01/Qtr] 1/Quarter [01/Qtr]	Composite [24] Composite [24]
	---	---	---	Report % [23] Report % [23]	1/Quarter [01/Qtr] 1/Quarter [01/Qtr]	Composite [24] Composite [24]
	---	---	---	Report µg/L [28] Report µg/L [28]	1/Quarter [01/Qtr]	Composite/Grab [24]
<b><u>Priority Pollutant (11)</u></b> [50008]	---	---	---	Report µg/L [28]	1/Year [01/YR]	Composite/Grab [24]

The italicized numeric values bracketed in the table and in subsequent text 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)

#### FOOTNOTES:

1. **Sampling** – The permittee shall 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. Samples that are sent to a POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000).

All analytical test results must be reported to the Department including results which are detected below the respective reporting limits (RLs) specified by the Department or as specified by other approved test methods. See **Attachment A** of this permit for a list of the Department's RLs. If a non-detect analytical test result is below the respective RL, the concentration result must be reported as <Y where Y is the RL achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL or reporting an estimated value ("J" flagged) is not acceptable and will be rejected by the Department. For mass, if the analytical result is reported as <Y or if a detectable result is less than a RL, report a <X lbs/day, where X is the parameter specific limitation established in the permit. Reporting analytical data and its use in calculations must follow established Department guidelines specified in this permit or in available Department guidance documents. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

2. **Percent Removal** – The permittee shall report percent removal for both biochemical oxygen demand and total suspended solids for all flows receiving secondary treatment. The percent removal must be 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. **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 shall utilize a USEPA-approved test method capable of bracketing the TRC limitations specified in this permitting action.

## SPECIAL CONDITIONS

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

#### FOOTNOTES:

6. **Arsenic (Total)** – Beginning upon issuance of this permit and lasting through a date on which the USEPA approves a test method for inorganic arsenic, the permittee shall sample and analyze the discharge from the facility for total arsenic. The Department's most current reporting limit (RL) for total arsenic is 5 µg/L but may be subject to revision during the term of this permit. All detectable analytical test results must be reported to the Department, including results which are detected below the Department's most current RL at the time of sampling and reporting. Only the detectable results greater than the total arsenic threshold of 0.60 µg/L (see page 26 of the Fact Sheet attached to this permit) or the Department's RL at the time (whichever is higher) will be considered as a possible exceedence of the inorganic limit. If a test result is determined to be a possible exceedence, the permittee shall submit a toxicity reduction evaluation (TRE) to the Department for review and approval within 45 days of receiving the test result of concern from the laboratory.
7. **Arsenic (Inorganic)** – The limitations and monitoring requirements are not in effect until the USEPA approves of a test method for inorganic arsenic. Once effective, compliance will be based on a 12-month rolling average basis beginning 12 months after the effective date of the limits. Following USEPA approval of a test method for inorganic arsenic and based on recent available data, the permittee may request that the Department reopen this permit in accordance with Special Condition O, *Reopening on Permit For Modifications*, of this permit to establish a schedule of compliance for imposition of the numeric inorganic arsenic limitations.
8. **Mercury** – The permittee shall 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 shall be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry*. See **Attachment B** for a Department report form for mercury test results. Compliance with the monthly average limitation established in Special Condition A.2 of this permit is based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.
9. **Whole effluent toxicity (WET) testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions set at levels to bracket the critical acute and chronic thresholds of 5.5% and 5.5%, respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points. The critical acute and chronic thresholds were derived as the mathematical inverse of the applicable acute and chronic dilution factors of 18.2:1 and 18.2:1, respectively.

## SPECIAL CONDITIONS

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

#### FOOTNOTES:

- a. **Surveillance level testing** – Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and resuming 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee shall conduct surveillance level acute and chronic WET testing at a minimum frequency of once per year (reduced testing) for the brook trout (*Salvelinus fontinalis*) and the water flea (*Ceriodaphnia dubia*). Tests must be conducted in a different calendar quarter each year.
- b. **Screening level testing** – Beginning 24 months prior to the expiration date of the permit and lasting through 12 months prior to permit expiration and every five years thereafter if a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the permittee shall conduct screening level acute and chronic WET testing at a minimum frequency of four times per year for both the water flea and the brook trout. Tests must be conducted in consecutive calendar quarters.

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 shall evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 5.5% and 5.5%, respectively.

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

- a. Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, Fourth Edition, October 2002, EPA-821-R-02-013.
- b. Methods for Measuring the Acute Toxicity of Effluent 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 also required to analyze and report results for the effluent for the parameters specified in the WET chemistry section, and the parameters specified in the analytical chemistry section of the form in **Attachment A** of this permit each time a WET test is performed.

## SPECIAL CONDITIONS

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

#### FOOTNOTES:

10. **Analytical chemistry** – Refers to those pollutants listed under “Analytical Chemistry” on the form included as **Attachment A** of this permit.

- a. **Surveillance level testing** – Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and resuming 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee shall conduct analytical chemistry testing at a minimum frequency of once per year (reduced testing). Tests must be conducted in a different calendar quarter each year.
- b. **Screening level testing** – Beginning 24 months prior to the expiration date of the permit and lasting through 12 months prior to permit expiration and every five years thereafter if a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the permittee shall conduct analytical chemistry testing at a minimum frequency of once per calendar quarter for four consecutive calendar quarters.

11. **Priority pollutant testing** – Refers to those pollutants listed under “Priority Pollutants” on the form included as **Attachment A** of this permit.

- a. **Screening level testing** - Beginning 24 months prior to the expiration date of the permit and lasting through 12 months prior to permit expiration and every five years thereafter if a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the permittee shall conduct screening level priority pollutant testing at a minimum frequency of once per year.

Surveillance level priority pollutant testing is not required pursuant to 06-096 CMR 530.

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

Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department, possible exceedences of the acute, chronic or human health AWQC as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005). For the purposes of DMR reporting, enter a “1” for yes, testing done this monitoring period or “NODI-9” monitoring not required this period.

## **SPECIAL CONDITIONS**

### **B. NARRATIVE EFFLUENT LIMITATIONS**

1. The permittee shall not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the usages designated for the classification of the receiving waters.
2. The permittee shall not discharge effluent that contains materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated for the classification of the receiving waters.
3. The permittee shall not discharge effluent that causes visible discoloration or turbidity in the receiving waters or that impairs the usages designated for the classification of the receiving waters.
4. Notwithstanding specific conditions of this permit, the permittee shall 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 treatment facility must be operated by a person holding a minimum of a **Grade IV** certificate (or by a Maine registered 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.

### **D. 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 September 24, 2012; 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

### **E. LIMITATIONS FOR INDUSTRIAL USERS**

Pollutants introduced into the wastewater collection and treatment system by a non-domestic source (user) shall not pass through or interfere with the operation of the treatment system. The permittee shall 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. The IWS shall 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).

## **SPECIAL CONDITIONS**

### **F. MONITORING AND REPORTING**

Monitoring results obtained during the previous month must be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and **postmarked on or before the thirteenth (13<sup>th</sup>) 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 (15<sup>th</sup>) day of the month** following the completed reporting period. A signed copy of the DMR and all other reports required herein shall be submitted to the Department-assigned inspector (unless otherwise specified by the Department) at the following address:

Department of Environmental Protection  
Eastern Maine Regional Office  
Bureau of Land and Water Quality  
Division of Water Quality Management  
106 Hogan Road  
Bangor, Maine 04401

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 **15<sup>th</sup> 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 (13<sup>th</sup>) 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 (15<sup>th</sup>) 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 15<sup>th</sup> day of the month following the completed reporting period.

### **G. NOTIFICATION REQUIREMENTS**

In accordance with Standard Condition D, the permittee shall 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.
3. For the purposes of this section, adequate notice shall include information on:
  - a. The quality and quantity of waste water introduced to the wastewater collection and treatment system; and
  - b. Any anticipated impact of the change in the quantity or quality of the wastewater to be discharged from the treatment system.

## **SPECIAL CONDITIONS**

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

By December 31 of each calendar year, the permittee shall provide the Department with a certification describing any of the following that have occurred since the effective date of this permit [*PCS Code 95799*]. See Attachment D 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;

In addition, in the comments section of the certification form, the permittee shall provide the Department with statements describing;

- (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 (hailed) wastes accepted by the facility.

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

### **I. SCHEDULE OF COMPLIANCE – INORGANIC ARSENIC**

Beginning upon issuance of this permit modification and lasting through a date on which the USEPA approves a test method for inorganic arsenic, the limitations and monitoring requirements for inorganic are not in effect. During this time frame, the permittee is required by Special Condition A, *Effluent Limitations and Monitoring Requirements*, of this permit to conduct 1/Quarter sampling and analysis for total arsenic.

Upon receiving written notification by the Department that a test method for inorganic arsenic has been approved by the USEPA, the limitations and monitoring requirements for inorganic arsenic become effective and enforceable and the permittee is relieved of their obligation to sample and analyze for total arsenic.



## **SPECIAL CONDITIONS**

### **J. OPERATIONS AND MAINTENANCE (O&M) PLAN**

This permittee shall have a current written comprehensive Operation & Maintenance (O&M) Plan for the facility. The plan must provide a systematic approach by which 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.

**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 must be kept on-site at all times and made available to Department and USEPA personnel upon request.

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

### **K. WET WEATHER MANAGEMENT PLAN**

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

**Once the Wet Weather Management Plan has been approved, the permittee shall review their plan at least annually and record any necessary changes to keep the plan up to date.** The Department may require review and update of the plan as it is determined to be necessary.

## SPECIAL CONDITIONS

### L. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

Pursuant to this permit and *Standards for the Addition of Transported Wastes to Waste Water Treatment Facilities*, 06-096 CMR 555 (last amended February 5, 2009), during the effective period of this permit, the permittee is authorized to receive and introduce into the treatment process or solids handling stream up to a **daily maximum of 5,000 gallons per day up to a monthly total of 152,100 gallons** 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 5,000 GPD authorized by this permit, the permittee is authorized to receive and introduce into the treatment process or solids handling stream up to a daily maximum of 5,000 GPD of septage wastes.
3. The character and handling of all transported wastes received must be consistent with the information and management plans provided in application materials submitted to the Department.
4. The permittee shall ensure that at no time the addition of transported wastes causes or contributes to effluent quality violations. The permittee shall ensure that transported wastes do not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility. Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. The permittee shall ensure that odors and traffic from the handling of transported wastes do not result in adverse impacts to the surrounding community. If any adverse effects exist, the permittee shall suspend the receipt or introduction of transported wastes into the treatment process or solids handling stream until there is no further risk of adverse effects.
5. The permittee shall maintain records for each load of transported wastes in a daily log which shall include at a minimum the following.
  - (a) The date;
  - (b) The volume of transported wastes received;
  - (b) The source of the transported wastes;
  - (d) The person transporting the transported wastes;
  - (e) The results of inspections or testing conducted;
  - (f) The volumes of transported wastes added to each treatment stream; and
  - (g) The information in (a) through (d) for any transported wastes refused for acceptance.The permittee shall maintain these records at the treatment facility for a minimum of five years.

## **SPECIAL CONDITIONS**

### **L. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY (cont'd)**

6. The permittee shall ensure that the addition of transported wastes into the treatment process or solids handling stream do not cause the treatment facility's design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, the permittee shall ensure that introduction of transported wastes into the treatment process or solids handling stream are reduced or terminated in order to eliminate the overload condition.
7. The permittee shall not record holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added as transported wastes, but shall report this waste stream in the treatment facility's influent flow.
8. During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current high flow management plan approved by the Department that provides for full treatment of transported wastes without adverse impacts.
9. In consultation with the Department, chemical analysis is required prior to receiving transported wastes from new sources that are not of the same nature as wastes previously received. The analysis must be specific to the type of source and designed to identify concentrations of pollutants that may pass through, upset or otherwise interfere with the facility's operation.
10. Access to transported waste receiving facilities may be permitted only during the times specified in the application materials and under the control and supervision of the person responsible for the wastewater treatment facility or his/her designated representative.
11. The authorization in this Special Condition is subject to annual review and, with notice to the permittee and other interested parties of record, may be suspended or reduced by the Department as necessary to ensure full compliance with 06-096 CMR 555 and the terms and conditions of this permit.

## SPECIAL CONDITIONS

### M. INDUSTRIAL PRETREATMENT PROGRAM

1. Pollutants introduced into POTWs by a non-domestic source (user) must not pass-through the publicly owned treatment works (POTW) or interfere with the operation or performance of the works.
  - a. The permittee shall develop and enforce specific effluent limits (local limits) for Industrial User(s), and all other users, as appropriate, which together with appropriate changes in the POTW facilities or operation, are necessary to ensure continued compliance with the MEPDES permit or sludge use or disposal practices. Specific local limits shall not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond.

**Within 180 days of the effective date of this permit, [PCS code 95979] the permittee shall prepare and submit a written technical evaluation to the Department analyzing the need to revise local limits. As part of this evaluation, the permittee shall assess how the POTW performs with respect to influent and effluent of pollutants, water quality concerns, sludge quality, sludge processing concerns/inhibition, biomonitoring results, activated sludge inhibition, worker health and safety and collection system concerns. In preparing this evaluation, the permittee shall complete the "Re-Assessment of Technically Based Local Limits" form included as **Attachment E** of this permit with the technical evaluation to assist in determining whether existing local limits need to be revised. Justifications and conclusions should be based on actual plant data if available and should be included in the report. Should the evaluation reveal the need to revise local limits, the permittee shall complete the revisions within 120 days of notification by the Department and submit the revisions to the Department for approval. The permittee shall carry out the local limits revisions in accordance with USEPA's document entitled, Local Limits Development Guidance (July 2004).**

2. The permittee shall implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the permittee's approved Pretreatment Program, and the General Pretreatment Regulations, found at 40 CFR 403 and *Pretreatment Program*, 06-096 CMR 528 (last amended March 17, 2008). At a minimum, the permittee must perform the following duties to properly implement the Industrial Pretreatment Program (IPP):
  - a. Carry out inspection, surveillance, and monitoring procedures which will determine, independent of information supplied by the industrial user, whether the industrial user is in compliance with the Pretreatment Standards. At a minimum, all significant industrial users shall be sampled and inspected at the frequency established in the approved IPP but in no case less than once per year and maintain adequate records.
  - b. Issue or renew all necessary industrial user control mechanisms within 90 days of their expiration date or within 180 days after the industry has been determined to be a significant industrial user.

## SPECIAL CONDITIONS

### M. INDUSTRIAL PRETREATMENT PROGRAM (cont'd)

- c. Obtain appropriate remedies for noncompliance by an industrial user with any pretreatment standard and/or requirement.
- d. Maintain an adequate revenue structure for continued implementation of the Pretreatment Program.
- e. The permittee shall provide the Department with an annual report describing the permittee's pretreatment program activities for the twelve-month period ending 60 days prior to the due date in accordance with federal regulation found at 40 CFR 403.12(i) and 06-096 CMR 528(12)(i). **The annual report shall be consistent with the format described in the "MEPDES Permit Requirements For Industrial Pretreatment Annual Report" form included as Attachment F of this permit and shall be submitted no later than March 1 of each calendar year.**
- f. The permittee shall obtain approval from the Department prior to making any significant changes to the industrial pretreatment program in accordance with federal regulation found at 40 CFR 403.18(c) and 06-096 CMR 528(18).
- g. The permittee shall assure that applicable National Categorical Pretreatment Standards are met by all categorical industrial users of the POTW. These standards are published in the federal regulations found at 40 CFR 405.
- h. The permittee shall modify its pretreatment program to conform to all changes in the federal regulations and State rules that pertain to the implementation and enforcement of the industrial pretreatment program. **Within 180 days of the effective date of this permit, [PCS code 95979]** the permittee shall provide the Department in writing, proposed changes to the permittee's pretreatment program deemed necessary to assure conformity with current federal regulations and State rules. At a minimum, the permittee shall address in its written submission the following areas: (1) Enforcement response plan; (2) revised sewer use ordinances; and (3) slug control evaluations. The permittee will implement these proposed changes pending the Department's approval under federal regulation 40 CFR 403.18 and 06-096 CMR 528(18). This submission is separate and distinct from any local limits analysis submission described in section 1(a) above.

### N. SURFACE WATER TOXICS CONTROL PROGRAM

During the term of this permit and upon written notification by the Department to the permittee, the permittee shall participate in the State's most current Surface Water Toxics Control Program (SWAT) for dioxin administered by the Department, pursuant to *Surface water ambient toxic monitoring program*, 38 M.R.S.A. § 420-B.

## **SPECIAL CONDITIONS**

### **O. REOPENING OF PERMIT FOR MODIFICATION**

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

### **P. SEVERABILITY**

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

# **ATTACHMENT A**

Maine Department of Environmental Protection  
WET and Chemical Specific Data Report Form

This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

Facility Name	MEPDES #	Facility Representative Signature
	Pipe #	To the best of my knowledge this information is true, accurate and complete.
Licensed Flow (MGD)	Flow for Day (MGD) <sup>(1)</sup>	Flow Avg. for Month (MGD) <sup>(2)</sup>
Acute dilution factor		
Chronic dilution factor	Date Sample Collected	Date Sample Analyzed
Human health dilution factor		
Criteria type: M(marine) or F(fresh)	Laboratory Address	Telephone
	Lab Contact	Lab ID #

## FRESH WATER VERSION

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

Please see the footnotes on the last page.

WHOLE EFFLUENT TOXICITY		Effluent Limits, %		Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)	Reporting Limit Check	Possible Exceedance <sup>(7)</sup>	
		Acute	Chronic				Acute	Chronic
Trout - Acute								
Trout - Chronic								
Water Flea - Acute								
Water Flea - Chronic								
<b>WET CHEMISTRY</b>								
pH (S.U.) <sup>(9)</sup>				(8)				
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)				
<b>ANALYTICAL CHEMISTRY <sup>(5)</sup></b>								
Also do these tests on the effluent with optional WET. Testing on the receiving water is								
TOTAL RESIDUAL CHLORINE (mg/L) <sup>(9)</sup>	Reporting Limit	Acute <sup>(6)</sup>	Chronic <sup>(6)</sup>	Health <sup>(6)</sup>		Reporting Limit Check	Possible Exceedance <sup>(7)</sup>	
	0.05						Acute	Chronic
AMMONIA	NA			NA				
ALUMINUM	NA			(8)				
ARSENIC	5			(8)				
CADMIUM	1			(8)				
CHROMIUM	10			(8)				
COPPER	3			(8)				
CYANIDE	5			(8)				
LEAD	3			(8)				
NICKEL	5			(8)				
SILVER	1			(8)				
ZINC	5			(8)				



Maine Department of Environmental Protection  
WET and Chemical Specific Data Report Form

This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

PRIORITY POLLUTANTS <sup>(4)</sup>										Possible Exceedence <sup>(7)</sup>		
		Reporting Limit	Acute <sup>(6)</sup>	Chronic <sup>(6)</sup>	Health <sup>(6)</sup>	Reporting Limit Check	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	3										
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	10										
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	2										
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	3										
BN	BENZO(G,H,I)PERYLENE	5										
BN	BENZO(K)FLUORANTHENE	3										
BN	BIS(2-CHLOROETHOXY)METHANE	5										
BN	BIS(2-CHLOROETHYL)ETHER	6										
BN	BIS(2-CHLOROISOPROPYL)ETHER	6										
BN	BIS(2-ETHYLHEXYL)PHTHALATE	3										
BN	BUTYLBENZYL PHTHALATE	5										
BN	CHRYSENE	3										
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										

Revised July 2009

[illegible]

[illegible]

(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.
- (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.

Revised July 2009

# **ATTACHMENT B**

Name of Facility: \_\_\_\_\_

Federal Permit # ME \_\_\_\_\_

Pipe # \_\_\_\_\_

Purpose of this  
test:

☐

Initial limit  
determination

☐

Compliance monitoring for:

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 certify 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 C**

**MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION  
WHOLE EFFLUENT TOXICITY REPORT  
FRESH WATERS**

Facility Name \_\_\_\_\_ MEPDES Permit # \_\_\_\_\_  
Pipe # \_\_\_\_\_

Facility Representative \_\_\_\_\_ Signature \_\_\_\_\_

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

Facility Telephone # \_\_\_\_\_ Date Collected \_\_\_\_\_ Date Tested \_\_\_\_\_  
mm/dd/yy mm/dd/yy

Chlorinated? \_\_\_\_\_ Dechlorinated? \_\_\_\_\_

**Results** \_\_\_\_\_ % effluent \_\_\_\_\_ Effluent Limitations  
water flea trout A-NOEL \_\_\_\_\_  
C-NOEL \_\_\_\_\_

**Data summary**

Data summary		water flea			trout		final weight (mg)
		% survival		no. young	% survival		
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							

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**





STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

PAUL R. LEPAGE  
GOVERNOR

PATRICIA W. AHO  
Commissioner

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?	<input type="checkbox"/>	<input type="checkbox"/>
2	Changes in the condition or operations of the facility that may increase the toxicity of the discharge?	<input type="checkbox"/>	<input type="checkbox"/>
3	Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge?	<input type="checkbox"/>	<input type="checkbox"/>
4	Increases in the type or volume of hauled wastes accepted by the facility?	<input type="checkbox"/>	<input type="checkbox"/>

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	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
WET Testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Priority Pollutant Testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analytical Chemistry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other toxic parameters <sup>1</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*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.*

<sup>1</sup> This only applies to parameters where testing is required at a rate less frequently than quarterly.

AUGUSTA  
17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0017  
(207) 287-7688 FAX: (207) 287-7826  
RAY BLDG., HOSPITAL ST.

BANGOR  
106 HOGAN ROAD, SUITE 6  
BANGOR, MAINE 04401  
(207) 941-4570 FAX: (207) 941-4584

PORTLAND  
312 CANCO ROAD  
PORTLAND, MAINE 04103  
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04769-2094  
(207) 764-0477 FAX: (207) 760-3143

# **ATTACHMENT E**

## RE-ASSESSMENT OF TECHNICALLY BASED INDUSTRIAL DISCHARGE LIMITS INSTRUCTIONS

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

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

### ITEM I.

- \* In Column (1), list what your POTW's influent flow rate was when your existing TBLLs were calculated. In Column (2), list your POTW's present influent flow rate. Your current flow rate should be calculated using the POTW's average daily flow rate from the previous 12 months.
- \* In Column (1) list what your POTW's SIU flow rate was when your existing TBLLs were calculated. In Column (2), list your POTW's present SIU flow rate.
- \* In Column (1), list what dilution ratio and/or 7Q10 value was used in your previous MEPDES permit. In Column (2), list what dilution ratio and/or 7Q10 value is presently being used in your reissued MEPDES permit.

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

- \* In Column (1), list the safety factor, if any, that was used when your existing TBLLs were calculated.
- \* In Column (1), note how your bio-solids were managed when your existing TBLLs were calculated. In Column (2), note how your POTW is presently disposing of its biosolids and how your POTW will be disposing of its biosolids in the future.

### ITEM II.

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

## RE-ASSESSMENT OF TECHNICALLY BASED INDUSTRIAL DISCHARGE LIMITS INSTRUCTIONS

### ITEM III.

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

### ITEM IV.

- \* Since your existing TBLLs were calculated, identify the following in detail:
  - (1) if your POTW has experienced any upsets, inhibition, interference or pass-through as a result of an industrial discharge.
  - (2) if your POTW is presently violating any of its current MEPDES permit limitations - include toxicity.

### ITEM V.

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

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

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

### ITEM VI.

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

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

## RE-ASSESSMENT OF TECHNICALLY BASED INDUSTRIAL DISCHARGE LIMITS INSTRUCTIONS

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

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

$$\text{EOP concentration} = [\text{Dilution factor} \times 0.75 \times \text{AWQC}] + [0.25 \times \text{AWQC}]$$
$$\text{Chronic AWQC} = 2.36 \text{ ug/L}$$

$$\text{Chronic EOP} = [25 \times 0.75^{(1)} \times 2.36 \text{ ug/L}] + [0.25 \times 2.36 \text{ ug/L}] = 45 \text{ ug/L}$$

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

### ITEM VII.

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

### ITEM VIII.

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

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

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

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

[illegible]

**REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS  
(TBLLs)**

**ITEM III.**

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

**ITEM IV.**

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

If yes, explain. \_\_\_\_\_  
\_\_\_\_\_

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

If yes, explain. \_\_\_\_\_  
\_\_\_\_\_

**ITEM V.**

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

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

# **REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)**

## **ITEM VI.**

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

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

\*Hardness Dependent (mg/l - CaCO<sub>3</sub>)



# RE-ASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

## ITEM VII.

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

Column (1) REISSUED PERMIT		Column (2) PREVIOUS PERMIT	
<u>Pollutants</u>	<u>Limitations</u> (ug/l)	<u>Pollutants</u>	<u>Limitations</u> (ug/l)
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

## ITEM VIII.

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

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

# **ATTACHMENT F**

**MEPDES PERMIT REQUIREMENTS  
FOR  
INDUSTRIAL PRETREATMENT ANNUAL REPORT**

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

1. An updated list of all industrial users by category, as set forth in federal regulation 40 CFR Part 403.8 and Department rule 06-096 CMR Chapter 528(9) indicating compliance or noncompliance with the following:
  - baseline monitoring reporting requirements for newly promulgated industries
  - compliance status reporting requirements for newly promulgated industries
  - periodic (semi-annual) monitoring reporting requirements,
  - categorical standards, and
  - local limit.
2. A summary of compliance and enforcement activities during the preceding year, including the number of:
  - significant industrial users inspected by POTW (include inspection dates for each industrial user);
  - significant industrial users sampled by POTW (include sampling dates for each industrial user);
  - compliance schedules issued (include list of subject users);
  - written notices of violations issued (include list of subject users);
  - administrative orders issued (include list of subject users),
  - criminal or civil suits filed (include list of subject users); and
  - penalties obtained (include list of subject users and penalty amounts).
3. A list of significantly violating industries required to be published in a local newspaper in accordance with federal regulation 40 CFR Part 403.8(f)(2)(viii) and Department rule 06-096 CMR Chapter 528(9)(f)(2)(vii).
4. A narrative description of program effectiveness including present and proposed changes to the program, such as funding, staffing, ordinances, regulations, rules and/or statutory authority.
5. A summary of all pollutant analytical results for influent, effluent, sludge and any toxicity or bioassay data from the wastewater treatment facility. The summary shall include a comparison of influent sampling results versus threshold inhibitory concentrations for the POTW and effluent sampling results versus water quality standards. Such a comparison shall be based on the sampling program described in the paragraph below or any similar sampling program described in this permit.

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

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

**MEPDES PERMIT REQUIREMENTS  
FOR  
INDUSTRIAL PRETREATMENT ANNUAL REPORT**

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

6. A detailed description of all interference and pass-through that occurred during the past year.
7. A thorough description of all investigations into interference and pass-through during the past year.
8. A description of monitoring, sewer inspections and evaluations which were done during the past year to detect interference and pass-through, specifying parameters and frequencies.
9. A description of actions being taken to reduce the incidence of significant violations by significant industrial users.
10. The date of the latest adoption of local limits and an indication as to whether or not the City is under a State or Federal compliance schedule that includes steps to be taken to revise local limits.

**MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
MAINE WASTE DISCHARGE LICENSE**

**FACT SHEET**

DATE: APRIL 4, 2013

PERMIT NUMBER: #ME0101443  
WASTE DISCHARGE LICENSE: #W000678-5M-L-R

NAME AND ADDRESS OF APPLICANT:

TOWN OF HARTLAND  
P.O. BOX 280  
HARTLAND, MAINE 04943

COUNTY: SOMERSET

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

TOWN OF HARTLAND  
162 PITTSFIELD AVENUE  
HARTLAND, MAINE 04943

RECEIVING WATER/CLASSIFICATION: SEBASTICOOK RIVER, WEST BRANCH MAIN STEM  
CLASS C

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: MR. MARK DESCOTEAUX  
(207) 938-4675

**1. APPLICATION SUMMARY**

Application: The Town of Hartland (Town) has submitted a timely and complete application to the Department of Environmental Protection (Department) for renewal of Waste Discharge License (WDL) #W000678-5M-H-R / Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101443, which was issued on December 6, 2007, and expired on December 6, 2012. The December 6, 2007 MEPDES permit authorized the monthly average discharge of 1.5 million gallons per day (MGD) of secondary treated sanitary and tannery process wastewater from a publicly owned treatment works (POTW) to the Sebasticook River (West Branch of the main stem), Class C, in Hartland, Maine.

It is noted that the Department issued four minor permit revisions on April 16, 2010 (reduction in total residual chlorine monitoring frequency), October 4, 2010 (reduction in biochemical oxygen demand monitoring frequency), February 4, 2011 (revision of the monthly average concentration limit for total chromium), and February 6, 2012 (revising the mercury monitoring frequency).

## 2. PERMIT SUMMARY

- a. Terms and Conditions: This permitting action is similar to the December 6, 2007 permitting action and four subsequent minor permit revisions in that it is:
1. Carrying forward the monthly average discharge flow limit of 1.5 MGD and the daily maximum discharge flow reporting requirement;
  2. Carrying forward the monthly average and daily maximum water quality-based concentration and mass limitations for biochemical oxygen demand (BOD<sub>5</sub>);
  3. Carrying forward the monthly average and daily maximum water quality-based concentration and mass limitations for total suspended solids (TSS);
  4. Carrying forward the reporting requirements for the 30-day average percent removal rates for BOD<sub>5</sub> and TSS;
  5. Carrying forward the daily maximum, technology-based concentration limitation of 0.3 ml/L for settleable solids;
  6. Carrying forward the seasonal monthly average and daily maximum concentration limits for *Escherichia coli* bacteria;
  7. Carrying forward the technology-based, monthly average and daily maximum concentration limits for total residual chlorine (TRC);
  8. Carrying forward the monthly average and daily maximum technology-based concentration and mass limits for oil and grease (O&G);
  9. Carrying forward the pH range limit of 6.0 to 9.0 standard units (SU);
  10. Carrying forward conditions and requirements for an Industrial Pretreatment Program (Special Condition M of this permit);
  11. Carrying forward the water quality-based monthly average and the technology-based daily maximum mass limits for total chromium; and
  12. Carrying forward Special Condition N, *Surface Water Toxics Control Program*.

## 2. PERMIT SUMMARY (cont'd)

**This permitting action is different from the December 6, 2007 permitting action and four subsequent minor permit revisions in that it is:**

1. Revising the seasonal monthly average concentration limit for *E. coli* bacteria based on changes to Maine's water quality standards for Class C waters;
2. Eliminating the seasonal monitoring and reporting requirements for total phosphorous (total-P) based on the results of facility testing;
3. Eliminating the chronic water quality limit of 5.5% for the water flea based on the results of facility testing;
4. Eliminating the water quality-based concentration and mass limits for 2,4,6-trichlorophenol, total aluminum, ammonia, B-BHC, bis(2-ethylhexyl) phthalate, chlorodibromomethane, chloroform, dichlorobromomethane, and total zinc based on the results of facility testing;
5. Establishing a water quality-based monthly average mass limit and concentration reporting requirement for inorganic arsenic and a monthly average mass and concentration reporting requirements for total arsenic based on the results of facility testing;
6. Establishing Special Condition I, *Schedule of Compliance*, for imposition of inorganic arsenic limits;
7. Establishing a water quality-based monthly average mass limit and a concentration reporting requirement for cyanide, amenable to chlorination based on the results of facility testing;
8. 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);
9. Revising previous Special Condition H, now called *06-096 CMR 530(2)(D)(4) Statement for Reduced Waived Toxics Testing*, to include certification requirements for inflow/infiltration and transported wastes that may increase the toxicity of the discharge;
10. Revising previous Special Condition L, now called *Disposal of Transported Wastes in Wastewater Treatment Facility*, based on the revised rule, *Standards for the Addition of Transported Wastes to Waste Water Treatment Facilities*, 06-096 CMR 555 (last amended February 5, 2009); and
11. Revising the minimum monitoring frequency requirements for TSS and settleable solids based on the results of facility testing.

## 2. PERMIT SUMMARY (cont'd)

- b. History: This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the Hartland Pollution Control Facility.

December 10, 1986 – The Board of Environmental Protection issued Water Level Order #L-013195-36-A-N, which required a minimum flow of 40 cfs from Great Moose Lake.

October 1, 1991 – The United States Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) renewal permit #ME0101443 to the Town for a five-year term. The 10/1/91 NPDES permit superseded the previous NPDES permit issued to the Town on June 29, 1984.

May 23, 2000 – The Department administratively modified the Town's December 22, 1999 WDL by establishing interim monthly average and daily maximum technology-based concentration limitations of 8.1 parts per trillion (ppt) and 12.1 ppt, respectively, for mercury.

October 16, 2000 – The Town of Hartland and the Department finalized a document entitled, Great Moose Lake Water Level Management Plan. The purpose of the plan was to explain how the Town of Hartland is to operate the Morgan Dam and monitor the lake levels and minimum flow releases to comply with the Board of Environmental Protection's December 10, 1986 water level order for Great Moose Lake. The 10/16/00 management plan required the town to install a primary water level staff gauge on the concrete abutment wall on the south side of the dam whereby water levels are monitored and recorded 1/ Week between April 1 and September 30 and 1/2 Weeks between October 1 and March 30 to ensure compliance with the water level management plan. A permanent record of all water level readings is kept at the town office.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permitting program in Maine, excluding areas of special interest to Maine Indian Tribes. From this point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program, and MEPDES permit #ME0101443 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.

December 6, 2007 – The Department issued WDL #W000678-5M-H-R / MEPDES permit #ME0101443 to the Town for a five-year term. The December 6, 2007 permit superseded WDL #W000678-5M-G-M issued on November 7, 2002, WDL #W000678-5M-E-R issued on December 22, 1999, and WDL #W000678-47-A-R issued on June 27, 1984 (earliest Order on file with the Department), as well as the 10/1/91 NPDES permit issued by the USEPA.

April 16, 2010 – The Department issued a minor permit revision to the Town, by way of WDL #W000678-5M-I-M, for a reduction in the minimum monitoring frequency requirement for total residual chlorine from twice per day to once per day.



## 2. PERMIT SUMMARY (cont'd)

October 4, 2010 – The Department issued a minor permit revision to the Town, by way of WDL #W000678-5M-J-M, for a reduction in the minimum monitoring frequency requirement for biochemical oxygen demand from three times per week to twice per week.

February 4, 2011 – The Department issued a minor permit revision to the Town, by way of WDL #W000678-5M-K-M, for a revision to the monthly average concentration limit for total chromium from 0.48 mg/L to 3.2 mg/L.

July 11, 2011 – The Maine Office of the Attorney General ratified an administrative consent agreement between the State of Maine and the Town for violations of its waste discharge license.

February 6, 2012 – The Department issued a minor revision to the December 6, 2007 permit thereby revising the minimum monitoring frequency requirement for mercury from once per quarter to once per year pursuant to 38 M.R.S.A. § 420(1-B)(F).

September 24, 2012 – The Town submitted a timely and complete General Application to the Department for renewal of the December 6, 2007 MEPDES permit. The application was accepted for processing on September 24, 2012, and was assigned WDL #W000678-5M-L-R / MEPDES #ME0101443.

- c. Source Description: The Hartland Pollution Control Facility (HPCF) began operations in 1977 and currently serves a population of approximately 1,300 people in the Town of Hartland. The sanitary sewer collection system consists of approximately twelve (12) miles of pipe with three (3) pump stations. There are no combined sewer overflow (CSO) points in the collection system. The collection system is both combined (40%) and separated (60%). The treatment facility receives sanitary waste waters generated by residential, commercial and one significant industrial entity, Tasman Leather Group, LLC, in the Town of Hartland.

Tasman Leather Group, LLC (formerly Irving Tanning Company) is a leather tanning facility which processes previously tanned hides and skins into finished leather by a retan-wet finishing process. Tasman Leather Group, LLC verified in electronic mail correspondence to the Department, dated February 14, 2013, that estimated long-term average raw material data of 268,000 lbs. of sides and splits per day and the facility's production capacity of 6,200 sides/day (136,400 lbs./day) and production startup of 5,980 splits/day (131,600 lbs./day) remain representative of the company's objectives for the Hartland facility. These figures are used to calculate certain permit effluent limitations.

All process wastewater from Tasman Leather Group, LLC is monitored and conveyed to the HPCF after pretreatment at Tasman Leather Group, LLC, which consists of screening, chemical addition, and pH adjustment.

## 2. PERMIT SUMMARY (cont'd)

The HPCF also receives landfill leachate from Hartland's secure sludge landfill. Leachate from Hartland's secure sludge landfill is directed to a leachate lagoon and then through a pipeline to Tasman Leather Group, LLC's pretreatment facility. Leachate and process wastewaters are combined and treated at the pretreatment facility. Once treated, it is pumped to the HPCF for additional treatment. The Town provided landfill leachate flow data for the period of January 2012 through August 2012 as part of its September 24, 2012 application. The arithmetic mean of landfill leachate flow during this time period is 19,331 gallons per day (0.019931 MGD) during said period.

The facility has applied for and was previously authorized to receive and introduce into the treatment process up to 5,000 gallons per day of septage (up to a monthly total of 152,100 gallons) from local septage haulers. The Town submitted an updated Septage Management Plan as part of their September 24, 2012 renewal application. Septage is dumped by private haulers into a septage receiving manhole and then flows into the influent pump station wet well.

The HPCF has a current wet weather management plan, which was last revised on May 30, 2003. Special Condition K of the permit requires the permittee to periodically review the plan and update it as necessary.

A map created by the Department showing the location of the treatment facility, the Irving Tannery Company, and the receiving water is included as Fact Sheet **Attachment A**.

- d. Wastewater Treatment: The HPCF is a secondary activated sludge treatment facility providing primary treatment, secondary treatment and clarification, disinfection and dechlorination. Sludge generated as a result of the treatment process is dewatered on-site and disposed of at a town-owned secure sludge landfill.

HPCF's primary treatment process includes influent screening through a comminutor and bar rack located at the headworks (wet well) of the plant. Influent is pumped into the two primary clarifiers using an automated, computerized system. The Town may add aluminum chloride and anionic polymer solutions to the influent in order to enhance the removal efficiency of solids in the primary settling process.

Primary effluent flows from the clarifiers to one of two aeration ponds. Phosphoric acid is typically added prior to the secondary system for nutrient control. The detention time within the activated sludge aeration system is 3-5 days depending on incoming flow rates and Irving Tanning's production schedules.

The mixed liquor from the pond flows into two secondary clarifiers where a polymer may be added to further improve effluent clarity and quality. Solids collected in the bottom of the clarifiers are returned to the aeration ponds or wasted to the primary clarifiers for removal and subsequent dewatering and disposal.

## 2. PERMIT SUMMARY (cont'd)

The effluent receives seasonal disinfection using a sodium hypochlorite solution and is then dechlorinated within the combined chlorination/dechlorination chamber at the facility. The effluent flow is recorded as it passes through a Parshall flume prior to being discharged into the Sebasticook River (West Branch of the main stem).

Final effluent is conveyed for discharge to the Sebasticook River (West Branch of the main stem) at Hartland via a 14-inch diameter outfall pipe fitted with a 50-foot, 200-port diffuser. The diffuser consists of a perforated pipe with 1.5-inch diameter perforations positioned 13 inches on-center. The Department's Division of Environmental Assessment has determined that the effluent does achieve complete and rapid mixing with the receiving waters.

A schematic of the treatment process is included as **Attachment B** of this fact sheet.

It is noted that one primary clarifier, one aeration pond, and one secondary clarify at the facility are not in an operable condition and it would take a substantial amount of money to get them back on line.

## 3. CONDITIONS OF PERMIT

*Conditions of licenses*, 38 M.R.S.A. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S.A. § 420 and 06-096 CMR 530 require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

## 4. RECEIVING WATER QUALITY STANDARDS

*Classification of major river basins*, 38 M.R.S.A. § 467(4)(H)(2)(b) classifies the "Sebasticook River, West Branch main stem, from the outlet of Great Moose Lake to its confluence with the East Branch, including all impoundments," 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(4) describes the standards for Class C waters.

## 5. RECEIVING WATER QUALITY CONDITIONS

*The State of Maine 2010 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 12.5-mile reach of the West Branch of the Sebasticook River, which includes the reach immediately below the Town's point of discharge, (Hydrologic Unit Code #ME0103000307 / Waterbody ID #330R) as, "Category 5-A: Rivers and Streams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)." Impairment in this context refers to a fish consumption advisory due to the presence of dioxin (including 2,3,7,8-TCDD) and polychlorinated biphenyls (PCBs). The Reports specifies that this non-attainment is on a medium priority schedule for development of a total maximum daily load (TMDL).

With regard to dioxin in the West Branch of the Sebasticook River, the Department's *Surface Water Ambient Toxics Monitoring Program 2010 Final Report* contains findings from the 2010 Dioxin Monitoring Program. The report states: "Dioxin concentrations measured in fish from the West Branch of the Sebasticook River were lower than when last measured, but still exceed [Maine Center for Disease Control and Prevention's] Fish Tissue Action Level (FTAL)." "Concentrations in both smallmouth bass and white sucker at Burnham on the main stem of the river exceeded the FTAL and those of previous years. They were also higher than those from the East Branch at Newport. This station is below the confluence of the East with the West Branch, where there is a tannery in Hartland, and also below the towns of Newport and Pittsfield with their sewage treatment plant discharges and urban runoff."

"Total PCB data were collected in bass and white sucker in 2008. These data indicate that more restrictive advice is necessary for the main stem and East Branch of the river. Therefore, a second year of sampling was requested for bass and white sucker at Burnham and Newport. These data were recommended for collection prior to changing the fish consumption advice for this river."

The Maine Center for Disease Control and Prevention (Maine CDCP) has issued a fish consumption advisory for the Sebasticook River due to dioxins or a combination of dioxins and dioxin-like coplanar PCBs.

The previous permit established a condition to participate in the State's fish advisory program as a result of the fish consumption advisory. During development of this permit, the Department consulted with the Maine CDCP on the current fish consumption advisory and status of any proposed changes to the advisory. Based on the interagency discussion, the Department has determined that the Maine CDCP may request additional data to complete its evaluation of the fish consumption advisory. This permitting action is carrying forward a condition (Special Condition N) to participate in the State's fish advisory program if a specific request is made by the Maine CDCP.

## 5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

The Report lists all of Maine's fresh waters as, "Category 4-A: Waters Impaired by Atmospheric Deposition of Mercury." Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, "All freshwaters are listed in Category 4A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Health and Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources." Pursuant to 38 M.R.S.A. § 420(1-B)(B), "a facility is not in violation of the ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413 subsection 11." The Department has established interim monthly average and daily maximum mercury concentration limits and reporting requirements for this facility pursuant to 06-096 CMR 519.

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

## 6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Applicability of National Effluent Guidelines: The USEPA has promulgated national effluent guidelines for the Leather Tanning and Finishing Point Source Category at 40 CFR Part 425. Based on a signed, written Industrial Wastewater Discharge Permit between the Town and Tasman Leather Group, LLC, dated November 4, 2003, Tasman Leather Group, LLC is permitted by the Town to discharge a monthly average flow of up to 1.07 MGD (approximately 71% of the facility's design criterion); monthly average and daily maximum biochemical oxygen demand (BOD<sub>5</sub>) loadings of 9,179 lbs./day (approximately 61% of the facility's design criterion) and 10,635 lbs./day, respectively; and a monthly average total suspended solids (TSS) loading of 13,895 lbs./day (approximately 93% of the facility's design criterion) to the HPCF. The Town verified to the Department via personal communication on February 12, 2013 that these loading rates from the tannery remain representative of current conditions.

Based on the significant industrial loadings contributed to the HPCF, this permitting action is carrying forward the Department's and USEPA's previous determinations to apply the guidelines at 40 CFR Part 425 to the discharge from the HPCF. Specifically, 40 CFR Part 425.41 Subpart D - *Retan-Wet Finish-Sides Subcategory* and 40 CFR Part 425.91 Subpart I, *Retan-Wet Finish-Splits Subcategory*, apply to the discharge from the Town. The applicable subparts of 40 CFR Part 425 establish effluent guideline limitations for BOD<sub>5</sub>, TSS, oil and grease, total chromium, and pH, which are being utilized in this permitting action to calculate technology-based effluent limitation thresholds.

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

- b. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limitation of 1.5 MGD based on the design capacity of the facility, and a daily maximum discharge flow reporting requirement to assist in compliance evaluations.

A summary of the discharge flow data as reported on the Discharge Monitoring Reports (DMRs) submitted to the Department for the period January 2008 through December 2011 is as follows:

### Flow (DMRs=48) Outfall #001A

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	1.5	0.10 – 0.71	0.35
Daily Maximum	n/a	0.28 – 2.17	0.75

- c. Dilution Factors: Dilution factors associated with the permitted discharge flow of 1.5 MGD from the facility and a regulated flow of 40 cfs in the Sebasticook River, West Branch main stem, (minimum flow of 40 cfs from Great Moose Pond pursuant to Water Level Order #L-013195-36-A-N) were derived in accordance with 06-096 CMR 530(4)(A) and were calculated as follows:

$$\text{Acute: } 1\text{Q}10 = 40 \text{ cfs} \quad \Rightarrow \frac{(40 \text{ cfs})(0.6464) + 1.5 \text{ MGD}}{1.5 \text{ MGD}} = 18.2:1$$

$$\text{Chronic: } 7\text{Q}10 = 40 \text{ cfs} \quad \Rightarrow \frac{(40 \text{ cfs})(0.6464) + 1.5 \text{ MGD}}{1.5 \text{ MGD}} = 18.2:1$$

$$\text{Harmonic Mean}^1 = 74.2 \text{ cfs} \quad \Rightarrow \frac{(74.2 \text{ cfs})(0.6464) + 1.5 \text{ MGD}}{1.5 \text{ MGD}} = 33.0:1$$

The Department's Division of Environmental Assessment (DEA) has determined that mixing of the effluent with the receiving water is complete and rapid and recommends that acute evaluations be based on the full 1Q10 value rather than the default stream design flow of ¼ of the 1Q10 in accordance with 06-096 CMR 530(4)(B)(1).

- d. Biochemical Oxygen Demand (BOD<sub>5</sub>): The previous permitting action carried forward from the 12/22/99 WDL water quality-based monthly average concentration and mass limits of 66 mg/L and 660 lbs./day, respectively, and daily maximum concentration and mass limits of 132 mg/L and 1,320 lbs./day, respectively for BOD<sub>5</sub>. These limitations were based on a desktop model conducted by the Department's Division of Environmental Assessment (DEA) in 1981, which the DEA stated is still appropriate for purposes of determining water quality-based discharge thresholds for this discharge.

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<sup>1</sup> The harmonic mean flow rate of 74.2 cfs was determined by prorating the USGS flow gage located in the Sebasticook River in Pittsfield, Maine.

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

*Effluent Guidelines and Standards*, 06-096 CMR 525(3)(III) (effective January 12, 2001) specifies secondary treatment requirements as monthly average and weekly average technology-based concentration limits of 30 mg/L and 45 mg/L, respectively, for BOD<sub>5</sub>. The Department has established a daily maximum concentration limit of 50 mg/L based on best professional judgment (BPJ) of best practicable treatment (BPT) for secondary treated municipal wastewater.

06-096 CMR 525(3)(IV)(b) provides special considerations for industrial wastes and allows for the values of BOD<sub>5</sub> and TSS to be adjusted upwards (from the secondary treatment standards specified above) provided: 1) the limits are not greater than the limits that would be applied to the industrial category if it discharged directly into navigable waters; and 2) the flow of pollutant loadings introduced by the industrial category exceeds 10% of the design flow or loadings of the POTW.

Based on the allowable flow and pollutant loadings specified in the Industrial Wastewater Discharge Permit (*i.e.*, pretreatment agreement) between the Town and Tasman Leather Group, LLC, the industrial loadings to the HPCF are greater than 10% of the HPCF design criteria. Therefore, the Department is making a best professional judgment determination that the effluent limitations for both BOD<sub>5</sub> and TSS may be adjusted upwards from the monthly average and weekly average secondary treatment standards of 30 mg/L and 45 mg/L, respectively.

For comparison purposes, effluent limitations for BOD<sub>5</sub> and TSS based on the secondary treatment requirements may be calculated as follows:

Monthly Average Mass Limit:  $(30 \text{ mg/L})(8.34 \text{ lbs./gallon})(1.5 \text{ MGD}) = 375 \text{ lbs./day}$   
Weekly Average Mass Limit:  $(45 \text{ mg/L})(8.34 \text{ lbs./day})(1.5 \text{ MGD}) = 563 \text{ lbs./day}$   
Daily Maximum Mass Limit:  $(50 \text{ mg/L})(8.34 \text{ lbs./day})(1.5 \text{ MGD}) = 626 \text{ lbs./day}$

This permitting action must establish the more stringent of either the water quality-based effluent limitations established in the previous permitting action or the sum of allowable technology-based effluent loadings based on the effluent guideline limitations promulgated at 40 CFR Part 425.41 and 40 CFR Part 425.91. It is noted that separate allocations for the municipal portion and landfill leachate portion have not been included in the following calculations as they are not significant sources compared to the tannery contribution.

40 CFR Part 425.41 Subpart D - *Retan-Wet Finish-Sides Subcategory* establishes monthly average and daily maximum BPT-based effluent guideline limitations for BOD<sub>5</sub> in terms of 4.0 pounds per 1,000 pounds (lbs./1,000 lbs.) of raw material and 8.9 lbs./1,000 lbs. of raw material, respectively.

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

40 CFR Part 425.91 Subpart I - *Retan-Wet Finish-Splits Subcategory* establishes monthly average and daily maximum BPT-based effluent guideline limitations for BOD<sub>5</sub> in terms of 2.6 lbs./1,000 lbs. of raw material and 5.8 lbs./1,000 lbs. of raw material, respectively.

With a projected, long-term average raw **sides** figure of 136,400 lbs./day, and a projected, long-term average raw **splits** figure of 131,600 lbs./day, technology-based effluent thresholds for BOD<sub>5</sub> may be calculated as the sum of allowable loadings for each subpart as follows:

Mass Calculations:

(Long-term Average Raw Materials, lbs./day)(Effluent Guideline, lbs./1,000 lbs.)

### Retan-Wet Finish-Sides Subcategory

Monthly Average: (136,400 lbs./day)(4.0 lbs./1,000 lbs.) = 546 lbs./day

Daily Maximum: (136,400 lbs./day)(8.9 lbs./1,000 lbs.) = 1,214 lbs./day

### Retan-Wet Finish-Splits Subcategory

Monthly Average: (131,600 lbs./day)(2.6 lbs./1,000 lbs.) = 342 lbs./day

Daily Maximum: (131,600 lbs./day)(5.8 lbs./1,000 lbs.) = 763 lbs./day

Sum of Allowable Loadings (BPT-Based Effluent Thresholds)

Monthly Average: 546 lbs./day + 342 lbs./day = 888 lbs./day

Daily Maximum: 1,214 lbs./day + 763 lbs./day = 1,977 lbs./day

*Waste Discharge License Conditions*, 06-096 CMR 523(6)(f)(2) states "...pollutants limited in terms of mass additionally may be limited in terms of other units of measurement and the permit shall require the permittee to comply with both limitations." To ensure best practicable treatment is being applied to the discharge from the HPCF at all times, the Department has made a best professional judgment determination that establishing monthly average and daily maximum technology-based concentrations limits for BOD<sub>5</sub> and TSS is appropriate.

BPT-based effluent concentration thresholds for BOD<sub>5</sub> may be derived by back-calculating values from the BPT-based effluent mass thresholds as follows:

Monthly Average: 
$$\frac{888 \text{ lbs./day}}{(1.5 \text{ MGD})(8.34 \text{ lbs./gallon})} = 71 \text{ mg/L}$$

Daily Maximum: 
$$\frac{1,977 \text{ lbs./day}}{(1.5 \text{ MGD})(8.34 \text{ lbs./gallon})} = 158 \text{ mg/L}$$



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

A summary of: 1) previous permit limits; 2) secondary treatment thresholds; 3) effluent guideline limitations (EGL) thresholds; and 4) water quality-based thresholds for BOD<sub>5</sub> are as follows:

BOD <sub>5</sub>	Previous Permit Limits	Secondary Treatment Thresholds	EGL Thresholds	Water Quality-Based Thresholds
Monthly Average	660 lbs./day	375 lbs./day	888 lbs./day	660 lbs./day
	66 mg/L	30 mg/L	71 mg/L	66 mg/L
Weekly Average	---	563 lbs./day	---	---
	---	45 mg/L	---	---
Daily Maximum	1,320 lbs./day	626 lbs./day	1,977 lbs./day	1,320 lbs./day
	132 mg/L	50 mg/L	158 mg/L	132 mg/L

A summary of effluent BOD<sub>5</sub> data submitted to the Department for the period of January 2008 through December 2011 is as follows:

### BOD<sub>5</sub> Mass (DMRs=48) Outfall #001A

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	660	9 – 528	69
Daily Maximum	1,320	11 – 4,336	222

### BOD<sub>5</sub> Concentration (DMRs=48) Outfall #001A

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	66	4 - 67	16
Daily Maximum	132	4 - 371	32

This permitting action is carrying forward the water quality-based monthly average and daily maximum concentration and mass effluent limitations for BOD<sub>5</sub> as they are more stringent than the technology-based (EGL) thresholds.

This permitting action is carrying forward a 30-day average percent removal reporting requirement for BOD<sub>5</sub> to assist in evaluating treatment system performance.

This permitting action is carrying forward the minimum monitoring frequency requirement for BOD<sub>5</sub> of twice per week which was established in the October 4, 2010 minor permit revision.

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

- e. Total Suspended Solids (TSS): The previous permitting action carried forward from the 12/22/99 WDL water quality-based monthly average concentration and mass limits of 103 mg/L and 1,028 lbs./day, respectively, and daily maximum concentration and mass limits of 224 mg/L and 2,238 lbs./day, respectively for TSS. These limitations were based on a desktop model conducted by the Department's Division of Environmental Assessment (DEA) in 1981, which the DEA stated is still appropriate for purposes of determining water quality-based discharge thresholds for this discharge.

Review Section 6(d) of this fact sheet, *Biochemical Oxygen Demand (BOD<sub>5</sub>)*, for additional discussion related to TSS limitations.

40 CFR Part 425.41 Subpart D - *Retan-Wet Finish-Sides Subcategory* establishes monthly average and daily maximum best practicable treatment (BPT)-based effluent guideline limitations for TSS in terms of 5.8 lbs./1,000 lbs. of raw material and 12.8 lbs./1,000 lbs. of raw material, respectively.

40 CFR Part 425.91 Subpart I - *Retan-Wet Finish-Splits Subcategory* establishes monthly average and daily maximum BPT-based effluent guideline limitations for TSS in terms of 3.8 lbs./1,000 lbs. of raw material and 8.3 lbs./1,000 lbs. of raw material, respectively.

With a projected, long-term average raw **sides** figure of 136,400 lbs./day, and a projected, long-term average raw **splits** figure of 131,600 lbs./day, technology-based effluent thresholds for TSS may be calculated as the sum of allowable loadings for each subpart as follows. It is noted that separate allocations for the municipal portion and landfill leachate portion have not been included in the following calculations as they are not significant sources compared to the tannery contribution.

### Retan-Wet Finish-Sides Subcategory

Monthly Average:  $(136,400 \text{ lbs./day})(5.8 \text{ lbs./1,000 lbs.}) = 791 \text{ lbs./day}$   
Daily Maximum:  $(136,400 \text{ lbs./day})(12.8 \text{ lbs./1,000 lbs.}) = 1,746 \text{ lbs./day}$

### Retan-Wet Finish-Splits Subcategory

Monthly Average:  $(131,600 \text{ lbs./day})(3.8 \text{ lbs./1,000 lbs.}) = 500 \text{ lbs./day}$   
Daily Maximum:  $(131,600 \text{ lbs./day})(8.3 \text{ lbs./1,000 lbs.}) = 1,092 \text{ lbs./day}$

### Sum of Allowable Loadings (BPT-Based Effluent Limitation Thresholds)

Monthly Average:  $791 \text{ lbs./day} + 500 \text{ lbs./day} = 1,291 \text{ lbs./day}$   
Daily Maximum:  $1,746 \text{ lbs./day} + 1,092 \text{ lbs./day} = 2,838 \text{ lbs./day}$

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

BPT-based effluent concentration thresholds for TSS may be derived by back-calculating values from the BPT-based effluent mass thresholds as follows:

$$\text{Monthly Average: } \frac{1,291 \text{ lbs./day}}{(1.5 \text{ MGD})(8.34 \text{ lbs./gallon})} = 103 \text{ mg/L}$$

$$\text{Daily Maximum: } \frac{2,838 \text{ lbs./day}}{(1.5 \text{ MGD})(8.34 \text{ lbs./gallon})} = 227 \text{ mg/L}$$

A summary of: 1) previous permit limits; 2) secondary treatment thresholds; 3) effluent guideline limitations (EGL) thresholds; and 4) water quality-based thresholds for TSS are as follows:

TSS	Previous Permit Limits	Secondary Treatment Thresholds	EGL Thresholds	Water Quality-Based Thresholds
Monthly Average	1,028 lbs./day	375 lbs./day	1,291 lbs./day	1,028 lbs./day
	103 mg/L	30 mg/L	103 mg/L	103 mg/L
Weekly Average	---	563 lbs./day	---	---
	---	45 mg/L	---	---
Daily Maximum	2,238 lbs./day	626 lbs./day	2,838 lbs./day	2,238 lbs./day
	224 mg/L	50 mg/L	227 mg/L	224 mg/L

A summary of effluent TSS data submitted to the Department for the period of January 2008 through December 2011 is as follows:

### TSS Mass (DMRs=48) Outfall #001A

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	1,028	15 – 238	70
Daily Maximum	2,238	35 – 1,953	219

### TSS Concentration (DMRs=48) Outfall #001A

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	103	4 - 90	20
Daily Maximum	224	9 - 162	36

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

This permitting action is carrying forward the water quality-based monthly average and daily maximum concentration and mass effluent limitations for TSS as they are more stringent than the technology-based (EGL) thresholds.

This permitting action is carrying forward a 30-day average percent removal reporting requirement for TSS to assist in evaluating treatment system performance.

This permitting action is revising the minimum monitoring frequency requirement for TSS from three times per week to twice per week which is consistent with BOD<sub>5</sub> monitoring.

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

A review of the daily maximum settleable solids data as reported on the Discharge Monitoring Reports submitted to the Department for the period January 2008 through December 2011 indicates the daily maximum settleable solids concentration discharge has been <0.1 ml/L or below 100% of the time during said reporting period (# DMRs = 48).

In consideration of compliance history with settleable solids, this permitting action is revising the minimum monitoring frequency requirement for settleable solids from five times per week to three times per week.

- g. *Escherichia coli* Bacteria: The previous permitting action established seasonal (May 15 through September 30) monthly average and daily maximum concentration limits for *E. coli* bacteria of 142 colonies/100 ml (geometric mean) and 949 colonies/100 ml (instantaneous level), respectively, which were based on the State of Maine Water Classification Program criteria for Class C waters.

A summary of effluent *E. coli* bacteria data for the applicable bacteria season from May 2008 through September 2011 is as follows:

### *E. coli* bacteria (DMRs=20) Outfall #001A

Value	Limit (col/100 mL)	Range (col/100 mL)	Mean (col/100 mL)
Monthly Average	142	1 – 40	7
Daily Maximum	949	1 – 689	92

In calendar year 2005, the Maine Legislature approved new geometric mean and instantaneous water quality standards of 126 colonies/100 ml and 236 colonies/100 ml, respectively, for Class C waters. Therefore, this permitting action is reducing the monthly average limit from 142 colonies/100 ml to 126 colonies/100 ml. However, the

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

Department has determined that end-of-pipe limitations for the instantaneous concentration standard of 949 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, as is the case with the Town's facility.

This permitting action is carrying forward the minimum monitoring frequency requirement for *E. coli* bacteria of three times per week.

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.

- h. Total Residual Chlorine (TRC): The previous permitting action established technology-based monthly average and daily maximum a concentration limits of 0.1 mg/L and 0.3 mg/L, respectively, for TRC. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department licensing/permitting actions impose the more stringent of either a water quality-based or BPT based limit. End-of-pipe acute and chronic water quality-based concentration thresholds may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	A & C Dilution Factors	Calculated	
			Acute Threshold	Chronic Threshold
0.019 mg/L	0.011 mg/L	18.2:1 (A) 18.2:1 (C)	0.35 mg/L	0.20 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that need to dechlorinate the discharge to meet water quality based thresholds, the Department has established monthly average and daily maximum BPT-based limits of 0.1 mg/L and 0.3 mg/L, respectively, which are more stringent than the water quality-based thresholds calculated above and are being carried forward in this permitting action.

A summary of effluent TRC data corresponding to the applicable bacteria season from May 2008 through September 2011 is as follows:

### TRC (DMRs=19) Outfall #001A

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	0.1	0.00 – 0.04	0.02
Daily Maximum	0.3	0.02 – 0.18	0.08

This permitting action is carrying forward the minimum monitoring frequency requirement for TRC of once per day.

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

- i. **pH:** The previous permitting action established, and this permitting action is carrying forward, a technology-based pH limit of 6.0 – 9.0 standard units, which is based on 06-096 CMR 525(3)(III).

The DMR data indicate the facility has been in compliance with the pH range limitation 100% of the time during the period of January 2008 through December 2011 (# DMRs = 48).

This permitting action is carrying forward the minimum monitoring frequency requirement for pH of once per day.

- j. **Oil and Grease (O&G):** The previous permitting action established monthly average and daily maximum mass limits of 188 lbs./day, and corresponding concentration limits of 15 mg/L of for O&G. The concentration limitation is based on Department BPJ of BPT, as this is the concentration above which oil & grease may cause a visible sheen on the surface of waterbodies.

40 CFR Part 425.41 Subpart D - *Retan-Wet Finish-Sides Subcategory* establishes monthly average and daily maximum BPT-based effluent guideline limitations for O&G of 1.7 lbs./1,000 lbs. of raw material and 3.7 lbs./1,000 lbs. of raw material, respectively.

40 CFR Part Subpart I - *Retan-Wet Finish-Splits Subcategory* establishes monthly average and daily maximum BPT-based effluent guideline limitations for O&G of 1.1 lbs./1,000 lbs. of raw material and 2.4 lbs./1,000 lbs. of raw material, respectively.

The Department has determined (utilizing the production-based calculations demonstrated for BOD<sub>5</sub> and TSS above) that the previously established limit of 15 mg/L is more stringent than the production-based effluent limit thresholds derived from the national effluent guidelines. This permitting action is carrying forward the monthly average and daily maximum concentration and mass limits.

A summary of effluent O&G data from January 2008 through December 2011 is as follows:

### O&G Mass (DMRs=48) Outfall #001A

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	188	0 – 37	7
Daily Maximum	188	1.66 – <188	27

### O&G Concentration (DMRs=48) Outfall #001A

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	15	1 – 5.1	2.3
Daily Maximum	15	1 – 5.1	2.3

This permitting action is carrying forward the minimum monitoring frequency requirement of once per month for O&G.

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

- k. **Total Phosphorus (Total-P):** The previous permitting action established monthly average, weekly average, and daily maximum concentration and mass reporting requirements for total phosphorous during the critical warm season of June 1 through September 30 of each year. The monitoring and reporting requirements were established based on a recommendation by Department's Division of Environmental Assessment to assess the impact of this discharge on receiving water quality. Monitoring was required at a minimum frequency of twice per month.

A summary of effluent total-P data submitted to the Department for the applicable summer season period of June 2008 through September 2011 is as follows:

### Total-P Mass (DMRs=15) Outfall #001A

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	Report	0 – 0.66	0.24
Weekly Average	Report	0 – 0.66	0.24
Daily Maximum	Report	0.10 – 0.77	0.31

### Total-P Concentration (DMRs=15) Outfall #001A

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	Report	0.03 – 0.12	0.08
Weekly Average	Report	0.05 – 0.16	0.09
Daily Maximum	Report	0.05 – 0.16	0.09

Based on the number of test results on file and the low levels of phosphorous present in the final effluent, the Department is not carrying forward monitoring and reporting requirements for total phosphorous in this permitting action.

### *Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing*

38 M.R.S.A. § 414-A and 38 M.R.S.A. § 420 prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. 06-096 CMR 530 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. 06-096 CMR 584 sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

WET, priority pollutant and analytical chemistry testing, as required by 06-096 CMR 530, is included in this permit in order to characterize the effluent. WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on invertebrate water flea (*Ceriodaphnia dubia*) and vertebrate brook trout (*Salvelinus fontinalis*). Chemical-specific monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria. Priority pollutant testing refers to the analysis for levels of

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

priority pollutants listed under "Priority Pollutants" on the form included as Attachment A of the permit. Analytical chemistry refers to those pollutants listed under "Analytical Chemistry" on the form included as Attachment A of the permit.

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

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

The Town discharges domestic (sanitary) and industrial process wastewater from the HPCF to surface waters and is therefore subject to the testing requirements of the toxics rule.

This permit provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment, and receiving water characteristics.

The previous permitting action established a chronic no observed effect level (C-NOEL) limit of 5.5% for the water flea based on an October 10, 2007 statistical evaluation of WET data on file with the Department which indicated the test result from September 17, 2006 demonstrated a reasonable potential to exceed the critical chronic ambient water quality threshold for the water flea of 5.5% (mathematical inverse of the chronic dilution factor of 18.2:1).

06-096 CMR 530(2)(B) categorizes dischargers subject to the toxics rule into one of four levels (Levels I through IV). Level I dischargers are those dischargers having a chronic dilution factor of less than 20 to 1. The chronic dilution factor associated with the discharge from the Town is 18.2:1; therefore, this facility is considered a Level I facility for purposes of toxics testing.

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

Surveillance level testing – Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and resuming 12 months prior to permit expiration (Year 5 of the term of the permit).

Level	WET Testing	Priority pollutant testing	Analytical chemistry
I	2 per year	None required	4 per year



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

Screening level testing – Beginning 24 months prior to the expiration date of the permit and lasting through 12 months prior to permit expiration and every five years thereafter if a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit.

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

06-096 CMR 530(2)(D)(3)(b) states, in part, "Dischargers in Level I may reduce surveillance testing to one WET or specific chemical series per year 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 and Department best professional judgment, the previous permitting action established reduced testing (once per year) for the brook trout and the water flea.

### 1. Whole Effluent Toxicity (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 February 9, 2012, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department for the Town in accordance with the statistical approach outlined above. **The 2/9/12 statistical evaluation indicates the discharge from the Hartland Pollution Control Facility has not exceeded or demonstrated a reasonable potential to exceed the critical acute or chronic ambient water quality thresholds for the water flea or brook trout. See Attachment C of this Fact Sheet for a summary of the WET test results.**

Therefore, this permitting action is eliminating the numeric C-NOEL limit of 5.5% for the water flea and establishing reduced surveillance level testing for both test organisms.

## 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.

Special Condition J of the previous permit established, *Surface Waters Toxics Control Program Statement For Reduced Toxics Testing*, pursuant to 06-096 CMR 530(2)(D)(4). The annual certification statement requirement is being carried forward in this permitting action. 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.

### *Analytical Chemistry & Priority Pollutant Testing Evaluation*

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

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

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.

Therefore, the Department is reserving 15% of the applicable water quality criteria in the calculations of this permitting action.

06-096 CMR 530(3)(E) states, "Where it is determined through [the statistical approach referred to in USEPA's Technical Support Document for Water Quality-Based Toxics Control] 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."

06-096 CMR 530(3)(D) states, "Where the need for effluent limits has been determined, limits derived from acute water quality criteria must be expressed as daily maximum values. Limits derived from chronic or human health criteria must be expressed as monthly average values."

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

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

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.

On January 18, 2013, the Department conducted a statistical evaluation of the most recent 60 months of chemical-specific tests results on file with the Department. **The evaluation indicates that the discharge: potentially exceeds the human health-based (water and organism) ambient water quality criterion (AWQC) threshold for inorganic arsenic; exceeds the chronic AWQC for chromium; demonstrates a reasonable potential to exceed the acute AWQC for copper; and demonstrates a reasonable potential to exceed the chronic AWQC for cyanide.** See Attachment D of this Fact Sheet for a summary of detectable test results.

The discharge does not exceed or demonstrate a reasonable potential to exceed the critical AWQC for any other parameters tested, including the following pollutants, which were limited in the previous permit: 2,4,6-trichlorophenol, total aluminum, ammonia, B-BHC, bis(2-ethylhexyl) phthalate, chlorodibromomethane, chloroform, dichlorobromomethane, and total zinc. **Therefore, this permitting action is eliminating the effluent limitations for those nine (9) pollutants.** It is noted that while the aluminum limits are being eliminated, alum is added in the treatment process and non-toxics levels are anticipated in the effluent.

The Department has prepared guidance that establishes protocols for establishing waste load allocations. See Attachment E of this Fact Sheet. The guidance states that the most protective of water quality becomes the facility's allocation. According to the 1/18/13 statistical evaluation, arsenic, chromium, copper and cyanide are to be limited based on the individual allocation method due the low dilution factors associated with the facility.

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

### Individual allocation methodology

In the individual allocation, the Department continues to utilize the formula it has used in permitting actions since October 2005 taking into consideration background (10% of AWQC) and a reserve (15% of AWQC). The formula is as follows:

$$\text{EOP concentration} = [\text{Dilution factor} \times 0.75 \times \text{AWQC}] + [0.25 \times \text{AWQC}]$$

$$\text{Mass limit} = (\text{EOP concentration in mg/L}^2)(8.34 \text{ lbs/gal})(\text{permit flow limit in MGD})$$

- m. Arsenic (Inorganic): The previous permitting action did not establish effluent limitations for arsenic.

$$\begin{aligned} \text{Monthly Average Conc.} &= (33.0)[(0.75)(0.012 \text{ } \mu\text{g/L})] + (0.25)(0.012 \text{ } \mu\text{g/L}) \\ &= 0.30 + 0.003 \\ &= 0.30 \text{ } \mu\text{g/L} \end{aligned}$$

$$\text{Monthly Average Mass} = \frac{(0.30 \text{ } \mu\text{g/L})(8.34 \text{ lbs./gallon})(1.5 \text{ MGD})}{1000 \text{ } \mu\text{g/mg}} = 0.0038 \text{ lbs./day}$$

06-096 CMR 530(C)(6) states:

All chemical testing must be carried out by approved methods that permit detection of a pollutant at existing levels in the discharge or that achieve detection levels as specified by the Department.

When chemical testing results are reported as less than, or detected below the Department's specified detection limits, those results will be considered as not being present for the purposes of determining exceedences of water quality criteria.

The USEPA has not approved a test method for inorganic arsenic as of the date of issuance of this permit. As such, there is no way for the permittee to formally demonstrate compliance with the monthly average water quality-based mass and concentration limits for inorganic arsenic established in this permitting action. Therefore, beginning upon issuance of this permit and lasting through the date in which the USEPA approves a test method for inorganic arsenic the permittee is being required to monitor for total arsenic. Once a test method has been approved, the Department will notify the permittee in writing and the limitations and monitoring requirements for inorganic arsenic become effective thereafter.

As of the date of this permitting action, the Department has limited data on the percentage of inorganic arsenic (approximately 50%) in total arsenic test results. Based on a literature search conducted by the Department, the inorganic fraction can range from 1% - 99% depending on the source of the arsenic. Generally speaking, ground water supplies derived from bedrock wells will likely tend to have higher fractions of inorganic arsenic (As<sup>+3</sup>-

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<sup>2</sup> Note: 1 mg/L = 1,000  $\mu$ g/L

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

arsentite and/or As<sup>+5</sup>- arsenate) than one may find in a food processing facility where the inorganic fraction is low and the organic fraction (arsenobetaine, arsenoribosides) is high.

Until the Department and the regulated community in Maine develop a larger database to establish statistically defensible ratios of inorganic and organic fractions in total arsenic test results, the Department is making a rebuttable presumption that the effluent contains a ratio of 50% inorganic arsenic and 50% organic arsenic in total arsenic results.

Being that the only approved test methods for compliance with arsenic limits established in permits is for total arsenic, the Department converted the water quality based end-of pipe monthly average concentration value of 0.30 µg/L for inorganic arsenic calculated on the previous page of this Fact Sheet into an equivalent total arsenic threshold (assuming 50% of the total arsenic is inorganic arsenic). This results in a total arsenic end-of-pipe monthly average concentration threshold of 0.60 µg/L. The calculation is as follows:

$$\frac{0.30 \text{ } \mu\text{g/L inorganic arsenic}}{0.5 \text{ } \mu\text{g/L inorganic arsenic} / 1.0 \text{ } \mu\text{g/L total arsenic}} = 0.60 \text{ } \mu\text{g/L total arsenic}$$

Therefore, a total arsenic value greater than 0.60 µg/L is potentially exceeding the water quality based end-of pipe monthly average concentration value of 0.30 µg/L for inorganic arsenic. Only the results greater than the 12-month rolling average total arsenic threshold of 0.60 µg/L will be considered a potential exceedence of the inorganic limit of 0.30 µg/L. It is noted the Department's current RL for total arsenic is 5.0 µg/L.

If a test result is determined to be a potential exceedence, the permittee shall submit a toxicity reduction evaluation (TRE) to the Department for review and approval within 45 days of receiving the test result of concern from the laboratory. Contact the Department's compliance inspector for a copy of the Department's December 2007 guidance on conducting a TRE for arsenic.

*Conditions of licenses*, 38 M.R.S.A. § 414-A(2), Schedules of Compliance, states,

Within the terms and conditions of a license, the department may establish a schedule of compliance for a final effluent limitation based on a water quality standard adopted after July 1, 1977. When a final effluent limitation is based on new or more stringent technology-based treatment requirements, the department may establish a schedule of compliance consistent with the time limitations permitted for compliance under the Federal Water Pollution Control Act, Public Law 92-500, as amended. A schedule of compliance may include interim and final dates for attainment of specific standards necessary to carry out the purposes of this subchapter and must be as short as possible, based on consideration of the technological, economic and environmental impact of the steps necessary to attain those standards.

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

Special Condition I, *Schedule of Compliance – Inorganic Arsenic*, of this permit establishes a schedule as follows:

Beginning upon issuance of this permit modification and lasting through a date on which the USEPA approves a test method for inorganic arsenic, the limitations and monitoring requirements for inorganic are not in effect. During this time frame, the permittee is required by Special Condition A, *Effluent Limitations and Monitoring Requirements*, of this permit to conduct 1/Quarter sampling and analysis for total arsenic.

Upon receiving written notification by the Department that a test method for inorganic arsenic has been approved by the USEPA, the limitations and monitoring requirements for inorganic arsenic become effective and enforceable and the permittee is relieved of their obligation to sample and analyze for total arsenic.

The schedule of compliance reserves the final date for compliance with the limit for inorganic arsenic. This reservation stems from the fact the USEPA has no schedule for approving a test method for inorganic arsenic nor does the Department have any authority to require the USEPA to do so. Therefore, the Department considers the aforementioned schedule for inorganic arsenic to be as short as possible given the technological (or lack thereof) issue of not being able to sample and analyze for inorganic arsenic with an approved method.

*Waste Discharge License Conditions*, 06-096 CMR 523(7)(a)(3), states in part:

...if a permit establishes a schedule of compliance which exceeds 1 year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.

- (i) The time between interim dates shall not exceed 1 year, except that in the case of a schedule for compliance with standards for sewage sludge use and disposal, the time between interim dates shall not exceed six months.
- (ii) If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than 1 year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

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

06-096 CMR 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 using best professional judgment given the timing, severity and frequency of occurrences of the exceedences or reasonable potential to exceed applicable critical water quality thresholds. Special Condition A, *Effluent Limitations and Monitoring Requirements*, of this permit requires that beginning upon issuance of this permit and lasting through USEPA approval of a test method for inorganic arsenic, the permittee shall conduct 1/Quarter monitoring for total arsenic. Should the test method approval for inorganic arsenic extend more than one year from the date of the issuance of this permit the sampling and analysis for total arsenic will serve to satisfy the interim requirements specified by 06-096 CMR 523(7)(a)(3). The Department is establishing a minimum monitoring frequency requirement for inorganic arsenic at the routine surveillance level frequency of 1/Year specified in 06-096 CMR 530.

- n. Total Chromium: The previous permit established water quality-based monthly average concentration and mass limits of 0.48 mg/L and 4.0 lbs./day, respectively, for total chromium. The previous permit established daily maximum concentration and mass limits of 3.4 mg/L and 34 lbs./day, respectively, for total chromium. The daily maximum limits have been carried forward in recent MEPDES permits from the Town's June 29, 1984 NPDES permit issued by the USEPA. The NPDES permit states that the limits were derived based on the facility's past demonstrated performance record.

On February 4, 2011, the Department issued a minor permit revision to the Town to revise the monthly average concentration limit for chromium from 0.48 mg/L to 3.2 mg/L based on the provisions of 06-096 CMR 530(3)(D)(1), which provides that "the Department may increase allowable [concentration] 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." The Town, the previous tannery owner, Irving Tanning Company (d/b/a Prime Tanning – Hartland), and Tasman Leather Group, LLC were working collaboratively at that time on a pollution prevention project at the Irving Tanning Company facility in Hartland to significantly reduce a source of chromium to the Town's wastewater treatment facility. Since installation of the so-called Buffing Dust Collection Bag House project in June 2011, the discharge from the HPCF has not exceeded the limits established in the December 6, 2007 permit.

40 CFR Part 425.41 Subpart D - *Retan-Wet Finish-Sides Subcategory* establishes monthly average and daily maximum BPT-based effluent guideline limitations for total chromium of 0.08 lbs./1,000 lbs. of raw material and 0.23 lbs./1,000 lbs. of raw material, respectively.

40 CFR Part 425.91 Subpart I - *Retan-Wet Finish-Splits Subcategory* establishes monthly average and daily maximum BPT-based effluent guideline limitations for total chromium of 0.05 lbs./1,000 lbs. of raw material and 0.15 lbs./1,000 lbs. of raw material, respectively.



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

Since the USEPA has promulgated effluent limitation guidelines for total chromium in terms of both daily maximum and monthly average limitations, this permitting action must limit the discharge in these terms as well. Water quality-based thresholds may be calculated as follows.

$$\begin{aligned}\text{Monthly Average Concentration} &= (18.2)[(0.75)(23.1 \mu\text{g/L})] + (0.25)(23.1 \mu\text{g/L}) \\ &= 315.3 + 5.8 \\ &= 321.1 \mu\text{g/L}\end{aligned}$$

$$\begin{aligned}\text{Daily Maximum Concentration} &= (18.2)[(0.75)(483.0 \mu\text{g/L})] + (0.25)(483.0 \mu\text{g/L}) \\ &= 6,593 + 121 \\ &= 6,714 \mu\text{g/L}\end{aligned}$$

$$\text{Monthly Average Mass} = \frac{(321.1 \mu\text{g/L})(8.34 \text{ lbs./gallon})(1.5 \text{ MGD})}{1000 \mu\text{g/mg}} = 4.0 \text{ lbs./day}$$

$$\text{Daily Maximum Mass} = \frac{(6,714 \mu\text{g/L})(8.34 \text{ lbs./gallon})(1.5 \text{ MGD})}{1000 \mu\text{g/mg}} = 84.0 \text{ lbs./day}$$

The Department has determined that the water-quality-based thresholds for total chromium are more stringent than the production-based effluent thresholds derived from the national effluent guidelines. This permitting action is carrying forward the monthly average water quality-based mass limit of 4.0 lbs./day, and the daily maximum mass limit of 34.0 lbs./day which has been carried forward in all permits since the 1984 NPDES permit. This permitting action is eliminating the monthly average and daily maximum concentration limits for total chromium based on the provisions at 38 M.R.S.A. § 464(4)(K), and establishing reporting requirements for concentration.

It is noted that since the so-called Buffing Dust Collection Bag House project was completed in June 2011 to reduce a significant source of chromium at the Tasman Leather Group, LLC, the discharge from the HPCF has not exceeded or demonstrated a reasonable potential to exceed the ambient water quality criteria for chromium<sup>3</sup>. Therefore, this permitting action is not requiring the Town to submit a toxicity reduction evaluation (TRE) plan for chromium at this time. Based on the timing, severity and frequency of occurrences of the exceedences or reasonable potential to exceed applicable critical water quality thresholds, this permitting action is carrying forward the minimum monitoring frequency requirement of once per month for total chromium.

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<sup>3</sup> See Response to Comments at the end of this fact sheet for updated information.

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

- o. Total Copper: The previous permit established water quality-based monthly average and daily maximum concentration and mass limits for total copper based on a 10/10/07 statistical evaluation of effluent data which indicated the effluent had a reasonable potential to exceed the acute and chronic AWQC for copper. The 1/18/13 statistical evaluation of effluent data indicates that the discharge has reasonable potential to exceed the acute AWQC only. Therefore, this permitting action is carrying forward the daily maximum mass limitation of 0.53 lbs./day for copper, as calculated below. This permitting action is eliminating the monthly average limitations for copper based on the results of the 1/18/13 evaluation, and is eliminating the daily maximum concentration limit for copper based on the provisions at 38 M.R.S.A. § 464(4)(K). This permitting action is establishing a daily maximum concentration reporting requirement for copper.

$$\begin{aligned}\text{Daily Maximum Concentration Threshold} &= (18.2)[(0.75)(3.07 \mu\text{g/L})] + (0.25)(3.07 \mu\text{g/L}) \\ &= 41.9 + 0.77 \\ &= 42.7 \mu\text{g/L}\end{aligned}$$

$$\text{Daily Maximum Mass Limit} = \frac{(42.7 \mu\text{g/L})(8.34 \text{ lbs./gallon})(1.5 \text{ MGD})}{1000 \mu\text{g/mg}} = 0.53 \text{ lbs./day}$$

Taking into consideration the test results on file, this permitting action is carrying forward the minimum monitoring frequency requirement of once per year for total copper.

- p. Cyanide, Amenable to Chlorination: The 1/18/13 statistical evaluation of effluent data indicates that the discharge has reasonable potential to exceed the chronic AWQC for cyanide. Therefore, this permitting action is establishing a monthly average mass limitation of 0.90 lbs./day and a monthly average concentration reporting requirement for cyanide, amenable to chlorination, as calculated below.

$$\begin{aligned}\text{Monthly Average Concentration Threshold} &= (18.2)[(0.75)(5.2 \mu\text{g/L})] + (0.25)(5.2 \mu\text{g/L}) \\ &= 71.0 + 1.3 \\ &= 72.3 \mu\text{g/L}\end{aligned}$$

$$\text{Monthly Average Mass Limit} = \frac{(72.3 \mu\text{g/L})(8.34 \text{ lbs./gallon})(1.5 \text{ MGD})}{1000 \mu\text{g/mg}} = 0.90 \text{ lbs./day}$$

Taking into consideration the test results on file, this permitting action is carrying forward the minimum monitoring frequency requirement of once per year for cyanide, amenable to chlorination. It is noted that while the ambient water quality criteria for cyanide is expressed as free cyanide, there is not an approved laboratory test method for free cyanide. The Department specifies that permittees shall analyze the wastewater for cyanide, amenable to chlorination for which there is an approved method.

- q. 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 #W000678-5M-E-R by establishing interim

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

monthly average and daily maximum effluent concentration limits of 8.1 parts per trillion (ppt) and 12.1 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. On February 6, 2012, the Department issued a minor revision to the December 6, 2007 permit thereby revising the minimum monitoring frequency requirement for mercury from once per quarter to once per year.

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 February 2007 through February 2012 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows.

### Mercury (n = 30)

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average, Maximum	8.1 – 12.1	0.59 – 3.30	1.62

On February 6, 2012, the Department issued a minor revision to the December 6, 2007 permit thereby revising the minimum monitoring frequency requirement from once per quarter to once per year pursuant to 38 M.R.S.A. § 420(1-B)(F).

## 7. PRETREATMENT

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

Upon issuance of this permit, the permittee is obligated to modify (if applicable) its pretreatment program to be consistent with current federal regulations and State rules. Those activities that the permittee must address include, but are not limited to, the following: (1) develop and enforce Department-approved specific effluent limits (technically-based local limits - last approved by the USEPA on May 13, 1999; (2) revise the local sewer-use ordinance or regulation, as appropriate, to be consistent with federal regulations and State rules; (3) develop an enforcement response plan; (4) implement a slug control evaluation program; (5) track significant non-compliance for industrial users; and (6) establish a definition of and track

## 7. PRETREATMENT (cont'd)

significant industrial users. These requirements are necessary to ensure continued compliance with the POTWs MEPDES permit and its sludge use or disposal practices.

In addition to the requirements described above, this permit requires that **within 180 days prior to the expiration date of this permit**, the permittee shall submit to the Department in writing, a description of proposed changes to permittee's pretreatment program deemed necessary to assure conformity with current federal and State pretreatment regulations and rules, respectively. These requirements are included in the permit to ensure that the pretreatment program is consistent and up-to-date with all pretreatment requirements in effect. **By July 1 of each calendar year**, the permittee shall submit a pretreatment annual report detailing the activities of the program for the twelve-month period ending 60 days prior to the due date.

## 8. DISPOSAL OF SEPTAGE WASTE IN WASTE WATER TREATMENT FACILITY

The Town has applied for, and pursuant to *Standards for the Addition of Transported Wastes to Waste Water Treatment Facilities*, 06-096 CMR 555 (last amended February 5, 2009), and the Town's written septage management plan, this permitting action authorizes the Town to receive and introduce into the treatment process or solids handling stream up to a daily maximum of 5,000 GPD of transported wastes (septage wastes) (up to a monthly total of 152,100 gallons). See Special Condition L of the permit.

## 9. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

## 10. PUBLIC COMMENTS

Public notice of this application was made in the *Rolling Thunder Express* newspaper on or about September 3, 2012. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

## 11. DEPARTMENT CONTACTS

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

Bill Hinkel  
Division of Water Quality Management  
Bureau of Land & Water Quality  
Department of Environmental Protection  
17 State House Station  
Augusta, Maine 04333-0017 Telephone: (207) 485-2281  
e-mail: [bill.hinkel@maine.gov](mailto:bill.hinkel@maine.gov)

## 12. RESPONSE TO COMMENTS

During the period of February 27, 2013 through the issuance date of this permit, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit to be issued to the Town for the proposed discharge. The Department-assigned compliance inspector noted minor typographical errors that have been corrected in addition to the following two comments.

**Comment #1:** The Department's compliance inspector for this facility commented that the statement on page 28 of the draft fact sheet should be revised to reflect the most current effluent chromium data for this facility.

**Response #1:** The fact sheet contains the following narrative on page 28:

"It is noted that since the so-called Buffing Dust Collection Bag House project was completed in June 2011 to reduce a significant source of chromium at the Tasman Leather Group, LLC, **the discharge from the HPCF has not exceeded or demonstrated a reasonable potential to exceed the ambient water quality criteria for chromium.** Therefore, this permitting action is not requiring the Town to submit a toxicity reduction evaluation (TRE) plan for chromium at this time. Based on the timing, severity and frequency of occurrences of the exceedences or reasonable potential to exceed applicable critical water quality thresholds, this permitting action is carrying forward the minimum monitoring frequency requirement of once per month for total chromium." (Emphasis added.)

Additional chromium data has been submitted by the permittee indicating that test results January and February 2013 exceeded the chronic ambient water quality criterion and permit limitation of 4.0 lbs./day. 06-096 CMR 530(3)(C) contains the requirements for conducting a toxicity reduction evaluation. Whereas water quality-based effluent limitations were established in the draft permit, no changes to permit conditions are being made based on this new information.

## 12. RESPONSE TO COMMENTS (cont'd)

**Comment #2:** The Department's compliance inspector for this facility commented that the monthly average mass calculation for cyanide on page 30 of the draft fact sheet contained a typographical error regarding the flow variable, and that this resulted in an erroneous monthly average mass limitation for cyanide.

**Response #2:** The fact sheet contained the following calculation on page 30:

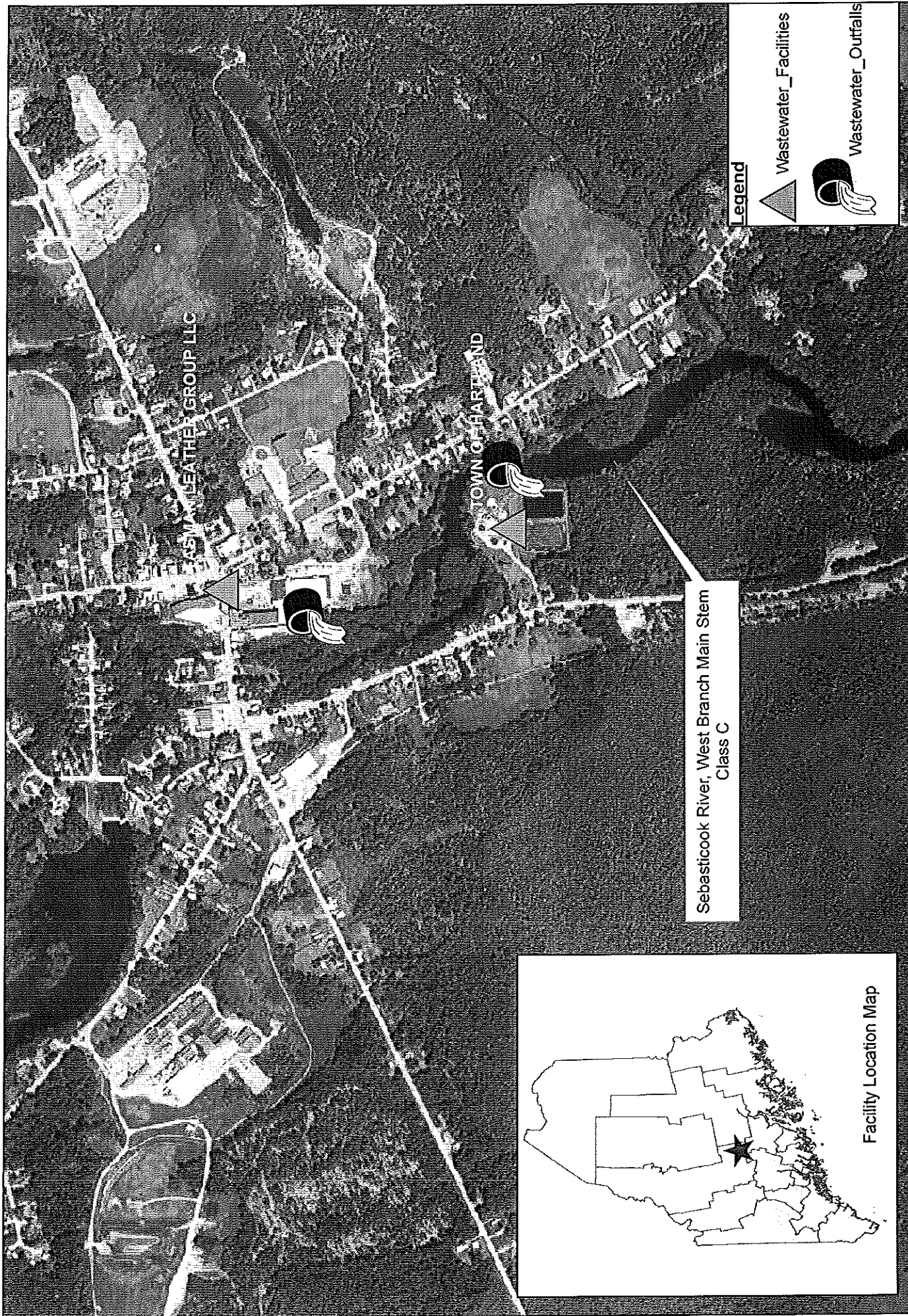
$$\text{Monthly Average Mass Limit} = \frac{(72.3 \mu\text{g/L})(8.34 \text{ lbs./gallon})(0.5 \text{ MGD})}{1000 \mu\text{g/mg}} = 0.03 \text{ lbs./day}$$

Using the correct flow value of 1.5 MGD yields a correct mass limitation of 0.90 lbs./day as follows:

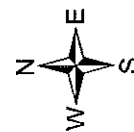
$$\text{Monthly Average Mass Limit} = \frac{(72.3 \mu\text{g/L})(8.34 \text{ lbs./gallon})(1.5 \text{ MGD})}{1000 \mu\text{g/mg}} = 0.90 \text{ lbs./day}$$

The Department has corrected this error in both the fact sheet and in the Special Condition A of the permit (the "limits table").

# **ATTACHMENT A**

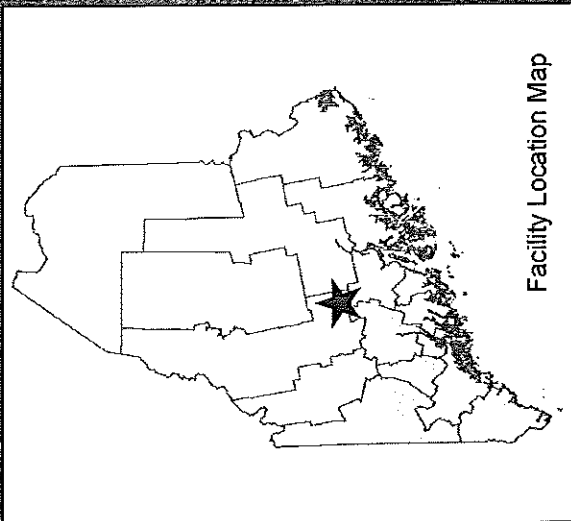


Map created by Maine DEP  
March 2012



0 900 1,800 3,600 Feet

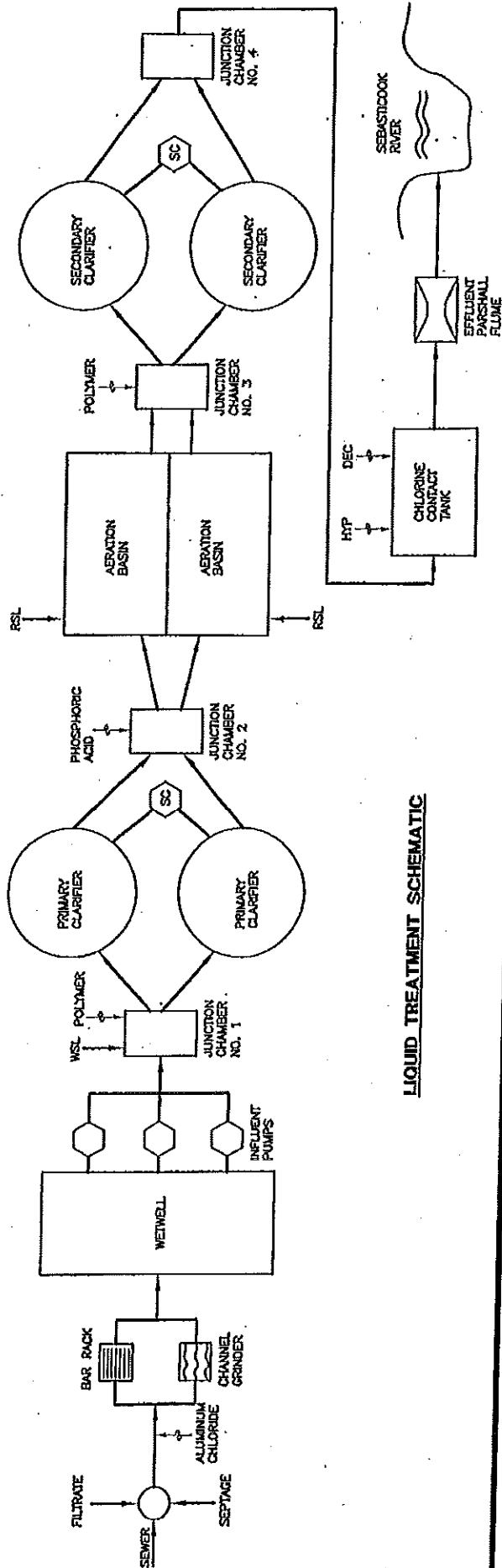
# Town of Hartland Water Pollution Control Facility Hartland, Maine



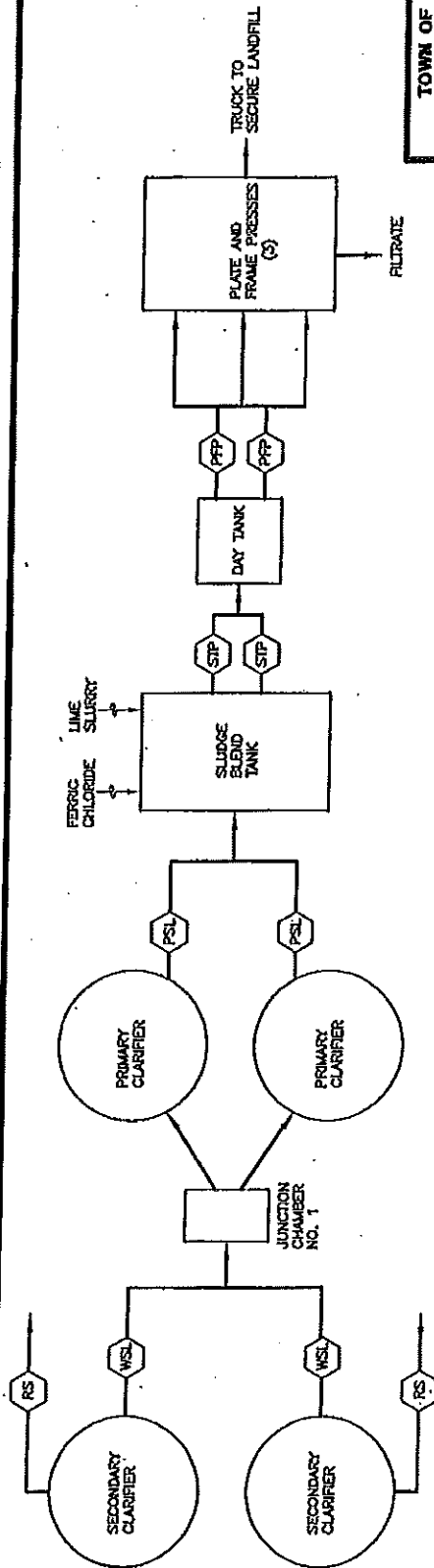
Facility Location Map



# **ATTACHMENT B**



**LIQUID TREATMENT SCHEMATIC**



**SOLIDS TREATMENT SCHEMATIC**

TOWN OF HARTLAND, ME		FIGURE	
WASTEWATER TREATMENT FACILITY		2	
PROJ NO	100011A	DATE	MAY 2003
SCALE	MTS	SCALE	MTS

# **ATTACHMENT C**

2/9/2012

## WET TEST REPORT

Data for tests conducted for the period  
09/Feb/2007 -09/Feb/2012



HARTLAND

NPDES= ME010144

Effluent Limit: Acute (%) = 5.483

Chronic (%) = 5.483

Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	23.90	03/06/2007	5.483		
TROUT	A_NOEL	100	06/17/2007	5.483		
TROUT	A_NOEL	17	09/09/2007	5.483		
TROUT	A_NOEL	100	11/04/2007	5.483		
TROUT	A_NOEL	20.80	04/06/2008	5.483		
TROUT	A_NOEL	100	08/03/2009	5.483		
TROUT	A_NOEL	31.10	10/18/2010	5.483		
TROUT	A_NOEL	53.40	11/29/2010	5.483		
TROUT	A_NOEL	53.40	11/29/2011	5.483		
TROUT	C_NOEL	21	03/06/2007	5.483		
TROUT	C_NOEL	100	06/17/2007	5.483		
TROUT	C_NOEL	100	09/09/2007	5.483		
TROUT	C_NOEL	100	11/04/2007	5.483		
TROUT	C_NOEL	17	04/06/2008	5.483		
TROUT	C_NOEL	50	08/03/2009	5.483		
TROUT	C_NOEL	17	11/29/2010	5.483		
TROUT	C_NOEL	17	11/29/2011	5.483		
WATER FLEA	A_NOEL	35.50	03/06/2007	5.483		
WATER FLEA	A_NOEL	100	06/17/2007	5.483		
WATER FLEA	A_NOEL	100	09/09/2007	5.483		
WATER FLEA	A_NOEL	100	11/04/2007	5.483		
WATER FLEA	A_NOEL	33.50	04/06/2008	5.483		
WATER FLEA	A_NOEL	55.60	10/05/2008	5.483		
WATER FLEA	A_NOEL	21.40	03/30/2009	5.483		
WATER FLEA	A_NOEL	100	08/03/2009	5.483		
WATER FLEA	A_NOEL	59.10	04/12/2010	5.483		
WATER FLEA	A_NOEL	14.70	10/18/2010	5.483		
WATER FLEA	A_NOEL	100	08/08/2011	5.483		
WATER FLEA	C_NOEL	10	03/06/2007	5.483		
WATER FLEA	C_NOEL	100	06/17/2007	5.483		
WATER FLEA	C_NOEL	100	09/09/2007	5.483		
WATER FLEA	C_NOEL	100	11/04/2007	5.483		
WATER FLEA	C_NOEL	50	04/06/2008	5.483		
WATER FLEA	C_NOEL	10	10/05/2008	5.483		

WATER FLEA	C_NOEL	17	03/30/2009	5.483
WATER FLEA	C_NOEL	100	08/03/2009	5.483
WATER FLEA	C_NOEL	50	04/12/2010	5.483
WATER FLEA	C_NOEL	10	10/18/2010	5.483
WATER FLEA	C_NOEL	17	08/08/2011	5.483

# **ATTACHMENT D**

2/9/2012

## PRIORITY POLLUTANT DATA SUMMARY

Date Range: 09/Feb/2007-09/Feb/2012



Facility Name: HARTLAND

NPDES: ME0101443

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
02/28/2007	0.34	0.60	1	0	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
03/04/2007	0.48	0.23	21	10	0	0	0	11	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
03/31/2007	0.34	0.60	1	0	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
04/30/2007	0.74	1.88	1	0	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
05/31/2007	0.47	0.88	2	1	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
06/17/2007	0.34	0.18	133	14	28	46	25	9	11	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
06/30/2007	0.34	0.61	1	0	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
07/31/2007	0.28	0.54	2	1	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
08/31/2007	0.27	0.63	1	0	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
09/09/2007	0.27	0.18	21	10	0	0	0	11	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
09/30/2007	0.27	0.47	1	0	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
10/31/2007	0.30	0.59	2	1	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
11/04/2007	0.44	0.44	21	10	0	0	0	11	0	F	0

## Key:

A = Acid                      O = Others                      P = Pesticides  
 BN = Base Neutral    M = Metals                      V = Volatiles

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
11/30/2007	0.44	1.27	2	1	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
12/31/2007	0.36	0.61	1	0	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
01/31/2008	0.50	0.80	1	0	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
02/28/2008	0.44	0.63	1	0	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
02/29/2008	0.44	0.63	2	2	0	0	0	0	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
03/31/2008	0.57	1.07	2	1	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
04/06/2008	0.77	0.79	21	10	0	0	0	11	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
04/30/2008	0.77	1.69	4	3	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
05/31/2008	0.47	0.98	3	2	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
06/30/2008	0.46	0.82	3	2	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
07/31/2008	0.38	0.56	4	3	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
08/31/2008	0.48	1.25	2	1	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
09/30/2008	0.52	1.24	4	3	0	0	0	1	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
10/05/2008	0.52	0.33	18	7	0	0	0	11	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
10/31/2008	0.52	1.24	4	3	0	0	0	1	0	F	0

**Key:**

A = Acid                      O = Others                      P = Pesticides  
 BN = Base Neutral    M = Metals                      V = Volatiles



Test Date 11/30/2008	Monthly (Flow MGD) 0.54	Daily (Flow MGD) 1.06	Total Test Number 2	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				1	0	0	0	1	0		
Test Date 12/31/2008	Monthly (Flow MGD) 0.45	Daily (Flow MGD) 0.99	Total Test Number 4	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				3	0	0	0	1	0		
Test Date 01/31/2009	Monthly (Flow MGD) 0.38	Daily (Flow MGD) 1.13	Total Test Number 3	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				2	0	0	0	1	0		
Test Date 02/28/2009	Monthly (Flow MGD) 0.33	Daily (Flow MGD) 0.55	Total Test Number 2	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				1	0	0	0	1	0		
Test Date 03/30/2009	Monthly (Flow MGD) 0.54	Daily (Flow MGD) 0.83	Total Test Number 18	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				7	0	0	0	11	0		
Test Date 03/31/2009	Monthly (Flow MGD) 0.54	Daily (Flow MGD) 0.83	Total Test Number 2	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				1	0	0	0	1	0		
Test Date 04/30/2009	Monthly (Flow MGD) 0.71	Daily (Flow MGD) 2.17	Total Test Number 4	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				3	0	0	0	1	0		
Test Date 05/31/2009	Monthly (Flow MGD) 0.41	Daily (Flow MGD) 0.57	Total Test Number 5	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				4	0	0	0	1	0		
Test Date 06/30/2009	Monthly (Flow MGD) 0.42	Daily (Flow MGD) 0.75	Total Test Number 2	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				1	0	0	0	1	0		
Test Date 07/31/2009	Monthly (Flow MGD) 0.40	Daily (Flow MGD) 0.62	Total Test Number 3	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				2	0	0	0	1	0		
Test Date 08/03/2009	Monthly (Flow MGD) 0.32	Daily (Flow MGD) 0.31	Total Test Number 21	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				10	0	0	0	11	0		
Test Date 08/31/2009	Monthly (Flow MGD) 0.32	Daily (Flow MGD) 0.54	Total Test Number 5	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				4	0	0	0	1	0		
Test Date 09/30/2009	Monthly (Flow MGD) 0.27	Daily (Flow MGD) 0.56	Total Test Number 2	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				1	0	0	0	1	0		
Test Date 10/31/2009	Monthly (Flow MGD) 0.37	Daily (Flow MGD) 0.83	Total Test Number 5	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				4	0	0	0	1	0		
Test Date 11/30/2009	Monthly (Flow MGD) 0.45	Daily (Flow MGD) 1.00	Total Test Number 2	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				1	0	0	0	1	0		

**Key:**

A = Acid                      O = Others                      P = Pesticides  
 BN = Base Neutral      M = Metals                      V = Volatiles

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
12/31/2009	0.41	0.73	2	1	0	0	0	1	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
01/31/2010	0.38	0.96	3	2	0	0	0	1	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
02/28/2010	0.43	1.00	2	1	0	0	0	1	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
03/31/2010	0.54	1.15	2	1	0	0	0	1	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
04/12/2010	0.49	0.54	18	7	0	0	0	11	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
04/30/2010	0.49	0.77	3	2	0	0	0	1	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
05/31/2010	0.32	0.63	2	1	0	0	0	1	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
06/30/2010	0.37	0.54	2	1	0	0	0	1	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
07/31/2010	0.29	0.47	3	2	0	0	0	1	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
08/31/2010	0.33	0.52	4	3	0	0	0	1	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
09/30/2010	0.30	0.49	2	1	0	0	0	1	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
10/18/2010	0.29	0.28	21	10	0	0	0	11	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
10/31/2010	0.29	0.65	5	4	0	0	0	1	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
11/29/2010	0.30	0.33	21	10	0	0	0	11	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
11/30/2010	0.30	0.89	1	1	0	0	0	0	0	F	0

**Key:**

A = Acid                      O = Others                      P = Pesticides  
 BN = Base Neutral    M = Metals                      V = Volatiles

Test Date 12/31/2010	Monthly (Flow MGD) 0.65	Daily 2.01	Total Test Number 2	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				1	0	0	0	1	0		
Test Date 01/31/2011	Monthly (Flow MGD) 0.27	Daily 0.61	Total Test Number 3	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				2	0	0	0	1	0		
Test Date 03/21/2011	Monthly (Flow MGD) 0.52	Daily 0.46	Total Test Number 21	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				10	0	0	0	11	0		
Test Date 05/10/2011	Monthly (Flow MGD) 0.28	Daily 0.27	Total Test Number 1	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				1	0	0	0	0	0		
Test Date 05/11/2011	Monthly (Flow MGD) 0.28	Daily 0.29	Total Test Number 3	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				0	0	0	0	3	0		
Test Date 05/18/2011	Monthly (Flow MGD) 0.28	Daily 0.46	Total Test Number 1	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				0	0	0	0	1	0		
Test Date 06/07/2011	Monthly (Flow MGD) 0.28	Daily 0.24	Total Test Number 1	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				1	0	0	0	0	0		
Test Date 06/08/2011	Monthly (Flow MGD) 0.22	Daily 0.28	Total Test Number 1	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				0	0	0	0	1	0		
Test Date 06/22/2011	Monthly (Flow MGD) 0.22	Daily 0.25	Total Test Number 1	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				0	0	0	0	1	0		
Test Date 07/12/2011	Monthly (Flow MGD) 0.10	Daily 0.31	Total Test Number 1	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				0	0	0	0	1	0		
Test Date 07/13/2011	Monthly (Flow MGD) 0.12	Daily 0.31	Total Test Number 2	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				2	0	0	0	0	0		
Test Date 07/28/2011	Monthly (Flow MGD) 0.10	Daily 0.21	Total Test Number 1	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				0	0	0	0	1	0		
Test Date 08/08/2011	Monthly (Flow MGD) 0.16	Daily 0.15	Total Test Number 18	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				7	0	0	0	11	0		
Test Date 10/04/2011	Monthly (Flow MGD) 0.20	Daily 0.31	Total Test Number 1	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				0	0	0	0	1	0		
Test Date 10/12/2011	Monthly (Flow MGD) 0.20	Daily 0.16	Total Test Number 3	Test # By Group						Clean F	Hg 0
				M	V	BN	P	O	A		
				2	0	0	0	1	0		

**Key:**

A = Acid                      O = Others                      P = Pesticides  
 BN = Base Neutral    M = Metals                      V = Volatiles

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
11/02/2011	0.20	0.26	1	0	0	0	0	1	0	F	0

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
11/08/2011	0.20	0.25	2	1	0	0	0	1	0	F	0

**Key:**

A = Acid                      O = Others                      P = Pesticides  
 BN = Base Neutral    M = Metals                      V = Volatiles

# **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](mailto: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 than a minimum number of tests. It is generally to a facility's long-term benefit to have more tests on file since their RP factor will be reduced.



Maine Department of Environmental Protection

Working Definitions of Terms Used in the DeTox System.

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

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

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

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

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

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

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

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

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

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

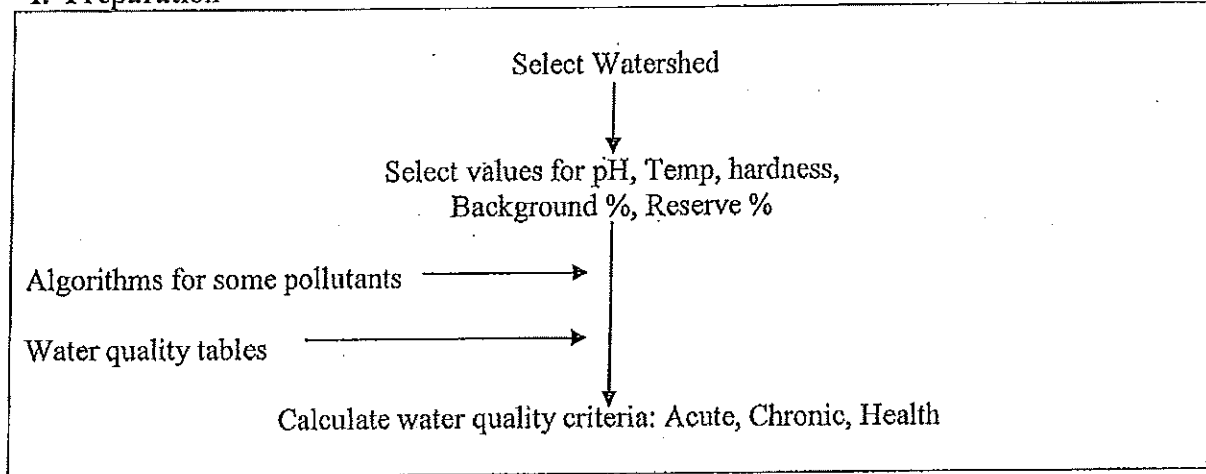
*Segment allocation.* One of three ways of developing an *allocation*. The amount is set by multiplying a facility's *historical discharge percentage* for a specific pollutant by the *assimilative capacity* for that pollutant and criterion. A facility will have different allocation percentages for each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

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

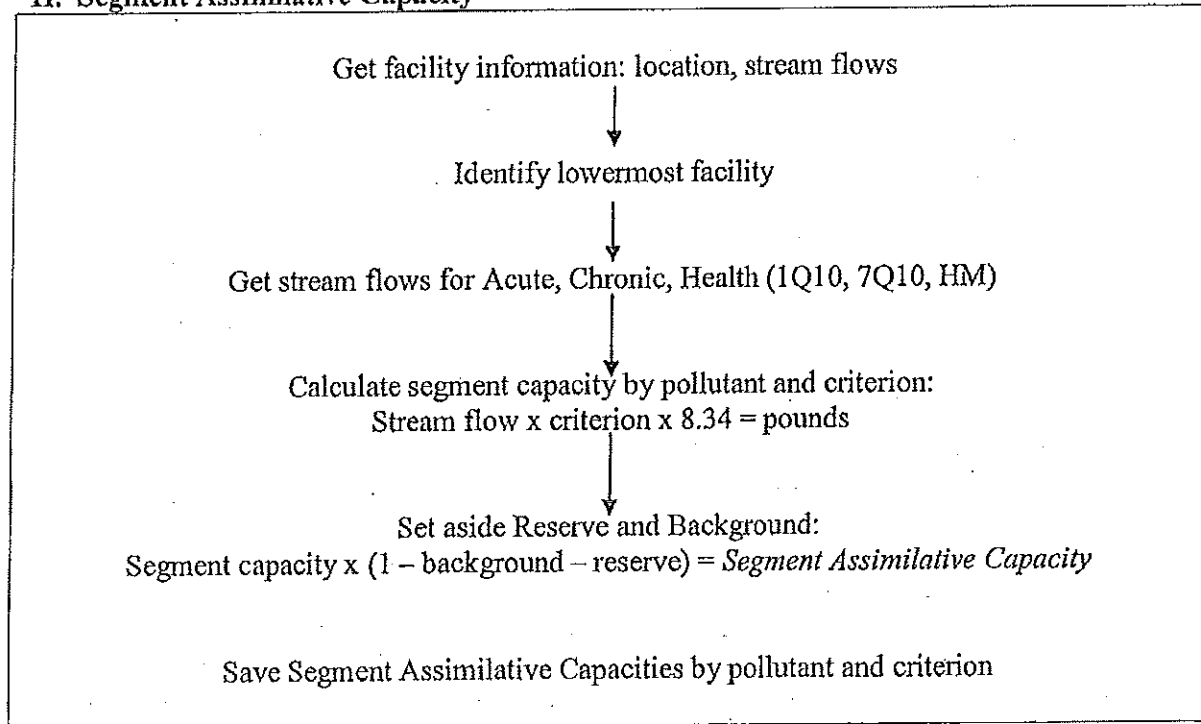
*Water quality criteria.* Standards for acceptable in-stream or ambient levels of pollutants. These are established in the Department's Chapter 584 and are expressed as concentrations in ug/L. There may be separate standards for acute and chronic protection aquatic life and/or human health. Each criterion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

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

I. Preparation

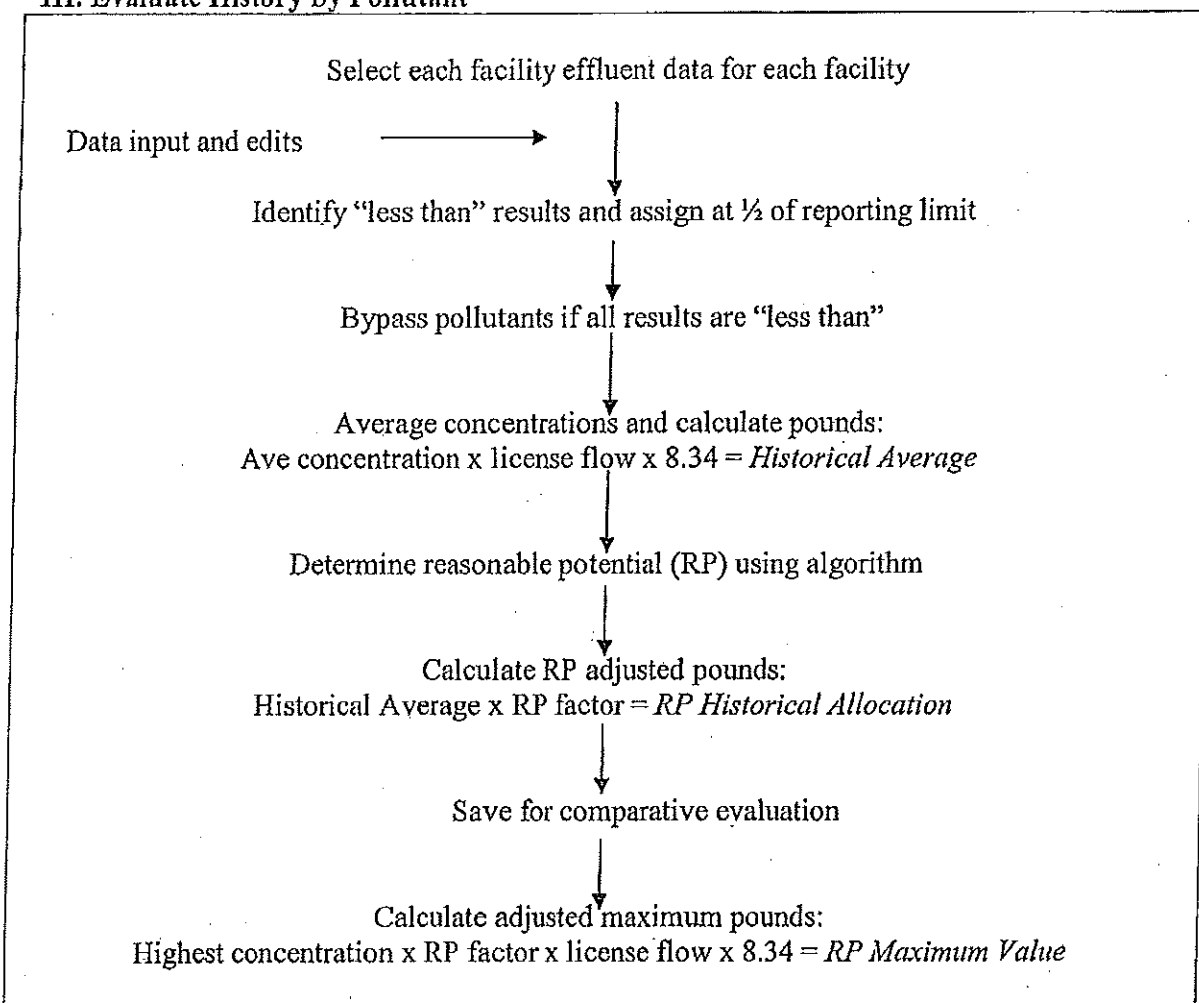


II. Segment Assimilative Capacity

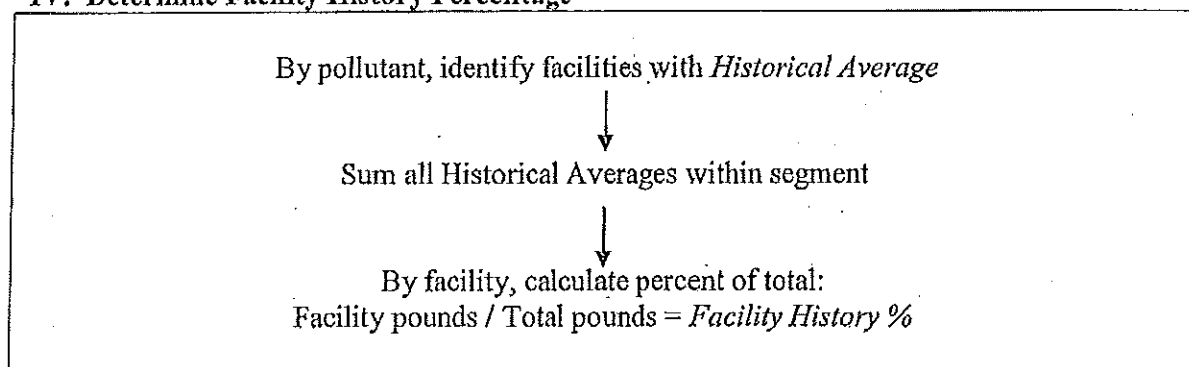


Maine Department of Environmental Protection  
General Processing Steps in "DeTox"

**III. Evaluate History by Pollutant**

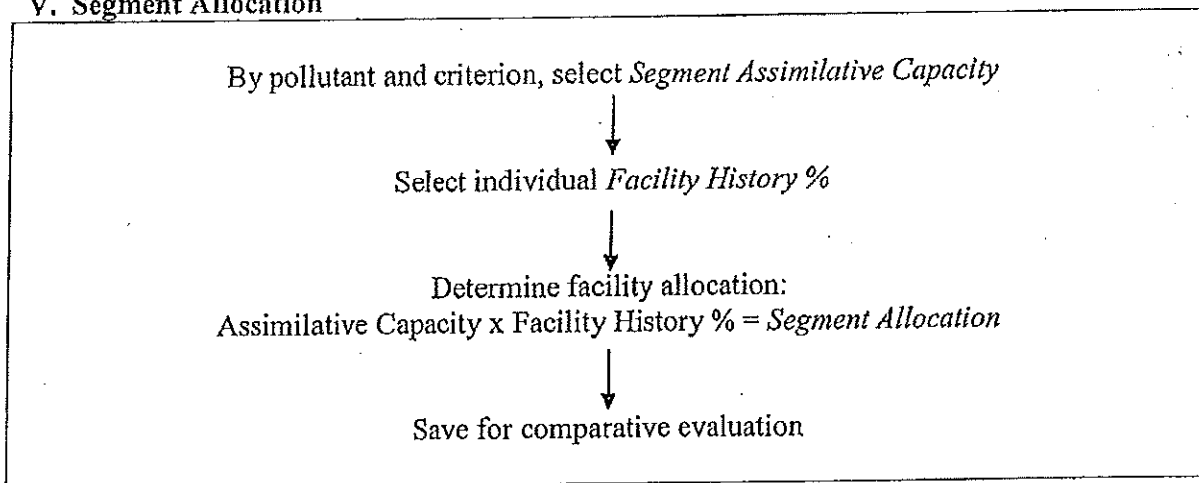


**IV. Determine Facility History Percentage**

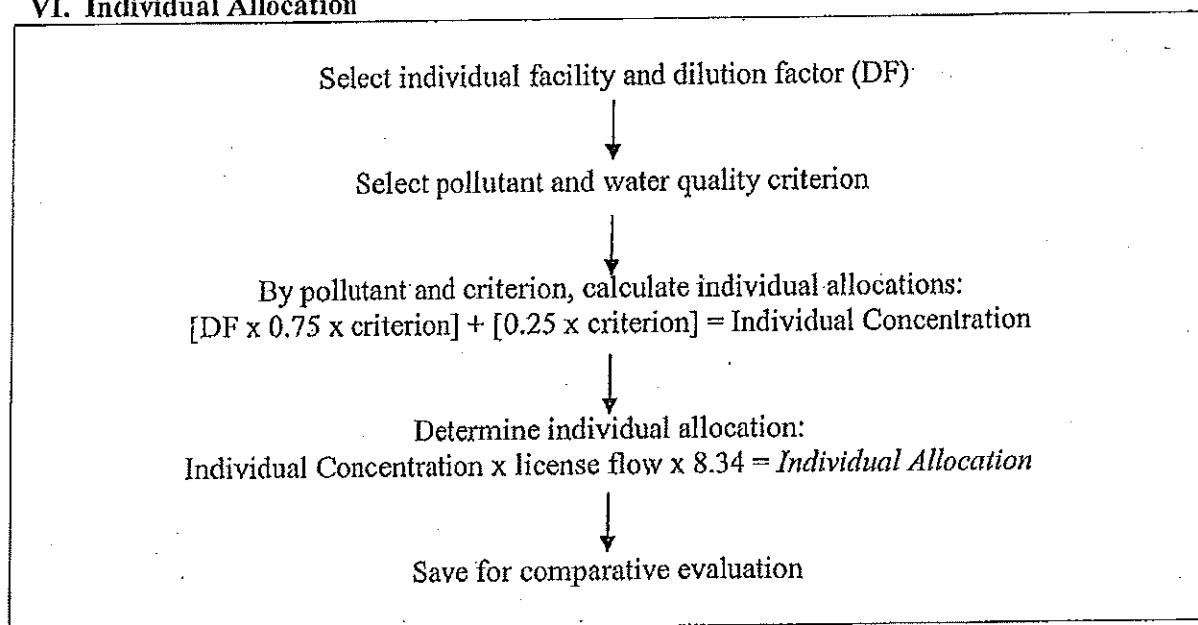


Maine Department of Environmental Protection  
General Processing Steps in "DeTox"

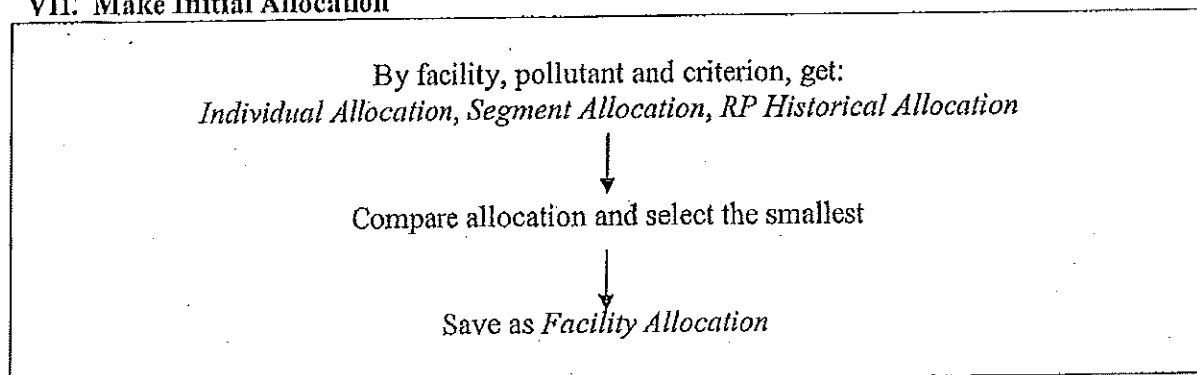
**V. Segment Allocation**



**VI. Individual Allocation**

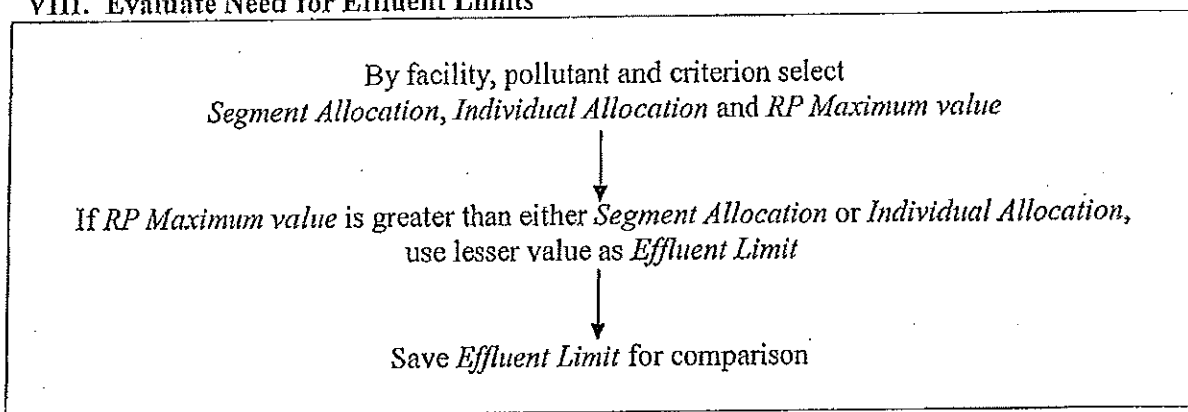


**VII. Make Initial Allocation**

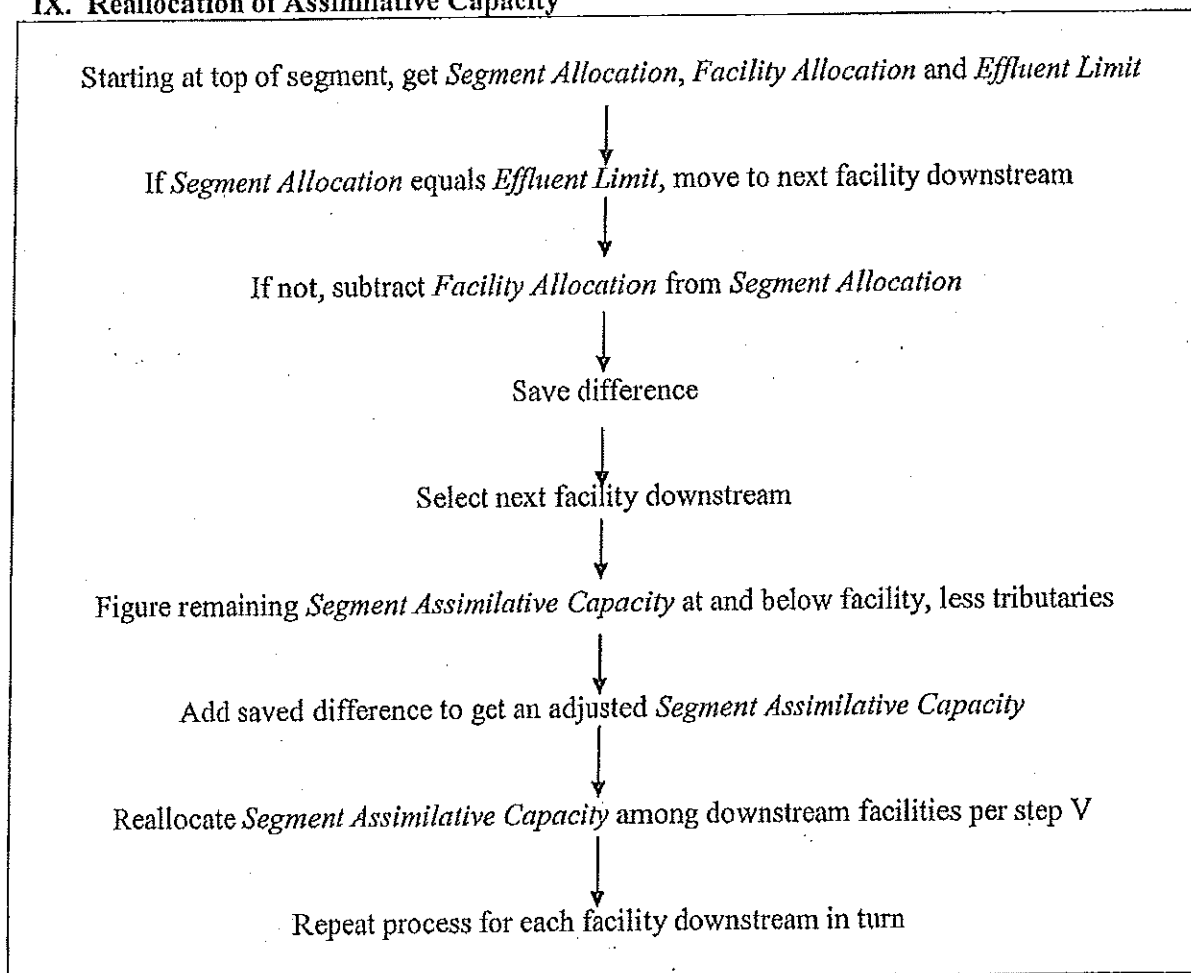


Maine Department of Environmental Protection  
General Processing Steps in "DeTox"

VIII. Evaluate Need for Effluent Limits



IX. Reallocation of Assimilative Capacity



MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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### 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).



## MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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**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 of 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 MAINTENANCE 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

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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- (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.

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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### 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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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**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

## MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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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).

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- (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.

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**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 contaminants 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.



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**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.

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**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.



# 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.

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**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.**

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