

### PAUL R. LEPAGE GOVERNOR

# STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL MERCER
COMMISSIONER

May 31, 2018

Mr. Chris Littlefield Manager, Town of Hartland 21 Elm Street P.O. Box 280 Hartland, ME. 04943

RE:

Maine Pollutant Discharge Elimination System (MEPDES\_Permit #ME0101443

Maine Waste Discharge License (WDL) #W000678-5M-R-R

**Final Permit** 

Dear Mr. Littlefield:

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL **renewal** which was approved by the Department of Environmental Protection. Please read this permit/license renewal and its attached conditions carefully. Compliance with this permit/license will protect water quality.

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

If you have any questions regarding the matter, please feel free to call me at 287-7693. Your Department compliance inspector copied below is also a resource that can assist you with compliance. Please do not hesitate to contact them with any questions.

Thank you for your efforts to protect and improve the waters of the great state of Maine!

Sincerely.

Gregg Wood

Division of Water Quality Management

Bureau of Water Quality

Enclosure

cc: Gary Brooks, DEP/EMRO Sandy Mojica, USEPA Lori Mitchell, DEP/CMRO Marelyn Vega, USEPA James Crowley, DEP/CMRO Olga Vergara, 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 HARTLAND, SOMERSET COUNTY, MAINE PUBLICLY OWNED TREATMENT WORKS ME0101443	) ) )	MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT AND WASTE DISCHARGE LICENSE
ME0101443 W000678-5M-R-R <b>APPROVAL</b>	)	RENEWAL

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC §1251, Conditions of licenses, 38 M.R.S. § 414-A, and applicable regulations, the Department of Environmental Protection (Department hereinafter) has considered the application of TOWN OF HARTLAND (Town hereinafter), 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-L-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0101443, (permit hereinafter) which was issued by the Department on April 5, 2013, for a five-year term. The 4/5/13 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 West Branch of the Sebasticook River, Class C, in Hartland, Maine.

The Department issued three minor permit revisions: 1) October 14, 2013 (modifying milestone deadlines in the Special Condition M, *Pretreatment*), 2) January 29, 2014, (modifying milestones deadlines in the Special Condition M, *Pretreatment*) and 3) March 15, 2016, (modified Special Condition L, *Disposal of Transported Wastes In Wastewater Treatment* that increased the quantity of transported waste received and treated at the facility).

#### PERMIT SUMMARY

This permit is carrying forward all the terms and conditions of the previous permit except the Department is making the following revisions to this permit as follows:

1. Eliminating the monthly average water quality based limits and reporting requirements for inorganic arsenic and eliminating the monthly average reporting requirements for total arsenic. A recent updated statistical evaluation conducted in accordance with 06-096 CMR Chapter 530 indicates there are no longer any test results for arsenic that exceed or have a reasonable potential to exceed applicable ambient water quality criteria (AWQC).

#### PERMIT SUMMARY (cont'd)

- 2. Eliminating the monthly average and or daily maximum water quality based mass limitations and concentration reporting requirements for total copper as a recent updated statistical evaluation conducted in accordance with 06-096 CMR Chapter 530 indicates there are no longer any test results for copper that exceed or have a reasonable potential to exceed applicable AWQC.
- 3. Establishing a monthly average water quality based mass limitation and concentration reporting requirement for total lead and establishing a C-NOEL limitation of 5.5% for the water flea. A recent updated statistical evaluation conducted in accordance with 06-096 CMR Chapter 530 indicates there are two test results for total lead have a reasonable potential to exceed the chronic AWQC for total lead and there are three C-NOEL test results for the water flea that have a reasonable potential to exceed the critical chronic threshold of 5.5%. This permit is establishing a 1/Quarter monitoring frequency for total lead and the water flea which is equivalent to a routine surveillance level monitoring frequency found in 06-096 CMR Chapter 530.
- 4. Reducing the monitoring frequency for total chromium from 1/Month to 1/Quarter given the most current statistical evaluation indicates the discharge does not exceed or have a reasonable potential to exceed any AWQC associated with chromium. The monitoring frequency of 1/Quarter is equivalent to a routine surveillance level monitoring frequency found in 06-096 CMR Chapter 530.
- 5. Increasing the monitoring frequency for cyanide (amenable to chlorination) from 1/Year to 1/Quarter given the most current statistical evaluation indicates the two most current test results submitted to the Department have a reasonable potential to exceed the chronic AWQC for cyanide. The monitoring frequency of 1/Quarter is equivalent to a routine surveillance level monitoring frequency found in 06-096 CMR Chapter 530.

#### CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated April 26, 2018, 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. § 464(4)(F), will be met, in that:
  - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
  - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
  - (c) Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
  - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
  - (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. § 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 West Branch of the Sebasticook River, 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. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (last amended October 9, 2015.)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEA	AL PROCEDURES
DONE AND DATED AT AUGUSTA, MAINE, THIS 31 DAY OF	May , 2018.
DEPARTMENT OF ENVIRONMENTAL PROTECTION	·
BY: Melanix St. For Paul Mercer, Comprissioner	Filed
Date of initial receipt of application February 5, 2018	MAY 3 1 2018
Date of application acceptance: February 5, 2018	State of Maine Board of Environmental Protection
Date filed with Board of Environmental Protection:	
This Order prepared by Gregg Wood, BUREAU OF WATER QUAL	ITY
ME0101443 2018 5/31/18	

ME0101443 W000678-5M-R-R

#### SPECIAL CONDITIONS

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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

Effluent Characteristic Discharge Limitations Monitoring Requirements

Elliuent Characteristic			Discharge	Limitations		Withitting Requirements				
	<u>Monthly</u> Average	<u>Weekly</u> Average	<u>Daily</u> Maximum	Monthly Average	Weekly Average	<u>Daily</u> Maximum	Measurement Frequency	<u>Sample</u> <u>Type</u>		
Flow (50050)	1.5 MGD	Average	Report MGD				Continuous	Recorder		
BOD <sub>5</sub> [00310]	660 lbs./day		1,320 lbs./day	66 mg/L [19]		132 mg/L [19]	2/Week [02/07]	24-Hour Composite		
BOD <sub>5</sub> Percent Removal <sup>(2)</sup>				Report %			1/Month [01/30]	Calculate [CA]		
TSS [00530]	1,028 lbs./day	***	2,238 lbs./day	103 mg/L [19]		224 mg/L [19]	2/Week [02/07]	24-Hour Composite		
TSS Percent Removal <sup>(2)</sup>				Report %	and lafe to		1/Month [01/30]	Calculate [CA]		
Settleable Solids  [00545]		THE PART AND				0.3 ml/L /25]	3/Week [03/07]	Grab [GR]		
E. coli Bacteria <sup>(3)</sup> May 15 – September 30 [31633]				126/100 ml <sup>(4)</sup>		949/100 ml	3/Week [03/07]	Grab [GR]		
Total Residual Chlorine <sup>(5)</sup> [50060]				0.1 mg/L [19]		0.3 mg/L [19]	1/Day [01/01]	Grab [GR]		
Oil and Grease	188 lbs./day		188 lbs./day	15 mg/L [19]	and also two	15 mg/L [19]	1/Month [01/30]	Grab (GR)		
<b>pH</b> (00400)					land had effet	6.0 – 9.0 SU <sub>[12]</sub>	1/Day [01/01]	Grab [GR]		

The italicized numeric values bracketed in the table and in subsequent tables 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.

Minimum

ME0101443 W000678-5M-R-R

#### SPECIAL CONDITIONS

### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

#### A, DEFENDENT EMILITATION OF THE PROPERTY OF TH

**Monitoring Requirements Discharge Limitations Effluent Characteristic** Weekly Daily Measurement Sample Monthly Weekly Daily Monthly Maximum Frequency Type Maximum Average Average Average Average 24-Hour Report µg/L Report µg/L 1/Quarter 34.0 lbs./day 4.0 lbs./day Chromium (Total) Composite [28] [01/90] [28] [26] [26] [01034] [24] 24-Hour 1/Quarter Report µg/L Cyanide (Amenable to 1.1 lbs./day Composite Chlorination) [01/90] [26] [28] [24] [00722] 24-Hour Report µg/L 1/Quarter 0.08 lbs./day Composite Lead (Total) [01/90] [28] [26] [24] [01051] 12.1 ng/L 1/Year Grab 8.1 ng/L Mercury (Total) (6) [3M] [GR] [01/YR] [3M][71900]

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

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

**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	Limitation	s	Minimum		
	Monthly Average	Daily Maximum	Monthly Average	Daily <u>Maximum</u>	Measurement Frequency	g Requirements <u>Sample</u> <u>Type</u>	
Whole Effluent Toxicity (7) <u>Acute – NOEL</u> Ceriodaphnia dubia (Water flea) [TDA3B]  Salvelinus fontinalis (Brook trout) [TDA6F]				Report % [23] Report % [23]	1/Quarter [01/90] 1 Year [01/YR]	Composite [24] Composite [24]	
Chronic – NOEL  Ceriodaphnia dubia (Water flea) [TBP3B]  Salvelinus fontinalis (Brook trout) [TBQ6F]				5.5·% [23] Report % [23]	1/Quarter [01/90] 1 Year [01/YR]	Composite [24] Composite [24]	
Analytical Chemistry (8,10) [51477]			4444	Report μg/L	1 Year [01/YR]	Composite/Grab [24]	

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

**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	e Limitation	Minimum Monitoring Requirements			
	Monthly Average	Daily <u>Maximum</u>	Monthly <u>Average</u>	Daily <u>Maximum</u>	Measurement <u>Frequency</u>	<u>Sample</u> <u>Type</u>	
Whole Effluent Toxicity (7)  Acute – NOEL  Ceriodaphnia dubia (Water flea) [TDA3B]  Salvelinus fontinalis (Brook trout) [TDA6F]				Report % [23] Report % [23]	1/Quarter [01/90] 1/Quarter [01/90]	Composite [24] Composite [24]	
Chronic – NOEL  Ceriodaphnia dubia (Water flea) [TDA3B]  Salvelinus fontinalis (Brook trout) [TBQ6F]				5.5 % [23] Report % [23]	1/Quarter [01/90] 1/Quarter [01/90]	Composite [24] Composite [24]	
Analytical Chemistry (8,10) [51477]	<b></b>			Report µg/L	1/Quarter [01/90]	Composite/Grab [24]	
Priority Pollutant (9,10) [50008]				Report µg/L	1/Year [01/YR]	Composite/Grab [24]	

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

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

#### **FOOTNOTES:**

- 1. Sampling Sampling for all parameters must be collected after the last treatment process prior to discharge to the receiving water. Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for waste water. Samples that are analyzed by laboratories operated by waste discharge facilities licensed pursuant to *Waste Discharge Licenses* 38 M.R.S. § 413 are subject to the provisions and restrictions of Maine Comprehensive and Limited Environmental Laboratory Certification Rules, 10-144 CMR 263 (last amended April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in this permit, all results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.
- 2. **Percent Removal** The permittee must 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<sup>th</sup> and September 30<sup>th</sup> 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 must utilize a USEPA-approved test method capable of bracketing the TRC limitations specified in this permitting action.
- 6. Mercury The permittee must conduct all mercury sampling required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the USEPA's "clean sampling techniques" found in USEPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis shall be conducted in accordance with USEPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See Attachment A for a Department report form for mercury test results. Compliance with the monthly average limitation 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.

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

#### **FOOTNOTES:**

- 7. 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.
  - 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 must 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 1/Quarter for the water flea (Ceriodaphnia dubia). For the brook trout, testing 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 must 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 must 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 as modified by Department protocol for the salmonids.

- 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.

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

#### **FOOTNOTES:**

Results of WET tests must be reported on the "Whole Effluent Toxicity Report Fresh Waters" form included as **Attachment B** 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 C** of this permit each time a WET test is performed.

- 8. Analytical chemistry Refers to those pollutants listed under "Analytical Chemistry" on the form included as Attachment C of this permit.
  - a. Surveillance level testing 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 must 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 must conduct analytical chemistry testing at a minimum frequency of once per calendar quarter for four consecutive calendar quarters.
- 9. **Priority pollutant testing** Refers to those pollutants listed under "Priority Pollutants" on the form included as **Attachment C** of this permit.
  - a. **Surveillance level** priority pollutant testing is not required pursuant to 06-096 CMR 530.
  - 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 must conduct screening level priority pollutant testing at a minimum frequency of once per year.
- 10. **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.

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

#### **FOOTNOTES:**

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

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

- 1. The permittee must not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the usages designated for the classification of the receiving waters.
- 2. The permittee must not discharge effluent that contains materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated for the classification of the receiving waters.
- 3. The permittee must not discharge effluent that causes visible discoloration or turbidity in the receiving waters or that impairs the usages designated for the classification of the receiving waters.
- 4. Notwithstanding specific conditions of this permit, the permittee must not discharge effluent that lowers the quality of any classified body of water below such classification, or lowers the existing quality of any body of water if the existing quality is higher than the classification.

#### C. TREATMENT PLANT OPERATOR

The 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 February 5, 2018; 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 must be reported in accordance with Standard Condition D(1)(f), Twenty-four hour reporting, of this permit.

#### E. LIMITATIONS FOR INDUSTRIAL USERS

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

#### F. NOTIFICATION REQUIREMENTS

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

- 1. Any introduction of pollutants into the wastewater collection and treatment system from an indirect discharger in a primary industrial category discharging process wastewater; and
- 2. Any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants to the system at the time of permit issuance.
- 3. For the purposes of this section, adequate notice must 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.

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

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

- (a) Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;
- (b) Changes in the operation of the treatment works that may increase the toxicity of the discharge;
- (c) Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge;
- (d) Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge; and
- (e) Increases in the type or volume of transported (hauled) wastes accepted by the facility.

The Department may require that routine 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.

### H. OPERATIONS AND MAINTENANCE (O&M) PLAN

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

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

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

#### I. WET WEATHER MANAGEMENT PLAN

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

# J. 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 45,000 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 45,000 GPD authorized by this permit, the permittee is authorized to receive and introduce into the treatment process or solids handling stream at the treatment facility and up to a daily maximum of 15,000 GPD of septage wastes and a daily maximum of 30,000 GPD of landfill leachate introduced into the collection system at the Landfill Leachate Pump Station and Pond.
- 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.

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

- 4. The permittee must ensure that at no time the addition of transported wastes causes or contributes to effluent quality violations. The permittee must ensure that transported wastes do not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility. Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. The permittee must ensure that odors and traffic from the handling of transported wastes do not result in adverse impacts to the surrounding community. If any adverse effects exist, the permittee must suspended the receipt or introduction of transported wastes into the treatment process or solids handling stream until there is no further risk of adverse effects.
- 5. The permittee must maintain records for each load of transported wastes in a daily log which must include at a minimum the following.
  - (a) The date;
  - (b) The volume of transported wastes received;
  - (b) The source of the transported wastes;
  - (d) The person transporting the transported wastes;
  - (e) The results of inspections or testing conducted;
  - (f) The volumes of transported wastes added to each treatment stream; and
  - (g) The information in (a) through (d) for any transported wastes refused for acceptance.

The permittee must maintain these records at the treatment facility for a minimum of five years.

- 6. The permittee must ensure that the addition of transported wastes into the treatment process or solids handling stream do not cause the treatment facility's design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, the permittee must ensure that introduction of transported wastes into the treatment process or solids handling stream are reduced or terminated in order to eliminate the overload condition.
- 7. The permittee must not record holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added as transported wastes, but must report this waste stream in the treatment facility's influent flow.
- 8. During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current high flow management plan approved by the Department that provides for full treatment of transported wastes without adverse impacts.

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

- 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.

#### K. INDUSTRIAL PRETREATMENT PROGRAM

- 1. Pollutants introduced into POTWs by a non-domestic source (user) must not pass-through the publicly owned treatment works (POTW) or interfere with the operation or performance of the works.
  - a. The permittee must develop and enforce specific effluent limits (local limits) 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 must not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond.

Within 180 days of the effective date of this permit, [ICIS code PR002] the permittee must prepare and submit a written technical evaluation to the Department analyzing the need to revise local limits. As part of this evaluation, the permittee must assess how the POTW performs with respect to influent and effluent of pollutants, water quality concerns, sludge quality, sludge processing concerns/inhibition, biomonitoring results, activated sludge inhibition, worker health and safety and collection system concerns. In preparing this evaluation, the permittee must 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 must complete the revisions within 120 days of notification by the Department and submit the revisions to the Department for approval. The permittee must carry out the local limits revisions in accordance with USEPA's document entitled, Local Limits Development Guidance (July 2004).

#### K. INDUSTRIAL PRETREATMENT PROGRAM

- 2. The permittee must implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the permittee's approved Pretreatment Program, and the General Pretreatment Regulations, found at 40 CFR 403 and *Pretreatment Program*, 06-096 CMR 528 (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 must be sampled and inspected at the frequency established in the approved IPP but in no case less than once per year and maintain adequate records.
  - b. Issue or renew all necessary industrial user control mechanisms within 90 days of their expiration date or within 180 days after the industry has been determined to be a significant industrial user.
  - c. Obtain appropriate remedies for noncompliance by an industrial user with any pretreatment standard and/or requirement.
  - d. Maintain an adequate revenue structure for continued implementation of the Pretreatment Program.
  - e. The permittee must provide the Department with an annual report describing the permittee's pretreatment program activities for the twelve-month period ending 60 days prior to the due date in accordance with federal regulation found at 40 CFR 403.12(i) and 06-096 CMR 528(12)(i). The annual report must 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 must be submitted no later than March 1 of each calendar year.
  - f. The permittee must obtain approval from the Department prior to making any significant changes to the industrial pretreatment program in accordance with federal regulation found at 40 CFR 403.18(c) and 06-096 CMR 528(18).
  - g. The permittee must assure that applicable National Categorical Pretreatment Standards are met by all categorical industrial users of the POTW. These standards are published in the federal regulations found at 40 CFR 405.

#### K. INDUSTRIAL PRETREATMENT PROGRAM

h. The permittee must modify its pretreatment program to conform to all changes in the federal regulations and State rules that pertain to the implementation and enforcement of the industrial pretreatment program. Within 180 days of the effective date of this permit, [ICIS code 50799] the permittee must provide the Department in writing, proposed changes to the permittee's pretreatment program deemed necessary to assure conformity with current federal regulations and State rules. At a minimum, the permittee 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.

#### L. SURFACE WATER TOXICS CONTROL PROGRAM

During the term of this permit and upon written notification by the Department to the permittee, the permittee must participate in the State's most current 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. § 420-B.

#### M. MONITORING AND REPORTING

#### **Electronic Reporting**

NPDES Electronic Reporting, 40 C.F.R. 127, requires MEPDES permit holders to submit monitoring results obtained during the previous month on an electronic discharge monitoring report to the regulatory agency utilizing the USEPA electronic system.

Electronic Discharge Monitoring Reports (DMRs) submitted using the USEPA NetDMR system, must be:

- 1. Submitted by a facility authorized signatory; and
- 2. Submitted no later than midnight on the 15<sup>th</sup> day of the month following the completed reporting period.

Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Toxics reporting must be done using the DEP Toxsheet reporting form included as **Attachment C** of this permit. An electronic copy of the Toxsheet reporting document must be submitted to the Department assigned compliance inspector as an attachment to an email. In addition, a hardcopy form of this sheet must be signed and submitted to the Department assigned compliance inspector, or a copy attached to your NetDMR submittal will suffice. Documentation submitted electronically to the Department in support of the electronic DMR must be submitted no later than midnight on the 15<sup>th</sup> day of the month following the completed reporting period.

#### M. MONITORING AND REPORTING (cont'd)

Toxsheet reporting forms must be submitted electronically as an attachment to an email sent to the Department assigned compliance inspector. In addition, a signed hardcopy of your Toxsheet must also be submitted. A signed copy of the DMR and all other reports required herein must be submitted to the Department assigned compliance inspector (unless otherwise specified) following address:

Department of Environmental Protection
Central Maine Regional Office
Bureau of Water Quality
Division of Water Quality Management
26 Tyson Drive
Augusta, ME. 04333

#### N. REOPENING OF PERMIT FOR MODIFICATION

In accordance with 38 M.R.S. § 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.

#### O. 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

### **Effluent Mercury Test Report**

Name of Facility:	Federal Permit # ME									
-										
Purpose of this test	Initial limit determination									
-	Compliance monitoring for: year calendar quarter									
	Supplemental or extra test									
SAMPLE COLLECTION INFORMATION										
Sampling Date:	Sampling time:AM/PM									
Sampling Location	mm dd yy									
Weather Conditions	s:									
Please describe any time of sample coll	unusual conditions with the influent or at the facility during or preceding the ection:									
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 Laborator	y:									
Date of analysis:	Result: ng/L (PPT)									
]	Please Enter Effluent Limits for your facility									
Effluent Limits:	Average =ng/L									
	emarks or comments from the laboratory that may have a bearing on the results or . If duplicate samples were taken at the same time please report the average.									
CERTIFICATION										
conditions at the tir	best of my knowledge the foregoing information is correct and representative of me of sample collection. The sample for mercury was collected and analyzed is 1669 (clean sampling) and 1631 (trace level analysis) in accordance with the DEP.									
Ву:	Date:									
Title:										

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

## ATTACHMENT B

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

Facility Name				MEPDES Permi		
Land Book Conference of the Co					Pipe#	<del></del>
Facility Representative			Signature	÷ Aura aggrupto	and complete	
By signing this form, I attest tha	it to the best of my l	mowledge that the	intermation provided	is true, accurate,	and complete.	
Facility Telephone #			Date Collected	/11/	Date Tested	mm/dd/yy
Chlorinated?		Dechlorinated?		mm/dd/yy		ппп сс. у у
Results	% eff1	A THE PERSON NAMED AND ADDRESS OF THE PERSON NAMED AND ADDRESS			A-NOEL	Effluent Limitations
A-NOEL	water flea	trout			C-NOEL	
C-NOEL						
					trout	
Data summary	% 51	water flea nvival	no. young	% :	survival	final weight (mg)
OC standard	A>90	C>80	>15/female	A>90	C>80	> 2% increase
lab control						
receiving water control						
cone. 1 ( %)						
conc. 2 ( %) conc. 3 ( %)						
conc. 4 ( %)						
conc. 5 (%)						
conc. 6 (%)						
stat test used	t to values statis	tically different	from controls			
piace " nex	t to values statis	ileany unierent	nom controls	for trout show	final wt and % inc	er for both controls
Reference toxicant	water	flea	tro	ut		
	A-NOEL	C-NOEL	A-NOEL	C-NOEL	7	
toxicant / date	-				_	
limits (mg/L)						
results (mg/L)					_	
Comments						
Commens						
Laboratory conducting te	st				284	
Company Name			Company Rep. Na	ame (Printed)		
Mailing Address			Company Rep. Si	gnature		
City, State, ZIP			Company Telepho	one#		

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

# ATTACHMENT C

# Maine Department of Environmental Protection WET and Chem

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

	Facility Name _			MEPDES#_ Pips#_		Facility Ro	presentative Signature To the bost of my kno	włodge this infor	mation is true,	accurate an	d complete.
	Licensed Flow (MGD)			Flow for D	ار (MGD)	Flow Avg. for Month (MGD)					
	Acute dilution factor						D 8	io Analyzod			
	Chronic dilution factor			Date Sampi	• Collected		Date Jamp	10 Musikase [			
	Human habith dilution factor				Laboratory				Telephone _		
	Criteria type: M(arine) or F(resh)	T			Address						
	Last Revision - July 1, 2015								Lab 1D#		
Us.	Charles Control of the Control of th	EDEC: 177	4 TEO VEDS		Lab Contact				C80 10 %		
	ERROR WARNING! Essential facility	FRESH W	ATER VERS	SION		Receiving	Errivent				
	information is missing. Please check required entries in bold above.	Please see the for	enatos on Il	no Inst BADO.		Water or	Concentration (us/L or				
	required entries in odid solve.	1 16925 300 (112 10)				Ambient	es noted)				
ini na	WHOLE EFFLUENT TOXICITY										
Г	WHOLE EFFECENT TOXIOITI		Effluent	Limits, %	(125-573) CC (25-071) VPT 43-00-08-00-0	2012 1.114	WET Rosuit, %	Roporting	Possibl€	Exceed	ence (/)
		<u> </u>	Acute	Chronic	•		Do not enter % sign	Limit Chock	Acuto	Chronic	<b></b>
	Trout - Acute										
	Trout - Chronic										<del>                                     </del>
	Water Fles - Acute										
	Water Flea - Chronic								•		
	WET CHEMISTRY				Г						
	<sub>Р</sub> Н (S.U.) (9)					(8)					
	Total Organic Corbon (mg/L)										ļ
<u> </u>	Total Solids (mg/L)								<u> </u>	ļ	<del>                                     </del>
<u> </u>	Total Suspended Solids (mg/L) Alkalinity (mg/L)					(8)				<del> </del>	1
<del> </del>	Specific Conductance (umhos)					(5)					+
	Total Hardness (mg/L)					(8)					-
	Total Magnosium (mg/L)				ļ	(8)					
	Total Calcium (mg/L)	COMPANIES CONTRACTOR C			J.,	[ (0)					
	ANALYTICAL CHEMISTRY (3)					1			1	e Exceed	(7)
1100000000	Also do these tests on the effluent with		Eff	luent Limits,	ug/L			Roporting	Possibi	e Exceed	1
1	WET. Testing on the receiving water is	Reporting Limit	Acute <sup>(6)</sup>	Chronic <sup>(6)</sup>	Health <sup>(6)</sup>			Limit Chock	Acuto	Chronic	Health
<u></u>	TOTAL RESIDUAL CHLORINE (mg/L) (9	) 0.05	, 10010		1	NA				<del> </del>	4
	AMMONIA	NA NA				(8)				<del> </del>	+
М	ALUMINUM	NA				(8)		<del> </del>		+	+
М	ARSENIC	5				(8)				+	1
М	CADMIUM	1			<u> </u>	(8)				1	
М	CHROMIUM	10		<u> </u>		(8)					
М	COPPER	<u>3</u> 5				(8)					
M	CYANIDE, TOTAL					(8)				1	
000	CYANIDE, AVAILABLE (3.)	5		<u> </u>	<u> </u>	(8)					
М	LEAD	<u>3</u> 5		<del> </del>	-	(8)					
М	NICKEL	1 1		<del> </del>		(8)					
M	SILVER	5				(8)		<u> </u>			
IV]	ZINC	<u> </u>									

# Maine Department of Environmental Protection WET and Chem

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

	PRIORITY POLLUTANTS (4)										
			Effluent Limits					Possible Exceedence (7)			
ļ	1	Raporting Limit	Acute <sup>(6)</sup>	Chronic <sup>(6)</sup>	Health <sup>(6)</sup>			Roparting Limit Check	Acute	Chronic	Health
М	ANTIMONY	5									
Μ	BERYLLIUM	2									
М	MERCURY (5)	0.2					1 to the second second				
Μ	SELENIUM	5		<u></u>							
М	THALLIUM	4									
Α	2,4,6-TRICHLOROPHENOL	5								ļ	
Α	2,4-DICHLOROPHENOL	5									
Α	2,4-DIMETHYLPHENOL	5									
Α	2,4-DINITROPHENOL	45	ļ								
Α	2-CHLOROPHENOL	5	<u> </u>								
Α	2-NITROPHENOL	5									
	4,6 DINITRO-O-CRESOL (2-Methyl-4,6-	1			1						
Α	dinitrophenoi)	25	ļ		ļ			ļ			<del></del>
Α	4-NITROPHENOL	20									
	P-CHLORO-M-CRESOL (3-methyl-4-				Ì				[		
Α	chlorophenoi)+B80	5	ļ			ļ			ļ	<u> </u>	ļ
A	PENTACHLÓROPHENOL	20	<u> </u>						ļ	ļ	
Α	PHENOL	5	ļ								
BN	1,2,4-TRICHLOROBENZENE	5						J			
BN	1,2-(O)DICHLOROBENZENE	5									ļ
ΒN	1,2-DIPHENYLHYDRAZINE	20	<u> </u>							ļ	
ΒN	1.3-(M)DICHLOROBENZENE	5		<u> </u>							ļ
BN	1,4-(P)DICHLOROBENZENE	5									
BN	2,4-DINITROTOLUENE	6	<u> </u>								
ΒN	2,6-DINITROTOLUENE	5									<u> </u>
BN	2-CHLORONAPHTHALENE	5									ļ
BN	3,3'-DICHLOROBENZIDINE	16.5									
BN	3.4-BENZO(B)FLUORANTHENE 4-BROMOPHENYLPHENYL ETHER	5	<u> </u>							<b></b>	ļ
BN	4-BROMOPHENYLPHENYL ETHER	5									ļ
ΒN	4-CHLOROPHENYL PHENYL ETHER	5			<u> </u>				<b></b>		ļ
BN	ACENAPHTHENE	5									ļ
BN	ACENAPHTHYLENE	5								<u> </u>	
	ANTHRACENE	5									
BN	BENZIDINE	45							<u> </u>		<del> </del>
BN	BENZO(A)ANTHRACENE	8		1	ļ						<del></del>
BN	BENZO(A)PYRENE	5			ļ			<u> </u>	<del> </del>	<u> </u>	<del> </del>
BN	BENZO(Ğ,H,I)PERYLENE BENZO(K)FLUORANTHENE	55			ļ				<del> </del>	<del> </del>	<del></del>
	BENZO(K)FLUORANTHENE	5		ļ				<u> </u>		<del>                                     </del>	+
BN	BIS(2-CHLOROETHOXY)METHANE	5				<b></b>			ļ	<del></del>	+
	BIS(2-CHLOROETHYL)ETHER	6							1	<u> </u>	<del></del>
BN	BIS(2-CHLOROISOPROPYL)ETHER	6						ļ		1	ļ
BN		10	<u> </u>					1	ļ		+
BN		5				-		<u> </u>	<del> </del>		<del>                                     </del>
BN	CHRYSENE	5				ļ		<b>_</b>	ļ		<del> </del>
BN		5			<b></b>				<del> </del>		<del> </del>
BN		5		ļ		ļ		<b> </b>	ļ	ļ	
BN		5						1		<b></b>	<del> </del>
BN	DIETHYL PHTHALATE	5							1	ļ	1
BN	DIMETHYL PHTHALATE	5							<b> </b>		<u> </u>
ΒN	FLUORANTHENE	5			<u> </u>			I	<u> </u>		

# Maine Department of Environmental Protection WET and Chem

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

<u></u>					r						]
BN	FLUORENE	5									
	HEXACHLOROBENZENE	5									
BN	HEXACHLOROBUTADIENE	5									
BN	HEXACHLOROCYCLOPENTADIENE	10									
BN	HEXACHLOROETHANE	5	I								
BN	INDENO(1,2,3-CD)PYRENE	5									
BN	ISOPHORONE	5									
BN	N-NITROSODI-N-PROPYLAMINE	10									
BN	N-NITROSODIMETHYLAMINE	5									
	N-NITROSODIPHENYLAMINE	5		*							
BN	NAPHTHALENE	5									
BN	NITROBENZENE	5									
BN	PHENANTHRENE	5									
	PYRENE	5	<u>-</u>								
P	4,4'-DDD	0.05									
F	4.4'-DDE	0.05			1						
P		0.05			<u> </u>						
P	4,4'-DDT	0.03			<u> </u>						
P	A-BHC	0.05			<b></b>						
P	A-ENDOSULFAN	0.05			<del> </del>					l	
	ALDRIN										
Р	В-ВНС	0.05			<del> </del>					<b>-</b>	
Р	B-ENDOSULFAN	0.05			-					<u> </u>	
Р	CHLORDANE	0.1						<del></del>			
Р	D-BHC	0.05			ļ						
Р	DIELDRIN	0.05			<u> </u>			<u> </u>		<del> </del>	
Р	ENDOSULFAN SULFATE	0.1								ļ	
Р	ENDRIN	0.05			<u> </u>	<u> </u>					
P	ENDRIN ALDEHYDE	0.05						ļ		ļ	
P	G-BHC	0.15			<u> </u>						
Ρ	HEPTACHLÖR	0.15								<u> </u>	<u></u>
Р	HEPTACHLOR EPOXIDE	0.1			<u> </u>			<b></b>	ļ	ļ	
Р	PCB-1016	0.3							<u> </u>	<b> </b>	
P	PCB-1221	0.3								<b></b>	
Р	PCB-1232	0.3								<u> </u>	
P	PCB-1242	0.3								<u> </u>	
P	PCB-1248	0.3									
Р	PCB-1254	0.3						<u> </u>			
P	PCB-1260	0.2								<u> </u>	ļ
P	TOXAPHENE	1									
V	1,1,1-TRICHLOROETHANE	5									
V	1,1,2,2-TETRACHLOROETHANE	7			<u> </u>						
V	1,1,2-TRICHLOROETHANE	5	<del>                                     </del>		1				I		
V	1,1-DICHLOROETHANE	5	†								
<u> </u>	1,1-DICHLOROETHANE		<del> </del>		<b>-</b>			1			<u> </u>
lv		3	j								
V	dightereathene) 1,2-DICHLOROETHANE	3	<del> </del>		<del> </del>				1	<u> </u>	
		<u> </u>			<del> </del>				1	1	
V	1,2-DICHLOROPROPANE	D	<del>                                     </del>						-	<u> </u>	
l	1,2-TRANS-DICHLOROETHYLENE (1,2-	F	1						1	1	
V	trans-dichloroothone)	5	ļ		<b>-</b>	<del> </del>				<del>                                     </del>	<del>                                     </del>
	1,3-DICHLOROPROPYLENE (1,3-	_							1	1	
V	dichloropropona)	5			<b>_</b>	<b></b>		<del>}</del>	<del> </del>	<del> </del>	
٧	2-CHLOROETHYLVINYL ETHER	20								<u> </u>	
V	ACROLEIN	NA			ļ			ļ	-		
V	ACRYLONITRILE	NA								<del> </del>	
V	BENZENE	5	1		1	l	<u> </u>	.L	1,	<u> </u>	L
			-								

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#### Maine Department of Environmental Protection WET and Chem

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			 		 ¥	1	·	
V	BROMOFORM	5			 <u> </u>			
V	CARBON TETRACHLORIDE	5						
$\nabla$	CHLOROBENZENE	6					<u> </u>	
V	CHLORODIBROMOMETHANE	3						
V	CHLOROETHANE	5						
V	CHLOROFORM	5						
V	DICHLOROBROMOMETHANE	3					<u> </u>	
V	ETHYLBENZENE	10						
V	METHYL BROMIDE (Bromomothano)	5						
V	METHYL CHLORIDE (Chloromothano)	5		<u>i</u>				
V	METHYLENE CHLORIDE	5			 			<u> </u>
					i			
1	TETRACHLOROETHYLENE			1				
lv	(Perchloroothylone or Tetrachieroothene)	5						
V	TOLUENE	5					<u> </u>	
	TRICHLOROETHYLENE							
V	(Trichtoroathana)	3						
V	VINYL CHLORIDE	5						

#### Notes:

- (1) Flow average for day pertains to WET/PP composite sample day.
- (2) Flow average for month is for month in which WET/PP sample was taken.
- (3) Analytical chemistry parameters must be done as part of the WET test chemistry.
- (3a) Cyanide, Available (Cyanide Amenable to Chlorination) is not an analytical chemistry parameter, but may be required by certain discharge permits.
- (4) Priority Pollutants should be reported in micrograms per liter (ug/L).
- (5) Mercury is often reported in nanograms per liter (ng/L) by the contract laboratory, so be sure to convert to micrograms per liter on this spreadsheet.
- (6) Effluent Limits are calculated based on dilution factor, background allocation (10%) and water quality reserves (15% to allow for new or changed discharges or non-point sources).
- (7) Possible Exceedence determinations are done for a single sample only on a mass basis using the actual pounds discharged. This analysis does not consider watershed wide allocations for fresh water discharges.
- (8) These tests are optional for the receiving water. However, where possible samples of the receiving water should be preserved and saved for the duration of the WET test. In the event of questions about the receiving water's possible effect on the WET results, chemistry tests should then be conducted.
- (9) pH and Total Residual Chlorine must be conducted at the time of sample collection. Tests for Total Residual Chlorine need be conducted only when an effluent has been chlorinated or residual chlorine is believed to be present for any other reason.

Comments:

# ATTACHMENT D

## STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### CHAPTER 530.2(D)(4) CERTIFICATION

ME	PDES#Facility Name		<del></del>
Since	the effective date of your permit, have there been;	NO	YES Describe in comments section
1	Increases in the number, types, and flows of industrial, commercial, or domestic discharges to the facility that in the judgment of the Department may cause the receiving water to become toxic?		
2	Changes in the condition or operations of the facility that may increase the toxicity of the discharge?		
3	Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the		
4	Increases in the type or volume of hauled wastes accepted by the facility?		
CO	MMENTS:		
Na	me (printed):		
Sig	nature: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				
Priority Pollutant Testing				
Analytical Chemistry				
Other toxic parameters <sup>1</sup>	. 🗆			

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.

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

# ATTACHMENT E

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

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

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

#### ITEM I.

- \* In Column (1), list what your POTW's influent flow rate was when your existing TBLLs were calculated. In Column (2), list your POTW's present influent flow rate. Your current flow rate should be calculated using the POTW's average daily flow rate from the previous 12 months.
- \* In Column (1) list what your POTW's SIU flow rate was when your existing TBLLs were calculated. In Column (2), list your POTW's present SIU flow rate.
- \* In Column (1), list what dilution ratio and/or 7Q10 value was used in your previous MEPDES permit. In Column (2), list what dilution ration and/or 7Q10 value is presently being used in your reissued MEPDES permit.
  - The 7Q10 value is the lowest seven day average flow rate, in the river, over a ten-year period. The 7Q10 value and/or dilution ratio used by the Department in your MEPDES permit can be found in your MEPDES permit "Fact Sheet."
- \* In Column (1), list the safety factor, if any, that was used when your existing TBLLs were calculated.
- \* In Column (1), note how your bio-solids were managed when your existing TBLLs were calculated. In Column (2), note how your POTW is presently disposing of its biosolids and how your POTW will be disposing of its biosolids in the future.

#### ITEM II.

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

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

#### ITEM III.

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

#### ITEM IV.

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

#### ITEM V.

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

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

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

#### ITEM VI.

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

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

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

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

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

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

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

(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.

# REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

POTW Name & Address:		
MEDES Permit # :		
Date EPA approved current TBI	LLs :	
Date EPA approved current Sew	ver Use Ordinance :	
	ITEM I.	
In Column (1) list the conditions Column (2), list current condition		
	Column (1)	Column (2)
	EXISTING TBLLs	PRESENT CONDITIONS
POTW Flow (MGD)		
SIU Flow (MGD)		
Dilution Ratio or 7Q10 from the MEPDES Permit)		
Safety Factor		
Biosolids Disposal Method(s)		

# REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

# ITEM II.

# **EXISTING TBLLs**

POLLUTANT	NUMERICAL LIMIT (mg/l) or (lb/day)	POLLUTANT	NUMERICAL LIMIT (mg/l) or (lb/day)
	ITEN	<b>1</b> III.	<del>-</del> .
Note how your exis Users (SIUs), i.e. ur specify by circling.	ting TBLLs, listed in Item II.	, are allocated to you utory flow, mass pro	ur Significant Industrial oportioning, other. Please
	ITEM	A IV.	·
Has your POTW ex sources since your e	perienced any upsets, inhibit existing TBLLs were calculat	ion, interference or ped?	oass-through from industrial
If yes, explain.			
Has your POTW vi	olated any of its MEPDES pe		
If yes, explain.			

# REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

#### ITEM V.

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

<u>Pollutant</u>	Column (1) Influent Data Analyses		Column (2) MAIHL Values	<u>Criteria</u>
	Maximum	Average	-	
	(lb/day)	(lb/day)	(lb/day)	
	())	<b>(</b> )	• • • • • • • • • • • • • • • • • • • •	
Arsenic				
Cadmium				
Chromium	·			
Copper	<del>, , , , , , , , , , , , , , , , , , , </del>			
Cyanide	-			
Lead			ALL ALLE	
			<del></del>	
Mercury				
Nickel		<del></del>		
Silver				
Zinc				
Other (List)				
			- Additional Control of the Control	
			***************************************	

# 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.

			Columns	
	Column (1)		(2A)	(2B)
Е	ffluent Data Analyses		Water Quality Criter	ria (AWQC)
	Maximum	Average	From TBLLs	Today
	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Pollutant	(-8)	(-0-)	(0)	
Arsenic				
Cadmium*				
Chromium*				
Copper*				
Cyanide				
Lead*				
Mercury		<del>.</del>		
Nickel*				
Silver		•		
Zinc*				
Other (List)				

<sup>\*</sup>Hardness Dependent (mg/l - CaCO3)

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

#### ITEM VII.

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

	Column (1) SSUED PERMIT	<b>Column (2)</b> PREVIOUS	
<u>Pollutants</u>	<u>Limitations</u> (ug/l)	<u>Pollutants</u>	Limitations (ug/l)
			<del></del>
		All controls	

# 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) Biosolids Data Anal	vses	(2A) Biosolids Criteria	(2B)
	Average	•	From TBLLs	New
	$\frac{\overline{\text{(mg/kg)}}}{}$		(mg/kg)	(mg/kg)
Pollutant				
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.

# MEPDES PERMIT REQUIREMENTS FOR INDUSTRIAL PRETREATMENT ANNUAL REPORT

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

a.) Total Cadmium

f.) Total Nickel

b.) Total Chromium g.) Total Silver

c.) Total Copper

h.) Total Zinc

d.) Total Lead

i.) Total Cyanide

e.) Total Mercury

j.) Total Arsenic

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

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

# STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

#### 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).

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- 7. Oil and hazardous substances. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under section 311 of the Federal Clean Water Act; section 106 of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980; or 38 MRSA §§ 1301, et. seq.
- 8. Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.
- 9. Confidentiality of records. 38 MRSA §414(6) reads as follows. "Any records, reports or information obtained under this subchapter is available to the public, except that upon a showing satisfactory to the department by any person that any records, reports or information, or particular part or any record, report or information, other than the names and addresses of applicants, license applications, licenses, and effluent data, to which the department has access under this subchapter would, if made public, divulge methods or processes that are entitled to protection as trade secrets, these records, reports or information must be confidential and not available for public inspection or examination. Any records, reports or information may be disclosed to employees or authorized representatives of the State or the United States concerned with carrying out this subchapter or any applicable federal law, and to any party to a hearing held under this section on terms the commissioner may prescribe in order to protect these confidential records, reports and information, as long as this disclosure is material and relevant to any issue under consideration by the department."
- 10. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- 11. Other laws. The issuance of this permit does not authorize any injury to persons or property or invasion of other property rights, nor does it relieve the permittee if its obligation to comply with other applicable Federal, State or local laws and regulations.
- 12. Inspection and entry. The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), upon presentation of credentials and other documents as may be required by law, to:
  - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
  - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
  - (d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

# B. OPERATION AND MAINTENACE OF FACILITIES

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

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

(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.

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

#### 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.

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

#### 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

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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).

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- (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.

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- 2. Spill prevention. (applicable only to industrial sources) Within six months of the effective date of this permit, the permittee shall submit to the Department for review and approval, with or without conditions, a spill prevention plan. The plan shall delineate methods and measures to be taken to prevent and or contain any spills of pulp, chemicals, oils or other contaminates and shall specify means of disposal and or treatment to be used.
- 3. **Removed substances.** Solids, sludges trash rack cleanings, filter backwash, or other pollutants removed from or resulting from the treatment or control of waste waters shall be disposed of in a manner approved by the Department.
- 4. Connection to municipal sewer. (applicable only to industrial and commercial sources) All wastewaters designated by the Department as treatable in a municipal treatment system will be cosigned to that system when it is available. This permit will expire 90 days after the municipal treatment facility becomes available, unless this time is extended by the Department in writing.
- **F. DEFINITIONS.** For the purposes of this permit, the following definitions shall apply. Other definitions applicable to this permit may be found in Chapters 520 through 529 of the Department's rules

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

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

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

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

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

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

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

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

**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.

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

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

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

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

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

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

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

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

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

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

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT MAINE WASTE DISCHARGE LICENSE

## FACT SHEET

DATE: April 26, 2018

PERMIT NUMBER:

#ME0101443

WASTE DISCHARGE LICENSE: #W000678-5M-R-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, Class C

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: Mr. Christopher Littlefield, Town Mgr.

Tel: 207-938-4401

E-mail: hartlandpotwtds.com

#### 1. APPLICATION SUMMARY

a. Application: The Town of Hartland (Town hereinafter) has submitted a timely and complete application to the Department for renewal of Waste Discharge License (WDL) #W000678-5M-L-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0101443, (permit hereinafter) which was issued by the Department on April 5, 2013, for a five-year term. The 4/5/13 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 West Branch of the Sebasticook River, Class C, in Hartland, Maine. See Attachment A of this Fact Sheet for location map.

# 1. APPLICATION SUMMARY (cont'd)

The Department issued three minor permit revisions: 1) October 14, 2013 (modifying milestone deadlines in the Special Condition M, *Pretreatment*), 2) January 29, 2014, (modifying milestones deadlines in the Special Condition M, *Pretreatment*) and 3) March 15, 2016, (modified Special Condition L, *Disposal of Transported Wastes In Wastewater Treatment* that increased the quantity of transported waste received and treated at the facility).

b. 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 retanwet 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.

The permittee is renewing its request to receive and treat up to 45,000 gpd of transported waste. Up to 15,000 gpd of the transported waste is primarily higher strength septage from local septage haulers and an additional 30,000 gpd of the transported waste is primarily weaker strength landfill leachate from Hartland's secure sludge landfill and is introduced at a satellite pump station referred to as the Landfill Leachate Pump Station and Pond. The waste received at the pump station conveys the waste to a pretreatment system located at the Tasman Leather Group facility located in Hartland. After receiving chemical treatment at the Tasman facility, the partially treated waste is conveyed to the headworks of the Hartland treatment facility. All transported wastes received and or conveyed to the Hartland waste water treatment facility will receive preliminary, primary and secondary treatment as well as seasonal disinfection. Combined, the total of 45,000 gpd of transported waste represents 3% of the waste water treatment plants design flow of 1.5 MGD.

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

c. <u>Wastewater Treatment</u>: 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 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. The detention time within the activated sludge aeration system is 3-5 days depending on incoming flow rates and Tasman Leather Group's production schedules.

The mixed liquor from the pond flows into two secondary clarifies 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.

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 West Branch of the Sebasticook River.

Final effluent is conveyed for discharge to the West Branch of the Sebasticook River 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.

#### 2. PERMIT SUMMARY

- a. <u>Terms and Conditions</u> This permit is carrying forward all the terms and conditions of the previous permit except this permit is:
  - 1. Eliminating the monthly average water quality based limits and reporting requirements for inorganic arsenic and eliminating the monthly average reporting requirements for total arsenic. A recent updated statistical evaluation conducted in accordance with 06-096 CMR Chapter 530 indicates there are no longer any test results for arsenic that exceed or have a reasonable potential to exceed applicable ambient water quality criteria (AWQC).
  - 2. Eliminating the monthly average and or daily maximum water quality based mass limitations and concentration reporting requirements for total copper as a recent updated statistical evaluation conducted in accordance with 06-096 CMR Chapter 530 indicates there are no longer any test results for copper that exceed or have a reasonable potential to exceed applicable AWQC.
  - 3. Establishing a monthly average water quality based mass limitation and concentration reporting requirement for total lead and establishing a C-NOEL limitation of 5.5% for the water flea. A recent updated statistical evaluation conducted in accordance with 06-096 CMR Chapter 530 indicates there are two test results for total lead have a reasonable potential to exceed the chronic AWQC for total lead and there are three C-NOEL test results for the water flea that have a reasonable potential to exceed the critical chronic threshold of 5.5%. %. This permit is establishing a 1/Quarter monitoring frequency for total lead and the water flea which is equivalent to a routine surveillance level monitoring frequency found in 06-096 CMR Chapter 530.
  - 4. Reducing the monitoring frequency for total chromium from 1/Month to 1/Quarter given the most current statistical evaluation indicates the discharge does not exceed or have a reasonable potential to exceed any AWQC associated with chromium. The monitoring frequency of 1/Quarter is equivalent to a routine surveillance level monitoring frequency found in 06-096 CMR Chapter 530.
  - 5. Increasing the monitoring frequency for cyanide (amenable to chlorination) from 1/Year to 1/Quarter given the most current statistical evaluation indicates the two most current test results submitted to the Department have a reasonable potential to exceed the chronic AWQC for cyanide. The monitoring frequency of 1/Quarter is equivalent to a routine surveillance level monitoring frequency found in 06-096 CMR Chapter 530.

### 2. PERMIT SUMMARY (cont'd)

b. <u>History</u>: 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 1/2Weeks 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

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).

April 5, 2013 – The Department issued WDL #W000678-5M-L-R / MEPDES permit #ME0101443 to the Town for a five-year term.

October 14, 2013 – The Department issued a modification of the April 5, 2013, permit by modifying milestone deadlines in the Special Condition M, Pretreatment.

January 29, 2014 - The Department issued a modification of the April 5, 2013, permit by modifying milestone deadlines in the Special Condition M, Pretreatment.

March 15, 2016 - The Department issued a modification of the April 5, 2018, permit that modified Special Condition L, Disposal of Transported Wastes In Wastewater Treatment that increased the quantity of transported waste received and treated at the facility from 5,000 gpd to 45,000 gpd

February 5, 2018 – The Town of Hartland submitted a timely and complete application to the Department to renew the April 5, 2013 permit.

#### 3. CONDITIONS OF PERMIT

Conditions of licenses, 38 M.R.S. § 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. § 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. § 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. § 465(4) describes the standards for Class C waters as follows:

- A. Class C waters must be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as a habitat for fish and other aquatic life.
- B. The dissolved oxygen content of Class C water may be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained. In order to provide additional protection for the growth of indigenous fish, the following standards apply.
  - (1) The 30-day average dissolved oxygen criterion of a Class C water is 6.5 parts per million using a temperature of 22 degrees centigrade or the ambient temperature of the water body, whichever is less, if:
    - (a) A license or water quality certificate other than a general permit was issued prior to March 16, 2004 for the Class C water and was not based on a 6.5 parts per million 30-day average dissolved oxygen criterion; or
    - (b) A discharge or a hydropower project was in existence on March 16, 2005 and required but did not have a license or water quality certificate other than a general permit for the Class C water.

This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004.

(2) In Class C waters not governed by subparagraph (1), dissolved oxygen may not be less than 6.5 parts per million as a 30-day average based upon a temperature of 24 degrees centigrade or the ambient temperature of the water body, whichever is less. This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004.

The department may negotiate and enter into agreements with licensees and water quality certificate holders in order to provide further protection for the growth of indigenous fish. Agreements entered into under this paragraph are enforceable as department orders according to the provisions of sections 347-A to 349.

## 4. RECEIVING WATER QUALITY STANDARDS (cont'd)

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

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

# 5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2014 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\_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 in fish tissue. The Reports specifies that this non-attainment is on a low 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 (SWAT report). 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."

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

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 if requested by the Department. During development of that 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 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 L) to participate in the State's fish advisory program if a specific request is made by the Maine CDCP.

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.

a. Applicability of National Effluent Guidelines: The USEPA has promulgated national effluent guidelines (NEGs) 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 BOD5, TSS, oil and grease, total chromium, and pH, which are being utilized in this permitting action to calculate technology-based effluent limitation thresholds.

b. <u>Flow</u>: The previous permitting action contained, 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 2015 through November 2017 is as follows:

Flow (DMRs=35) Outfall #001A

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	1.5	0.18 - 0.60	0.30
Daily Maximum	Report	0.33 - 1.36	0.67

c. <u>Dilution Factors</u>: Dilution factors associated with the permitted discharge flow of 1.5 MGD from the facility and a regulated flow of 40 cfs in the West Branch of the Sebasticook River, (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:

Acute: 1Q10 = 40 cfs  $\Rightarrow (40 \text{ cfs})(0.6464) + 1.5 \text{ MGD} = 18.2:1$ 1.5 MGD

Chronic: 7Q10 = 40 cfs  $\Rightarrow (40 \text{ cfs})(0.6464) + 1.5 \text{ MGD} = 18.2:1$ 1.5 MGD

Harmonic Mean<sup>1</sup> = 74.2 cfs  $\Rightarrow$  (74.2 cfs)(0.6464) + 1.5 MGD = 33.0:11.5 MGD

The Department's Division of Environmental Assessment (DEA) has determined that mixing of the effluent with the receiving water is rapid and complete 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. <u>Biochemical Oxygen Demand (BOD<sub>5</sub>)</u>: 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.

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.

<sup>&</sup>lt;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.

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 BODs 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 mg/L)(8.34 lbs./gallon)(1.5 MGD) = 375 lbs./day Weekly Average Mass Limit: (45 mg/L)(8.34 lbs./day)(1.5 MGD) = 563 lbs./day Daily Maximum Mass Limit: (50 mg/L)(8.34 lbs./day)(1.5 MGD) = 626 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 BODs 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.

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./dayDaily 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./dayDaily 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 BOD5 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: 888 lbs./day = 71 mg/L

(1.5 MGD)(8.34 lbs./gallon)

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

A summary of: 1) previous permit limits; 2) effluent guideline limitations (EGL) thresholds; and 3) permit limits for BODs are as follows:

BOD <sub>5</sub>	Previous Permit Limits	EGL Thresholds	Permit Limits
Monthly	660 lbs./day	888 lbs./day	660 lbs./day
Average	66 mg/L	71 mg/L	66 mg/L
Weekly			
Average			896
Daily	1,320 lbs./day	1,977 lbs./day	1,320 lbs./day
Maximum	132 mg/L	158 mg/L	132 mg/L

A summary of effluent BODs data submitted to the Department for the period of January 2015 through November 2017 is as follows:

BOD<sub>5</sub> Mass (DMRs=35) Outfall #001A

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	660	6 - 373	62
Daily Maximum	1,320	9 - 417	110

BOD<sub>5</sub> Concentration (DMRs=35) Outfall #001A

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	66	3 - 137	19
Daily Maximum	132	4 - 142	30

This permitting action is carrying forward the water quality-based monthly average and daily maximum concentration and mass effluent limitations for BODs as they are more stringent than the technology-based (EGL) thresholds. See the bolded values in the table on page 13 of this Fact Sheet.

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. A summary of effluent BOD<sub>5</sub> data submitted to the Department for the period of January 2015 through November 2017 is as follows:

BOD % Removal (DMRs=34)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	Report	68 - 99	95
Daily Maximum	report	95 - 99	98

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.

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.

As with BOD, 06-096 CMR Chapter 525(3)(IV)(b) provides special considerations for industrial wastes and allows for the values of TSS to be adjusted upwards.

Secondary treatment requirements for TSS may be calculated as follows:

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

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 lbs./day)(5.8 lbs./1,000 lbs.) = 791 lbs./day Daily Maximum: (136,400 lbs./day)(12.8 lbs./1,000 lbs.) = 1,746 lbs./day

#### Retan-Wet Finish-Splits Subcategory

Monthly Average: (131,600 lbs./day)(3.8 lbs./1,000 lbs.) = 500 lbs./day Daily Maximum; (131,600 lbs./day)(8.3 lbs./1,000 lbs.) = 1,092 lbs./day

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

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

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

Monthly Average:  $\frac{1,291 \text{ lbs./day}}{(1.5 \text{ MGD})(8.34 \text{ lbs./gallon})} = 103 \text{ mg/L}$ 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) effluent guideline limitations (EGL) thresholds; and 3) water quality-based thresholds for TSS are as follows:

TSS	Previous Permit Limits	EGL Thresholds	Permit Limits
Monthly Average	1,028 lbs./day	1,291 lbs./day	1,028 lbs./day
	103 mg/L	103 mg/L	103 mg/L
Weekly Average			
Daily Maximum	2,238 lbs./day	2,838 lbs./day	2,238 lbs./day
	224 mg/L	227 mg/L	224 mg/L

A summary of effluent TSS data submitted to the Department for the period of January 2015 through November 2017 is as follows:

TSS Mass (DMRs=34) Outfall #001A

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	1,028	6 - 123	26
Daily Maximum	2,238	14 - 392	64

TSS Concentration (DMRs=34) Outfall #001A

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	103	3 - 46	9
Daily Maximum	224	4 - 138	17

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. See the bolded values in the table on page 16 of this Fact Sheet.

This permitting action is carrying forward a 30-day average percent removal reporting requirement for TSS to assist in evaluating treatment system performance. A summary of effluent TSS percent removal data submitted to the Department for the period of January 2015 through November 2017 is as follows:

TSS % Removal (DMRs=34)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	Report	95 - 99	98

This permitting action is carrying forward the minimum monitoring frequency requirement of 2/Week for TSS which is consistent with the BOD<sub>5</sub> monitoring requirement.

f. <u>Settleable Solids</u>: 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 Department best practicable treatment limitation (BPT) for secondary treated wastewater.

A review of the DMR data for the period January 2015 – November 2017 indicates the daily maximum settleable solids concentration values have been reported as follows:

Settleable solids concentration (n=35)

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

This permitting action is carrying forward the minimum monitoring frequency requirement of 3/Week for settleable solids.

g. <u>Escherichia coli Bacteria:</u> The pervious permitting action established seasonal (May 15 through September 30) monthly average and daily maximum concentration limits for *E. coli* bacteria of 126 cfu/100 ml (geometric mean) and 949/100 ml (instantaneous level), respectively. The monthly average was based on Maine law 38 M.R.S. § 465(4) and the daily maximum of 949 cfu/100 ml was carried from an earlier permitting action taking into consideration for dilution.

Calculated

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

Department has determined the instantaneous concentration standard of 949 colonies/100 mL in the previous permit will be achieved the ambient count of 236 cfu/100 ml 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.

A summary of effluent *E. coli* bacteria data for the applicable bacteria season from May 2016 through September 2017 is as follows:

E. coli bacteria (DMRs=15) Outfall #001A

Value Value	Limit	Range (col/100 mL)	Mean (col/100 mL)
Monthly Average	(col/100 mL) 126	<1 – 3	1.4
Daily Maximum	949	1 - 81	20

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 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:

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

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 2015 through September 2017 is as follows:

TRC (DMRs=15) Outfall #001A

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	0.1	0.00 - 0.05	0.02
Daily Maximum	0.3	0.00 - 0.22	0.06

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

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

A reviewed of the monthly DMRs data for the period January 2015 – November 2017 indicates values have reported as follows:

pH (DMRs 35)

ſ	Value	Limit (su)	Minimum (SU)	Maximum (su)
	Range	6.0 - 9.0	6.4	7.7

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 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.

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 lbs./day)(1.7 lbs./1,000 lbs.) = 232 lbs./day Daily Maximum: (136,400 lbs./day)(3.7 lbs./1,000 lbs.) = 505 lbs./day

### Retan-Wet Finish-Splits Subcategory

Monthly Average: (131,600 lbs./day)(1.1 lbs./1,000 lbs.) = 145 lbs./day Daily Maximum: (131,600 lbs./day)(2.4 lbs./1,000 lbs.) = 316 lbs./day

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

Monthly Average: 232 lbs./day + 145 lbs./day = 377 lbs./dayDaily Maximum: 505 lbs./day + 316 lbs./day = 821 lbs./day

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

Monthly Average:  $\frac{377 \text{ lbs./day}}{(1.5 \text{ MGD})(8.34 \text{ lbs./gallon})} = 30 \text{ mg/L}$ 

Daily Maximum:  $\frac{821 \text{ lbs./day}}{(1.5 \text{ MGD})(8.34 \text{ lbs./gallon})} = 66 \text{ mg/L}$ 

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 of 15 mg/L.

A summary of effluent O&G data from January 2015 through November 2017 is as follows:

O&G Mass (DMRs=35) Outfall #001A

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	188	0 – 11	1
Daily Maximum	188	6.7 - 23	12

O&G Concentration (DMRs=35) Outfall #001A

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	15	<4.2 - <4.2	<4.2
Daily Maximum	15	<4.2 - <4.2	<4.2

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

k. Whole Effluent Toxicity (WET) & Chemical-Specific Testing – Maine law, 38 M.R.S.A., Sections 414-A and 420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department Rules, 06-096 CMR Chapter 530, Surface Water Toxics Control Program, and Chapter 584, Surface Water Quality Criteria for Toxic Pollutants set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters. WET, priority pollutant and analytical chemistry testing as required by Chapter 530, is included in this permit in order to fully characterize the effluent. This permit also provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment and receiving water characteristics.

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

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

- 1) Level I chronic dilution factor of <20:1.
- 2) Level II chronic dilution factor of  $\geq 20:1$  but  $\leq 100:1$ .
- 3) Level III chronic dilution factor  $\geq$ 100:1 but <500:1 or >500:1 and Q  $\geq$ 1.0 MGD
- 4) Level IV chronic dilution >500:1 and Q  $\leq$ 1.0 MGD

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.

Chapter 530(1)(D)(1) specifies that <u>routine</u> screening and surveillance level testing requirements are 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).

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

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

Chapter 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 exceedance of water quality criteria, appropriate water quality-based limits must be established in any licensing action."

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

See Attachment C of this Fact Sheet for a summary of the WET test results and Attachment D of this Fact Sheet for a summary of the chemical-specific test dates evaluated for this permitting action.

### WET Evaluation

On January 19, 2018, 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 1/19/18 statistical evaluation indicates the discharge from the Hartland Pollution Control Facility has three (3) tests results 10% ((8/11/15, 5/17/16 and 3/21/17) for the water flea that demonstrated a reasonable potential to exceed the critical chronic ambient water quality threshold (C-NOEL) of 5.5% (mathematical inverse of the acute and chronic dilution factors of 18.2:1 respectively). As a result, this permit is establishing a C-NOEL limit of 5.5% along with a 1/Quarter monitoring requirement for the water flea. Test results for the brook trout indicate the discharge does not exceed or have a reasonable potential to exceed critical acute or chronic thresholds.

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 exceedance as calculated pursuant to section 3(E)." Based on the provisions of 06-096 CMR 530 and Department best professional judgment, this permitting action is carrying forward reduced testing (once per year) for the brook trout. Therefore, the monitoring requirements were established 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 commencing again 12 months prior to permit expiration (Year 5 of the term of the permit).

Level	WET Testing
I	Brook Trout 1/Year
	Water flea 1/Quarter

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

Level	WET Testing	
I	Brook Trout 1/Quarter	
	Water flea 1/Quarter	

### ME0101443 W000678-5M-R-R

### 6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The reduced monitoring requirements are being carried forward in this permitting action.

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.

In accordance with Department rule Chapter 530(2)(D)(4) and Special Condition G of this permit, 06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing, the permittee must annually submit to the Department a written statement evaluating its current status for each of the four conditions listed. An example certification statement is included as **Attachment D** of the permit.

### Priority Pollutants and Analytical chemistry

On January 18, 2018, 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 demonstrates a reasonable potential to exceed the acute and chronic AWQC for chromium, the chronic AWQC for cyanide and the acute AWQC for total lead.

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 1/18/18 statistical evaluation, chromium and lead are to be limited based on the individual allocation method given Hartland is the only facility amongst two facilities (Pittsfield) that is discharging chromium and lead at or above their respective reporting limits. Therefore, Hartland will be allocated 100% of the assimilative capacity of the West Branch of the Sebasticook River.

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 (0% of AWQC). The formula is as follows:

EOP concentration = [Dilution factor  $\times 0.90 \times AWQC$ ] +  $[0.10 \times AWQC]$ 

Mass limit = (EOP concentration in mg/L)(8.34 lbs/gal)(permit flow limit in MGD)

k. <u>Total Chromium:</u> The previous permit contained 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 also contained 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.

A summary of effluent chromium data from January 2015 through November 2017 is as follows:

Chromium Mass (DMRs=35) Outfall #001A

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	4.0	0.07 - 2.42	0.41
Daily Maximum	34	0.07 - 2.42	0.41

Chromium Concentration (DMRs=35) Outfall #001A

	· · · · · · · · · · · · · · · · · · ·	/	
Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	Report	0.04 - 0.88	0.13
Daily Maximum	Report	0.04 - 0.88	0.13

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.

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 lbs./day)(0.08 lbs./1,000 lbs.) = 10.9 lbs./day Daily Maximum: (136,400 lbs./day)(2.3 lbs./1,000 lbs.) = 313.7 lbs./day

### Retan-Wet Finish-Splits Subcategory

Monthly Average: (131,600 lbs./day)(0.05 lbs./1,000 lbs.) = 6.6 lbs./dayDaily Maximum: (131,600 lbs./day)(0.15 lbs./1,000 lbs.) = 19.7 lbs./day

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

Monthly Average: 10.9 lbs./day + 6.6 lbs./day = 17.5 lbs./dayDaily Maximum: 313.7 lbs./day + 19.7 lbs./day = 333.4 lbs./day

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

Monthly Average:  $\frac{17.5 \text{ lbs./day}}{17.5 \text{ lbs./day}} = 1.4 \text{ mg/L}$ 

(1.5 MGD)(8.34 lbs./gallon)

Daily Maximum:  $\frac{333.4 \text{ lbs./day}}{(1.5 \text{ MGD})(8.34 \text{ lbs./gallon})} = 26.6 \text{ mg/L}$ 

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 based on the individual methodology as follows;

Given: Acute and Chronic dilutions = 1.82

Chronic AWQC = 23.1 ug/L

Acute AWQC = 483 ug/L

Monthly Average Concentration =  $(18.2)[(0.90)(23.1 \mu g/L)] + (0.10)(23.1 \mu g/L)$ = 422 + 2.3=  $424 \mu g/L$ 

Daily Maximum Concentration =  $(18.2)[(0.90)(483.0 \mu g/L)] + (0.10)(483.0 \mu g/L)$ 

= 7.911 + 48.3= 7.959 µg/L

Monthly Average Mass =  $(424 \mu g/L)(8.34 \text{ lbs./gallon})(1.5 \text{ MGD}) = 5.3 \text{ lbs./day}$ 

1000 μg/mg

Daily Maximum Mass =  $(7.959 \mu g/L)(8.34 \text{ lbs./gallon})(1.5 \text{ MGD}) = 100 \text{ lbs./day}$ 

 $1000 \, \mu g/mg$ 

Chromium	Previous Permit Limits	EGL Thresholds	Water Quality- Based Thresholds
Monthly Average	4.0 lbs./day	17.5 lbs./day	5.3 lbs./day
Daily Maximum	34 lbs./day	333 lbs./day	100 lbs./day

The Department has determined that the facility's past demonstrated performance thresholds for total chromium are more stringent than the production-based effluent thresholds derived from the national effluent guidelines and the water quality based thresholds calculated above. Therefore, 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 were established in the 1984 NPDES permit and are consistent with the provisions as set forth in the anti-backsliding provisions in the CWA. This permitting action is also carrying forward the monthly average and daily maximum concentration reporting requirements for total chromium. Given testing results indicate the discharge does not exceed or have a reasonable potential to exceed applicable AWQC, this permit is reducing the monitoring frequency to 1/Quarter which is equivalent to routine surveillance level monitoring in 06-096 CMR Chapter 530.

No concentration limits are being established in the this permit (or other the previous permit) pursuant to 06-096 CMR Chapter 530(3)(D(1) and the fact there are no NEGS expressed in concentration for chromium. 06-096 CMR Chapter 530(3)(D(1) states in part "For specific chemicals, effluent limits must be expressed in total quantity that may be discharged. Unless required by an applicable effluent limitation guideline adopted by the Department, all permit limitations for metals shall be expressed only as mass-based limits."

1. Cyanide (Amenable to Chlorination) - The previous permit established a monthly average water quality based mass limit of 0.90 lbs/day given test results for the previous 60 months indicated the discharge had a reasonable potential to exceed applicable AWQC. There are no NEGs associated with cyanide. The limit was based on withholding a background concentration equal to 10% of the AWQC for cyanide and withholding 15% for reserve. The limit was calculated as follows:

The formula is as follows:

EOP concentration = [Dilution factor x  $0.75 \times AWQC$ ] +  $[0.25 \times AWQC]$ 

Mass limit = (EOP concentration in mg/L)(8.34 lbs/gal)(Permit flow limit in MGD)

Chronic AWQC = 5.2 ug/L

Chronic dilution factor = 18.2:1

Monthly Average Concentration Threshold =  $(18.2)[(0.75)(5.2 \mu g/L)] + (0.25)(5.2 \mu g/L)$ = 71.0 + 1.3=  $72.3 \mu g/L$ 

Monthly Average Mass Limit

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

The 1/18/18 statistical evaluation (DeTox Report 940) of effluent data indicates that the discharge has two data points (62 ug/L and 40 ug/L) that have a reasonable potential to exceed the chronic AWQC for cyanide based on withholding a background concentration equal to 10% of the AWQC for cyanide and withholding 0% for reserve. The reserve has been reduced from 15% to 0% to be consistent with 06-096 CMR Chapter 530 §4(E) which states "Notwithstanding the above, for the purpose of calculating waste discharge license limits for toxic substances, the department may use any unallocated assimilative capacity that the Department has set aside for future growth if the use of that unallocated assimilative capacity would avoid an exceedance of applicable ambient water quality criteria or a determination by the Department of a reasonable potential to exceed applicable water quality criteria." The formula is modified as follows:

EOP concentration = [Dilution factor x  $0.90 \times AWQC$ ] +  $[0.10 \times AWQC]$ 

Mass limit = (EOP concentration in mg/L)(8.34 lbs/gal)(Permit flow limit in MGD)

Chronic AWQC = 5.2 ug/L

Chronic dilution factor = 18.2:1

Monthly Average Concentration Threshold = 
$$(18.2)[(0.90)(5.2 \mu g/L)] + (0.10)(5.2 \mu g/L)$$
  
=  $85.2 + 0.5$   
=  $85.7 \mu g/L$ 

Monthly Average Mass Limit

=  $(85.7 \mu g/L)(8.34 lbs./gallon)(1.5 MGD)$  = 1.07 lbs./day 1000  $\mu g/mg$ 

Therefore, this permit is increasing the monthly average water quality based mass limit for cyanide from 0.90 lbs/day to 1.1 lbs/day pursuant to 06-096 CMR Chapter 530. Anti-backsliding provisions are met in that the updated statistical evaluation constitutes new information that was not available at the time of the previous permitting action.

Taking into consideration the high test results (the most current) on file, this permitting action is increasing the minimum monitoring frequency requirement from once per year to once per calendar quarter 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.

m. Lead (Total) – The previous permit did not contain any limitations for lead as the statistical evaluation conducted at that time indicated the discharge did not exceed or have a reasonable potential to exceed AWQC at that time. The 1/18/18 statistical evaluation indicates there are two data points (3.57 ug/L and 11.9 ug/L) that have a reasonable potential to exceed the chronic AWQC for lead. Therefore, a monthly average limitation can be calculated as follows:

Chronic AWQC = 0.41 ug/L Chronic dilution factor = 18.2:1

Monthly Average Concentration Threshold =  $(18.2)[(0.90)(0.41 \mu g/L)] + (0.10)(0.41 \mu g/L)$ = 6.72 + 0.04=  $6.8 \mu g/L$ 

Monthly Average Mass Limit

=  $(6.8 \mu g/L)(8.34 \text{ lbs./gallon})(1.5 \text{ MGD}) = 0.08 \text{ lbs./day}$ 1000  $\mu g/mg$ 

Taking into consideration the high test results are the most current on file, this permitting action is establishing a minimum monitoring frequency requirement of once per calendar quarter.

n. 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 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 from once per quarter to once per year pursuant to 38 M.R.S. § 420(1-B)(F).

38 M.R.S. § 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 May 1998 through September 2017 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows.

Mercury (n = 55)

W000678-5M-R-R

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average, Maximum	8.1 - 12.1	0.2 - 23	3.1

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

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

<sup>&</sup>lt;sup>2</sup> Waste Discharge License Conditions, 06-096 CMR 523(5)(d)(1)(i) (effective date January 12, 2001)

<sup>&</sup>lt;sup>3</sup> 06-096 CMR 523(5)(d)(1)(vi)(A)

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

For the background concentration in the Sebasticook River just upstream of the Hartland discharge, the Department utilized a background concentration of 0.016 mg/L. This value was determined to be representative of background conditions in ambient water quality sampling in the summer of 2014.

As for effluent concentration sampling this Fact Sheet is utilizing a mean effluent concentration of 0.08 mg/L based on data collected in the period June 2008 – September 2011.

Using the following calculation and criteria, the Hartland facility does not exceed or have a reasonable potential to exceed the EPA's Gold Book value of 0.100 mg/L and the Department's 06-096 CMR Chapter 583 draft criteria of 0.032 mg/L for Class C waters. The calculations are as follows:

$$Cr = QeCe + QsCs$$
 $Qr$ 

Qe = effluent flow i.e. facility design flow = 1.5 MGD Ce = effluent pollutant concentration = 0.08 mg/L

Qs = 7Q10 flow of receiving water = 25.8 MGD (27 cfs)

Cs = upstream concentration = 0.016 mg/L Or = receiving water flow = 27.3 MGD

Cr = receiving water concentration = ?

 $Cr = (1.5 \text{ MGD} \times 0.08 \text{ mg/L}) + (25.8 \text{ MGD} \times 0.016 \text{ mg/L}) = 0.020 \text{ mg/L}$ 27.3 MGD

 $Cr = 0.020 \text{ mg/L} > 0.100 \text{ mg/L} \Rightarrow$  No reasonable potential  $Cr = 0.020 \text{ mg/L} > 0.030 \text{ mg/L} \Rightarrow$  No reasonable potential

### 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 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 March 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 TRANSPORTED WASTE IN WASTE WATER TREATMENT FACILITY

The permittee is renewing its request to receive and treat up to 45,000 gpd of transported waste. Up to 15,000 gpd of the transported waste is primarily higher strength septage from local septage haulers and an additional 30,000 gpd of the transported waste is primarily weaker strength landfill leachate from Hartland's secure sludge landfill and is introduced at a satellite pump station. The waste received at the pump station conveys the waste to a pretreatment system located at the Tasman Leather Group facility located in Hartland. After receiving chemical treatment at the Tasman facility, the partially treated waste is conveyed to the headworks of the Hartland treatment facility. All transported wastes received and or conveyed to the Hartland waste water treatment facility will receive preliminary, primary and secondary treatment as well as seasonal disinfection. Combined, the total of 45,000 gpd of transported waste represents 3% of the waste water treatment plants design flow of 1.5 MGD.

### 8. DISPOSAL OF TRANSPORTED WASTE IN WASTE WATER TREATMENT FACILITY (CONT'D)

The Department has made the determination the receipt of the quantity of transported as described above will receive best practicable treatment and will not cause upset conditions in the waste water treatment facility if introduced into the treatment facility as described in their Transported Waste Management Plan submitted as an attachment to the February 2018 permit application.

### 9. ANTI-BACKSLIDING

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

This permitting action is removing previously established water quality based effluent limitations and monitoring requirements for total copper and inorganic arsenic given the most current 60 months of data indicates there are no test results that exceed or have a reasonable potential to exceed applicable AWQC. Consistent with 06-096 CMR Chapter 530, limitations are no longer necessary. The Department has made the determination that removing the limitation is based on new information that was not available at the time of the previous permitting action.

### 10. ANTI-DEGREDATION - IMPACT ON RECEIVING WATER QUALITY

Maine's anti-degradation policy is included in 38 M.R.S., Section 464(4)(F) and addressed in the *Conclusions* section of this permit. Based on the information provided in the referenced section, the Department has made the determination that the discharge approved by this permit will not result in a significant lowering of water quality. As permitted, the Department has determined the existing and designated water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the West Branch of the Sebasticook River to meet standards for Class C classification.

### 11. PUBLIC COMMENTS

Public notice of this application was made in the <u>Rolling Thunder Express</u> newspaper on or about <u>February 15, 2018</u>. 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 <u>Application Processing Procedures for Waste Discharge Licenses</u>, 06-096 CMR 522 (effective January 12, 2001).

### 12. DEPARTMENT CONTACTS

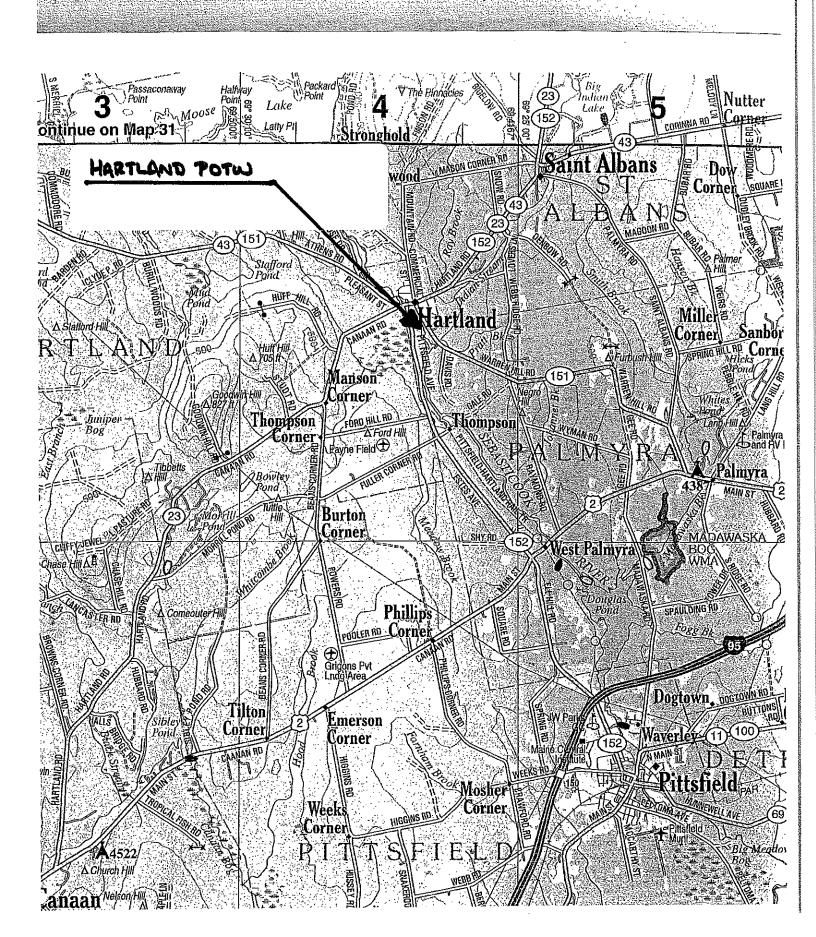
Additional information concerning this permitting action may be obtained from, and written comments sent to:

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

### 13. RESPONSE TO COMMENTS

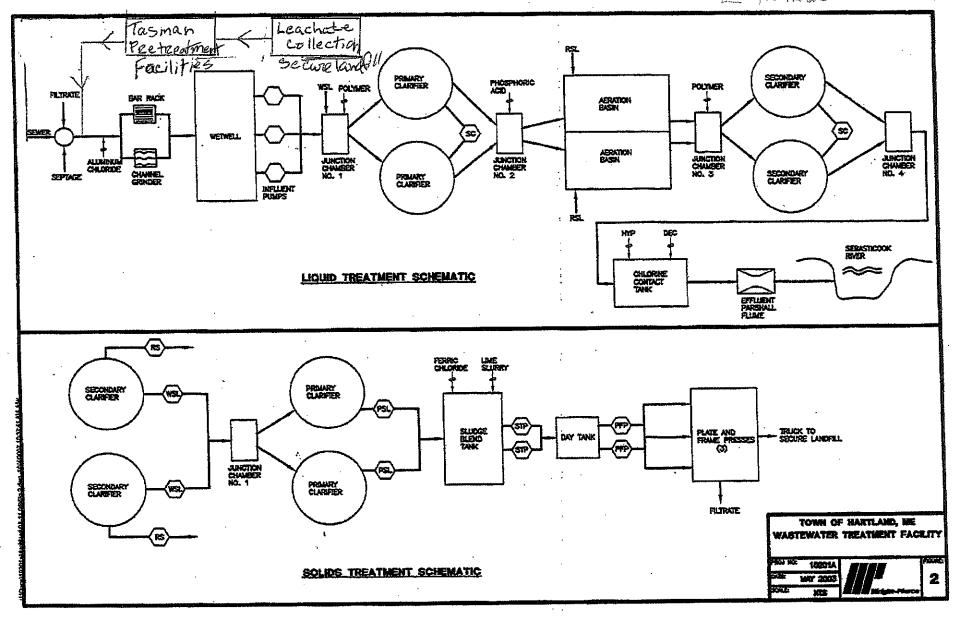
During the period of April 26, 2018, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department did not receive comments from the permittee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the permit. Therefore, the Department has not prepared a Response to Comments.

### ATTACHMENT A



### ATTACHMENT B

12



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### ATTACHMENT C

2/8/2018

### WEITEST REPORT



### Data for tests conducted for the period

08/Feb/2013 -08/Feb/2018

HARTLAND WWTF		NPDES= ME010144	Effluer	nt Limit: Acute (%) =	5.483	Chronic (%) = 5.483	
	Species	Test	Percent	Sample date	Critical %	Exception	RP
	TROUT	A_NOEL	100	11/03/2013	5.483		
	TROUT	A_NOEL	100	06/02/2014	5.483		
	TROUT	A_NOEL	50	08/11/2015	5.483		
	TROUT	A_NOEL	100	05/17/2016	5.483		
	TROUT	A_NOEL	25	03/21/2017	5.483		
	TROUT	C_NOEL	10	11/03/2013	5.483	-	
	TROUT	C_NOEL	50	06/02/2014	5.483		
	TROUT	C_NOEL	50	08/11/2015	5.483		
	TROUT	C_NOEL	100	05/17/2016	5.483	•	
	TROUT	C_NOEL	25	03/21/2017	5.483		
	WATER FLEA	A_NOEL	100	11/03/2013	5.483		
	WATER FLEA	A_NOEL	100	06/02/2014	5.483		
	WATER FLEA	A_NOEL	50	08/11/2015	5.483		
	WATER FLEA	A_NOEL	25	05/17/2016	5.483		
	WATER FLEA	A_NOEL	50	03/21/2017	5.483		
	WATER FLEA	C_NOEL	100	11/03/2013	5.483		
	WATER FLEA	C_NOEL	100	06/02/2014	5.483	•	
	WATER FLEA	C_NOEL	10	08/11/2015	5.483		
	WATER FLEA	C_NOEL	10	05/17/2016	5.483		
	WATER FLEA	C_NOEL	10	03/21/2017	5.483		

### ATTACHMENT D

Date Range: 08/Feb/20:13×08/Feb/2018



acility Name: H	ARTLAND WW	TF			N	IPDES	: ME	010	L443		,
	Monthly	Daily	Total Test		Tes	it#B	y Gre	oup			
Test Date	(Flow M	_	Number	М	V	BN	P	0	Α	Clean	Hg
02/12/2013	0.15	0.17	1	0	0	0	0	1	0	F	0
	Monthly	Daily	Total Test			t # B	<u>у Gr</u> Р	oup_ O	Α_	Clean	Hg
Test Date	(Flow M	•	Number	M	V	BN	-	0	0	F	0
02/18/2013	0.15	0.14	2	2	0	0	0			г	
	Monthly	Daily	Total Test		Tes	t#B	y Gr	oup			
Test Date	(Flow M		Number	М	V	BN	P	0	Α	Clean	Hg
02/20/2013	0.15	0.46	2	2	0	0	0	0	0	F	0
					_						
	Monthly	Daily	Total Test			st # B				Clean	Ll a
Test Date	(Flow M	-	Number	M	V	BN	Þ	0			Hg
02/21/2013	0.15	0.20	2	2	0	0	0	0	0	F	0
	Monthly	Daily	Total Test		Tes	st # B	y Gr	oup			
Test Date	(Flow M	-	Number	M	V	BN	P	0		Clean	Hg
02/25/2013	0.16	0.17	2	2	0	0	0	0	0 .	F	0
		**********	_			- 4					
	Monthly	Daily	Total Test			st # B				<b></b>	
Test Date	(Flow M	-	Number	M	V	BN	P	0	A	Clean	Hg
03/05/2013	0.27	0.33	2	11	0	0	0	1	0	F	0
	Monthly	Daily	Total Test		Tes	st#B	y Gr	oup			
Test Date	(Flow M		Number	М	٧	BN	P	0	А	Clean	Hg
03/12/2013	0.27	0.67	2	1	0	0	0	1	0	F	0
,			- 1 - 1 L		<b>T</b>	# D		oun			
	Monthly	Daily	Total Test Number	M	V	st#B BN	P	<u>oup</u>	A	Clean	Hg
Test Date	(Flow M		2	1 1	0	0	0	1	Ô	F	0
04/03/2013	0.24	0.41	<u></u>	<u>,L</u>				<u>+</u>			
	Monthly	Daily	<b>Total Test</b>		Te	st#B	y Gr	oup			
Test Date	(Flow M	IGD)	Number	М	V	BN	P	0	Α	Clean	Hg
04/10/2013	0.24	0.32	1	0	0	0	0	1	0	F	0
4	h	n - 11	Total Test		To	st # B	w Gr	nun			
7 Duka	Monthly (Flow M	Daily	Number	M	V	BN	P	000	A	Clean	Hg
<b>Test Date</b> 04/23/2013	0,24	0,23	1	1	ō	0	0	0	0	F	0
04/23/2013	U <sub>1</sub> ZT									·	
	Monthly	Daily	<b>Total Test</b>		-	st # B					
Test Date	(Flow M		Number	М	V	BN	P	0	A	Clean	Hg
05/07/2013	0.23	0.20	1	. 1	0	0	0	. 0	.0	F	0
	Monthly	Daily	Total Test		Tρ	st#B	lv Gr	ดนก			
Test Dete	Monthly (Flow M	_	Number	M	V	BΝ	P	0	Α	Clean	Hg
Test Date	-	-	2	1	o	0	0	1	0	F	0
05/08/2013	0.23	0.20		<del>-</del>				· <del>-</del>			

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ĭ			
	H		
4			и

A = Acid 0 = 0 thers

P = Pesticides

BN = Base Neutral M = Metals

V.= Volatiles



Date Range: 08/Feb/2013 08/Feb/2018

acility Name: H	ARTLAND WWTF			N	PDES:	: ME	0101	443	<u>,,.                                   </u>	·
, , , , , , , , , , , , , , , , , , , ,		Total Test		Tes	t#B	v Gre	านก			
	Monthly Daily	Number		V	BN	P	0	Α	Clean	Hg
Test Date	(Flow MGD)	3	2	Ö	0	0	1	0	F	ō
05/15/2013	0.23 0.19	J					<del></del>	••••		·
	Monthly Daily	<b>Total Test</b>		Tes	t # B	y Gr	oup			
Test Date	(Flow MGD)	Number	M	V	BN	P	0	Α	Clean	Hg
06/12/2013	0.17 0.38	1	1	0	0	0	0	0	F	0
<u> </u>				_						
	Monthly Daily	Total Test			st # B		oup O		Clean	Hg
Test Date	(Flow MGD)	Number	M	V	BN	₽	0	0	F	0
07/03/2013	0.12 0.14	1	1	0	0	0		<u>V</u>		
	Monthly Daily	Total Test		Tes	st # B	y Gr	oup			
Test Date	(Flow MGD)	Number	M	V	BN	P	0	Α	Clean	Hg
07/10/2013	0.12 0.32	1	1	0	0	0	0	0	F	0
0//10/2013	0112	***************************************								
	Monthly Daily	Total Test			st # B				O)	1.1
Test Date	(Flow MGD)	Number	M	V	BN	P	0	A	Clean	Hg
08/20/2013	0.15 0.18	1	1	0	0	0	0	0	F	0
	Manthly Daily	Total Test		Te	st#B	lv Gr	ano			
	Monthly Daily (Flow MGD)	Number	М	V	BN	P	0	A	Clean	Hg
Test Date	0,22 0,21	1	1	o	0	0	0	0	F	Ō
09/12/2013	0,22 0,21	<u> </u>		<del>-</del>						
	Monthly Daily	<b>Total Test</b>		Te	st#E					
Test Date	(Flow MGD)	Number	M	٧	BN	P	0	A	Clean	Hg
10/09/2013	0.22 0.13	1	1	0	0	0	0	0	<i></i> F	C
	Pa_:!!	Takal Task		Tο	st # E	av Gi	oun.			
	Monthly Daily	Total Test Number	М	V	BN	P	0	A	Clean	Hg
Test Date	(Flow MGD) 0.33 0.24	21	10	Ö	0	0	11	0	F	Ö
11/03/2013	0.33 0.24									
	Monthly Daily	<b>Total Test</b>		Te	st # F	3y Gi				
Test Date	(Flow MGD)	Number	M	V	BN	P	0	Α	Clean	H
11/12/2013	0.33 0.34	1	1	0	0	0	0	0	F	
				та	st # 1	av Ci	raun			
	Monthly Dally	Total Test Number	M	<u></u>	BN	P	0.00	Α_	Clean	Н
Test Date	(Flow MGD)		1	0	0	o	ō	ō	F	(
12/04/2013	0.26 0.41	1	<u>.</u>							
	Monthly Daily	<b>Total Test</b>		Te	st#l	By G	roup		•	
Test Date	(Flow MGD)	Number	М	V	BN	Р	Q	A	Clean	H
12/26/2013	0.26 0.14	, <b>1</b>	1	0	0	0	0	0	F	0
May 201 20 20					_1 11				•	
	Monthly Daily	Total Test	= #		st#				Clean	H
Test Date	(Flow MGD)	Number	M	V	BN	P	0	<b>A</b> 0	F	111
12/27/2013	0.26 0.12	1	1	0	0	0	0	U	<u>-</u> -	

Key:

\_ A = Acid O = Others P = PestIcides

BN = Base Neutral M = Metals V = Volatiles



Date Range: 08/Feb/2013-08/Feb/2018

cility Name: <b>H</b>	ARTLAND WWTF			N	PDES:	ME	0101	443	<u></u>	
		ly Total Test		Tes	t # B	y Gro	oup			
			М	V	BN	Р	0	Α	Clean	Hg
Test Date	(Flow MGD) 0,26 0,2	,	1	0	0	0	Q	0	F	0
12/31/2013	0.26 0.2	<u>T</u>								
•	Monthly Dai	ly Total Test		Tes	t # B	y Gre	oup_			
Test Date	(Flow MGD)		М	٧	BN	P	0	Α	Clean	Ηg
01/02/2014	0.40 0.3		1	0	O	0	0	0	F	0
01/02/2014	01.70									
	Monthly Dai	lly Total Test	,		st # B				<b>61</b>	
Test Date	(Flow MGD	) Number	M	V	BN	P	0	A	Clean	H
01/14/2014	0.40 1.0		1	Ò	0	0	0	0	F	(
21/11/772						🕶				
	Monthly Dai				st # B				Clean	H
Test Date	(Flow MGD		M	۷	BN	P	0	<b>A</b> 0	F	(
01/20/2014	0.40 0.3	16 1	1	0	0	0	0	<u>U</u>		•••••
		رو مورورات ما المورورات المورورات المورورات المورورات المورورات المورورات المورورات المورورات المورورات المورو المورورات المورورات		To.	st#B	v Gr	Olin			
	Monthly Da		М	V	BN	P	<u> </u>		Clean	Н
Test Date	(Flow MGD	,	1	Ö	0	Ö	ō	0	F	
01/27/2014	0.40 0.	27 1	<del></del>							~~~~
	Manahla Da	ilv Total Test		Te	st#B	ly Gr	oup			
	Monthly Da	,	M	V	BN	Р	O	A	Clean	Н
Test Date	(Flow MGD	,	1	Ö	0	0	0	0	F	
01/28/2014	0.40 0.	23 1								
	Monthly Da	ily Total Test		Te	st <u># E</u>	By Gr	oup		•	
Test Data	(Flow MGD	,	М	V	BN	P	0	Α	Clean	Н
Test Date	-	23 1	1	0	0	0	0	0	F	
01/29/2014										
	Monthly Da	ily Total Test	<u></u>		st # E					
Test Date	(Flow MGD		М	V	BN	P	0	A	Clean	ŀ
01/30/2014		13 1	1	0	0	0	0	0	F	
01/30/2021				_						
		ily Total Test			st #				- Clean	ŀ
Test Date	(Flow MGE		M	V		P	0	0	F	•
02/10/2014	0.24 0.	22 1	1	0	0	0	0			
			<b>.</b>	To	est#	Rv G	roun			
		aily Total Test >> Number	. <u> </u>	V		P	0	A	- Clean	ŀ
Test Date	(Flow MGI		1	0	0	0	ō	Ô	F	
03/05/2014	0.29 0.	.29 1	<u>+</u>					<u>×</u>		
	Monthly N	aily Total Tesi	ŀ	Τe	est#	By G	roup		<u>_</u> .	
	Monthly Da (Flow MGI			V			0	Α	Clean	ŧ
Test Date		.30 8	8	0		Ō	0	0	F	
03/12/2014	0.29 . 0	.20								
	Monthly Da	aily Total Tesi	t	Te	est#	By G	roup		<del></del>	
Test Date	(Flow MGI						0	A	Clean	ŀ
		.64 1	1	0	0	0	0	0	F	
04/03/2014	0,79									

A = Acid

O= Others -- P=Pesticides

BN = Base Neutral - M = Metals

V = Volatiles

State of Maine - Department of Environmental Protection



Date Range: 08/Feb/2013-08/Feb/2018

acility Name: H	ARTLAND WWTF			N	IPDES	: ME	010	L443		
	Monthly Daily	Total Test		Tes	t # B	y Gr	oup			
Test Date	(Flow MGD)	Number	М	٧	BN	Р	0	A	Clean	Hg
05/07/2014	0.38 0.44	1	1	0	0	0	0	0	F	0
05/07/2014						_		****		
	Monthly Daily	Total Test			t#B				<b>51</b>	11
Test Date	(Flow MGD)	Number	M	٧	BN	P	0	A	Clean	Hg
06/02/2014	0.34 0.35	10	0	0	0	0	10	0	F	0
	Monthly Daily	Total Test		Tes	st#B	v Gr	อนต			
		Number	М	V	BN	P	0	A	Clean	Hg
Test Date	(Flow MGD)	10	10	ō	0	Ô	0	0	F	ā
06/03/2014	0,34 0,35	1U	10							
	Monthly Daily	Total Test		Tes	st#B	y Gr	oup			
Test Date	(Flow MGD)	Number	M	V	BN	P	0	Α	Clean	Hg
06/05/2014	0.34 0.37	1	1	0	0	0	0	0	F	C
		_								
	Monthly Daily	Total Test			st # B				Class	u.
Test Date	(Flow MGD)	Number	M	V	BN	P	0	A	Clean	H
07/18/2014	0.32 0.38	2	2	0	0	0	0	0	F	
	Monthly Daily	Total Test		Te	st#B	lv Gr	quo			
w b-2-	Monthly Daily (Flow MGD)	Number	M	V	BN	Р	0	A	Clean	H
<b>Test Date</b> 08/06/2014	0.36 0.36	1	1	ō	0	0	0	0	F	(
08/06/2014	0.50									
	Monthly Daily	Total Test			st#E					
Test Date	(Flow MGD)	Number	М	V	BN	P	0	A	Clean	H
10/14/2014	0.27 0.17	1	1	0	0	0	0	0	F	(
	Monthly Daily	Total Test		Te	st#E	sv Gi	dno.			
	(Flow MGD)	Number	M	V	BN	P	o	A	Clean	H
Test Date	0.31 0.26	1	1	o o	0	0	Q	0	F	(
11/14/2014	0,51 0,20									
	Monthly Daily	<b>Total Test</b>			st#E					
Test Date	(Flow MGD)	Number	M	V	BN	P	0	A	Clean	Н
12/17/2014	0.50 0.51	1	i	0	0	0	0	0	F	
***************************************	Manufalie Daily	Total Test		Te	st # [	3v Gi	oup			
	Monthly Daily (Flow MGD)	Number	M	v	BN	Р	0	Α	Clean	Н
Test Date	0.50 0.26	1	1	ō	0	0	0	0	F	
12/22/2014	0,50 0,20		, <del></del> **							
	Monthly Daily	<b>Total Test</b>			st # I					
Test Date	(Flow MGD)	Number	М	V	BN	P	0	A	Clean	Н
01/23/2015	0.31 0.36	1	1	0	0	0	0	0	F	
***************************************	NA	Total Test		Te	st#I	BV G	าดเมต	·		
	Monthly Daily	Number	М	V	BN	P	0	Α	Clean	H
Test Date	(Flow MGD)			0	0	0	0	Ō	F	
02/19/2015	0.27 0.33	1	1	U	υ	V	U			

Key:

A = Acid O = Others

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BN = Base Neutral M = Metals

V = Volatiles

State of Maine Department of Environmental Protection



Date Range: 08/Feb/2013 - 08/Feb/2018

acility Name: H	ARTLAND WWTF			N	PDES	: ME	0101	L443		
		Total Test		Tes	t # B	v Gre	oun			
	Monthly Daily	Number	M	V	BN	P	0	A	Clean	Hg
Test Date	(Flow MGD)	1	1	Ö	0	0	0	0	F	ő
04/09/2015	0.59 0.58	L								
	Monthly Daily	Total Test		Tes	t # B	y Gr	oup_			
Test Date	(Flow MGD)	Number	М	V	BN	P	0	Α	Clean	Hg
04/12/2015	0.34 0.44	1	1	0	0	0	0	0	F	0
04/12/2013						_				
	Monthly Daily	<b>Total Test</b>			t#B				<b>~</b> 1	11
Test Date	(Flow MGD)	Number	М	V	BN	P	0	A	Clean	Hg
05/07/2015	0.34 0.32	1	1	0	0	0	0	0	F	0
	· · · · · · · · · · · · · · · · · ·	Tabal Took		Too	st#B	v Gr	oun			
	Monthly Daily	Total Test Number	М	V	BN	P	0	Α_	Clean	Hg
Test Date	(Flow MGD)		1	0	0	0	0	0	F	0
06/03/2015	0.43 0.64	1	<u>_</u>							
•	Monthly Daily	Total Test		Tes	st # B	y Gr	oup			
Test Date	(Flow MGD)	Number	М	V	BN	Р	0	Α	Clean	Hg
07/09/2015	0,33 0.35	1	ì	0	0	0	0	0	F	0
0//09/2013	0.00								A A 444	
•	Monthly Daily	<b>Total Test</b>		Tes	st # B					
Test Date	(Flow MGD)	Number	М	V	BN	P	0	A	Clean	Hg
08/11/2015	0.32 0.42	21	10	0	0	0	11	0	F	0
				<b>T</b> -	_ L _ A _ E	·· C-				
	Monthly Daily	Total Test		V	st#E	<u>р</u>	Oup O	Ā	Clean	Hg
Test Date	(Flow MGD)	Number	М	-	<b>BN</b> 0	0	0	0	F	0
08/19/2015	NR NR	<u></u>	<u>1</u>	0	U					<u>.</u>
	Monthly Daily	Total Test		Te	st#E	3v Gi	quo			
	(Flow MGD)	Number	M	V	BN	P	0	Α	Clean	Hg
Test Date	0.31 0.33	1	1	Ō	0	0	0	0	F	0
09/17/2015	0.01	<u>.</u> ************************************								
	Monthly Daily	Total Test		Тe	st # F	3y Gi				
Test Date	(Flow MGD)	Number	М	V	BN	P	0	A	Clean	Hg
10/14/2015	0.32 0.26	1	1	0	0	0	0	0	F	0
					_ 2. 46 9	<i>(</i>	~~			
•	Monthly Daily	Total Test			st # 1	ay Gi P	O		Clean	Hg
Test Date	(Flow MGD)	Number	М	V	BN	_	0	0	F	ייי כ
11/12/2015	0.04 0.02	1	1	0	0	0				
	Monthly Daily	Total Test		Te	st#I	By G	roup			
	Monthly Daily (Flow MGD)	Number	М	v	BN	P	0	Α	Clean	H
Test Date	-	1	1	ō	0	0	Ö	0	F	C
12/23/2015	0,34 0.31					<u>-</u>				
	Monthly Daily	Total Test		Te	st#	By G	roup		_	•
Test Date	(Flow MGD)	Number	М	٧	BN	P	0	Α	Clean	H
01/14/2016	NR NR	1	1	0	0	0	0	0	F	
01/14/5010	1417 1417									

Key:

A = Acid O = Others

P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

State of Maine - Department of Environmental Protection



Date Range:

08/Feb/2013-08/Feb/2018

cility Name: HA	RTI AND WW	rF			N	PDES:	ME	0101	<u>443</u>		
cinty rante. 114			Tatal Tast		Tee	t#By	Gro	цр			
	Monthly	Daily	Total Test Number	М	V	BN	P	0	Α	Clean	Нg
Test Date	(Flow M			1	Ö	0	0	0	0	F	ō
02/02/2016	22,24	21.74	1				<del></del>				
	W# 2[_1.	Daily	Total Test		Tes	t#By	/ Gro	up			
	Monthly	_	Number	М	V	BN	Р	0	Α	Clean	Hg
Test Date	(Flow M		1	1	0	0	0	0	0	F	0
03/10/2016	0.36	0.43									
	Monthly	Daily	Total Test		Tes	t # By	/ Gro	up			
~t Naia	(Flow M	•	Number	М	V	BN	P	0	A	Clean	Hg
Test Date	NR	NR	1	1	0	0	0	0	0	F	0
04/07/2016	INIX					<b></b>					
	Monthly	Daily	<b>Total Test</b>		Tes	t # B		up			
Test Date	(Flow M		Number	M	V	BN	P	0	Α	Clean	Hg
05/05/2016	0.23	0.36	1	1	0	0	0	0	0	F	0
J5/U5/ZU16											
	Monthly	Daily	Total Test			t # B				<b>61</b>	LI e
Test Date	(Flow N	1GD)	Number	M	V	BN	P	0	A	Clean	Hg
05/17/2016	0.29	0.27	21	10	0	0	0	11	0	F	0
03/1//2010				t Test # By Group							
	Monthly	Daily	Total Test							Clean	Hç
Test Date	(Flow N	4GD)	Number	M	٧	BN	P	0	A	F	0
03/21/2017	0.33	0.39	19	9	0	0	0	10	<u> </u>		
					Ta	st # B	v Gr	o i i in			
	Monthly	Daily	Total Test		V	BN	p	0	А	Clean	He
Test Date	(Flow i		Number	M	_		0	0	Ô	F	Ċ
04/14/2017	0.60	0.78	1	1	0	0					
		- W.	Total Test		Te	st#E	v Gr	oup			
	Monthly	Daily	Number	М	v	BN	P	0	Α	Clean	H
Test Date	(Flow I			1	Ö	0	o	0	0	F	(
04/21/2017	0.60	0.52	1				<u>-</u>				
	Bit on and the last	Daily	Total Test	Test # By Group						_	
	Monthly (Flow !		Number	М	V	BN	P	0	Α	Clean	Н
Test Date	-	0.39	1	1	0	0	0	0	0	F	(
05/11/2017	0.37	0.35	**							***************************************	
	Monthly Daily Total Test Test # By Group										
Test Date	(Flow		Number	M	V	BN	P	0	Α	Clean	H
	0.25	0.29	1	1	0	0	0	0	0	F	
08/02/2017	0.23				• • • • • • • • • • • • • • • • • • • •						
	Monthly	Daily	Total Test			st#I				- <b>-</b>	L.K
Test Date	(Flow	MGD)	Number	M	V		P	0	A	Clean	H
09/25/2017	0.24	0.13	. 9	9	0	0	0	0	0	F	
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			est_#	n ~	was	-		
			1 - k		Te	CT #	nv G	roub			
	Monthly	Daily	Total Test							Close	1.4
Test Date	Monthly (Flow	-	Total Test Number 1	М 1	<b>V</b>	BN	<b>P</b> 0	<b>0</b>	<b>A</b> 0	Clean F	H

**		

A⊫Acid

O = Others

P = Pesticides

BN = Base Neutral M = Metals

V = Volatiles

State of Maine - Department of Environmental Protection

### 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 <u>Dennis L.Merrill@maine.gov</u> or 287-7788.

### Maine Department of Environmental Protection

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### Maine Department of Environmental Protection

### Working Definitions of Terms Used in the DeTox System.

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

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

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

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

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

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

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

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

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

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

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

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

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

I. Preparation
Select Watershed
. ★
Select values for pH, Temp, hardness,
Background %, Reserve %
Algorithms for some pollutants
Water quality tables
1 Trator quanty success
Calculate water quality criteria: Acute, Chronic, Health
Calculate water quanty official. Acuto, Chromo, Tromm

Get facility information: location, stream flows

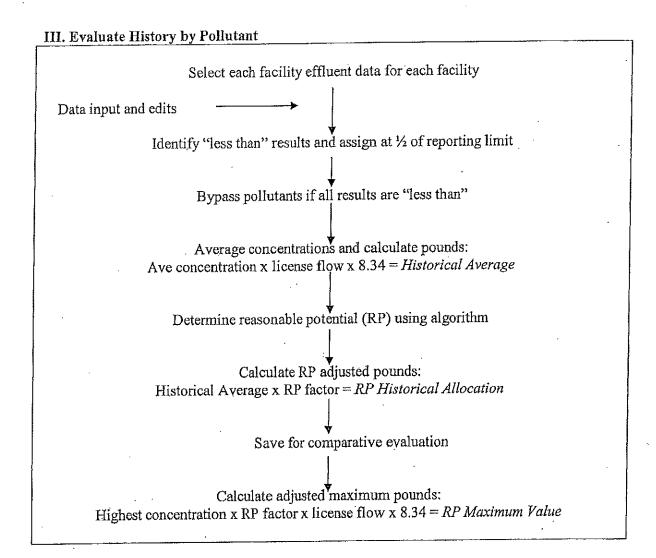
Identify lowermost facility

Get stream flows for Acute, Chronic, Health (1Q10, 7Q10, HM)

Calculate segment capacity by pollutant and criterion:
Stream flow x criterion x 8.34 = pounds

Set aside Reserve and Background:
Segment capacity x (1 - background - reserve) = Segment Assimilative Capacity

Save Segment Assimilative Capacities by pollutant and criterion



By pollutant, identify facilities with Historical Average

Sum all Historical Averages within segment

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

## By pollutant and criterion, select Segment Assimilative Capacity Select individual Facility History % Determine facility allocation: Assimilative Capacity x Facility History % = Segment Allocation Save for comparative evaluation

## Select individual facility and dilution factor (DF) Select pollutant and water quality criterion By pollutant and criterion, calculate individual allocations: [DF x 0.75 x criterion] + [0.25 x criterion] = Individual Concentration Determine individual allocation: Individual Concentration x license flow x 8.34 = Individual Allocation Save for comparative evaluation

### WII. Make Initial Allocation By facility, pollutant and criterion, get: Individual Allocation, Segment Allocation, RP Historical Allocation Compare allocation and select the smallest Save as Facility Allocation

### VIII. Evaluate Need for Effluent Limits

IX. Reallocation of Assimilative Capacity

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

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

Save Effluent Limit for comparison

# Starting at top of segment, get Segment Allocation, Facility Allocation and Effluent Limit If Segment Allocation equals Effluent Limit, move to next facility downstream If not, subtract Facility Allocation from Segment Allocation Save difference Select next facility downstream Figure remaining Segment Assimilative Capacity at and below facility, less tributaries Add saved difference to get an adjusted Segment Assimilative Capacity Reallocate Segment Assimilative Capacity among downstream facilities per step V

Repeat process for each facility downstream in turn



### 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:

OCF/90-1/r95/r98/r99/r00/r04/r12

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

### OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

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

### WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

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

### II. JUDICIAL APPEALS

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

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

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

### ADDITIONAL INFORMATION

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

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