



STATE OF MAINE  
Department of Environmental Protection

Paul R. LePage  
GOVERNOR

James Brooks  
ACTING COMMISSIONER

May 19, 2011

Mr. Kenneth W. Locke  
Superintendent  
Brewer Waste Water Treatment Facility  
80N. Main Street  
Brewer, Maine 04412

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100072  
Maine Waste Discharge License (WDL) Application #W002679-5M-D-R  
**Final Permit**

Dear Ken:

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

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

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

Sincerely,

A handwritten signature in cursive script, appearing to read "G. Wood".

Gregg Wood  
Division of Water Quality Management  
Bureau of Land and Water Quality

Enc.

cc: Stakeholder Service List  
David Breau, DEP/CMRO  
Sandy Mojica, USEPA

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

**DEPARTMENT ORDER**

**IN THE MATTER OF**

CITY OF BREWER	)	MAINE POLLUTANT DISCHARGE
PUBLICLY OWNED TREATMENT WORKS	)	ELIMINATION SYSTEM PERMIT
BREWER, PENOBSCOT COUNTY, MAINE	)	AND
ME0100072	)	WASTE DISCHARGE LICENSE
W002679-5M-D-R	)	<b>RENEWAL</b>
<b>APPROVAL</b>	)	

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, *et. seq.* and *Conditions of Licenses*, 38 M.R.S.A., Section 414-A *et seq.*, and applicable regulations, the Department of Environmental Protection (Department hereinafter) has considered the application of the CITY OF BREWER (City/permittee hereinafter) with its supportive data, agency review comments, and other related material on file and FINDS THE FOLLOWING FACTS:

**APPLICATION SUMMARY**

The City has submitted a timely and complete application to the Department for renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100072/Maine Waste Discharge License (WDL) #W002679-5M-C-R (permit hereinafter) which was issued on April 25, 2003, and expired on April 25, 2008. The 4/25/03 permit authorized the discharge of up to a monthly average flow of 5.19 million gallons per day (MGD) of secondary treated sanitary waste waters from a municipal waste water treatment facility to the Penobscot River, Class B, in Brewer, Maine. The 4/25/03 permit also authorized the discharge of primary treated waste waters when the influent to the waste water treatment facility exceeded a sustained daily flow rate of 3,604 gallons per minute (5.19 MGD) or a peak hourly flow rate of 6,438 gallons per minute (9.27 MGD) and authorized the discharge of an unspecified quantity of untreated combined sanitary and storm water from five (5) combined sewer overflow (CSO) outfalls to the Penobscot River, Class B in Brewer, Maine.

**PERMIT SUMMARY**

**This permitting action is carrying forward all the terms and conditions of the 4/25/03 permitting action except that this permit;**

1. Reduces the seasonal (June – September) monitoring frequency for total phosphorus from 1/Week to 2/Month.
2. Establishes monthly average and or daily maximum water quality based mass and concentrations limitations for arsenic, copper and lead.

## CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated March 22, 2011, and subject to the Conditions listed below, the Department makes the following CONCLUSION:

### Secondary and Primary Treated Waste Waters:

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, 38 MRSA Section 464(4)(F), will be met, in that:
  - a. Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
  - b. Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
  - c. The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
  - d. Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and
  - e. Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharges (including the five CSO's) will be subject to effluent limitations that require application of best practicable treatment.

**ACTION**

THEREFORE, the Department APPROVES the application of the CITY OF BREWER to discharge up to a monthly average flow of 5.19 million gallons per day (MGD) of secondary treated sanitary waste waters and an unspecified quantity of excess combined sanitary and storm water receiving primary treatment only from a municipal waste water treatment facility and untreated combined sanitary and storm water from five combined sewer overflow (CSO) outfalls to the Penobscot River, Class B, in Brewer. The discharges shall be 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 becomes effective upon the date of signature below and expires at midnight five (5) years thereafter. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of the this permit, the terms and conditions of the this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S.A. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (effective April 1, 2003)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application June 18, 2008.

Date of application acceptance June 18, 2008.



This permit is digitally signed by Teco Brown on behalf of Acting Commissioner James P. Brooks. It is digitally signed pursuant to 10 M.R.S.A. § 9418. It has been filed with the Board of Environmental Protection as of the signature date.  
2011.05.19 14:27:29 -04'00'

This Order prepared by GREGG WOOD, BUREAU OF LAND & WATER QUALITY

**SPECIAL CONDITIONS**

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

- Beginning the effective date of the permit, the permittee is authorized to discharge secondary treated waste waters to the Penobscot River. Such treated waste water discharges shall be limited and monitored by the permittee as specified below.

**SECONDARY TREATED WASTE WATERS - OUTFALL #001A**

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow [50050]	5.19 MGD [03]	---	Report (MGD)	---	---	---	Continuous [99/99]	Recorder [RC]
Biochemical Oxygen Demand (BOD <sub>5</sub> ) [00310]	1,298 lbs/Day [26]	1,947 lbs/Day [26]	Report lbs/Day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	5/Week [05/07]	Composite [24]
BOD <sub>5</sub> % Removal <sup>(1)</sup> [81010]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]
Total Suspended Solids (TSS) [00530]	1,298 lbs/Day [26]	1,947 lbs/Day [26]	Report lbs/Day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	5/Week [05/07]	Composite [24]
TSS % Removal <sup>(1)</sup> [81011]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]
Settleable Solids [00545]	---	---	---	---	---	0.3 ml/L [25]	1/Day [01/01]	Grab [GR]
<i>E. coli</i> Bacteria <sup>(2)</sup> [31633] (May 15 – September 30)	---	---	---	64/100 ml <sup>(3)</sup> [13]	---	427/100 ml [13]	3/Week [03/07]	Grab [GR]
Total Residual Chlorine [50060]	---	---	---	---	---	1.0 mg/L [19]	1/Day [01/01]	Grab [GR]
Total Phosphorus [00665] (June 1 – September 30)	Report lbs/Day [26]	---	Report lbs/Day [26]	Report mg/L [19]	---	Report mg/L [19]	2/Month <sup>(4)</sup> [02/30]	Composite [24]
pH (Std. Units) [00400]	---	---	---	---	---	6.0-9.0 [12]	1/Day [01/01]	Grab [GR]

**SPECIAL CONDITIONS**

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd) – OUTFALL #001A**

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
<u>Arsenic (Total)</u> <sup>(5)</sup> [01002] <i>Upon permit issuance</i>	Report lbs./day [26]	---	Report ug/L [28]		1/Year [01/YR]	Composite [24]
<u>Arsenic (Inorganic)</u> <sup>(6)</sup> [01252] <i>Upon EPA test method approval</i>	0.093 lbs./day [26]	---	2.1 ug/L [28]	---	1/Year [01/YR]	Composite [24]
<u>Copper (Total)</u> [01042]	0.77 lbs./day [26]	1.32 lbs./day [26]	36 ug/L [28]	60 ug/L [28]	1/Year [01/YR]	Composite [24]
<u>Lead (Total)</u> [01051]	0.18 lbs./day [26]	---	8 ug/L [28]	---	1/Year [01/YR]	Composite [24]

**SCREENING LEVEL** - Beginning 12 months prior to permit expiration (**June 2015**) and lasting through permit expiration and every five years thereafter.

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
<b><u>Whole Effluent Toxicity</u></b> <sup>(7)</sup> <b><u>Acute – NOEL</u></b>						
<i>Ceriodaphnia dubia</i> (Water flea) [TDA3B]	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
<i>Salvelinus fontinalis</i> (Brook trout) [TDA6F]	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
<b><u>Chronic – NOEL</u></b>						
<i>Ceriodaphnia dubia</i> (Water flea) [TBP3B]	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
<i>Salvelinus fontinalis</i> (Brook trout) [TBQ6F]	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Analytical chemistry <sup>(8,9)</sup> [51168]	---	---	---	Report ug/L [28]	1/Quarter [01/90]	Composite/Grab [24]
Priority Pollutant <sup>(9)</sup> [50008]	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/Grab [24]

**SPECIAL CONDITIONS**

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

- Beginning the effective date of the permit, the permittee is authorized to bypass secondary treatment. Such discharges may only occur in response to wet weather events when the influent to the waste water treatment facility exceeds a sustained daily flow rate of 3,604 gallons per minute (5.19 MGD) or a peak hourly flow rate of 6,438 gallons per minute (9.27 MGD) or in accordance with the most current approved Wet Weather Flow Management Plan and shall be monitored and reported as specified below.

**PRIMARY TREATED WASTE WATERS - OUTFALL #001B (Internal Waste Stream)**

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	<u>Monthly Average</u> as specified	<u>Daily Maximum</u> as specified	<u>Monthly Average</u> as specified	<u>Daily Maximum</u> as specified	<u>Measurement Frequency</u> as specified	<u>Sample Type</u> as specified
Flow, MGD [50050]	Report (Total MGD) [03]	Report (MGD) [03]	---	---	Continuous [99/99]	Recorder [RC]
Surface Loading Rate <sup>(10)</sup> [50997]	---	Report (gpd/sf) [07]	---	---	1/Discharge Day <sup>(11)</sup> [01/DS]	Calculate [CA]
Overflow Use, Occurrences <sup>(12)</sup> [74062]	---	---	Report (# of days) [93]	---	1/Discharge Day <sup>(11)</sup> [01/DS]	Record Total [RT]
BOD5 [00310]	---	---	---	Report mg/L [19]	1/Discharge Day <sup>(11)</sup> [01/DS]	Composite
BOD5 % Removal <sup>(13)</sup> [81010]	Report (%) [23]	---	---	---	1/Discharge Day <sup>(11)</sup> [01/DS]	Calculate [24]
TSS [00530]	---	---	---	Report mg/L [19]	1/Discharge Day <sup>(11)</sup> [01/DS]	Composite
TSS % Removal <sup>(13)</sup> [81011]	Report (%) [23]	---	---	---	1/Discharge Day <sup>(11)</sup> [01/DS]	Calculate [24]
<i>E. coli</i> Bacteria <sup>(2)</sup> [31633] (May 15 – September 30)	---	---	---	427/100 ml [13]	1/Discharge Day <sup>(11)</sup> [01/DS]	Grab [GR]
Total Residual Chlorine [50060]	---	---	--	1.0 mg/L [19]	1/Discharge Day <sup>(11)</sup> [01/DS]	Grab [GR]

## SPECIAL CONDITIONS

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

#### Footnotes:

#### **Sampling Locations:**

**Influent sampling** for BOD<sub>5</sub> and TSS shall be sampled after the aerated grit chamber but before the parshall flumes measuring flow into the treatment plant.

#### **Effluent receiving secondary treatment (Outfall #001A)**

- a. During normal operations when all flows conveyed to the treatment facility are receiving secondary treatment, samples for all parameters shall be collected after the chlorine contact chamber.
- b. During times of secondary bypass events (when Outfall #00B is active) waste waters receiving secondary treatment shall be sampled for all parameters [with the exception of total residual chlorine (TRC) and *E. coli* bacteria] after the secondary clarifiers but before the parshall flume (dedicated to the secondary treated waste stream) and chlorine contact chamber. TRC and *E. coli* bacteria shall be sampled after the chlorine contact chamber.

**Effluent receiving primary treatment (Outfall #001B)** shall be sampled for BOD<sub>5</sub> and TSS after the primary settling units but before the parshall flume (dedicated to the primary treated waste stream) and prior to combining with the secondary treated effluent in the chlorine contact chamber.

Any change in sampling location(s) other than those specified above must be reviewed and approved by the Department in writing.

**Sampling** - Sampling and analysis must be conducted in accordance with; a) methods approved in 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Human Services. Samples that are sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 or laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000).

## SPECIAL CONDITIONS

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

#### Footnotes:

All analytical test results shall be reported to the Department including results which are detected below the respective reporting limits (RLs) specified by the Department or as specified by other approved test methods. See **Attachment A** of this permit for a list of the Department's RLs. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the RL achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL or reporting an estimated value ("J" flagged) is not acceptable and will be rejected by the Department. Reporting analytical data and its use in calculations must follow established Department guidelines specified in this permit or in available Department guidance documents.

1. **Percent removal** - The treatment facility shall maintain a minimum of 85 percent removal of both BOD<sub>5</sub> and TSS for all waste waters receiving a secondary level of treatment. The percent removal shall be based on a monthly average calculation using influent and effluent concentrations. The percent removal shall be waived when the monthly average influent concentration is less than 200 mg/L. For instances when this occurs, the facility shall report "*NODI-9*" on the monthly Discharge Monitoring Report. Influent and effluent values collected during bypass conditions shall not be used in calculating the BOD<sub>5</sub> and TSS percent removal rates.
2. ***E. coli* bacteria** - Limits are seasonal and apply between May 15 and September 30 of each calendar year. The Department reserves the right to require disinfection on a year-round basis to protect the health and welfare of the public. If the secondary bypass is inactive at the beginning of the week and the 3/Week tests are conducted on the secondary waste stream and the primary bypass becomes active at the end of the week, one additional set of grab samples for *E. coli* bacteria and total residual chlorine test on the combined waste streams (primary and secondary) is required if the bypass is active for a single continuous discharge event lasting greater than 60 minutes or during intermittent discharge events over a course of a 24 hour period lasting greater than 120 minutes. If the bypass is active for more than three days during the first part of the week and the 3/Week bacteria tests are conducted on the combined waste streams and then the primary bypass activity ceases, one additional test on the secondary treated waste stream is required.
3. ***E. coli* bacteria** – The monthly average limitation is a geometric mean limitation and shall be calculated and reported as such.
4. **Total phosphorus** – There shall be at least 10 days between sampling events. See **Attachment B** of this permit for a Department protocol for total phosphorus.

## SPECIAL CONDITIONS

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

#### Footnotes:

5. **Arsenic (Total)– Beginning the effective date of this permit and lasting through EPA approval of a test method for inorganic arsenic**, the permittee shall sample and analyze the discharge from the facility for total arsenic. The Department's most current reporting limit (RL) for total arsenic is 5 ug/L but may be subject to revision during the term of this permit. All detectable analytical test results shall be reported to the Department including results which are detected below the Department's most current RL at the time of sampling and reporting. Only the detectable results greater than the total arsenic threshold of 4.2 ug/L or the Department's RL at the time (whichever is higher) will be considered as a possible exceedence of the water quality criteria for inorganic arsenic. If a test result is determined to be a possible exceedence, the permittee shall submit a toxicity reduction evaluation (TRE) to the Department for review and approval within 45 days of receiving the test result of concern from the laboratory.
6. **Arsenic (Inorganic)** - The limitations and monitoring requirements are not in effect until the USEPA approves of a test method for inorganic arsenic. Once effective, compliance will be based on a 12-month rolling average basis beginning 12 months after the effective date of the limits. Following USEPA approval of a test method for inorganic arsenic and based on recent available data, the permittee may request that the Department reopen this permit in accordance with Special Condition P, *Reopening on Permit For Modifications*, of this permit to establish a schedule of compliance for imposition of the numeric inorganic arsenic limitations.
7. **Whole effluent toxicity (WET) testing** - Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical modified acute and chronic dilution of 1.1% and 0.2% 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.

**Screening level testing** - Beginning twelve months prior to the expiration date of the permit and every five years thereafter, the permittee shall initiate screening level WET tests at a frequency of once per year. Pursuant to Department rule Chapter 530, surveillance level testing is waived for the first four years of the term of this permit. Testing shall be conducted on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*). Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following U.S.E.P.A. methods manuals.

## SPECIAL CONDITIONS

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

#### Footnotes:

- a. Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, 4th 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, 3<sup>rd</sup> Edition, October 2002, EPA-821-R-02-012.

Once received by the permittee, 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 after receiving the results from the laboratory before submitting them. The permittee shall evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 1.1% and 0.2%, respectively.

See **Attachment C** of this permit for the Department's WET report form.

The permittee is also required to analyze the effluent for the parameters specified in the WET chemistry section, and the parameters specified in the analytical chemistry section of the form in **Attachment A** of this permit each time a WET test is performed.

8. **Analytical chemistry** – Refers to a suite of chemical tests in **Attachment A** of the permit

**Screening level testing** - Beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter, the permittee shall conduct screening level analytical chemistry testing at a minimum frequency of once per calendar quarter. As with WET testing, surveillance level testing is waived for the first four years of the term of this permit.

9. **Priority pollutant testing** – Priority pollutants are those parameters listed in **Attachment A** of this permit.

**Screening level testing** - Beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter, the permittee shall conduct screening level priority pollutant testing at a minimum frequency of once per year. It is noted Chapter 530 does not require routine surveillance level priority pollutant testing in the first four years of the term of this permit.

Priority pollutant and analytical chemistry testing shall 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 shall be conducted using methods that permit

## SPECIAL CONDITIONS

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

#### Footnotes:

detection of a pollutant at existing levels in the effluent or that achieve minimum reporting levels of detection as specified by the Department. See **Attachment A** of this permit for a list of the Department's RLs of detection.

Once received by the permittee, priority pollutant and analytical chemistry test results must be submitted to the Department not later than the next DMR required by the permit provided, however, that the permittee may review the toxicity reports for up to 10 business days after receiving the test results from the laboratory before submitting them. The permittee shall evaluate test results being submitted and identify to the Department, possible exceedences of the acute, chronic or human health AWQC as established in Department rule Chapter 584. For the purposes of Discharge Monitoring Report (DMR) reporting, enter a "1" for yes, testing done this monitoring period or "NODI-9" monitoring not required this period.

10. **Surface Overflow Rate** – For the purposes of this permitting action surface overflow rate is defined as the average hourly rate per overflow occurrence in a discharge day. The permittee should provide this information to establish data on the effectiveness of peak flows receiving primary treatment only.
11. **Discharge Day** - A discharge day is defined as a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.
12. **Overflow occurrence** – An overflow occurrence is defined as the period of time between initiation and cessation of flow from the storm flow chlorine contact tank. Overflow occurrences are reported in discharge days.

Multiple intermittent overflow occurrences in one discharge day are reported as one overflow occurrence and are sampled according to the measurement frequency specified. One composite sample for BOD5 and TSS shall be collected per discharge day and shall be of flow proportioned from each intermittent overflow during that 24-hour period.

For overflow occurrences exceeding one day in duration, sampling shall be performed each day of the event according to the measurement frequency specified. For example, if an overflow occurs for all or part of three discharge days, the permittee shall take three composite samples for BOD and TSS, initiating samples at the start of the overflow and each subsequent discharge day thereafter and terminating samples at the end of the discharge day or the end of the overflow occurrence. Samples shall be flow proportioned.

## **SPECIAL CONDITIONS**

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

#### Footnotes:

13. **BOD<sub>5</sub> and TSS** - The permittee shall analyze both the influent and effluent of the primary clarifiers for BOD and TSS during the discharge of treated excess combined sewer waste waters from Outfall 001B and report the percent (%) removal on the monthly Discharge Monitoring Report (DMR). As an attachment to the DMR, the permittee shall report the individual BOD and TSS test results used to calculate the percent removal rates reported.

For facilities whose normal staffing hours do not include weekends, or whose weekend staffing time is limited to minimum facility oversight (i.e. permit required daily grab sample analysis, setting up composite samplers, or performing routine observations of treatment plant functions), bypass BOD<sub>5</sub>/TSS composite samples collected after one hour before the end of normal staffing hours on Friday through 22 hours before normal staffing time on Monday may be held beyond the maximum holding time of twenty-four hours and analyzed as soon as possible during staffed hours on the Monday following the weekend. Composite samples with extended holding times must remain refrigerated until analyzed, and must conform to any other bypass sampling procedures as defined in this document. Any reported extended holding time composite sample results must be flagged to distinguish them from samples that were analyzed within the proper holding time.

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

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time which would impair the usages designated by the classification of the receiving waters.
2. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated by the classification of the receiving waters.
3. The discharges shall not cause visible discoloration or turbidity in the receiving waters which would impair the usages designated by the classification of the receiving waters.
4. Notwithstanding specific conditions of this permit the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

## **SPECIAL CONDITIONS**

### **C. TREATMENT PLANT OPERATOR**

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

### **D. LIMITATIONS FOR INDUSTRIAL USERS**

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

### **E. AUTHORIZED DISCHARGES**

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on June 8, 2008; 2) the terms and conditions of this permit; and 3) from Outfall #001A and five (5) combined sewer overflow outfalls listed in Special Condition K, *Combined Sewer Overflows*, of this permit. Discharges of waste water from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

### **F. NOTIFICATION REQUIREMENT**

In accordance with Standard Condition D, the permittee shall notify the Department of the following.

1. Any introduction of pollutants into the waste water collection and treatment system from an indirect discharger in a primary industrial category discharging process waste water; and
2. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system by a source introducing pollutants into the system at the time of permit issuance. For the purposes of this section, notice regarding substantial change shall include information on:
  - (a) the quality and quantity of waste water introduced to the waste water collection and treatment system; and
  - (b) any anticipated impact caused by the change in the quantity or quality of the waste water to be discharged from the treatment system.

## SPECIAL CONDITIONS

### G. SCHEDULE OF COMPLIANCE – INORGANIC ARSENIC

This permitting action is establishing a schedule of compliance for the monthly average mass and concentration limits for inorganic arsenic as follows:

**Beginning upon issuance of this permit and lasting through EPA approval of a test method for inorganic arsenic**, the permittee shall conduct 1/Year testing for total arsenic and report the mass and concentration on the applicable DMR's.

**Beginning 12 months after EPA approval of a test method for inorganic arsenic**, the permittee shall be in compliance with the 12-month rolling average mass and concentration limits of 0.093 lbs/day and 2.1 ug/L respectively, for inorganic arsenic.

Note: The applicable ambient water quality criteria for arsenic is currently undergoing review by the Department and other regulatory authorities. Should the criteria be changed during the term of this permit, the permit may be reopened and amended accordingly.

### H. MERCURY

All mercury sampling (4/Year) required by this permit or required to determine compliance with interim limitations established pursuant to Department rule Chapter 519, shall be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis shall be conducted in accordance with EPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See **Attachment D**, *Effluent Mercury Test Report*, of this permit for the Department's form for reporting mercury test results.

### I. AMBIENT WATER QUALITY MONITORING

**Between July 1 and September 30 of each year**, the permittee is required to participate in the monitoring of ambient water quality on the Penobscot River pursuant to a Department prepared monitoring plan. The total cost to the permittee for the monitoring program shall not exceed a five-year (term of the permit) cap of \$1,000.

## SPECIAL CONDITIONS

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

During the effective period of this permit, the permittee is authorized to receive and introduce into the treatment process or solids handling stream **a daily maximum of 52,000 gallons per day** of transported wastes, subject to the following terms and conditions.

1. "Transported wastes" means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.
2. The character and handling of all transported wastes received must be consistent with the information and management plans provided in application materials submitted to the Department.
3. At no time shall the addition of transported wastes cause or contribute to effluent quality violations. Transported wastes may not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility.

Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. Odors and traffic from the handling of transported wastes may not result in adverse impacts to the surrounding community. If any adverse effects exist, the receipt or introduction of transported wastes into the treatment process or solids handling stream shall be suspended until there is no further risk of adverse effects.

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

## **SPECIAL CONDITIONS**

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

5. The addition of transported wastes into the treatment process or solids handling stream shall not cause the treatment facility's design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of transported wastes into the treatment process or solids handling stream shall be reduced or terminated in order to eliminate the overload condition.
6. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added shall not be recorded as transported wastes but should be reported in the treatment facility's influent flow.
7. During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current Wet Weather Flow Management Plan approved by the Department that provides for full treatment of transported wastes without adverse impacts.
8. In consultation with the Department, chemical analysis is required prior to receiving transported wastes from new sources that are not of the same nature as wastes previously received. The analysis must be specific to the type of source and designed to identify concentrations of pollutants that may pass through, upset or otherwise interfere with the facility's operation.
9. Access to transported waste receiving facilities may be permitted only during the times specified in the application materials and under the control and supervision of the person responsible for the wastewater treatment facility or his/her designated representative.
10. The authorization 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 Chapter 555 of the Department's rules and the terms and conditions of this permit.

**SPECIAL CONDITIONS**

**K. COMBINED SEWER OVERFLOWS (CSO's)**

Pursuant to Chapter 570 of Department Rules, *Combined Sewer Overflow Abatement*, the permittee is authorized to discharge from the following locations of combined sewer overflows (CSO's) (stormwater and sanitary wastewater) subject to the conditions and requirements herein.

1. CSO locations

<u>Outfall Number</u>	<u>Outfall Location</u>	<u>Receiving Water and Class</u>
002	Oak Grove	Penobscot River, Class B
003	James Street	Penobscot River, Class B
006	Hardy Street	Penobscot River, Class B
008	South Main Street	Penobscot River, Class B
010	Brewer Cove	Penobscot River, Class B

2. Prohibited Discharges

- a) The discharge of dry weather flows is prohibited. All such discharges shall be reported to the Department in accordance with Standard Condition D (1) of this permit.
- b) No discharge shall occur as a result of mechanical failure, improper design or inadequate operation or maintenance.
- c) No discharges shall occur at flow rates below the maximum design capacities of the wastewater treatment facility, pumping stations or sewerage system.

3. Narrative Effluent Limitations

- a) The effluent shall not contain a visible oil sheen, settled substances, foam, or floating solids at any time that impair the characteristics and designated uses ascribed to the classification of the receiving waters.
- b) The effluent shall not contain materials in concentrations or combinations that are hazardous or toxic to aquatic life; or which would impair the usage designated by the classification of the receiving waters.
- c) The discharge shall not impart color, turbidity, toxicity, radioactivity or other properties that cause the receiving waters to be unsuitable for the designated uses and other characteristics ascribed to their class.

## SPECIAL CONDITIONS

### K. COMBINED SEWER OVERFLOWS (CSO's)(cont'd)

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

#### 4. CSO Master Plan (see Sections 2 & 3 of Chapter 570 Department Rules)

The permittee shall implement CSO control projects in accordance with an approved CSO Master Plan and abatement schedule. The CSO Master Plan entitled *Sewer System Master Plan For CSO Abatement*, dated June 1993 was approved on April 12, 1995 and the abatement project schedule was last amended on January 15, 2004 and approved by the Department on January 26, 2004.

**On or before December 31, 2011, (PCS Code 04599)** the permittee shall complete the sewer separation project referred to as Upper Hardy Street subsystem in the Jefferson Street and Silk Street areas.

**On or before December 30, 2013, (PCS Code 04599)** the permittee shall submit to the Department for review and approval an updated CSO Master Plan that analyzes the effectiveness of the abatement projects to date and if necessary, includes an implementation schedule for additional abatement projects.

To modify the dates and or projects specified in Special Condition A(4) of this permit (but not dates in the Master Plan), the permittee must file an application with the Department to formally modify this permit. The work items identified in the abatement schedule may be amended from time to time based upon approval by the Department. The permittee must notify the Department in writing prior to any proposed changes to the implementation schedule.

#### 5. Nine Minimum Controls (NMC) (see Section 5 Chapter 570 of Department Rules)

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

## SPECIAL CONDITIONS

### K. COMBINED SEWER OVERFLOWS (CSO's)(cont'd)

6. CSO Compliance Monitoring Program (see Section 6 Chapter 570 of Department Rules)

The permittee shall conduct block testing or flow monitoring according to an approved *Compliance Monitoring Program* on all CSO points, as part of the CSO Master Plan. Annual flow volumes for all CSO locations shall be determined by actual flow monitoring, or by estimation using a model such as EPA's Storm Water Management Model (SWMM).

Results shall be submitted annually as part of the annual *CSO Progress Report* (see below), and shall include annual precipitation, CSO volumes (actual or estimated) and any block test data required. Any abnormalities during CSO monitoring shall also be reported. The results shall be reported on the Department form "*CSO Activity and Volumes*" (**Attachment E** of this permit) or similar format and submitted to the Department on diskette.

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

7. Additions of New Wastewater (see Section 8 Chapter 570 of Department Rules)  
Chapter 570 Section 8 lists requirements relating to any proposed addition of wastewater to the combined sewer system. Documentation of the new wastewater additions to the system and associated mitigating measures shall be included in the annual *CSO Progress Report* (see below). Reports must contain the volumes and characteristics of the wastewater added or authorized for addition and descriptions of the sewer system improvements and estimated effectiveness.

8. Annual CSO Progress Reports (see Section 7 of Chapter 570 of Department Rules)  
**By March 1 (PCS Code 33101)**, of each year the permittee shall submit *CSO Progress Reports* covering the previous calendar year (January 1 to December 31). The CSO Progress Report shall include, but is not necessarily limited to, the following topics as further described in Chapter 570: CSO abatement projects, schedule comparison, progress on inflow sources, costs, flow monitoring results, CSO activity and volumes, nine minimum controls update, sewer extensions, and new commercial or industrial flows.

## SPECIAL CONDITIONS

### K. COMBINED SEWER OVERFLOWS (CSO's)(cont'd)

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

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

#### 9. Signs

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

**CITY OF BREWER  
WET WEATHER  
SEWAGE DISCHARGE  
CSO # AND NAME**

#### 10. Definitions

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

- a. Combined Sewer Overflow - a discharge of excess waste water from a municipal or quasi-municipal sewerage system that conveys both sanitary wastes and storm water in a single pipe system and that is in direct response to a storm event or snowmelt.
- b. Dry Weather Flows - flow in a sewerage system that occurs as a result of non-storm events or are caused solely by ground water infiltration.
- c. Wet Weather Flows - flow in a sewerage system that occurs as a direct result of a storm event, or snowmelt in combination with dry weather flows.

## SPECIAL CONDITIONS

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

**By December 31 of each calendar year**, the permittee shall provide the Department with a certification describing any of the following that have occurred since the effective date of this permit *[PCS Code 95799]*: See **Attachment G** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

- (a) Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;
- (b) Changes in the operation of the treatment works that may increase the toxicity of the discharge; and
- (c) Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge.

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

- (d) Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge.
- (e) Increases in the type or volume of hauled wastes accepted by the facility.

The Department reserves the right to reinstate annual (surveillance level) testing or other toxicity testing if new information becomes available that indicates the discharge may cause or have a reasonable potential to cause exceedences of ambient water quality criteria/thresholds.

### M. WET WEATHER FLOW MANAGEMENT PLAN

The treatment facility staff shall maintain a current written Wet Weather Flow Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall.

The plan shall conform to Department guidelines for such plans and shall include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events. **The permittee shall review their plan annually** and record any necessary changes to keep the plan up to date.

## SPECIAL CONDITIONS

### N. OPERATION & MAINTENANCE (O&M) PLAN

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

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

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

### O. MONITORING AND REPORTING

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

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

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

## SPECIAL CONDITIONS

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

Additional monthly reporting requires submitting (in electronic version preferably) a *DEP-49-CSO Form For Use With Dedicated CSO Primary Clarifiers* (see **Attachment F** of this permit) to:

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

### P. ASSET MANAGEMENT PROGRAM (AMP)

The permittee shall prepare an AMP in accordance with Department guidance entitled, *Maine Department of Environmental Protection, Clean Water State Revolving Fund (CWSRF) Guidance for Minimum Requirements for an Asset Management Program and Reserve Account In Order to Qualify for CWSRF Principal Forgiveness*, DEPLW1190-2010. The AMP shall be reviewed and updated as necessary at least annually. The AMP shall be kept on-site at the permittee's office and made available to Department staff for review during normal business hours.

**On or before April 26, 2012, (PCS Code 59499)** the permittee shall submit a certification to the Department indicating a CWSRF AMP has been implemented in accordance with the Department guidance document DEPLW1190-2010. See **Attachment G** of this permit for a copy of the certification form.

### Q. REPAIR AND REPLACEMENT RESERVE ACCOUNT

**Beginning April 26, 2012**, and every year thereafter totaling five consecutive years, the permittee shall fund a Repair and Replacement Reserve Account in the amount recommended in the permittee's Asset Management Plan or at a minimum of 2% of the permittee's total yearly waste water operation and maintenance budget.

**On or before April 26, 2012**, and every year thereafter for five years (*PCS Code 59499*) the permittee shall submit a certification to the Department indicating a Repair and Replacement Reserve Account has been fully funded as required above. See **Attachment H** of this permit for a copy of the certification form. The permittee shall attach copies of yearly audit reports to the annual certification forms showing funds in the reserve account for each year for the five years and, if funds were expended, what the funds were used for.

## **SPECIAL CONDITIONS**

### **R. WASTE WATER FACILITY ENERGY AUDIT**

The permittee shall conduct a comprehensive process energy audit for the waste water facilities and infrastructure. The audit shall contain the minimum scope of work as presented in a document entitled, *Maine Department of Environmental Protection, Model Energy Audit Request For Proposals*, DEPLW1189-2010.

**On or before April 26, 2012, (PCS Code 43699)** the permittee shall submit a final report to the Department that contains the findings of the energy audit.

### **S. REOPENING OF PERMIT FOR MODIFICATIONS**

Upon evaluation of the tests results specified by 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.

### **T. 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 respects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

# ATTACHMENT A

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

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

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

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

Flow for Day (MGD)<sup>(1)</sup>  Flow Avg. for Month (MGD)<sup>(2)</sup>   
 Date Sample Collected  Date Sample Analyzed

Laboratory \_\_\_\_\_ Telephone \_\_\_\_\_  
 Address \_\_\_\_\_  
 Lab Contact \_\_\_\_\_ Lab ID # \_\_\_\_\_

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

**FRESH WATER VERSION**  
 Please see the footnotes on the last page.

WHOLE EFFLUENT TOXICITY		Effluent Limits, %			Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)	WET Result, % Do not enter % sign	Reporting Limit Check	Possible Exceedence <sup>(7)</sup>		
		Acute	Chronic						Acute	Chronic	
	Trout - Acute										
	Trout - Chronic										
	Water Flea - Acute										
	Water Flea - Chronic										
<b>WET CHEMISTRY</b>											
	pH (S.U.) <sup>(9)</sup>				(8)						
	Total Organic Carbon (mg/L)				(8)						
	Total Solids (mg/L)										
	Total Suspended Solids (mg/L)										
	Alkalinity (mg/L)				(8)						
	Specific Conductance (umhos)										
	Total Hardness (mg/L)				(8)						
	Total Magnesium (mg/L)				(8)						
	Total Calcium (mg/L)				(8)						
<b>ANALYTICAL CHEMISTRY <sup>(3)</sup></b>											
	Also do these tests on the effluent with WET. Testing on the receiving water is optional	Reporting Limit	Effluent Limits, ug/L					Reporting Limit Check	Possible Exceedence <sup>(7)</sup>		
			Acute <sup>(6)</sup>	Chronic <sup>(6)</sup>	Health <sup>(6)</sup>				Acute	Chronic	Health
	TOTAL RESIDUAL CHLORINE (mg/L) <sup>(9)</sup>	0.05				NA					
	AMMONIA	NA				(8)					
M	ALUMINUM	NA				(8)					
M	ARSENIC	5				(8)					
M	CADMIUM	1				(8)					
M	CHROMIUM	10				(8)					
M	COPPER	3				(8)					
M	CYANIDE	5				(8)					
M	LEAD	3				(8)					
M	NICKEL	5				(8)					
M	SILVER	1				(8)					
M	ZINC	5				(8)					

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



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

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

**Notes:**

- (1) Flow average for day pertains to WET/PP composite sample day.
- (2) Flow average for month is for month in which WET/PP sample was taken.
- (3) Analytical chemistry parameters must be done as part of the WET test chemistry.
- (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 B

## **Protocol for Total Phosphorus Sample Collection and Analysis for Waste Water and Receiving Water Monitoring Required by Permits**

Approved Analytical Methods: EPA 365.1 (Rev. 2.0), 365.3, 365.4; SM 4500-P B.5, 4500-P E, 4500-P F; ASTM D515-88(A), D515-88(B); USGS I-4600-85, I-4610-91; OMAAOAC 973.55, 973.56

**Sample Collection:** The Maine DEP is requesting that total phosphorus analysis be conducted on composite effluent samples, unless a facility's Permit specifically designates grab sampling for this parameter. Facilities can use individual collection bottles or a single jug made out of glass or polyethylene. Bottles and/or jugs should be cleaned prior to each use with dilute HCL. This cleaning should be followed by several rinses with distilled water. Commercially purchased, pre-cleaned sample containers are an acceptable alternative. The sampler hoses should be cleaned, as needed.

**Sample Preservation:** During compositing the sample must be at 0-6 degrees C (without freezing). If the sample is being sent to a commercial laboratory or analysis cannot be performed the day of collection then the sample must be preserved using  $H_2SO_4$  to obtain a sample pH of <2 su and refrigerated at 0-6 degrees C (without freezing). The holding time for a preserved sample is 28 days.

**Note:** Ideally, Total P samples are preserved as described above. However, if a facility is using a commercial laboratory then that laboratory may choose to add acid to the sample once it arrives at the laboratory. The Maine DEP will accept results that use either of these preservation methods.

**Laboratory QA/QC:** Laboratories must follow the appropriate QA/QC procedures that are described in each of the approved methods.

**Sampling QA/QC:** If a composite sample is being collected using an automated sampler, then once per month run a blank on the composite sampler. Automatically, draw distilled water into the sample jug using the sample collection line. Let this water set in the jug for 24 hours and then analyze for total phosphorus. Preserve this sample as described above.

# ATTACHMENT C

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

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

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

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

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

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

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

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

place \* next to values statistically different from controls

for trout show final wt and % incr for both controls

Reference toxicant	water flea		trout	
	A-NOEL	C-NOEL	A-NOEL	C-NOEL
toxicant / date				
limits (mg/L)				
results (mg/L)				

Comments \_\_\_\_\_

**Laboratory conducting test**

Company Name \_\_\_\_\_ Company Rep. Name (Printed) \_\_\_\_\_

Mailing Address \_\_\_\_\_ Company Rep. Signature \_\_\_\_\_

City, State, ZIP \_\_\_\_\_ Company Telephone # \_\_\_\_\_

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

# ATTACHMENT D

### Effluent Mercury Test Report

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

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

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

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

#### SAMPLE COLLECTION INFORMATION

Sampling Date: 

mm	dd	yy

 Sampling time: \_\_\_\_\_ AM/PM

Sampling Location: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

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

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

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

#### ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: \_\_\_\_\_

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

Please Enter Effluent Limits for your facility

Effluent Limits:      **Average** = \_\_\_\_\_ ng/L      **Maximum** = \_\_\_\_\_ ng/L

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

#### CERTIFICATION

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

By: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

# ATTACHMENT E

**MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION  
CSO ACTIVITY AND VOLUMES**

MUNICIPALITY OR DISTRICT		MEPDES / NPDES PERMIT NO.								
REPORTING YEAR		SIGNED BY:								
YEARLY TOTAL PRECIPITATION		DATE:								
INCHES		FLOW DATA (GALLONS PER DAY) OR BLOCK ACTIVITY ("1")								
CSO EVENT NO.	START DATE OF STORM	PRECIP. DATA		LOCATION:	LOCATION:	LOCATION:	LOCATION:	LOCATION:	EVENT OVERFLOW GALLONS	EVENT DURATION HRS
		TOTAL INCHES	MAX. HR. INCHES							
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
<b>TOTALS</b>										

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

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

# ATTACHMENT F



# ATTACHMENT G

**CLEAN WATER STATE REVOLVING FUND  
ASSET MANAGEMENT PROGRAM  
CERTIFICATION**

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

hereby certify that as of \_\_\_\_\_ a *Clean Water State Revolving*  
*(date)*

*Fund (CWSRF) Asset Management Program* has been prepared and implemented in accordance with Department Guidance entitled, *Maine Department of Environmental Protection, Clean Water State Revolving Fund (CWSRF) Guidance for Minimum Requirements for an Asset Management Program and Reserve Account In Order to Qualify for CWSRF Principal Forgiveness*, DEPLW1190-2010.

Signature \_\_\_\_\_

Date \_\_\_\_\_

# ATTACHMENT H

**CLEAN WATER STATE REVOLVING FUND**

**REPAIR AND REPLACEMENT RESERVE ACCOUNT  
CERTIFICATION**

I \_\_\_\_\_ representing the \_\_\_\_\_  
(print name of cognizant official) (print name of permittee)

hereby certify to the Maine Department of Environmental Protection that as of \_\_\_\_\_  
(date)

a *Clean Water State Revolving Fund (CWSRF) Repair and Replacement Reserve Account* has been established and is fully funded in accordance with Department Guidance entitled, *Maine Department of Environmental Protection, Clean Water State Revolving Fund (CWSRF) Guidance for Minimum Requirements for an Asset Management Program and Reserve Account In Order to Qualify for CWSRF Principal Forgiveness, DEPLW1190-2010*; and

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

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

That \$ \_\_\_\_\_ was deposited to the Repair and Replacement Reserve Account last year; and

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

That the current balance of the Repair and Replacement Reserve Account is \$ \_\_\_\_\_.

Signature \_\_\_\_\_

Date \_\_\_\_\_

**MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT**

**AND**

**MAINE WASTE DISCHARGE LICENSE**

**FACT SHEET**

Date: **March 22, 2011**

PERMIT NUMBER: **ME0100072**  
LICENSE NUMBER: **W002679-5M-D-R**

NAME AND ADDRESS OF APPLICANT:

**CITY OF BREWER  
80 N. Main Street  
Brewer, Maine 04412**

COUNTY: **Penobscot County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**Brewer Water Pollution Control Facility  
37 Oak Street  
Brewer, Maine 04412**

RECEIVING WATER/CLASSIFICATION: **Penobscot River/Class B**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Kenneth Locke, Supt.**  
**(207) 989-5417**  
e-mail: [klocke@brewerme.org](mailto:klocke@brewerme.org)

**1. APPLICATION SUMMARY**

- a. Application: The City of Brewer (City/permittee hereinafter) has submitted a timely and complete application to the Department for renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100072/Waste Discharge License (WDL) #W002679-5M-C-R (permit hereinafter) which was issued on April 25, 2003, and expired on April 25, 2008. The 4/25/03 permit authorized the discharge of up to a monthly average flow of 5.19 million gallons per day (MGD) of secondary treated sanitary waste waters from a municipal waste water treatment facility to the Penobscot River, Class B, in Brewer, Maine. The 4/25/03 permit also authorized the discharge of primary treated waste waters when the influent to the waste water treatment facility exceeded a sustained daily flow rate of 3,604 gallons per minute (5.19 MGD) or a peak hourly flow rate of 6,438 gallons per minute (9.27 MGD) and authorized the discharge of an unspecified quantity of untreated combined sanitary and storm water from five combined sewer overflow (CSO) outfalls to the Penobscot River, Class B in Brewer, Maine. See **Attachment A** of this Fact Sheet for a location map of the waste water treatment facility.

## 1. APPLICATION SUMMARY (cont'd)

- b. Source Description: The waste water treatment facility receives sanitary waste water flows from approximately 10,000 residential, commercial and industrial users in the City of Brewer. Up until its permanent closure in 2004, the largest industrial user of the system was Eastern Fine Paper Inc. which was located adjacent to the waste water treatment facility. Eastern Fine Paper Inc. was a non-integrated paper mill with a production of approximately 200 tons per day of fine paper. The City had established monthly average and daily maximum local limitations of 1.24 MGD and 1.31 MGD respectively, on Eastern Fine Paper's process waste water conveyed to the City's treatment plant. Cooling waters and boiler blowdown from the mill were discharged directly to the Penobscot River via outfalls pursuant to MEPDES #ME0000086 (WDL #W002522) last issued by the Department on May 1, 2001. Both the MEPDES permit and WDL for Eastern Fine Paper have since been retired.

The Department has authorized the City to accept up to 1,500,000 gallons per year of landfill leachate from a closed municipal landfill for the City of Brewer and receive and treat up to a daily maximum of 52,000 gallons per day of septage from local septage haulers.

The City's sewer collection system is approximately 46 miles in length and is approximately 85% combined and 15% separated. The collection system has a total of 14 pump stations. Nine (9) of the pump stations have on-site generators for back-up power while the remaining pump stations have electrical receptacles whereby back-up power is provided by a portable generator. There are five remaining permitted CSOs associated with the collection system and are listed in Special Condition K, *Combined Sewer Overflows (CSO)*, of this permitting action.

- c. Waste Water Treatment: The waste water treatment facility is designed to provide a secondary level of treatment for a sustained flow of 5.19 MGD. Secondary treatment for the sanitary portion of waste waters received at the facility is provided by two aerated grit chambers, three bar racks, two primary clarifiers, selector basins, an activated sludge system with two aeration basins, four secondary clarifiers and disinfection by way of a chlorine contact chamber. Effluent is measured by a parshall flume prior to being discharged to the Penobscot River via a ductile iron pipe measuring thirty (30) inches in diameter and is considered a bank outfall by the Department. See **Attachment B** of this Fact Sheet for schematic for the waste water treatment facility.

A 1998 upgrade of the treatment facility increased the preliminary, primary, and disinfection systems at the plant to receive up to a daily maximum flow of 13.0 MGD and a peak hourly flow of 14.5 MGD (12.0 MGD from the municipal collection system plus 2.5 MGD from the industrial stream). The upgrade included the addition of a primary clarifier which allowed one primary clarifier to be dedicated to the industrial waste stream, installation of a grit chamber and grinders on the sanitary waste stream, reconfiguration of the primary distribution box and aeration distribution box, the addition, expansion and reconfiguration of the chlorine contact chamber.

## 1. APPLICATION SUMMARY (cont'd)

As part of its combined sewer overflow abatement program, the 1998 upgrade of the facility enables the City to treat a portion of the excess combined sewer flows at the waste water treatment facility. To the extent possible, combined sewer flows receive secondary treatment along with normal dry weather flows. However, in order to prevent damage to the treatment system and/or upsetting the secondary biological process, the volume of water receiving secondary treatment is limited. The force main from the three main pump stations (Hardy St., South Main St., and Brewer Cove) to the treatment plant is capable of delivering 12 MGD to the treatment plant. The maximum combined sewer flow receiving secondary treatment is a peak hourly rate of 9.27 MGD. However, due to seasonal variations and the need to maintain stable treatment for dry weather flows, the amount of combined sewer flow receiving secondary treatment may vary at any given time. Flows received at the treatment facility exceeding a sustained flow rate of 3,604 gallons per minute (5.19 MGD) or peak hourly flow rate of 6,438 gallons per minute of (9.27 MGD) receive primary treatment via grit removal, grinding, measurement and primary clarification. The primary treated portion of the total flow is then combined with secondary treated waste water and the combined waste stream is disinfected prior to discharge to the Penobscot River.

## 2. PERMIT SUMMARY

- a. Terms and conditions - This permitting action is carrying forward all the terms and conditions of the 4/25/03 permitting action except that this permit;
  1. Reducing the seasonal (June – September) monitoring frequency for total phosphorus from 1/Week to 2/Month.
  2. Establishes monthly average and or daily mass and concentrations limitations for arsenic, copper and lead.
- b. History: The most current relevant licensing permitting and other actions include the following:

*February 28, 1989* - The Department issued WDL #W002679-46-A-R for a five-year term.

*February, 1992* - The City of Brewer and the Department entered into an Administrative Consent Agreement and Enforcement Order for violations of parameters in the 2/28/89 WDL. In addition, the Consent Agreement ordered the City to continue to develop and implement a prioritized, long term program for evaluation and abatement of combined sewer overflows (CSO) resulting in the submission of a Master Plan to the Department.

*June, 1993* - The City submitted a CSO Master Plan entitled "Sewer System Master Plan for CSO Abatement" to the Department as required in the 2/92 Consent Agreement. The plan was subsequently approved by the Department on April 12, 1995.

## 2. PERMIT SUMMARY (cont'd)

*March 28, 1994* - The City submitted a document entitled, "City of Brewer Waste Water Treatment Facility Septage Management Plan" to the Department and was subsequently approved by the Department.

*February 21, 1997* - The City submitted the High Flow Management Plan for the waste water treatment facility that was subsequently approved by the Department.

*April 17, 1998* – The Department issued WDL #W002679-46-B-R for a five-year term.

*September 30, 1998* - The EPA issued a renewal of NPDES #ME0100072 for a four and one-half year term.

*May 23, 2000* – The Department administratively modified the 4/17/98 WDL by establishing interim monthly average and daily maximum concentration limits for the discharge of mercury.

*January 12, 2001* – The State of Maine received authorization from the EPA to administer the NPDES permitting program in Maine. From this date forward the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) permit program.

*April 25, 2003* – The Department issued combination MEPDES permit #ME0100072/WDL W002679-5M-C-R for a five-year term.

*September 10, 2004* – The Department issued an administrative modification that reduced the monitoring frequency for BOD and TSS from 1/Day to 5/Week as a result of the permanent shutdown of the Eastern Fine Paper mill, the largest industrial contributor of waste water the City's waste water treatment facility.

*April 10, 2006* – The Department issued a modification of the 4/25/03 MEPDES permit/WDL by incorporating whole effluent toxicity (WET) and chemical specific testing requirements pursuant to Department rule, 06-096 CMR, Chapter 530, *Surface Water Toxics Control Program*, promulgated on October 12, 2005.

*June 18, 2008* – The City submitted a timely and complete application to the Department to renew the MEPDES permit/WDL.

### 3. CONDITIONS OF PERMITS

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S.A., Section 420 and Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, 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 STANDARDS

Maine law, 38 M.R.S.A., Section 467(7)(A)(6) indicates the Penobscot River main stem, from the Maine Central Railroad bridge in Bangor to a line extended in an east-west direction from the confluence of Reeds Brook in Hampden, is classified as a Class B waterway. The Legislature finds that the free-flowing habitat of this river segment provides irreplaceable social and economic benefits and that this use must be maintained. Maine law, 38 M.R.S.A., Section 465(3) describes standards for classification of Class B waters as follows;

*Class B 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 habitat for fish and other aquatic life. The habitat must be characterized as unimpaired.*

*The dissolved oxygen content of Class B waters may not be less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration may not be less than 9.5 parts per million and the 1-day minimum dissolved oxygen concentration may not be less than 8.0 parts per million in identified fish spawning areas. Between May 15th and September 30th, the number of Escherichia coli bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 64 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.*

*Discharges to Class B waters may not cause adverse impact to aquatic life in that the receiving waters must be of sufficient quality to support all aquatic species indigenous to the receiving water without detrimental changes in the resident biological community.*

## 5. RECEIVING WATER CONDITIONS

Table Category 5-D entitled, *Rivers and Streams Impaired By Legacy Pollutants*, in a document entitled, 2008 Maine Integrated Water Quality Report, [referred to as the 305(b) report] published by the Department states the designated use of fishing (consumption) is impaired in a ten mile segment of the Penobscot River between the Veazie Dam and Reed Brook due to the presence of PCBs in fish tissue. The Department is not aware of any information that indicates the discharge from the City of Brewer's waste water treatment facility is causing or contributing to the impairment.

In addition, the Report lists all freshwaters in Maine in "*Category 4-A: Rivers and Streams With Impaired Use, TMDL Completed*. Impairment in this context refers to the designated use of recreational fishing due to elevated levels of mercury in some fish caused by atmospheric deposition. As a result, the State has established a fish consumption advisory for all freshwaters in Maine. The Report states that a regional scale TMDL has been approved. In addition, pursuant to Maine law, 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 for this facility. See the discussion on compliance in section 6(j) of this Fact Sheet.

In the summers of 1997, 2001 and 2007, the Department conducted ambient water quality sampling on a 103-mile segment of the Penobscot River from Millinocket to Bucksport. Reports entitled, Penobscot River Modeling Report, Final, June 2000, Penobscot River Data Report May 2002, and Penobscot River Modeling Report Draft, March 2003, prepared by the Department, indicate there are sections of non-attainment of dissolved oxygen standards as a result of algal blooms in portions of the Class B sections of the rivers. These sections of river have experienced measured DO non-attainment at various locations during periods of low flow and high water temperature. Measured DO non-attainment is predominantly in the early morning hours in sections of river with significant diurnal dissolved oxygen (DO) swings. These significant diurnal DO swings are caused by nutrient enrichment and resulting plant growth. The Department has issued a report entitled, Penobscot River Phosphorus Waste Load Allocation, May 2011 stating seasonal mass based total phosphorus limitations are necessary for the four industrial dischargers on the river as well as monitoring for total phosphorus for five municipal waste water treatment facilities, including the Brewer facility. The specific eutrophication related responses that are targeted by the waste load allocation are not expected to persist into the tidally influenced portion of the Penobscot River. However, water quality improvements associated with the waste load allocation are expected to extend into the tidally influenced section of the river. The effectiveness of the nutrient load reductions will be assessed through routine ambient monitoring for total phosphorous, dissolved oxygen and biochemical oxygen demand. See Special Condition I, *Ambient Water Quality Monitoring*.

**5. RECEIVING WATER CONDITIONS (cont'd)**

If ambient water quality monitoring or future modeling determines that at full permitted discharge limits the City of Brewer's discharge is causing or contributing to the non-attainment of standards, this permit will be re-opened per Special Condition S, *Reopening of Permit For Modifications*, to impose more stringent limitations to meet water quality standards.

**6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

***Secondary Treated Effluent***

- a. Flow: The monthly average flow limitation of 5.19 MGD in the previous permitting action is being carried forward in this permitting action and is considered to be representative of the monthly average design flow for the waste water treatment facility. A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2005 – October 2010 indicates flows have been reported as follows

**Flow**

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	5.19	1.039 – 4.226	2.05

- b. Dilution Factors - The Department established applicable dilution factors for the discharge in accordance with freshwater protocols established in Department Rule Chapter 530, *Surface Water Toxics Control Program*, October 2005. With a monthly average flow limit of 5.19 MGD, the dilution factors are as follows:

$$\text{Modified Acute}^{(1)} = 731 \text{ cfs} \Rightarrow \frac{(731 \text{ cfs})(0.6464) + (5.19 \text{ MGD})}{(5.19 \text{ MGD})} = 92:1$$

$$\text{Acute: 1Q10} = 2,925 \text{ cfs} \Rightarrow \frac{(2,925 \text{ cfs})(0.6464) + (5.19 \text{ MGD})}{(5.19 \text{ MGD})} = 365:1$$

$$\text{Chronic: 7Q10} = 3,243 \text{ cfs} \Rightarrow \frac{(3,243 \text{ cfs})(0.6464) + (5.19 \text{ MGD})}{(5.19 \text{ MGD})} = 405:1$$

$$\text{Harmonic Mean:} = 9,101 \text{ cfs} \Rightarrow \frac{(9,101 \text{ cfs})(0.6464) + (5.19 \text{ MGD})}{(5.19 \text{ MGD})} = 1,134:1$$

Footnotes: (1) Chapter 530 (D)(4)(a) states that analyses using numeric acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone. The 1Q10 is the lowest one day flow over a ten-year recurrence interval. The regulation goes on to say that where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of

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

***Secondary Treated Effluent***

the stream design, up to including all of it. The Department has made the determination that the discharge does not receive rapid and complete mixing with the receiving water, therefore the default stream flow of ¼ of the 1Q10 is applicable in acute statistical evaluations pursuant to Chapter 530.

- c. Biochemical Oxygen Demand (BOD5) & Total Suspended Solids (TSS): - The previous permit established monthly and weekly average BOD5 and TSS best practicable treatment (BPT) concentration limits of 30 mg/L and 45 mg/L respectively, that were based on secondary treatment requirements of Department rule 06-096 CMR Chapter 525 §(3)(III). The maximum daily BOD5 and TSS concentration limits of 50 mg/L were based on a Department best professional judgment (BPJ) of BPT. All three concentration limits are being carried forward in this permitting action.

As for mass limitations, the previous permitting action established monthly average and weekly average limitations based on a monthly average limit of 5.19 MGD. The mass limits are being carried forward in this permitting action and were calculated as follows:

Monthly average:  $(5.19 \text{ MGD})(8.34)(30 \text{ mg/L}) = 1,298 \text{ lbs/day}$   
 Weekly average:  $(5.19 \text{ MGD})(8.34)(45 \text{ mg/L}) = 1,947 \text{ lbs/day}$

No daily maximum mass limitations (report only) for BOD5 or TSS were established in the previous permit or this permitting action as doing so may discourage the City from treating as much waste water as possible through the secondary treatment system during wet weather events.

This permitting action also carries forward a requirement of 85% removal for BOD and TSS pursuant to Department rule 06-096 CMR Chapter 525(3)(III)(a&b)(3).

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2005 – October 2010 indicates BOD and TSS have been reported as follows:

**BOD Mass**

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	1,298	33 - 336	109
Weekly Average	1,947	39 - 593	170
Daily Maximum	Report	62 - 863	299

**BOD Concentration**

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	3 - 12	5
Weekly Average	45	3 - 16	7
Daily Maximum	50	5 - 20	11

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

*Secondary Treated Effluent*

**TSS mass**

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	1,298	20 - 200	73
Weekly Average	1,947	26 - 366	120
Daily Maximum	Report	31 - 564	227

**TSS concentration**

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	1 - 6	3
Weekly Average	45	2 - 17	5
Daily Maximum	50	3 - 22	8

Monitoring frequencies for BOD and TSS of 5/Week are being carried forward from the 9/10/04 administrative modification and are based on a long standing Department guidance document for facilities with a monthly average flow greater than 5.0 MGD.

- d. Settleable Solids - The previous permitting action established a daily maximum concentration limit of 0.3 ml/L considered by the Department to be a BPJ of BPT.

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2005 – October 2010 indicates settleable solids have been reported as follows:

**Settleable solids concentration**

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

- e. Escherichia coliform (*E. coli*) bacteria: The monthly average and daily maximum *E. coli* bacteria limits of 64 colonies/100 ml and 427 colonies/100 ml in the previous permitting action are being carried forward in this permitting action and were based on the State of Maine Water Classification Program criteria for Class B waters at that time. Subsequent to issuance of the 4/23/03 permit, the State Legislature adopted more stringent AWQC for *E. coli* bacteria. The newer criteria for Class B waste are 64 colonies/100 ml as a monthly average and 236 colonies/100 ml as a daily maximum. The Department has made the determination that after taking into consider the dilution associated with the discharge, the BPT limits established in this permitting action are protective of the newer AWQC for bacteria.

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

***Secondary Treated Effluent***

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2005 – October 2010 indicates *E. coli* bacteria have been reported as follows:

***E. coli. bacteria***

<b>Value</b>	<b>Limit (col/100 ml)</b>	<b>Range (col/100 ml)</b>	<b>Mean (col/100 ml)</b>
Monthly Average	64	1.6 – 16.8	8
Daily Maximum	427	4 – 149	70

- f. Total Residual Chlorine - The previous permitting action established a seasonal (May 15 – September 30) daily maximum BPT limit of 1.0 mg/L for the discharge. This permitting action is removing the reference to seasonal as chlorine is toxic all times of the year. Limits on total residual chlorine (TRC) are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. The Department imposes the more stringent of the water quality or technology based limits in permitting actions. End-of-pipe water quality based concentration thresholds may be calculated as follows:

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution	Acute Limit	Chronic Limit
Chlorine	19 ug/L	11 ug/L	92:1	403:1	1.7 mg/L	4.4 mg/L

Example calculation: Acute – 0.019 mg/L (91) = 1.7 mg/L

In the case of the Brewer facility, the calculated acute water quality based threshold is higher than 1.0 mg/l, thus the BPT limit of 1.0 mg/L is imposed as a daily maximum limit. A review of the seasonal DMR data for the period May 2005 – September 2010 indicates the daily maximum TRC discharged is as follows:

**Total residual chlorine**

<b>Value</b>	<b>Limit (mg/L)</b>	<b>Range (mg/L)</b>	<b>Mean (mg/L)</b>
Daily Maximum	1.0	0.58 – 1.0	0.84

- g. Total phosphorus – The previous permitting action established a seasonal (June – September) 1/Week monitoring and reporting requirement for total phosphorus due to the limited assimilative capacity of the Penobscot River. The City was required to report monthly average, weekly average and daily maximum mass and concentrations values for total phosphorus. Gathering such data was required to enable the Department to continually update the river model developed by the Department in calendar year 2001 to predict potential algal blooms that may lead to depressed ambient dissolved oxygen conditions.

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

***Secondary Treated Effluent***

A review of the seasonal DMR data for the period June 2005 – September 2009 indicates total phosphorus discharge values have been reported as follows:

**Total Phosphorus Mass**

<b>Value</b>	<b>Limit (lbs/day)</b>	<b>Range (lbs/day)</b>	<b>Average (lbs/day)</b>
Monthly Average	Report	5 – 31	16
Daily Maximum	Report	9 - 46	24

**Total phosphorus Concentration**

<b>Value</b>	<b>Limit (mg/L)</b>	<b>Range (mg/L)</b>	<b>Average (mg/L)</b>
Monthly Average	Report	0.44 – 2.13	1.0
Daily Maximum	Report	0.79 – 4.5	1.4

Based on the consistency of the data cited above, the Department is making a BPJ determination to reduce the seasonal (June 1 – September 30) monitoring frequency to 2/Month. This permitting action is carrying forward the monthly average and daily maximum reporting requirement for both mass and concentration but eliminating the weekly average reporting requirements as they are not necessary given the change in the monitoring frequency.

- h. pH Range- The previous permitting action established a pH range limitation of 6.0 –9.0 standard units pursuant to Department rule, 06-096 CMR, Chapter 525 §(3)(III)(c). The limits are considered BPT. A review of the DMR data for the period January 2005 – October 2010 indicates the limitation has never been exceeded.
- i. Whole Effluent Toxicity (WET) & Chemical-Specific Testing – Maine law, 38 M.R.S.A., Sections 414-A and 420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department Rules, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants* set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters. WET, priority pollutant and analytical chemistry testing as required by Chapter 530, is included in this permit in order to fully characterize the effluent. This permit also provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment and receiving water characteristics.

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

*Secondary Treated Effluent*

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on invertebrate 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 <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

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

**Screening level testing** – Beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter.

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

**Surveillance level testing** – Beginning upon issuance of the permit and lasting through 12 months prior to permit expiration.

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

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

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

### *Secondary Treated Effluent*

Department rule Chapter 530(D)(3)(b) states in part, *Dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E).*

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 exceedence 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.*”

### **WET evaluation**

On 2/9/11, the Department conducted a statistical evaluation on the most recent 60 months of WET data that indicates that the discharge does not exceed or have a reasonable potential (RP) to exceed the acute or chronic critical ambient water quality criteria (AWQC) thresholds (1.1% and 0.2% – mathematical inverse of the modified acute dilution factor 92:1 and the chronic dilution factor 405:1).

Given the absence of exceedences or reasonable potential to exceed critical WET thresholds, the permittee meets the surveillance level monitoring frequency waiver criteria found at Department rule Chapter 530(D)(3)(b). Therefore, this permit is establishing a requirement for the permittee to only conduct screening level testing for both the water flea and the brook trout that shall be conducted in the 12-month period prior to the expiration date of this permit and every five years thereafter.

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

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

### *Secondary Treated Effluent*

#### Chemical evaluation

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

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

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

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

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

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

### *Secondary Treated Effluent*

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

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

See **Attachment E** of this Fact Sheet for Department guidance that establishes protocols for establishing waste load allocations. The guidance states that the most protective of water quality becomes the facility's allocation. According to the 2/9/11 statistical evaluation (Report ID #342), all pollutants of concern (arsenic, copper and lead) are to be limited based on the segment allocation method.

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

As not to penalize the permittee for operating at flows less than the permitted flow, the Department is establishing concentration limits based on a back calculation from the mass limit utilizing a multiplier of 2.0.

It is noted the Penobscot Indian Nation (PIN) has informally notified the Department of its intent to formally petition the Department to adopt a site specific fish consumption rate for a segment(s) of the Penobscot River for use in calculating human health based ambient water quality criteria (AWQC) specified by 06-096 CMR Department rule, Chapter 584, *Surface Water Quality Criteria For Toxic Pollutants*. Once petitioned, a formal public process as outlined in **Attachment F** of this Fact Sheet, will be invoked and adhered to. Should an alternate fish consumption rate be adopted, this permit may be reopened pursuant to Special Condition S, *Reopening of Permit For Modifications*, of this permit to establish new or revised water quality based limits for pollutants that exceed or have a reasonable potential to exceed human health AWQC.

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

### *Secondary Treated Effluent*

#### Segment allocation methodology

##### **Historical Average:**

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

#### Arsenic (inorganic)

##### Mass limits

Mean concentration (n=8) = 3 ug/L or 0.003 mg/L

Permit flow limit = 5.19 MGD

Historical average mass = (0.003 mg/L)(8.34)(5.19 MGD) = 0.130 lbs/day

The 2/9/11 statistical evaluation indicates the historical average mass of arsenic discharged by the permittee's facility is 21.34% of the arsenic discharged by the facilities on the Penobscot River and its tributaries. Therefore, the permittee's segment allocation for arsenic is calculated as 21.34% of the harmonic mean assimilative capacity of the river at Bangor, the most downstream facility minus the assimilative capacity assigned to the tributaries on the Penobscot River that have permitted discharges. The Department has calculated a chronic assimilative capacity of 0.437 lbs/day at Bangor. Therefore, the mass segment allocation for arsenic for the permittee can be calculated as follows:

Monthly average (harmonic mean) mass limitation for arsenic is calculated as follows:

Monthly average: (Harmonic mean assimilative capacity mass)(% of total arsenic discharged)

$$(0.437 \text{ lbs/day})(0.2134) = 0.093 \text{ lbs/day}$$

##### Concentration limits

Monthly average concentration for inorganic arsenic;

$$\frac{0.093 \text{ lbs/day}}{(5.19 \text{ MGD})(8.34 \text{ lbs/gal.})} = 0.0021 \text{ mg/L or } 2.1 \text{ ug/L}$$

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

### *Secondary Treated Effluent*

Department rule Chapter 530 (C)(6) states:

*All chemical testing must be carried out by approved methods that permit detection of a pollutant at existing levels in the discharge or that achieve detection levels as specified by the Department. When chemical testing results are reported as less than, or detected below the Department's specified detection limits, those results will be considered as not being present for the purposes of determining exceedences of water quality criteria.*

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

As of the date of this permitting action, the Department has limited data on the percentage of inorganic arsenic (approximately 50%) in total arsenic test results. Based on a literature search conducted by the Department, the inorganic fraction can range from 1% - 99% depending on the source of the arsenic. Generally speaking, ground water supplies derived from bedrockwells will likely tend to have higher fractions of inorganic arsenic (As<sup>+3</sup>-arsenite and/or As<sup>+5</sup>-arsenate) than one may find in a food processing facility where the inorganic fraction is low and the organic fraction (arsenobetaine, arsenoribosides) is high. Until the Department and the regulated community in Maine develop a larger database to establish statistically defensible ratios of inorganic and organic fractions in total arsenic test results, the Department is making a rebuttable presumption that the effluent contains a ratio of 50% inorganic arsenic and 50% organic arsenic in total arsenic results.

Being that the only approved test methods for compliance with arsenic limits established in permits is for total arsenic, the Department converted the water quality based end-of-pipe monthly average concentration value of 2.1 ug/L for inorganic arsenic calculated on the previous page of this Fact Sheet into an equivalent total arsenic threshold (assuming 50% of the total arsenic is inorganic arsenic). This results in a total arsenic end-of-pipe monthly average concentration threshold of 4.2 ug/L. The calculation is as follows:

$$\frac{2.1 \text{ ug/L inorganic arsenic}}{0.5 \text{ ug/L inorganic arsenic} / 1.0 \text{ ug/L total arsenic}} = 4.2 \text{ ug/L total arsenic}$$

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

### *Secondary Treated Effluent*

Therefore, a total arsenic value greater than 4.2 ug/L is potentially exceeding the water quality based end-of pipe monthly average concentration value of 2.1 ug/L for inorganic arsenic. Only the results greater than the total arsenic threshold of 4.2 ug/L will be considered a potential exceedence of the inorganic limit of 2.1 ug/L. It is noted the Department's current RL for total arsenic is 5.0 ug/L.

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

Maine law, 38 M.R.S.A., §414-A(2), Schedules of Compliance states "*Within the terms and conditions of a license, the department may establish a schedule of compliance for a final effluent limitation based on a water quality standard adopted after July 1, 1977. When a final effluent limitation is based on new or more stringent technology-based treatment requirements, the department may establish a schedule of compliance consistent with the time limitations permitted for compliance under the Federal Water Pollution Control Act, Public Law 92-500, as amended. A schedule of compliance may include interim and final dates for attainment of specific standards necessary to carry out the purposes of this subchapter and must be as short as possible, based on consideration of the technological, economic and environmental impact of the steps necessary to attain those standards.*" Special Condition G, *Schedule of Compliance – Inorganic Arsenic*, of this permit establishes a schedule as follows:

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

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

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

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

### *Secondary Treated Effluent*

Department rule Chapter 523, Waste Discharge License Conditions, § Section 7, *Schedules of Compliance* sub-§3, *Interim dates*, states in part, “*if a permit establishes a schedule of compliance which exceeds 1 year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.*”

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

Special Condition A, *Effluent Limitations and Monitoring Requirements*, of this permit requires that beginning upon issuance of this permit and lasting through USEPA approval of a test method for inorganic arsenic, the permittee shall conduct 1/Year monitoring for total arsenic. Should the test method approval for inorganic arsenic extend more than one year from the date of the issuance of this permit the sampling and analysis for total arsenic will serve to satisfy the interim requirements specified by Department rule, Chapter 523, *Waste Discharge License Conditions*, Section 7, *Schedules of Compliance*, Sub-section 3, *Interim dates*.

*Chapter 530 §(3)(D)(1) states “For specific chemicals, effluent limits must be expressed in total quantity that may be discharged and in effluent concentration. In establishing concentration, the Department may increase allowable values to reflect actual flows that are lower than permitted flows and/or provide opportunities for flow reductions and pollution prevention provided water quality criteria are not exceeded.*

*With regard to concentration limits, the Department may review past and projected flows and set limits to reflect proper operation of the treatment facilities that will keep the discharge of pollutants to the minimum level practicable.”*

It is noted the calculations for establishing limitations for inorganic arsenic in this Fact Sheet do not increase the EOP concentration for inorganic arsenic by a factor of 2.0 due to uncertainty of the ratio between organic and inorganic fractions of total arsenic. However, the Department has given the permittee some flexibility by evaluating possible exceedences using the rebuttable presumption that the effluent contains a ratio of 50% inorganic arsenic and 50% organic arsenic in total arsenic results. In other words, the equivalent total arsenic concentration threshold has been increased by a factor of 2.0.

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

### *Secondary Treated Effluent*

#### Copper

##### Mass limits

Mean concentration (n=8) = 8.6 ug/L or 0.0086 mg/L

Permit flow limit = 5.19 MGD

Historical average mass = (0.0086 mg/L)(8.34)(5.19 MGD) = 0.37 lbs/day

The 2/9/11 statistical evaluation indicates the historical average mass of copper discharged by the permittee's facility is 2.51% of the copper discharged by the facilities on the Penobscot River and its tributaries. However, the Red Shield Acquisition facility upstream of Bangor facility was limited by the individual allocation for the acute (daily maximum) limit resulting in a surplus of copper to be allocated to downstream dischargers where copper is being limited as a daily maximum value in a permit. In this case, Brewer is the only downstream discharger being limited for acute copper. Therefore, the permittee's acute segment allocation for copper is calculated as 3.68% of the copper discharged on the Penobscot River and its tributaries. As for the chronic allocation, Brewer's historical average mass of the copper discharged is 2.51% of the copper is discharged by the facilities on the Penobscot River and its tributaries

The Department has calculated an acute assimilative capacity of 35.94 lbs/day and a chronic assimilative capacity 30.51 lbs/day of copper at Bangor. Therefore, the mass segment allocations for copper for the permittee can be calculated as follows:

Daily maximum: (Acute assimilative capacity mass)(% of total copper discharged)  
(35.94 lbs/day)(0.0368) = 1.32 lbs/day

Monthly average: (Chronic assimilative capacity mass)(% of total copper discharged)  
(30.51 lbs/day)(0.0251) = 0.77 lbs/day

Since the adoption of Chapter 530, the Department has developed a policy for establishing equitable concentration limits in permits that are greater than calculated end-of-pipe concentrations. In general, most dischargers subject to the Chapter 530 testing requirements are discharging at or about 50% of the flow limitations established in their permits. This provides the Department with the flexibility to establish higher concentration limits in the permit while still maintaining compliance with the water quality based mass limitations. With an actual discharge flow at ½ (0.5) of permitted flow rate, a concentration limit of two times (mathematical inverse of 0.5) the calculated end-of-pipe concentration, will maintain compliance with water quality based mass limits. Therefore, this permitting action is establishing concentration limitations that are two (2) times higher than the calculated end-of-pipe concentrations. The permittee must keep in mind, if flows greater than 50% of the permitted flow are realized, the concentration in the effluent must be reduced proportionally to maintain compliance with the mass limitations.

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

### *Secondary Treated Effluent*

#### Concentration limits:

Daily mass limit = 1.32 lbs/day

$$\frac{(1.32 \text{ lbs/day})}{(8.34 \text{ lbs/gal})(5.19 \text{ MGD})} = 0.030 \text{ mg/L}$$

$$(0.030 \text{ mg/L})(1,000 \text{ ug/mg})(2) = 60 \text{ ug/L}$$

Monthly average mass limit = 0.77 lbs/day

$$\frac{(0.77 \text{ lbs/day})}{(8.34 \text{ lbs/gal})(5.19 \text{ MGD})} = 0.018 \text{ mg/L}$$

$$(0.018 \text{ mg/L})(1,000 \text{ ug/mg})(2) = 36 \text{ ug/L}$$

#### **Lead**

#### Mass limits

Mean concentration (n=8) = 2.9 ug/L or 0.00294 mg/L

Permit flow limit = 5.19 MGD

Historical average mass = (0.00294 mg/L)(8.34)(5.19 MGD) = 0.0127 lbs/day

The 2/9/11 statistical evaluation indicates the historical average mass of lead discharged by the permittee's facility is 3.40% of the lead discharged by the facilities on the Penobscot River and its tributaries. Therefore, permittee's segment allocation for lead is calculated as 3.40% of the chronic assimilative capacity of the river at Bangor, the most downstream facility minus the assimilative capacities assigned to the tributaries on the Penobscot River that have permitted discharges. The Department has calculated a chronic assimilative capacity of 5.33 lbs/day of lead at Bangor. Therefore, the mass segment allocation for lead for the permittee can be calculated as follows:

#### Monthly average mass for lead

$$\begin{aligned} &(\text{Chronic assimilative capacity mass})(\% \text{ of total lead discharged}) \\ &(5.33 \text{ lbs/day})(0.0340) = 0.18 \text{ lbs/day} \end{aligned}$$

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

### *Secondary Treated Effluent*

#### Concentration limits

Monthly average concentration for lead;

$$\frac{0.18 \text{ lbs/day}}{(5.19 \text{ MGD})(8.34 \text{ lbs/gal.})} = 0.0042 \text{ mg/L}$$

$$(0.0042 \text{ mg/L})(1,000 \text{ ug/mg})(2) = 8.4 \text{ or } 8 \text{ ug/L}$$

As for the remaining chemical specific parameters tested to date, none of the test results in the 60-month evaluation period exceed or have a reasonable potential to exceed applicable acute, chronic or human health AWQC. Therefore, this permitting action is carrying forward the waived surveillance level reporting and monitoring frequency for analytical chemistry and priority pollutant testing. As with reduced WET testing, the permittee must file an annual certification with the Department pursuant to Chapter 530 §2(D)(4) and Special Condition L, *06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing* of this permit.

Beginning 12 months prior to the expiration date of the permit, the permittee shall conduct default screening level analytical chemistry testing at 1/Quarter and priority pollutant testing of 1/Year.

- j. Mercury – Pursuant to *Certain deposits and discharges prohibited*, Maine law, 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* on May 25, 2000, to the permittee thereby administratively modifying WDL #W002679-5M-C-R by establishing interim monthly average and daily maximum effluent concentration limits of 4.5 parts per trillion (ppt) and 6.8 ppt, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury. It is noted the limitations have not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit as limitations and monitoring frequencies are regulated separately through 38 M.R.S.A. § 413 and 06-096 CMR 519. However, the interim limitations remain in effect and enforceable and any modifications to the limits and or monitoring requirements will be formalized outside of this permitting document.

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

### *Secondary Treated Effluent*

Maine law 38 M.R.S.A., §420 1-B,(B)(1) states 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 pursuant to section 413, subsection 11. A review of the Department's data base for the period April 2004 through the present indicates the permittee has been in compliance with the interim limits for mercury as the results have ranged from 1.1 ppt to 2.4 ppt with an arithmetic mean of 1.6 ppt.

- h. Transported waste – The previous permitting action authorized the City to receive and treat up 52,000 gallons per day (gpd) of septage from local septage haulers. Department rule Chapter 555, *Addition of Septage To Waste Water Treatment Facilities*, limits the quantity of septage treated at a facility to 1% of the design capacity of treatment facility. In their application for permit renewal the City has requested the Department carry forward the daily quantity of septage it is authorized to receive and treat up to 52,000 gpd. With a design capacity of 5.19 MGD, 52,000 gpd only represents 1.0% of said capacity. The permittee has submitted an up-to-date Septage Management Plan as an exhibit to their April 2008 application for permit renewal.

The Department has reviewed and approved said plan and determined that under normal operating conditions, the addition of 52,000 gpd of septage to the facility will not cause or contribute to upset conditions of the treatment process.

### *Primary Treated Effluent*

For those flows received at the treatment facility which are greater than that which can be treated to a secondary level of treatment, the Department has made a BPJ that primary treatment and disinfection constitutes appropriate and BPT. The only limitations that have been established for this waste stream are daily maximum limitations for *E. coli* bacteria and TRC. As with the limitations established for the secondary treatment process, the *E. coli* bacteria and TRC limits are based on a BPJ of BPT.

The reporting requirements for the parameters in Special Condition A(2) of this permit (Flow, Surface Loading Rate, Overflow Occurrences and BOD5 and TSS percent removal rates) are being carried forward in this permitting action. These are parameters the Department has deemed necessary to evaluate the performance of the primary treatment process. It is noted this permitting action is not carrying forward the BOD5 and TSS percent removal reporting requirements as this information is not providing any meaningful data.

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

*Primary Treated Effluent*

A review of the DMR data for the period January 2005 – November 2010 indicates the following:

k. Flow:

**Flow (DMRs=61)**

Value	Limit (MGD)	Range (MGD)	Total (MGD)
Total gallons/month	Report	0.387 – 3.61 (2005) 0.082 – 2.378 (2006) 0.067 – 2.004 (2007) 0.184 – 2.127 (2008) 0.251 – 1.489 (2009) 0.181 – 2.209 (2010)	35.29 (2005) 22.59 (2006) 11.95 (2007) 25.20 (2008) 18.17 (2009) 35.39 (2010)

l. Surface loading rate

**Surface loading rate (DMRs=61)**

Value	Limit (gpd/sf)	Range (gpd/sf)	Mean (gpd/sf)
Daily Maximum	Report	132 – 2,855	1,775

m. Overflow occurrences

**Overflow occurrences**

Value	Range (# of days)	Total (# of days)
Daily Maximum	---	---
2005	2 - 13	65
2006	1 - 9	45
2007	1 - 10	22
2008	0 - 8	42
2009	1 - 10	48
2010	1 - 6	21

n. BOD concentration

**BOD concentration (DMRs=61)**

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	Report	7 - 155	72

o. TSS concentration

**TSS concentration**

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	Report	71 - 269	142

## 7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

The Department acknowledges that the elimination of the five CSO's in the collection system and the secondary bypass (primary treated only) of sanitary wastewater is a costly long term project. As the City's sewer collection system is upgraded and maintained in accordance to the CSO Master Plan and Nine Minimum Controls, there should be reductions in the frequency and volume of CSO activities and in the waste water receiving primary treatment only at the treatment plant and over time, improvement in the quality of the waste water discharge to the receiving waters over time. As permitted, the Department of Environmental Protection has determined the existing water uses will be maintained and protected.

If ambient water quality monitoring or future modeling determines that at full permitted discharge limits the City of Brewer's discharge is causing or contributing to the non-attainment of standards, this permit will be re-opened per Special Condition S, *Reopening of Permit For Modifications*, to impose more stringent limitations to meet water quality standards.

## 8. PUBLIC COMMENTS

Public notice of this application was made in the Bangor Daily News newspaper on or about June 1, 2008. The Department receives public comments on an application until the date a final agency action is taken on that 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 Chapter 522 of the Department's rules.

## 9. DEPARTMENT CONTACTS

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

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

## 10. RESPONSE TO COMMENTS

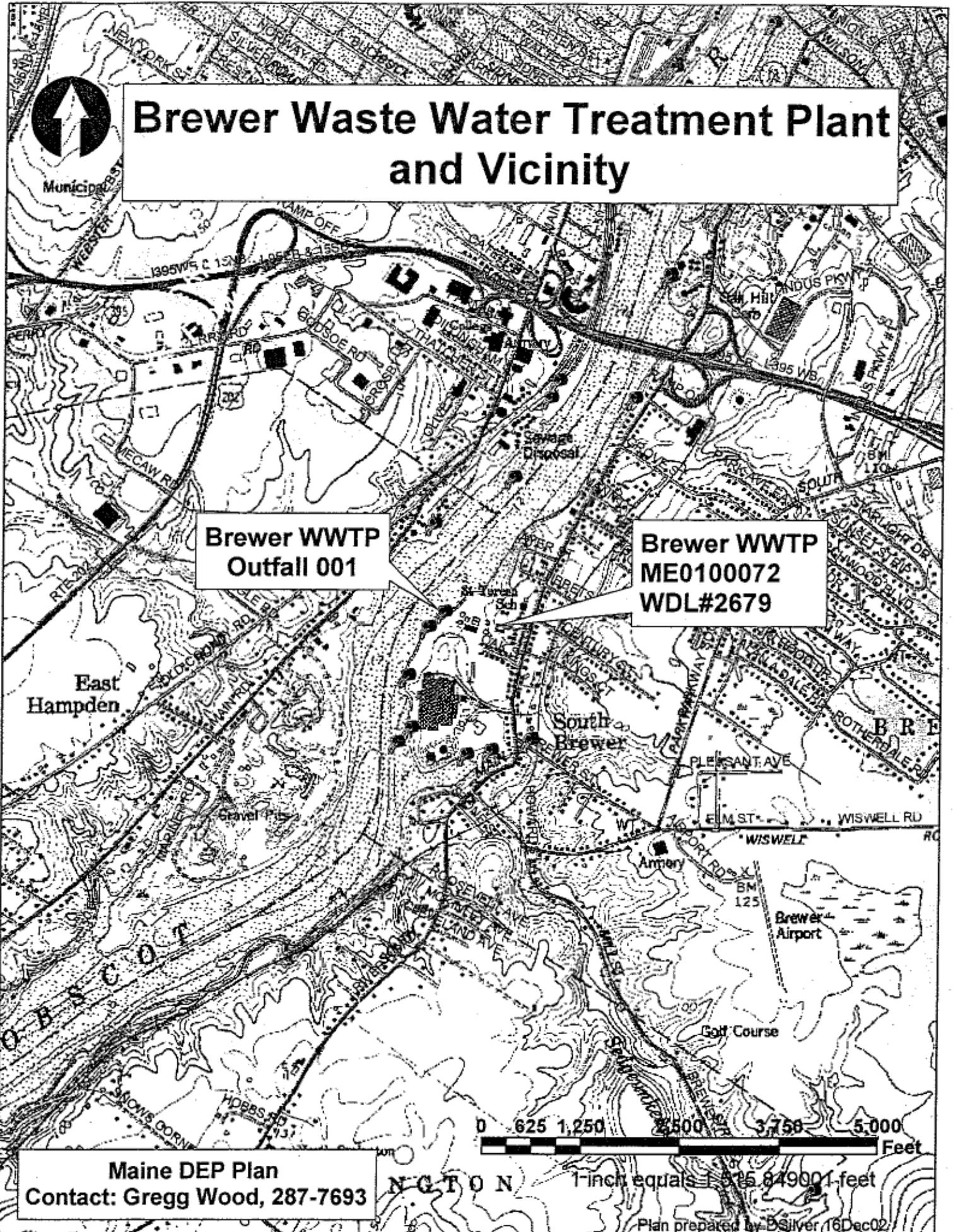
During the period of March 22, 2011, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department did not receive comments from the permittee, state or federal agencies 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



Municipal

# Brewer Waste Water Treatment Plant and Vicinity



**Brewer WWTP  
Outfall 001**

**Brewer WWTP  
ME0100072  
WDL#2679**

East Hampden

South Brewer

Brewer Airport

Golf Course

0 625 1,250 2,500 3,750 5,000 Feet

Maine DEP Plan  
Contact: Gregg Wood, 287-7693

N G T O N

1 inch equals 315.849001 feet

Plan prepared by B. Silver 16Dec02

# ATTACHMENT B



# ATTACHMENT C

2/4/2011

WET TEST REPORT

Data for tests conducted for the period  
04/Feb/2006 - 04/Feb/2011 period.



BREWER

NPDES= ME010007

Effluent Limit: Acute (%) = 0.274

Chronic (%) = 0.247

Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	100	07/29/2007	0.274		
TROUT	C_NOEL	100	07/29/2007	0.247		
WATER FLEA	A_NOEL	100	07/29/2007	0.274		
WATER FLEA	C_NOEL	100	07/29/2007	0.247		

# ATTACHMENT D

Facility Name: **BREWER**NPDES: **ME0100072**

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
05/30/2007	2.62	1.57	12	9	0	0	0	3	0	F	0
07/30/2007	1.34	1.15	137	13	28	46	25	14	11	F	0
12/20/2007	2.06	1.36	12	9	0	0	0	3	0	F	0
03/26/2008	3.70	4.64	12	9	0	0	0	3	0	F	0
09/29/2008	1.95	3.83	123	13	28	46	25	0	11	F	0
06/16/2009	1.37	1.64	12	9	0	0	0	3	0	F	0
12/28/2009	2.62	3.70	123	13	28	46	25	0	11	F	0
12/20/2010	3.14	2.60	126	13	28	46	25	3	11	F	0

y:

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

	09/29/2008	0.050	Y
	12/28/2009	0.050	Y
	12/20/2010	0.050	Y
<b>Parameter: ALDRIN</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	07/30/2007	0.150	Y
	09/29/2008	0.150	Y
	12/28/2009	0.150	Y
	12/20/2010	0.150	Y
<b>Parameter: ALUMINUM</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	05/30/2007	45.000	N
	07/30/2007	93.000	N
	12/20/2007	39.000	N
	03/26/2008	72.000	N
	06/16/2009	26.000	N
	12/20/2010	44.000	N
<b>Parameter: AMMONIA</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	05/30/2007	100.000	Y
	07/30/2007	100.000	Y
	12/20/2007	2300.000	N
	03/26/2008	1800.000	N
	06/16/2009	800.000	N
	12/20/2010	800.000	N
<b>Parameter: ANTHRACENE</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	07/30/2007	2.000	Y
	09/29/2008	2.000	Y
	12/28/2009	2.000	Y
	12/20/2010	2.000	Y
<b>Parameter: ANTIMONY</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	07/30/2007	2.000	Y
	09/29/2008	3.000	N
	12/28/2009	2.000	Y
	12/20/2010	2.000	Y
<b>Parameter: ARSENIC</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	05/30/2007	1.000	N
	07/30/2007	1.000	Y
	12/20/2007	1.000	Y
	03/26/2008	2.000	N
	09/29/2008	2.000	N
	06/16/2009	2.000	Y
	12/28/2009	9.000	N
	12/20/2010	2.000	Y
<b>Parameter: B-BHC</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	07/30/2007	0.050	Y
	09/29/2008	0.050	Y
	12/28/2009	0.050	Y
	12/20/2010	0.050	Y
<b>Parameter: B-ENDCSULFAN</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	07/30/2007	0.050	Y
	09/29/2008	0.050	Y
	12/28/2009	0.050	Y
	12/20/2010	0.050	Y

	07/30/2007	2.000	Y
	09/29/2008	2.000	Y
	12/28/2009	1.000	Y
	12/20/2010	1.000	Y
<b>Parameter: CHLOROFORM</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	07/30/2007	6.000	N
	09/29/2008	16.000	N
	12/28/2009	1.000	Y
	12/20/2010	1.000	Y
<b>Parameter: CHROMIUM</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	05/30/2007	5.000	N
	07/30/2007	3.000	N
	12/20/2007	2.000	Y
	03/26/2008	2.000	Y
	09/29/2008	2.000	Y
	06/16/2009	2.000	Y
	12/28/2009	2.000	Y
	12/20/2010	2.000	Y
<b>Parameter: CHRYSENE</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	07/30/2007	2.000	Y
	09/29/2008	2.000	Y
	12/28/2009	2.000	Y
	12/20/2010	2.000	Y
<b>Parameter: COPPER</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	05/30/2007	13.000	N
	07/30/2007	10.000	N
	12/20/2007	8.000	N
	03/26/2008	23.000	N
	09/29/2008	4.000	N
	06/16/2009	2.000	N
	12/28/2009	6.000	N
	12/20/2010	3.000	N
<b>Parameter: CYANIDE</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	05/30/2007	12.000	N
	07/30/2007	16.000	N
	12/20/2007	3.000	N
	03/26/2008	2.000	Y
	09/29/2008	4.000	N
	06/16/2009	2.000	Y
	12/28/2009	2.000	Y
	12/20/2010	2.000	Y
<b>Parameter: D-BHC</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	07/30/2007	0.050	Y
	09/29/2008	0.050	Y
	12/28/2009	0.050	Y
	12/20/2010	0.050	Y
<b>Parameter: DIBENZO(A,H)ANTHRACE</b>	<b>Test date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>
	07/30/2007	2.000	Y
	09/29/2008	2.000	Y
	12/28/2009	2.000	Y
	12/20/2010	2.000	Y

**Parameter: ISOPHORONE**

Test date	Result (ug/l)	Lsthan
07/30/2007	2.000	Y
09/29/2008	2.000	Y
12/28/2009	2.000	Y
12/20/2010	2.000	Y

**Parameter: LEAD**

Test date	Result (ug/l)	Lsthan
05/30/2007	3.000	N
07/30/2007	3.000	N
12/20/2007	5.000	N
03/26/2008	3.000	N
09/29/2008	3.000	N
06/16/2009	1.000	Y
12/28/2009	4.000	N
12/20/2010	1.000	N

**Parameter: MAGNESIUM**

Test date	Result (ug/l)	Lsthan
07/30/2007	8900.000	N

**Parameter: MERCURY**

Test date	Result (ug/l)	Lsthan
03/30/2006	0.002	N
06/28/2006	0.002	N
12/20/2006	0.002	N
05/29/2007	0.002	N
08/30/2007	0.001	N
12/28/2007	0.001	N
03/28/2008	0.002	N
06/30/2008	0.001	N
09/25/2008	0.001	N
12/31/2008	0.001	N
03/24/2009	0.002	N
06/28/2009	0.002	N
09/25/2009	0.001	N
12/31/2009	0.001	N
03/22/2010	0.002	N
05/26/2010	0.001	N
09/30/2010	0.002	N

**Parameter: METHYL BROMIDE**

Test date	Result (ug/l)	Lsthan
07/30/2007	2.000	Y
09/29/2008	2.000	Y
12/28/2009	1.000	Y
12/20/2010	1.000	Y

**Parameter: METHYL CHLORIDE**

Test date	Result (ug/l)	Lsthan
07/30/2007	2.000	Y
09/29/2008	2.000	Y
12/28/2009	1.000	Y
12/20/2010	1.000	Y

**Parameter: METHYLENE CHLORIDE**

Test date	Result (ug/l)	Lsthan
07/30/2007	5.000	Y
09/29/2008	5.000	Y
12/28/2009	5.000	Y
12/20/2010	5.000	Y

**Parameter: NAPHTHALENE**

Test date	Result (ug/l)	Lsthan
07/30/2007	2.000	Y

# ATTACHMENT E

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

DATE: October 2008

TO: Interested Parties

FROM: Dennis Merrill, DEP

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

\*\*\*\*\*

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

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

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

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

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

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

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

Maine Department of Environmental Protection

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maine Department of Environmental Protection

Working Definitions of Terms Used in the DeTox System.

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

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

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

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

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

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

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

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

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

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

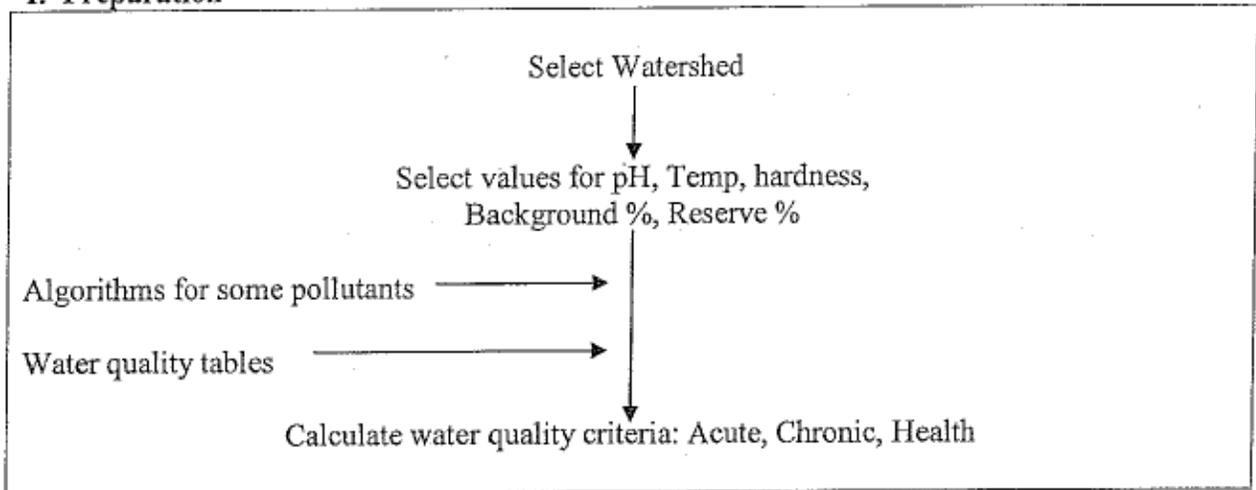
*Segment allocation.* One of three ways of developing an *allocation*. The amount is set by multiplying a facility's *historical discharge percentage* for a specific pollutant by the *assimilative capacity* for that pollutant and criterion. A facility will have different allocation percentages for each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

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

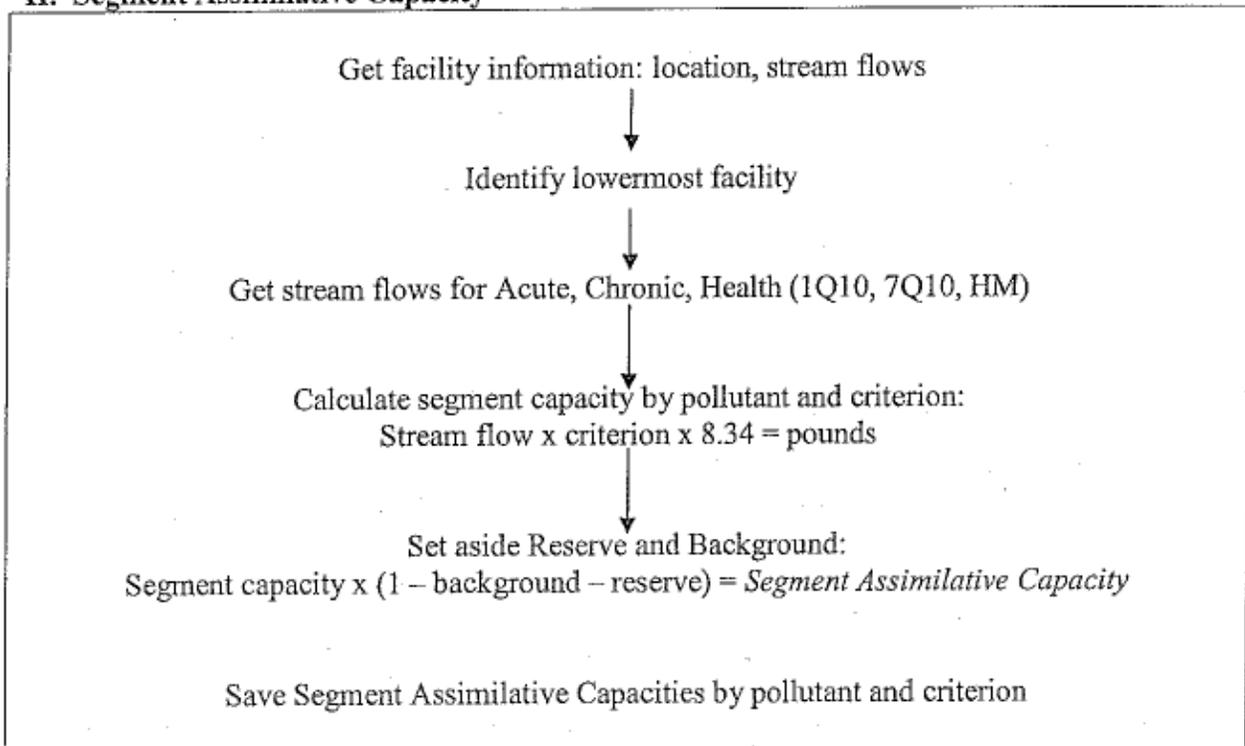
*Water quality criteria.* Standards for acceptable in-stream or ambient levels of pollutants. These are established in the Department's Chapter 584 and are expressed as concentrations in ug/L. There may be separate standards for acute and chronic protection aquatic life and/or human health. Each criterion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

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

**I. Preparation**

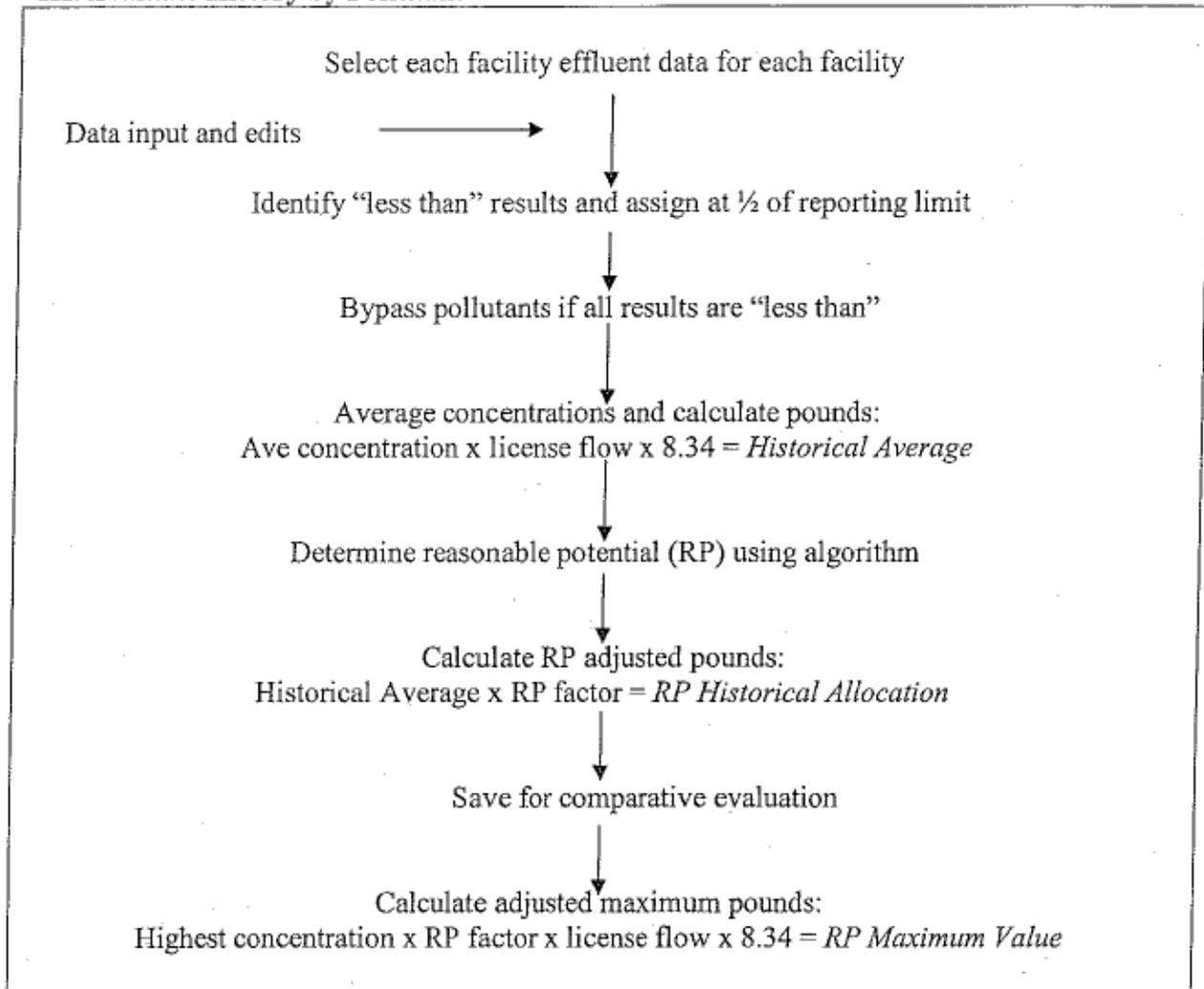


**II. Segment Assimilative Capacity**

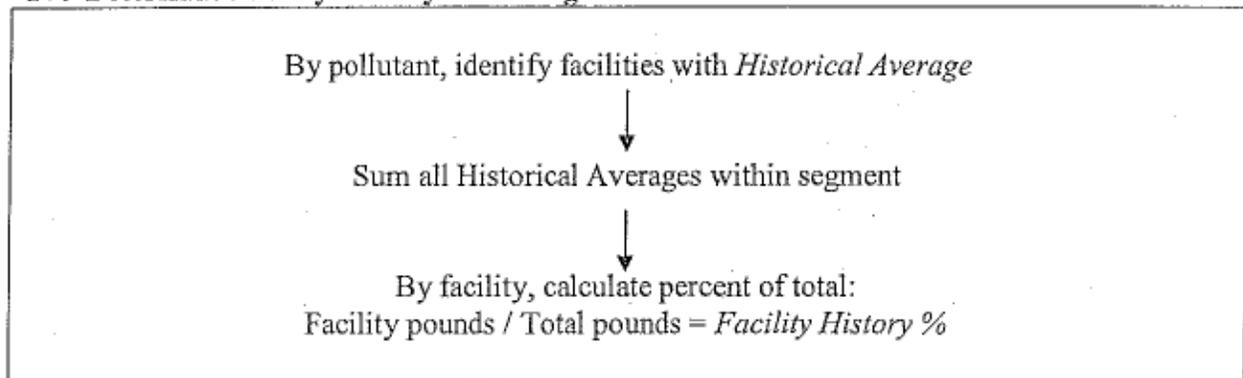


Maine Department of Environmental Protection  
General Processing Steps in "DeTox"

**III. Evaluate History by Pollutant**

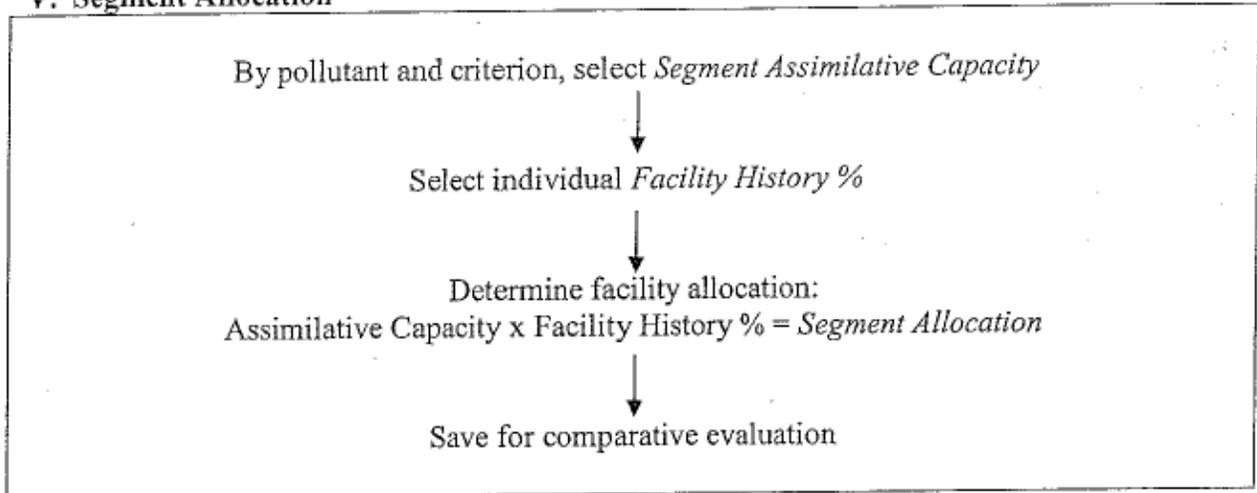


**IV. Determine Facility History Percentage**

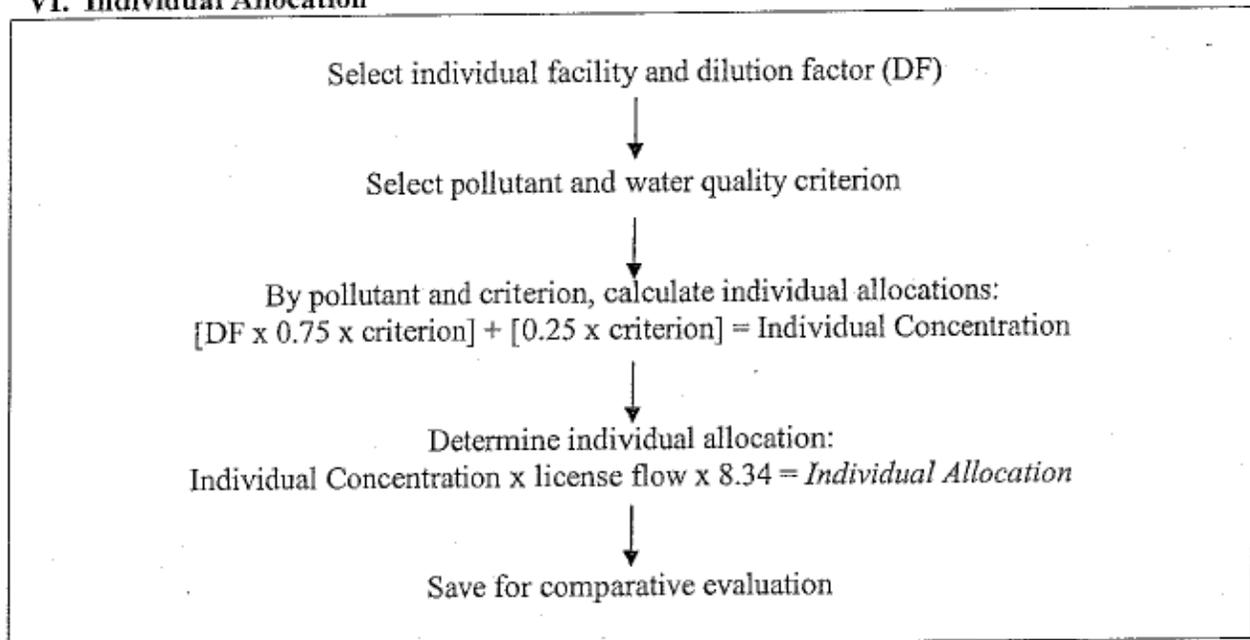


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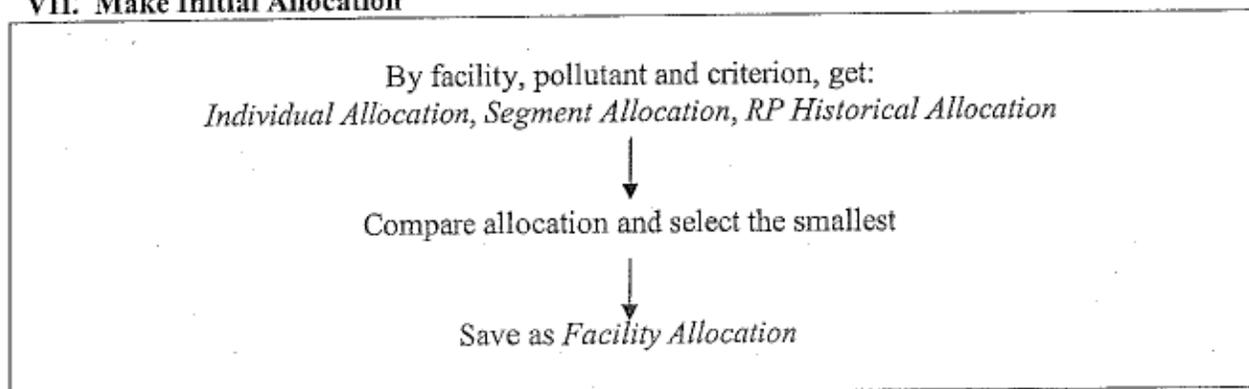
**V. Segment Allocation**



**VI. Individual Allocation**

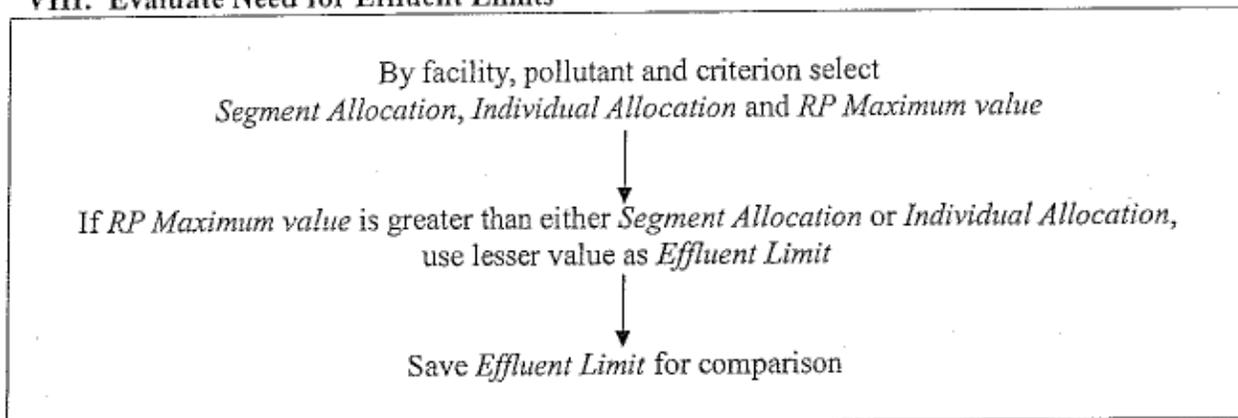


**VII. Make Initial Allocation**

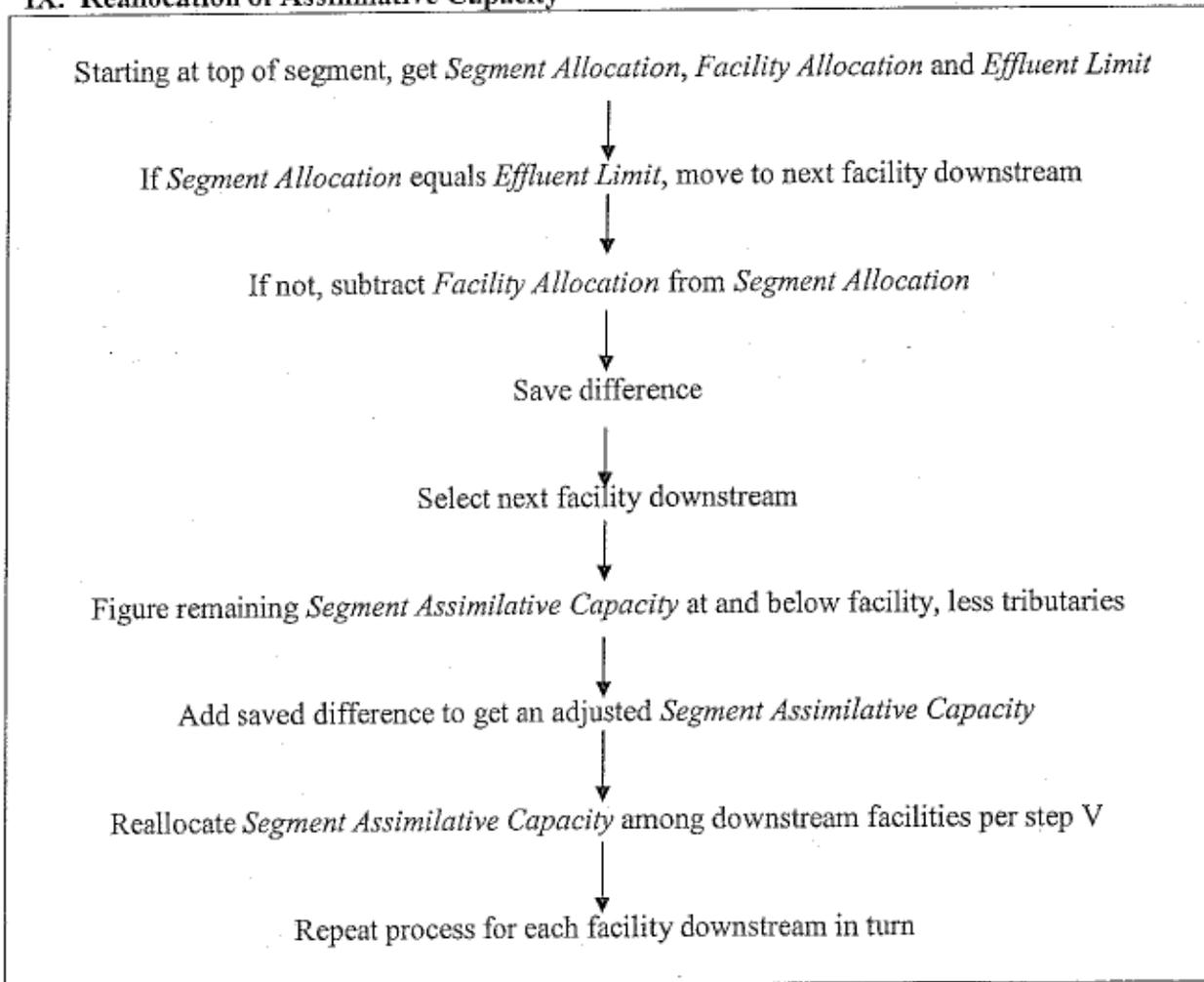


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**VIII. Evaluate Need for Effluent Limits**



**IX. Reallocation of Assimilative Capacity**



# ATTACHMENT F

## Explanatory Statement of Process DEP Will Follow in the Development of Site Specific Water Quality Criteria

References: 38 MRSA, section 420(2)(B) and DEP Rules, Chapters 2 and 584(3)(B)

The BEP has initial jurisdiction for issuance of permits that have limits based on site specific criteria ("SSC") developed pursuant to 38 MRSA, Section 420(2)(B). Typically, requests for SSC will come to the Department staff from one of two sources. A discharge source may have information from studies to indicate that statewide criteria are not appropriate for a given pollutant and location. Alternatively, third parties may have information regarding the unique or different uses of a particular water body or may have information about the relative toxicity of certain pollutants. In any event, a request for SSC must be supported by appropriate scientific studies conducted according to a plan of study approved in advance by the Department in consultation with EPA and the Bureau of Health if human health criteria are involved.

Because SSC are implemented through permit limits, they must be considered in the context of permit issuance or modification proceeding. If a permit issuance or renewal is not pending, any person can request that the Department open for modification a current permit for any cause described in 38 MRSA, Section 414-A(5). See also 38 MRSA, Section 341-D(3). Below are the steps that would likely be followed for consideration of SSC, with options for different processes depending on when and how a person intends to develop the technical information in support of the SSC request. This explanation of process is intended solely as advice to assist persons in exercising their options to request site specific criteria as part of a licensing proceeding under Chapter 584, and is not intended to be judicially enforceable.

1. Initial contact is made with DEP staff, indicating a desire to institute a Site Specific Criteria (SSC) proceeding. A petitioner must file with the Department a petition requesting that the BEP assume jurisdiction of the licensing action and making the necessary showing in support of the request for SSC, as described in 06-096 CMR Chapter 584. This will include, but is not limited to, the pollutants and/or issues of concern, and an outline of the proposed studies and process the party intends to use.
2. At the time a petition is filed with the Department, the petitioner must post a public notice in a newspaper having general circulation in the area that would be affected by the SSC. The Department will (by certified mail) notify potentially affected permitted discharge sources and interested parties of record for those permits. Any person may comment on the pending petition. A public hearing may be requested in accordance with the public notice. A service list of potentially interested parties will also be developed.
3. The DEP will prepare recommendations on whether BEP should dismiss or take up the petition. This, together with any comments received on the petition, will be forwarded to the BEP and the matter will be placed on the BEP's agenda. These materials will also be distributed to the service list.
4. The BEP will consider whether a petition includes the necessary information, as provided in Chapter 584. If the BEP grants initial approval of the petition, all permits that may be

affected by a decision to establish a SSC will be reopened for modification consideration in the same proceeding. If the petition is denied, the license that is the subject of the request, if it is being considered for renewal, will be sent back to the DEP for processing.

5. If the Board grants initial approval of the petition for SSC, the petitioner will prepare a plan of study for SSC investigations and submit it to the DEP staff. The topics to be included in the plan are described in Chapter 584(3)(B). The Department may hold pre-submission conferences with the petitioner and other interested parties. At that time, the parties will discuss issues such as the general scope of the study, the participants, existing studies, and any studies that may be proposed by other parties.
6. The DEP, EPA and, if human health criteria are involved, the Bureau of Health will review the Plan(s) of Study. The Department may approve, approve with conditions or not approve a Plan of Study. If a plan is not approved, the deficiencies and criteria for their correction will be clearly identified and opportunity provided for their correction. Department determinations on plans of study are not subject to appeal. All correspondence will be copied to the service list.
7. The approved Plan of Study will then be implemented. In order to capture seasonal variations, studies using sampling programs may continue for a year or more. Those relying on demographic surveys or literature searches may be done in less time.
8. A report of the studies will be provided to the DEP and the service list. Interested parties will be provided a time specified by the Department, but at least 30 days, in which to provide comments. DEP, EPA and, if appropriate, the Bureau of Health will review the report and comments and formulate a technical analysis.
9. The DEP will provide staff recommendations to the BEP as to whether a public hearing should be held. When requested by an affected licensee or when there is credible conflicting technical information that a hearing will help clarify, a public hearing will be held. Copies of the study reports and all comments received will be provided to the BEP. If no hearing is recommended, the staff will provide a draft order for acceptance or denial of the SCC request.
10. The BEP will either schedule a public hearing or hear argument at a public meeting on staff recommendations.
11. If scheduled, a public hearing will be conducted pursuant to 5 MRSA, Chapter 375, Subchapter IV. Affected licensees have a right to participate in a public hearing and this constitutes their opportunity for hearing on license modifications that may result from SSC determinations. All other parties must petition to intervene in the hearing if they so desire. The Department will then prepare a summary of public comments and staff recommendations and place these on the BEP's agenda.

12. If the BEP decides to set SSC different from the state-wide criteria in Appendix A of Chapter 584, it will direct the staff to prepare permit modifications for affected discharge sources.
13. The staff will prepare draft permit modifications to each discharge source affected, and will notice EPA and other interested parties consistent with Chapter 522.
14. After receiving comments on the draft permits, the staff will prepare proposed permit modifications and place them on the BEP's agenda for consideration.
15. Once approved by the BEP, the modified permits will become valid and subject to the normal appeal provisions of law.

August 2006

# **ATTACHMENT G**

## CHAPTER 530(2)(D)(4) CERTIFICATION

MEPDES# \_\_\_\_\_ Facility Name \_\_\_\_\_

Since the effective date of your permit have there been:	NO	YES (Describe in Comments)
1. changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may <b>increase</b> the toxicity of the discharge?		
2. changes in the operation of the treatment works that may <b>increase</b> the toxicity of the discharge?		
3. changes in industrial manufacturing processes contributing wastewater to the treatment works that may <b>increase</b> the toxicity of the discharge?		

COMMENTS:

Name(print) \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

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

This form may be used to meet the requirements of Chap 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.

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**A. GENERAL PROVISIONS**

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

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

- (a) They are not
  - (i) Designated as toxic or hazardous under the provisions of Sections 307 and 311, respectively, of the Federal Water Pollution Control Act; Title 38, Section 420, Maine Revised Statutes; or other applicable State Law; or
  - (ii) Known to be hazardous or toxic by the licensee.
- (b) The discharge of such materials will not violate applicable water quality standards.

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

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

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

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

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

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

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

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

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

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

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

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

**B. OPERATION AND MAINTENANCE OF FACILITIES**

**1. General facility requirements.**

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

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- maximize removal of pollutants unless authorization to the contrary is obtained from the Department.
- (b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.
  - (c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.
  - (d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.
  - (e) The permittee shall install flow measuring facilities of a design approved by the Department.
  - (f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.

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

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

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

**5. Bypasses.**

- (a) Definitions.
  - (i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
  - (ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.
- (c) Notice.
  - (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

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- (ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D(1)(f), below. (24-hour notice).
- (d) Prohibition of bypass.
  - (i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
    - (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    - (C) The permittee submitted notices as required under paragraph (c) of this section.
  - (ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (d)(i) of this section.

**6. Upsets.**

- (a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
  - (ii) The permitted facility was at the time being properly operated; and
  - (iii) The permittee submitted notice of the upset as required in paragraph D(1)(f) , below. (24 hour notice).
  - (iv) The permittee complied with any remedial measures required under paragraph B(4).
- (d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

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**C. MONITORING AND RECORDS**

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

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

**3. Monitoring and records.**

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (b) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.
- (c) Records of monitoring information shall include:
  - (i) The date, exact place, and time of sampling or measurements;
  - (ii) The individual(s) who performed the sampling or measurements;
  - (iii) The date(s) analyses were performed;
  - (iv) The individual(s) who performed the analyses;
  - (v) The analytical techniques or methods used; and
  - (vi) The results of such analyses.
- (d) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit.
- (e) State law provides that any person who tampers with or renders inaccurate any monitoring devices or method required by any provision of law, or any order, rule license, permit approval or decision is subject to the penalties set forth in 38 MRSA, §349.

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**D. REPORTING REQUIREMENTS**

**1. Reporting requirements.**

- (a) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
  - (i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
  - (ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).
  - (iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
- (b) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Transfers. This permit is not transferable to any person except upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.
- (d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
  - (i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.
  - (ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.
  - (iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.
- (e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- (f) Twenty-four hour reporting.
  - (i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance

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

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

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit.

(B) Any upset which exceeds any effluent limitation in the permit.

(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

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

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

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

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

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

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

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

(i) One hundred micrograms per liter (100 ug/l);

(ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or

(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

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- (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
- (i) Five hundred micrograms per liter (500 ug/l);
  - (ii) One milligram per liter (1 mg/l) for antimony;
  - (iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
  - (iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

**5. Publicly owned treatment works.**

- (a) All POTWs must provide adequate notice to the Department of the following:
- (i) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA or Chapter 528 if it were directly discharging those pollutants.
  - (ii) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
  - (iii) For purposes of this paragraph, adequate notice shall include information on (A) the quality and quantity of effluent introduced into the POTW, and (B) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (b) When the effluent discharged by a POTW for a period of three consecutive months exceeds 80 percent of the permitted flow, the permittee shall submit to the Department a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

**E. OTHER REQUIREMENTS**

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

- (a) For municipal sources. During power failure, all wastewaters which are normally treated shall receive a minimum of primary treatment and disinfection. Unless otherwise approved, alternate power supplies shall be provided for pumping stations and treatment facilities. Alternate power supplies shall be on-site generating units or an outside power source which is separate and independent from sources used for normal operation of the wastewater facilities.
- (b) For industrial and commercial sources. The permittee shall either maintain an alternative power source sufficient to operate the wastewater pumping and treatment facilities or halt, reduce or otherwise control production and or all discharges upon reduction or loss of power to the wastewater pumping or treatment facilities.

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

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

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

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

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

**Maximum daily discharge limitation** means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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



# DEP INFORMATION SHEET

## Appealing a Commissioner's Licensing Decision

Dated: May 2004

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. This INFORMATION SHEET, in conjunction with consulting statutory and regulatory provisions referred to herein, can help aggrieved persons with understanding their rights and obligations in filing an administrative or judicial appeal.

### I. ADMINISTRATIVE APPEALS TO THE BOARD

#### **LEGAL REFERENCES**

DEP's *General Laws*, 38 M.R.S.A. § 341-D(4), and its *Rules Concerning the Processing of Applications and Other Administrative Matters* (Chapter 2), 06-096 CMR 2.24 (April 1, 2003).

#### **HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD**

The Board must receive a written notice of appeal within 30 calendar days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days 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 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 and the applicant a copy of the documents. All 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**

The materials constituting an appeal must contain the following information at the time submitted:

1. *Aggrieved Status.* Standing to maintain an appeal requires the appellant to show they are particularly injured by 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 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 as part of an appeal only when 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 show 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, Section 24(B)(5).

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

1. *Be familiar with all relevant material in the DEP record.* A license file is public information 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.* An applicant proceeding with a project pending the outcome of an appeal 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 initiation of the appeals procedure, including the name of the DEP project manager assigned to the specific appeal, within 15 days of receiving a timely filing. The notice of appeal, all materials accepted by the Board Chair as additional evidence, and any materials submitted in response to the appeal will be sent to Board members along with a briefing and recommendation from DEP staff. Parties filing appeals and interested persons are notified in advance of the final 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. The Board will notify parties to an appeal and interested persons of its decision.

#### **II. APPEALS TO MAINE SUPERIOR COURT**

Maine law allows aggrieved persons to appeal final Commissioner licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2.26; 5 M.R.S.A. § 11001; & MRCivP 80C. Parties to the licensing decision must file a petition for review within 30 days after receipt of notice of the Commissioner's written decision. A petition for review by any other person aggrieved must be filed within 40-days from the date the written decision is rendered. The laws cited in this paragraph and other legal procedures govern the contents and processing of a Superior Court appeal.

#### **ADDITIONAL INFORMATION**

If you have questions or need additional information on the appeal process, contact the DEP's Director of Procedures and Enforcement at (207) 287-2811.

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

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