



STATE OF MAINE  
Department of Environmental Protection

Paul R. LePage  
GOVERNOR

James Brooks  
ACTING COMMISSIONER

May 26, 2011

Mr. Dennis McComb  
Environmental and Safety Manager  
Lincoln Paper and Tissue, LLC  
P.O. Box 490  
Lincoln, Maine 04457

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit # ME0002003  
Maine Waste Discharge License (WDL) Application #W000381-5N-F-R  
**Final Permit**

Dear Mr. McComb:

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 black ink, appearing to read "G. Wood", written over a light blue rectangular stamp.

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

Enc.

cc: Stakeholder Service List  
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**

LINCOLN PAPER & TISSUE LLC	)	MAINE POLLUTANT DISCHARGE
LINCOLN, PENOBSCOT COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PULP & PAPER MANUFACTURING FACILITY	)	AND
ME0002003	)	WASTE DISCHARGE LICENSE
W000381-5N-F-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 LINCOLN PAPER & TISSUE LLC (LPT/permittee hereinafter) with its supportive data, agency review comments, and other related material on file and FINDS THE FOLLOWING FACTS:

**APPLICATION SUMMARY**

LPT has filed a timely and complete application with the Department to renew State Waste Discharge License (WDL) #W000381-44-B-R, which was issued on January 23, 1997, and expired on January 23, 2002. It is noted the January 23, 1997, WDL was subsequently modified on a number of occasions thereafter to establish new or revised limitations for color, dioxin, furan, metals and temperature as well as to suspend a Special Condition pertaining to biological monitoring of the bald eagle.

The LPT mill located in Lincoln, Maine manufactures bleached kraft pulp and bleached kraft fine paper and tissue. LPT is seeking to obtain a combination Maine Pollutant Discharge Elimination System (MEPDES) permit and Waste Discharge License (WDL) to discharge up to a monthly average of 19.3 million gallons per day (MGD) of treated process and other miscellaneous waste waters associated with the pulp and papermaking process including, but not limited to, cooling waters, treated process waste waters from other commercial facilities and storm water from various areas of the mill complex to the Penobscot River. LPT's waste water collection and treatment systems are also used as elementary neutralization pursuant to Maine law, 38 MRSA, §1319-1. The mill produces approximately 450 air-dried tons/day of bleached kraft pulp/fine paper and tissue from hardwood chips (50%) and recycled softwood sawdust (50%).

## **PERMIT MODIFICATIONS REQUESTED**

Outfall #001 – Final outfall of treated process waste water, cooling water and storm water.

- a. Eliminate monitoring for dioxin at the final outfall (Outfall #001).
- b. Eliminate water quality based limitations and monitoring requirements for arsenic and lead.
- c. Eliminate the requirement for 80% removal for total suspended solids (TSS).
- d. Incorporate the pH excursion language found in Department rules for permittee's that monitor pH on a continuous basis.
- e. Reduce the monitoring frequency for adsorbable organic halides (AOX) to 1/Quarter.

Outfall #002 – Leachate and storm water runoff

- f. Eliminate the outfall from the permit in its entirety as the watershed in which leachate and storm water runoff are generated are no longer owned by the permittee.

Outfall #100 – Bleach plant (internal waste stream)

- h. Eliminate the requirement to report the percentage of chlorine dioxide substitution.

## **PERMIT SUMMARY**

On January 12, 2001, the Department received authorization from the U.S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) program in Maine excluding areas of special interest to Maine Indian Tribes. On October 30, 2003, after consultation with the U.S. Department of Justice, USEPA extended Maine's NPDES program delegation to all but tribally owned lands. From that point forward, the program has been referred to as the MEPDES program and will utilize a permit number of #ME0002003 (same as the NPDES permit) as a reference number for LPTs MEPDES permit.

**PERMIT SUMMARY (cont'd)**

This permit is significantly different than the effective NPDES permit last issued by the EPA on March 28, 1985, and the effective WDL issued by the State of Maine on January 23, 1997, and subsequently modified on April 18, 1997, November 6, 1998, and August 23, 2002. This permit includes requirements pursuant to federal regulation found at 40 Code of Federal Regulation (CFR) Part 430 which is often referred to as the "Cluster Rule." The regulation was promulgated by the EPA in April of 1998.

Terms and conditions being carried forward from WDL #W000381-44-B-R dated January 23, 1997, and subsequent WDL modifications cited above include, but are not limited to:

1. Tiered seasonal technology based mass limitations for biochemical oxygen demand (BOD5) and total suspended solids (TSS) and limitations for process waste waters and cooling water flows.
2. The daily maximum technology based temperature limit of 120°F.
3. The technology based pH range limitation of 5.0 -9.0 standard units.
4. The quarterly average technology based mass color limit of 175 lbs/ton of unbleached pulp produced.
5. The daily maximum concentration limit of <10 pg/L for 2,3,7,8 TCDD (dioxin) and 2,3,7,8 TCDF (furan) in the bleach plant effluent, Outfall #100, an internal waste stream for the mill.
6. Testing requirements for whole effluent toxicity (WET) and chemical specific (priority pollutant and analytical chemistry) testing.

This permit is different from WDL #W000381-44-B-R dated January 27, 1997 and subsequent WDL modifications previously cited in that it:

7. Removes the monthly average and daily maximum mass and concentration reporting requirements for mercury. It is noted quarterly monitoring remains in effect pursuant to Department Rule, Chapter 519 and reporting of said results are tracked separately by the Department.
8. Establishes monthly average and daily maximum production based mass limits for adsorbable organic halides (AOX).

**PERMIT SUMMARY** (cont'd)

9. Establishes daily maximum concentration limits for 12 chlorinated phenolic compounds for the bleach plant, Outfall #100.
10. Establishes monthly average and daily maximum production based limits for chloroform for the bleach plant, Outfall #100.
11. Requires the permittee to implement and periodically update a Best Management Plan (BMP) for the mill operations in accordance with federal regulation 40 CFR, Part 403.03(d).
12. Establishes a seasonal (June 1 – September 30) monthly average water quality based mass limitation and monitoring requirement for total phosphorus.
13. Establishing a seasonal requirement to fund ambient water quality monitor on the Penobscot River in accordance with a Department approved plan.
14. Modifies the critical acute and chronic dilution factors associated with the discharge from the mill based on revised 1Q10 and 7Q10 low flow values for the Penobscot River.
15. Establishes new or revised monthly average and or daily maximum water quality based limitations for aluminum, copper and lead.

## CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated April 12, 2011, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
3. The provisions of the State's antidegradation policy, 38 M.R.S.A., 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 discharge will be subject to effluent limitations that require application of best practicable treatment.

**ACTION**

THEREFORE, the Department APPROVES the above noted application of LINCOLN PAPER & TISSUE LLC, to discharge up to a monthly average of 19.3 million gallons per day (MGD) of treated process and other miscellaneous waste waters associated with the pulp and papermaking process including, but not limited to, treated pulp and paper manufacturing waste water, cooling waters, treated process waste waters from other commercial facilities and storm water from various areas of the mill complex to the Penobscot River, 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 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 January 24, 2002.  
Date of application acceptance January 25, 2002.

This order prepared by GREGG WOOD, BUREAU OF LAND AND WATER QUALITY  
ME0002003 2011 5/22/11



**SPECIAL CONDITION**

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. The permittee is authorized to discharge treated process waste waters, including bleach plant effluent (internal waste stream), cooling waters and storm waters to the Penobscot River. Such discharges shall be limited and monitored by the permittee as specified below. The italicized numeric values in brackets in the table below and the tables that follow are not limitations but are code numbers used by Department personnel to code Discharge Monitoring Reports (DMR's).

**OUTFALL #001 – Treated process waste waters, cooling waters and storm water**

***Current Production  $\Rightarrow \leq 430$  -  $< 450$  ADTPD of unbleached pulp***

Effluent Characteristic	Monitoring Requirements					
	<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
Production [00145]	Report <sup>(1)</sup>	---	---	---	1/Month [01/30]	Calculate[CA]
Process Flow (MGD) [50050] Thermal flow (MGD)	--- ---	13.5 MGD 2.3 MGD [03]	--- ---	--- ---	Continuous [99/99]	Recorder[RC]
<u>BOD<sub>5</sub></u> [00310] June 1 – September 30	4,231 lbs/day	8,500 lbs/day	---	---	1/Day	Composite
October 1 – May 31	5,760 lbs/day [26]	9,987 lbs/day [26]	---	---	1/Day [01/01]	Composite [24]
<u>TSS</u> [00530] June 1 – September 30	10,980 lbs/day	18,000 lbs/day	---	---	1/Day	Composite
October 1 – May 31	12,920 lbs/day [26]	20,450 lbs/day [26]	---	---	1/Day [01/01]	Composite [24]

**SPECIAL CONDITION**

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

**OUTFALL #001 – Treated process waste waters, cooling waters and storm water**

***Tier I  $\Rightarrow$   $>450 - \leq 540$  ADTPD of unbleached pulp***

Effluent Characteristic		Monitoring Requirements				
	Monthly <u>Average</u> as specified	Daily <u>Maximum</u> as specified	Monthly <u>Average</u> as specified	Daily <u>Maximum</u> as specified	Measurement <u>Frequency</u> as specified	Sample <u>Type</u> as specified
Production [00145]	Report <sup>(1)</sup>	---	---	---	1/Month [01/30]	Calculate[CA]
Process Flow (MGD) [50050] Thermal flow (MGD)	--- ---	14.6 MGD 2.5 MGD [03]	--- ---	--- ---	Continuous [99/99]	Recorder[RC]
<u>BOD<sub>5</sub></u> [00310] June 1 – September 30	4,654 lbs/day	9,350 lbs/day	---	---	1/Day	Composite
October 1 – May 31	6,336 lbs/day [26]	10,986 lbs/day [26]	---	---	1/Day [01/01]	Composite [24]
<u>TSS</u> [00530] June 1 – September 30	12,078 lbs/day	19,800 lbs/day	---	---	1/Day	Composite
October 1 – May 31	14,212 lbs/day [26]	22,495 lbs/day [26]	---	---	1/Day [01/01]	Composite [24]

**SPECIAL CONDITION**

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

**OUTFALL #001 – Treated process waste water, cooling water and storm water**

***Tier II ⇒ >540 ADTPD of unbleached pulp***

Effluent Characteristic		Monitoring Requirements				
	<b>Monthly Average</b> as specified	<b>Daily Maximum</b> as specified	<b>Monthly Average</b> as specified	<b>Daily Maximum</b> as specified	<b>Measurement Frequency</b> as specified	<b>Sample Type</b> as specified
Production [00145]	Report <sup>(1)</sup>	---	---	---	1/Month [01/30]	Calculate[CA]
Process Flow (MGD) [50050]	---	16.3 MGD	---	---	Continuous	Recorder[RC]
Thermal flow (MGD)	---	3.0 MGD [03]	---	---	[99/99]	
<u>BOD<sub>5</sub></u> [00310] June 1 – September 30	5,585 lbs/day	11,220 lbs/day	---	---	1/Day	Composite
October 1 – May 31	7,603 lbs/day [26]	13,183 lbs/day [26]	---	---	1/Day [01/01]	Composite [24]
<u>TSS</u> [00530] June 1 – September 30	14,494 lbs/day	23,760 lbs/day	---	---	1/Day	Composite
October 1 – May 31	17,054 lbs/day [26]	26,994 lbs/day [26]	---	---	1/Day [01/01]	Composite [24]

**SPECIAL CONDITION**

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

**OUTFALL #001 – Treated process waste water, cooling water and storm water**

Effluent Characteristic		Monitoring Requirements				
	<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
<u>Temperature</u> [00011] June 1 – September 30 October 1 – May 31	---	---	---	120°F [15]	1/Day [01/01]	Measure [MS]
	---	---	---	120 °F [15]	1/Week [01/07]	Measure [MS]
Color <sup>(2)</sup> [00084]	175 lbs/ton [42]	---	---	---	3/Week [03/07]	Calculate [CA]
Adsorbable Organic Halides <sup>(3)</sup> (AOX) [03594]	---	---	0.623 kg/kkg [31]	0.951 kg/kkg [31]	1/Quarter [01/90]	Composite [24]
<u>Total Phosphorus</u> <sup>(4)</sup> [00665] (June 1 – September 30)	68 lbs/day [26]	Report lbs/day [26]	Report ug/L [19]	Report ug/L [19]	1/Week [01/07]	Composite [24]
pH (Std. Unit) [00400]	---	--	---	5.0 – 9.0 SU <sup>(5)</sup> [12]	Continuous [99/99]	Recorder [RC]
Aluminum (Total) [01105]	468 lbs./day [26]	---	8,313 ug/L [28]	---	1/Year [01/YR]	Composite [24]
Copper (Total) [01042]	7.1 lbs./day [26]	6.0 lbs./day [26]	106 ug/L [28]	126 ug/L [28]	1/Year [01/YR]	Composite [24]
Lead (Total) [01051]	0.56 lbs./day [26]	---	10 ug/L [28]	---	1/Year [01/YR]	Composite [24]

**SPECIAL CONDITIONS**

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

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

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
<b>Whole Effluent Toxicity<sup>(6)</sup></b> <u><b>Acute – NOEL</b></u> <i>Ceriodaphnia dubia</i> (Water flea) [TDA3B] <i>Salvelinus fontinalis</i> (Brook trout) [TDA6F]  <u><b>Chronic – NOEL</b></u> <i>Ceriodaphnia dubia</i> (Water flea) [TDA3B] <i>Salvelinus fontinalis</i> (Brook trout) [TDA6F]	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Analytical chemistry <sup>(7)</sup> [51168]	---	---	---	Report ug/L [28]	1/Quarter [01/90]	Composite/Grab [24]
Priority Pollutant <sup>(8)</sup> [50008]	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/Grab [24]

**SPECIAL CONDITIONS**

**A. OUTFALL #100 (Bleach Plant)**

Effluent Characteristic		Discharge Limitations			Monitoring Requirements	
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow [50050]	Report MGD [03]	Report MGD [03]	---	---	1/Day <sup>(9)</sup> [01/01]	Measure [MS]
2,3,7,8 TCDD (Dioxin) <sup>(10)</sup> [34675]	---	---	---	<10 pg/L <sup>(11)</sup> [3L]	1/Year [01/YR]	Composite [24]
2,3,7,8 TCDF (Furan) <sup>(10)</sup> [38691]	---	---	---	<10 pg/L <sup>(11)</sup> [3L]	1/Year [01/YR]	Composite [24]
Trichlorosyringol <sup>(12)</sup> [73054]	---	---	---	<2.5 ug/L <sup>(11)</sup> [28]	2/Year [02/YR]	Composite [24]
3,4,5-Trichlorocatechol <sup>(12)</sup> [73037]	---	---	---	<5.0 ug/L <sup>(11)</sup> [28]	2/Year [02/YR]	Composite [24]
3,4,,6- Trichlorocatechol <sup>(12)</sup> [51024]	---	---	---	<5.0 ug/L <sup>(11)</sup> [28]	2/Year [02/YR]	Composite [24]
3,4,5-Trichloroguaiacol <sup>(12)</sup> [61024]	---	---	---	<2.5 ug/L <sup>(11)</sup> [28]	2/Year [02/YR]	Composite [24]
3,4,6-Trichloroguaiacol <sup>(12)</sup> [51022]	---	---	---	<2.5 ug/L <sup>(11)</sup> [28]	2/Year [02/YR]	Composite [24]
4,5,6-Trichloroguaiacol <sup>(12)</sup> [73088]	---	---	---	<2.5 ug/L <sup>(11)</sup> [28]	2/Year [02/YR]	Composite [24]
2,4,5-Trichlorophenol <sup>(12)</sup> [61023]	---	---	---	<2.5 ug/L <sup>(11)</sup> [28]	2/Year [02/YR]	Composite [24]
2,4,6-Trichlorophenol <sup>(12)</sup> [34621]	---	---	---	<2.5 ug/L <sup>(11)</sup> [28]	2/Year [02/YR]	Composite [24]
Tetrachlorocatechol <sup>(12)</sup> [79850]	---	---	---	<5.0 ug/L <sup>(11)</sup> [28]	2/Year [02/YR]	Composite [24]
Tetrachloroguaiacol <sup>(12)</sup> [73047]	---	---	---	<5.0 ug/L <sup>(11)</sup> [28]	2/Year [02/YR]	Composite [24]
2,3,4,6-Tetrachlorophenol <sup>(12)</sup> [77770]	---	---	---	<2.5 ug/L <sup>(11)</sup> [28]	2/Year [02/YR]	Composite [24]
Pentachlorophenol <sup>(12)</sup> [39032]	---	---	---	<5.0 ug/L <sup>(11)</sup> [28]	2/Year [02/YR]	Composite [24]
Chloroform <sup>(13)</sup> [32106]	4.14 g/kg [20]	6.92 g/kg [20]	---	---	1/Quarter [01/90]	Composite [CP]

## SPECIAL CONDITIONS

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

#### Outfall #001 - Treated process waste water, cooling water and storm water

##### Footnotes:

**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).

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) **Production** – Report a numeric value of “1” current production ( $\leq 430$  -  $<450$  ADTPD) a value of “2” for Tier I production ( $450$  ADTP -  $\leq 540$  ADTPD), a value of “3” for Tier II production ( $>540$  ADTPD) where ADTPD is unbleached pulp.
- (2) **Color** – The limitation is a calendar quarterly average limitation. Quarterly results shall be reported in the monthly DMR's for the months of March, June, September and December of each calendar year. The permittee shall monitor the true color (at a pH of 7.6 S.U) in the effluent from Outfall #001 at a minimum of three (3) times per week. The calculated mass discharged, expressed as lbs/ton of unbleached pulp produced, shall be based on air-dried tons of brown stock entering the bleach plant. A color pollution unit is equivalent to a platinum cobalt color unit as described in NCASI Technical Document #253. The mass of color is defined as the number of color pollution units multiplied by the volume of effluent discharged in million gallons per day multiplied by 8.34.

## SPECIAL CONDITIONS

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

#### Outfall #001 - Treated process waste water, cooling water and storm water

##### Footnotes:

- (3) **AOX** - The analytical method to be used to determine adsorbable organic halides shall be EPA Method 1650 for which a ML (Minimum Level) of 20 ug/l shall be attained. The ML is defined as the level at which the analytical system gives recognizable signals and an acceptable calibration point. The mass discharged shall be based on air-dried tons of brown stock entering the bleach plant at the stage where chlorine based compounds are first added.
- (4) **Total phosphorus** – See **Attachment B** of this permit for a Department protocol.
- (5) **pH** – The total time during which the pH values may be outside the range of 5.0 – 9.0 standard units shall not exceed 7 hours and 26 minutes in any calendar month and no individual excursion from said pH range shall exceed 60 minutes.
- (6) **WET** - Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions set at levels to bracket the modified acute and chronic critical water quality threshold dilution factors of 0.92% and 0.88 % respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points. The critical acute and chronic thresholds were derived as the mathematical inverse of the applicable acute and chronic dilution factors of 108:1 and 113:1 respectively.

**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 WET testing at a minimum frequency of once per year (1/Year) for both species. Acute and chronic tests shall be conducted on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*). It is noted that based on a statistical evaluation on the WET tests submitted to the Department, the permittee has been granted a waiver from surveillance level WET testing in the first four years of the term of the permit.

Once received by the permittee, WET test results must be submitted to the Department no 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 their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 0.92% and 0.88% respectively.



**SPECIAL CONDITIONS**

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

**Outfall #001 - Treated process waste water, cooling water and storm water**

Footnotes:

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.

- a. Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, Fourth Edition, October 2002, EPA-821-R-02-013.
- b. Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002, EPA-821-R-02-012.

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.

- (7) **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 analytical chemistry testing at a minimum frequency of once per calendar quarter (1/Quarter) for four consecutive calendar quarters. It is noted that based on a statistical evaluation of the analytical chemistry data submitted to the Department, the permittee has been granted a waiver from surveillance level analytical chemistry testing in the first four years of the term of the permit.

- (8) **Priority pollutant testing** – 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 priority pollutant testing at a minimum frequency of once per year (1/Year). It is noted Department rule Chapter 530, *Surface Water Toxics Control Program*, does not establish routine surveillance level testing priority pollutant testing.

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 detection of a pollutant at existing levels in the effluent or that achieve minimum reporting levels of detection as specified by the Department.

## SPECIAL CONDITIONS

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

#### Outfall #001 - Treated process waste water, cooling water and storm water

##### Footnotes:

Once received by the permittee, 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 their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department, possible exceedences of the acute, chronic or human health AWQC as established in Department rule Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*. For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "NODI-9" monitoring not required this period.

#### Outfall #100 – Bleach plant

- (9) **Flow** – Shall be calculated on the same day(s) of the month that the bleach plant effluent is sampled for 2,3,7,8 TCDD (Dioxin), 2,3,7,8 TCDF (Furan), twelve (12) chlorinated phenolic compounds or chloroform.
- (10) **2,3,7,8 TCDD (Dioxin) & 2,3,7,8 TCDF (Furan)** – The analytical method to be used to determine the concentrations of dioxin and furan shall be EPA Method 1613B. See Special Condition J of this permit.
- (11) **Minimum Levels (ML's)** - The limitations established in this permitting action for dioxin, furan and the 12 chlorinated phenolic compounds are equivalent to the ML's established for EPA Methods 1613 and 1653 respectively. Compliance will be based on the ML's as listed in Special Condition A of this permit. Any level of TCDD/TCDF reported below the ML is not quantifiable and is considered an estimate.
- (12) **12 Chlorinated phenolic compounds** - The analytical method to be used to determine the concentrations of these compounds shall be EPA Method 1653.
- (13) **Chloroform** - The preferred analytical method to be used for chloroform is EPA Method 1624B for which a ML of 10 ug/l shall be attained. Other approved EPA methods are 601 and 624, and Standard Method 6210B and 6230B. The permittee must collect separate grab samples from the acid and alkaline bleach plant filtrates for chloroform analysis. Samples to be analyzed for chloroform may be taken over a 32-hour period where a minimum of six (6) grab samples are collected, each grab sample being at least four (4) hours apart but no more than 16 hours apart.

## **SPECIAL CONDITIONS**

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

1. The effluent shall not contain a visible oil sheen, more than a trace amount of 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 effluent shall not cause visible discoloration or turbidity in the receiving water which would impair the usages designated by the classification of the receiving waters.
4. Notwithstanding specific conditions of the 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.
5. The permittee shall not use chlorophenolic-containing biocides.

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

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

### **D. NOTIFICATION REQUIREMENT**

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

1. Any substantial change (realized or anticipated) in the volume or character of pollutants being introduced into the waste water collection and treatment system.
2. For the purposes of this section, adequate notice 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 change in the quality and quantity of the waste water to be discharged from the treatment system.

## **SPECIAL CONDITIONS**

### **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 January 25, 2002; 2) the terms and conditions of this permit, and 3) only from Outfall #001. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

### **F. 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 fourteenth (14<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 following address:

Maine Department of Environmental Protection  
Eastern Maine Regional Office  
Bureau of Land & Water Quality  
Division of Water Quality Management  
106 Hogan Road  
Bangor, ME. 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 fourteenth (14<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**

### **G. BEST MANAGEMENT PRACTICES PLAN**

- a. Best Management Practices (BMPs) for spent pulping liquor must be developed by the permittee in accordance with federal regulation 40 CFR, Part 430.03, best engineering practices and must be implemented in a manner that takes into account the specific circumstances at each facility.
- b. The permittee must amend its BMP Plan whenever there is a change in mill design, construction, operation, or maintenance that materially affects the potential for leaks or spills of spent pulping liquor, turpentine, or soap from the immediate process areas.
- c. The permittee must complete a review and evaluation of the BMP Plan every five years. As a result of this review and evaluation, the permittee must amend the BMP Plan within three months of the review if the mill determines that any new or modified management practices and engineered controls are necessary to reduce significantly the likelihood of spent pulping liquor, soap, and turpentine leaks, spills, or intentional diversions from the immediate process areas, including a schedule for implementation of such practices and controls.
- d. The BMP Plan, and any amendments, must be reviewed by the senior technical manager at the mill and approved and signed by the mill manager. Any person signing the BMP Plan or its amendments must certify to the Permitting Authority under penalty of law that the BMP Plan (or its amendments) has been prepared in accordance with good engineering practices and in accordance with this regulation. The mill is not required to obtain approval from the Permitting Authority of the BMP Plan or any amendments.
- e. The permittee must maintain on its premises a complete copy of the current BMP Plan and associated records. The BMP Plan and records must be made available to the Permitting Authority or his or her designee for review upon request.

### **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. FISH ADVISORY PROGRAM**

When directed to do so, the permittee is required to participate in the State's most current Surface Water Toxics Control Program (SWAT) for dioxin administered by the Department, pursuant to Maine law, 38 M.R.S.A., §420-B.

## **SPECIAL CONDITIONS**

### **J. ANNUAL DIOXIN/FURAN CERTIFICATION**

In lieu of 1/Month monitoring of the bleach plant waste stream for 2,3,7,8 TCDD (dioxin) and 2,3,7,8 TCDF (furan) (40 CFR Part 430), **by December 31 of each calendar year [PCS Code 95799]**, the permittee shall provide the Department with a certification stating:

- a. Elemental chlorine gas or hypochlorite was not used in the bleaching of pulp.
- b. The chlorine dioxide (ClO<sub>2</sub>) generating plant has been operated in a manner which minimizes or eliminates byproduct elemental chlorine generation per the manufacturers/suppliers recommendations.
- c. Documented and verifiable purchasing procedures are in place for the procurement of defoamers or other additives without elevated levels of known dioxin precursors.
- d. Fundamental design changes that affect the ClO<sub>2</sub> plant and/or bleach plant operation have been reported to the Department prior to their implementation and said reports explained the reason(s) for the change and any possible adverse consequences if any.

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

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

## **SPECIAL CONDITIONS**

### **K. ANNUAL 06-096 CMR 530(2)(D)(4) STATEMENT FOR REDUCED/WAIVED TOXICS TESTING (cont'd)**

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 off-site process waste waters 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.

### **L. 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 \$5,000.

### **M. 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.

### **N. SEVERABILITY**

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

# ATTACHMENT A



Maine Department of Environmental Protection  
WET and Chemical Specific Data Report Form  
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

Facility Name

MEPDES #

Pipe #

Facility Representative Signature

To the best of my knowledge this information is true, accurate and complete.

Licensed Flow (MGD)

Acute dilution factor

Chronic dilution factor

Human health dilution factor

Criteria type: M(marine) or F(fresh)

Flow for Day (MGD)<sup>(1)</sup>

Flow Avg. for Month (MGD)<sup>(2)</sup>

Date Sample Collected

Date Sample Analyzed

Laboratory Address

Telephone

Lab Contact

Lab ID #

FRESH WATER VERSION

Please see the footnotes on the last page.

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

**Maine Department of Environmental Protection**  
**WET and Chemical Specific Data Report Form**  
**This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.**

PRIORITY POLLUTANTS <sup>(4)</sup>		Reporting Limit			Effluent Limits		Health <sup>(6)</sup>		Reporting Limit Check	Possible Exceedence <sup>(7)</sup>	
					Acute <sup>(6)</sup>	Chronic <sup>(6)</sup>	Health <sup>(6)</sup>			Acute	Chronic
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									

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

[illegible]

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

[illegible]

**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			A-NOEL
C-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: 

--	--	--

 Sampling time: \_\_\_\_\_ AM/PM  
mm dd yy

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

**MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT**

**AND**

**MAINE WASTE DISCHARGE LICENSE**

**FACT SHEET**

**Date: April 12, 2011**

**PERMIT NUMBER: ME0002003**

**LICENSE NUMBER: W000381-5N-F-R**

**NAME AND ADDRESS OF APPLICANT**

**LINCOLN PAPER and TISSUE LLC**

**P.O. Box 490**

**Lincoln, Maine 04457**

**NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:**

**Lincoln Mill**

**50 Katahdin Avenue**

**Lincoln, Maine**

**COUNTY:**

**Penobscot County**

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

**COGNIZANT OFFICIAL AND TELEPHONE NUMBER:**

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**1. APPLICATION SUMMARY**

- a. Application: Lincoln Paper and Tissue LLC (LPT/permittee hereinafter) has filed a timely and complete application with the Department to renew Maine Waste Discharge License (WDL) #W000381-44-B-R that was issued on January 23, 1997, and expired on January 23, 2002. It is noted the January 23, 1997, WDL was subsequently modified on a number of occasions thereafter, to establish new or revised limitations for color, dioxin, furan, metals and temperature as well as to suspend a Special Condition pertaining to biological monitoring of the bald eagle.

## 1. APPLICATION SUMMARY (cont'd)

- c. Source Description - The LPT mill located in Lincoln, Maine manufactures bleached kraft pulp and bleached kraft fine paper and tissue. LPT is seeking to obtain a combination Maine Pollutant Discharge Elimination System (MEPDES) permit and Waste Discharge License (WDL) to discharge up to a monthly average of 19.3 million gallons per day (MGD) of treated process and other miscellaneous waste waters associated with the pulp and papermaking process including, but not limited to, cooling waters, treated process waste waters from other commercial facilities and storm water from various areas of the mill complex to the Penobscot River. The mill produces approximately 450 air-dried tons/day (ADTPD) of bleached kraft pulp/fine paper and tissue from an approximate 50%/50% blend of hardwood chips and recycled softwood sawdust. The 1/23/97 licensing action provided for a two tier production increase, Tier I (450-540 ADTPD) and Tier II (>540 ADTPD).

LPT discharges treated process waste waters, non-contact cooling waters and storm water via Outfall 001 to the Penobscot River in Lincoln. See **Attachment A** of this Fact Sheet for a location map. Sanitary waste water flows of approximately 0.0195 MGD are directed to the waste water treatment plant that is owned and operated by the Lincoln Sanitary District (LSD). The discharge from the LSD is regulated by this Department via combination MEPDES permit #ME01011796/WDL W001479. Waste streams contributing to Outfall 001 include waste waters from the paper/tissue mill, the pulp mill, evaporators, recovery, recausting utilities and non-contact cooling waters and storm water from several sources from within the mill complex. On occasion, the permittee receives transported wastes from other entities that have been approved by the Department. The pulp and paper waste water treatment plant is also utilized to treat spills of process chemicals and miscellaneous waste waters associated with normal production.

In June of 1999, the former owner of the mill (LP&P) custom designed a state-of-the-art oxygen bleaching technology process that at that time was unique in the United States. Generally speaking, the process substituted oxygen for elemental chlorine and significantly reduced reliance on chlorine dioxide. The bleaching technology is referred to as *enviroO<sub>2</sub>*<sup>TM</sup> and is a two-stage oxygen bleaching sequence of AdOo(D)D (activation, two oxygen stages chlorine dioxide stage and a final chlorine dioxide polishing stages). The process was developed in a effort to comply with the federal "Cluster Rule" limitations for certain parameters such as dioxin, chloroform and chlorinated phenolics. Since the installation of the *enviroO<sub>2</sub>*<sup>TM</sup> process, the bleach plant effluent has been non-detect for dioxin and furan at a detection level of less than 1.0 parts per quadrillion (ppq) or nanograms/liter (ng/L) and all chlorinated phenolics are below the Cluster Rules published minimum levels (MLs) of detection. In addition, absorbable organic halides (AOX), a bulk parameter that measures the total mass of chlorinated organic matter in waste water in the final effluent from the mill have been at levels approximately ten times lower than the limits established in the Cluster Rule.

## 1. APPLICATION SUMMARY (cont'd)

- c. Waste Water treatment - The pulp mill waste waters receives best practicable treatment by way of preliminary treatment, primary clarification, an extended aerated activated sludge process and secondary clarification before being discharged to the receiving waters. The activated sludge aeration basin provides a holding capacity of 15.3 million gallons and provides for a two-day detention time. LPT's waste water collection and treatment systems are also used as elementary neutralization pursuant to Maine law, 38 MRSA, §1319-1.

The paper/tissue mill waste waters receive treatment via preliminary treatment and primary clarification before combining with the secondary treated pulp mill waste stream and discharged to the river via an outfall pipe measuring 30 inches in diameter that extends out into the Penobscot River approximately 150 feet with approximately seven feet of water over the crown of the pipe at mean low water. The end of the outfall pipe is fitted with a multi-port diffuser to enhance mixing of the treated waste water with the receiving water upon discharge. Non-contact cooling water generated throughout the mill is conveyed to the paper/tissue mill's primary clarifier. The cooling water flow and process waste water flows are monitored separately. The pulp and paper waste water treatment plant is also utilized to treat spills of process chemicals, storm water, and other off-site process waste waters and miscellaneous waste waters associated with normal production.

## 2. PERMIT MODIFICATIONS REQUESTED

Outfall #001 – Final outfall of treated process waste water, cooling water and storm water.

- a. Eliminate monitoring for dioxin at the final outfall (Outfall #001).
- b. Eliminate water quality based limitations and monitoring requirements for arsenic and lead.
- c. Eliminate the requirement for 80% removal for total suspended solids (TSS).
- d. Incorporate the pH excursion language found in Department rules for permittee's that monitor pH on a continuous basis.
- e. Reduce the monitoring frequency for adsorbable organic halides (AOX) to 1/Quarter.

Outfall #002 – Leachate and storm water runoff

- f. Eliminate the outfall from the permit in its entirety as the watershed in which leachate and storm water runoff are generated are no longer owned by the permittee.

## 2. PERMIT MODIFICATIONS REQUESTED

Outfall #100 – Bleach plant (internal waste stream)

- g. Eliminate the requirement to report the percentage of chlorine dioxide substitution.

## 3. PERMIT SUMMARY

- a. Regulatory - On January 12, 2001, the Department received authorization from the U.S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) program in Maine excluding areas of special interest to Maine Indian Tribes. On October 30, 2003, after consultation with the U.S. Department of Justice, USEPA extended Maine's NPDES program delegation to all but tribally owned lands. From this point forward, the program will be referred to as the MEPDES program and will utilize a permit number of #ME0002003 (same as the NPDES permit) as a reference number for LPTs MEPDES permit.
- b. Terms & conditions - This permit is significantly different than the effective NPDES permit issued by the EPA on March 28, 1985 and the effective WDL issued by the State of Maine on January 23, 1997 and subsequently modified on April 18, 1997, November 6, 1998, and August 23, 2002. This permit includes requirements pursuant to federal regulation found at 40 Code of Federal Regulation (CFR) Part 430 and is often referred to as the "Cluster Rule." The regulation was promulgated by the EPA in April of 1998.

Terms and conditions being carried forward from WDL #W000381-44-B-R dated January 23, 1997 and subsequent WDL modifications cited above include, but not limited to:

1. Tiered seasonal technology based mass limitations for biochemical oxygen demand (BOD5) and total suspended solids (TSS) limitations for process waste waters and cooling water flows.
2. The daily maximum technology based temperature limit of 120°F.
3. The technology based pH range limitation of 5.0 -9.0 standard units.
4. The quarterly average technology based mass color limit of 175 lbs/ton of unbleached pulp produced.
5. The daily maximum concentration limit of <10 pg/L for 2,3,7,8 TCDD (dioxin) and 2,3,7,8 TCDF (furan) in the bleach plant effluent, Outfall #100, an internal waste stream for the mill.
6. Testing requirements for whole effluent toxicity (WET) and chemical specific (priority pollutant and analytical) testing.

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

This permit is different from WDL #W000381-44-B-R dated January 27, 1997 and subsequent WDL modifications previously cited in that it:

7. Removes the monthly average and daily maximum mass and concentration reporting requirements for mercury. It is noted quarterly monitoring remains in effect pursuant to Department Rule, Chapter 519 and reporting of said results are tracked separately by the Department.
8. Establishes monthly average and daily maximum production based mass limits for adsorbable organic halides (AOX).
9. Establishes daily maximum concentration limits for 12 chlorinated phenolic compounds for the bleach plant, Outfall #100.
10. Establishes monthly average and daily maximum production based limits for chloroform for the bleach plant, Outfall #100.
11. Requires the permittee to implement and periodically update a Best Management Plan (BMP) for the mill operations pursuant to federal regulation 40 CFR Part 403.02(d).
12. Establishes a seasonal (June 1 – September 30) monthly average water quality based mass limitation and monitoring requirement for total phosphorus.
13. Establishing a seasonal requirement to fund ambient water quality monitor on the Penobscot River in accordance with a Department approved plan.
14. Modifies the critical acute and chronic dilution factors associated with the discharge from the mill based on revised 1Q10 and 7Q10 low flow values for the Penobscot River.
15. Establishes new or revised monthly average and or daily maximum water quality based limitations for aluminum, copper and lead.

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

- c. History: The most current relevant regulatory actions include the following:

*December 31, 1980* – The Department issued WDL #381 to LP&P for a five-year term.

*March 28, 1985* – The EPA issued NPDES permit #ME0002003 to LP&P for a five-year term.

*June 19, 1987* – The Department issued WDL #W000381-44-A-R to LP&P for a 33-month term. The permit expired on March 28, 1990 to coincide with the expiration date of the NPDES permit issued by the EPA on March 28, 1985.

*October 30, 1989* - LP&P submitted a timely and complete application to the EPA for renewal of NPDES permit #ME0002003.

*January 24, 1990* – The EPA issued a letter to LP&P indicating the 10/30/89 application submitted to the Agency was deemed to be complete for processing.

*February 23, 1990* – LP&P submitted a timely and complete application to the Department to renew the WDL.

*January 22, 1997* – The Department issued a Section 401 Water Quality certification (#W007979-68-A-N) with conditions of a public notice draft NPDES permit issued by the EPA on August 27, 1993.

*January 23, 1997* - The Department issued WDL renewal #W000381-44-B-R to LP&P for a five-year term.

*January 23, 1997* - The EPA issued NPDES permit #ME0002003 to LP&P for a five-year term.

*March 3, 1997* - The Penobscot Indian Nation (PIN) filed an appeal of NPDES permit #ME0002003 issued by the EPA on 1/23/97. The appeal placed the NPDES permit in abeyance until the appeal was acted on and resolved.

*April 18, 1997* - The Department issued WDL modification #W000381-5N-C-M suspending the implementation of Special Condition J, *Biological Opinion Monitoring Requirements*, of the 1/23/97 WDL. Suspension of the monitoring requirements was deemed appropriate due to the appeal of the NPDES permit, the source of the monitoring requirements specified in the WDL.

*November 6, 1998* – The Department issued WDL modification #W000381-5N-D-M to LP&P that incorporated new technology based limitations for color, dioxin and furan as well as water quality based limitations arsenic and lead.



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

*May 23, 2000* – The Department administratively modified the 1/23/97 WDL by establishing interim mean and maximum technology based concentration limitations of 28.9 ng/L and 43.3 ng/L, respectively for mercury.

*September 15, 2000* – The EPA withdrew NPDES permit #ME0002003 issued on 1/23/97. The EPA indicated the permit was being withdrawn so that the permit could address the terms of EPA's "Cluster Rule" for pulp and paper mills. As a result of the permit being withdrawn, the appeal filed by the PIN on 3/3/97 became null and void.

*January 14, 2002* – LP&P submitted a timely and complete application to the Department to renew the WDL for the Lincoln mill.

*August 23, 2002* – The Department issued WDL modification #W000381-5N-E-M by establishing a new daily maximum temperature limitation of 120°F for Outfall #001.

*January 2004* – The LP&P mill ceased production at the facility due to financial hardship.

*May 5, 2004* – The Department administratively modified the 1/23/97 WDL by temporarily suspending monitoring for all parameters in the WDL with the exception of flow, biochemical oxygen demand (BOD), total suspended solids (TSS) and pH. It is noted the frequency of monitoring for BOD and TSS was temporarily reduced from 1/Day to 1/Week.

*May 20, 2004* – The Department issued a License Transfer document that transferred all permits and licenses held by LP&P to Lincoln Paper and Tissue LLC (LPT).

*June 14, 2004* – The Lincoln mill resumed production. The Department administratively modified the 1/23/97 WDL by reinstating the monitoring requirements that were temporarily suspended on 5/5/04.

*August 2, 2004* – The Department administratively modified the 1/23/97 WDL by eliminating the monitoring requirements for Outfall #002 (storm water and landfill leachate). It is noted the watershed area contributing to the discharge from Outfall #002 was not part of the property purchased by LPT from LP&P.

*October 12, 2005* - The Department promulgated rules, Chapter 530, *Surface Water Toxics Control Program* and Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*.

*April 10, 2006* – The Department modified WDL #W000381-44-B-R to incorporate the terms and conditions of Department rules Chapter 530 and Chapter 584 pertaining to ambient water quality criteria and whole effluent toxicity (WET) testing.

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

May 1, 2007 – The Department administratively modified 1/23/97 WDL by reducing the monitoring frequency for 2,4,7,8 TCDD and 2,4,7,8 TCDF from 2/Quarter to 1/Year.

### 4. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S.A. §467(7)(A)(3) states that the Penobscot River main stem from the confluence of Cambolasse Stream to the West Enfield Dam is classified as a Class B waterway. Maine law, 38 M.R.S.A. §465(3) contains the classification standards for Class B waters and states

*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 QUALITY CONDITIONS

A document entitled, 2008 Maine Integrated Water Quality Report, [referred to as the 305(b) report] published by the Department lists the Penobscot River below the permittee's facility in tables entitled, Category 5-D entitled, *Rivers and Streams Impaired By Legacy Pollutants* and *Category 4-B: Rivers and Streams Impaired by Pollutants – Pollution Control Requirements Reasonably Expected to Result in Attainment*. For category 5-D the report states the designated use of fishing (consumption) is impaired in a segment of the Penobscot River below the LPT mill due to the presence of PCBs in fish tissue. The Department is not aware of any information that indicates the discharge from LPT's waste water treatment facility is causing or contributing to the impairment. For category 4-B, the report states "Dioxin license limits in 38 MRSA, Section 420. New dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste

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

stream (at 10 pg/L detection limit) (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference." See the discussion on dioxin in response #3 of section 11 of this Fact Sheet.

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(m) 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.

The primary objective of the phosphorus waste load allocation is to prevent in-stream total phosphorus (TP) from exceeding concentration thresholds that would result in non-attainment of the water quality standards for each class of water. The results presented in the Department's waste load allocation report entitled, *Penobscot River Phosphorus Waste Load Allocation, May 2011*, were derived from a conservative mass balance based analysis of all point sources and non-point sources at 7Q10 river flow conditions. The Department has developed draft nutrient criteria for rivers and streams, which recommend thresholds of 33 ug/l and 30 ug/l TP for Class C and Class B streams respectively. These concentrations were used as the basis for the derived waste load allocation. Additionally, the waste load allocation assumes that TP is a conservative pollutant, in the same manner that the Department evaluate toxics. The Department recognizes that there are periods of time where uptake/loss of phosphorus may occur, but significant losses are not predicted under steady state modeling of non-enriched conditions.

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

Effluent limitations and monitoring requirements are integral components of the Department's Adaptive Management approach to addressing non-attainment of water quality standards on the Penobscot River. The Department's phosphorus waste load allocation recommends seasonal (June 1 – September 30) monthly average TP mass limits for the four mills. The two Katahdin mills limits will be based on the full permitted flow and a concentration of 100 ug/l and the Lincoln Paper & Tissue mill and the Red Shield mill in Old Town will be based on the full permitted flow and a concentration of 500 ug/L. The limits for the Katahdin mills are more stringent than the other mills as they are located in the stretch of river that is particularly prone to algae (phytoplankton) blooms and the biological response to enrichment in Dolby Pond and the Mattaseunk impoundment is more similar to a lake-like system. Lakes have a significantly lower threshold response to phosphorus. For the non-summer season (October 1 – May 31), the Katahdin mills will not be subject to a limitation for TP but will be required to monitor TP on a 1/Month basis to track annual loadings of phosphorus to Dolby Pond. Additionally, the Town of Millinocket's waste water treatment facility (upstream from Dolby Pond) will be required to monitor for total phosphorus 2/Month during the period of June 1 – September 30 of each year.

Ambient water quality monitoring is also an integral component of an Adaptive Management approach to addressing non-attainment of water quality standards. The Department is requiring ambient monitoring of the river pursuant to Special Condition L, *Ambient Water Quality Monitoring*, of this permit during of periods of low flow. Periods of low flow will be considered to be times when the West Enfield Gage registers a flow less than 4,400 cfs. Additionally, the Department is requiring that a network of remote multi-probe sensors be deployed in the river during summer months to more accurately assess the true diurnal dissolved oxygen response to the phosphorus waste load allocation. The location of deployment for the remote sensors is intended to be somewhat flexible such that they can be moved around in a systematic approach to improve the Department's understanding of the specific river response.

The Department is pursuing the waste load allocation because it is reasonably expected to address the dissolved oxygen non-attainment presently being experienced on the Penobscot River. The Department has a high level of confidence that implementation of a phosphorus waste load allocation will dramatically curtail phytoplankton growth, to the point where it will be a negligible influence on dissolved oxygen. 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.

Should future ambient water quality monitoring indicate water quality standards are not being achieved and the permittee is causing or contributing to the non-attainment, this permit may be reopened pursuant to Special Condition M, *Reopening of Permit For Modifications*, to establish additional limitations and or monitoring requirements to achieve applicable water quality standards.

## 6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Regulatory Basis: The discharge from LPT facility is subject to National Effluent Guidelines (NEG) found in 40 Code of Federal Regulations (CFR) Part 430 – *Pulp, Paper and Paperboard Manufacturing Point Source Category*. The regulation was revised on April 15, 1998 and reorganized 26 sub-categories in the previous regulation into 12 sub-categories by grouping mills with similar processes. Applicable Subparts of the new regulation for the LPT facility are limited to Subpart B, *Bleached Papergrade and Soda*. The NEG's establish applicable limitations representing; 1) best practicable control technology currently available (BPT) for toxic and conventional pollutants for existing dischargers, 2) best conventional pollutant technology economically achievable (BCT) for conventional pollutants for existing dischargers, and 3) best available technology economically achievable (BAT) for toxic and non-conventional pollutants for existing dischargers. The regulation establishes limitations and monitoring requirements on the final outfall to the receiving waterbody as well as internal waste stream(s) such as the bleach plant effluent. The regulation also establishes limitations based on several methodologies including monthly average and or daily maximum mass limits based on production of pulp and paper produced or concentration limitations based on BPT, BCT or BAT.

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges require application of best practicable treatment, 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, Maine law, 38 M.R.S.A., Section 420 and Department rules Chapter 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria For Toxic Pollutants*, requires the regulation of toxic substances at the levels set forth in said rules.

- b. Production: Special Condition G, *Notification of Production Changes*, of the 1/23/97 WDL contained the following text:

*The licensee's current annual average production is below 450 ADT/day and thus the corresponding [biochemical oxygen demand] BOD, [total suspended solids] TSS and flow limits detailed in Special Condition A(1) are in effect upon issuance of the license. In order for Tier I or Tier II limits to become effective, the licensee must notify the Department and EPA in writing that actual production at or above Tier I or Tier II levels (450 ATD/day to 540 ADT/day and >540 ADT/day) have been achieved and that the company anticipates that annual average Tier I or Tier II production levels will be maintained.*

Correspondence with LPT in the fall of calendar year 2010 indicates production levels remain at or about 450 ADTPD of pulp and paper and it would like to maintain a tiered approach to permitting the discharge from the facility as future production increases will not trigger the necessity for a permit modification.

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

- c. Flow: The 1/23/97 WDL established tiered daily maximum flow limits for process waste waters of 13.5 MGD, 14.6 MGD and 16.3 MGD for current and Tier I and Tier II production levels respectively, and was based on the effective Maine waste discharge license #W000381-44-A-R, and expected increases noted in the February 1990 application submitted to the Department. This permitting action is carrying the respective daily maximum flow limitations forward in this permitting action as they remain representative of flows associated with each tier of production. A review of the monthly Discharge Monitoring Reports (DMRs) submitted to the Department for the period January 2007 through November 2010 indicates that at current production levels, the daily maximum process water flows have ranged from 9.6 MGD to 13.7 MGD with an arithmetic mean of 11.0 MGD.

As for non-contact cooling waters, the 1/23/97 WDL established tiered daily maximum flow limits for non-contact cooling waters of 2.2 MGD, 2.5 MGD and 3.0 MGD for current and Tier I and Tier II production levels respectively. As with the process flows, the limitations were based on the effective Maine waste discharge license #W000381-44-A-R, and expected increases noted in the February 1990 application submitted to the Department. This permitting action is carrying the respective daily maximum flow limitations forward in this permitting action as they remain representative of flows associated with each tier of production.

- d. Dilution factors – The 1/23/97 WDL contained the following text:

*The Department has determined the 7Q10 and harmonic stream flows for the Penobscot River at the point of discharge are 2,690 cfs (1,739 MGD) and 5,678 cfs (3,670 MGD) respectively. The licensee has indicated that intake water utilized for mill processes is taken from a series of dam-controlled lakes and not the Penobscot River. The corresponding dilution ratios based on a monthly average flows are calculated as follows:*

$$\text{Dilution Ratio} = \frac{\text{Plant flow} + \text{River flow}}{\text{Plant flow}}$$

### Plant Flows

(Process waste water)

Current Production:	13.5 MGD
Tier I Production:	14.6 MGD
Tier II Production:	16.3 MGD

### Dilution Ratios

	@ 7Q10	@ Harmonic Mean <sup>(1)</sup>	Corrected value
Current Production:	130:1	233:1	273:1
Tier I Production:	120:1	216:1	252:1
Tier II Production:	108:1	191:1	226:1

(1) Dilutions in error – See corrected value column

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

Based on the March 2003 Penobscot River modeling report, the statistical stream flow values for the Penobscot River are being modified in this permitting action. The Department has determined the 1Q10, 7Q10 and harmonic mean flows are as follows:

$$1Q10 = 2,703 \text{ cfs} \quad 7Q10 = 2,822 \text{ cfs} \quad \text{Harmonic mean} = 5,678 \text{ cfs}^{(1)}$$

### Footnotes:

- (1) The harmonic mean flow of the Penobscot River established in the previous WDL and being carried forward in this permitting action is based on a 1/9/91 statistical evaluation developed by Walter M. Grayman, a consulting engineer for the US EPA 1990 Risk Assessment for Dioxin.

The Department has made the determination that the dilution factors associated with the discharge shall be calculated in accordance with freshwater protocols established in Department Regulation Chapter 530, *Surface Water Toxics Control Program*, promulgated on October 12, 2005. With a permit flow limit of 16.3 MGD (Tier II production) and the 1Q10, 7Q10 and harmonic mean low flow values for the Penobscot River, the dilution factors can be calculated as follows:

$$\text{Acute: } 1Q10 = 2,703 \text{ cfs} \Rightarrow \frac{(2,703 \text{ cfs})(0.6464) + (16.3 \text{ MGD})}{(16.3 \text{ MGD})} = 108:1$$

$$\text{Chronic: } 7Q10 = 2,822 \text{ cfs} \Rightarrow \frac{(2,822 \text{ cfs})(0.6464) + (16.3 \text{ MGD})}{(16.3 \text{ MGD})} = 113:1$$

$$\text{Harmonic Mean: } = 5,678 \text{ cfs} \Rightarrow \frac{(5,678 \text{ cfs})(0.6464) + (16.3 \text{ MGD})}{(16.3 \text{ MGD})} = 226:1$$

- e. Biochemical oxygen demand (BOD) and total suspended solids (TSS) – The Fact Sheet of the 1/23/97 WDL contains the following italicized text;

*The Clean Water Act (CWA) requires that the effluent of point discharges satisfy minimum treatment technology and receiving stream water quality requirements. EPA established minimum technology requirements for the pulp and paper industry in the form of effluent guidelines promulgated under 40 CFR 430. The guidelines specify the maximum mass (pounds/day) of BOD<sub>5</sub> and TSS which can be allowed to discharge per mass (air dried tons/day) of product produced. The maximum quantity of BOD<sub>5</sub> and TSS allowed varies for the different types of pulp and paper products as well as manufacturing methods. The following Subcategories and Subpart are applicable to operations at LP&T:*

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

*Subpart H(a) - Bleached kraft tissue (Integrated)*  
*Subpart H(d) - Integrated tissue, hardwood flume*  
*Subpart S - Non-Integrated tissue*  
*Subpart I(a) - Fine bleached kraft paper (Integrated)*  
*Subpart I(d) - Integrated paper hardwood flume*  
*Subpart R - Non-Integrated Fine Papers*  
*Subpart G(a) - Market kraft pulp*  
*Subpart G(d) - Market pulp hardwood flume*

*The following average daily production figures for the mill are representative of figures in the licensee's 1990 application to the Department as well as projected figures for the next five years:*

<u>Subpart</u>	<u>1987-1989</u>	<u>Tier I</u>	<u>Tier II</u>
<i>H(a)</i>	93	110	140.4
<i>H(d)</i>	67	81.4	103.9
<i>S</i>	13	19.2	24.5
<i>I(a)</i>	193	207.9	271.9
<i>I(d)</i>	139	153.8	201.2
<i>R</i>	4	21.1	28.6
<i>G(a)</i>	127	169.7	149.5
<i>G(d)</i>	92	125.6	110.6

*Based on the above production values, the following federal effluent guideline limits may be calculated:*

	<u>BOD-5 (lb/day)</u>		<u>TSS (lb/day)</u>	
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
<i>1987-89 Production (382 ADTPD)</i>	5,810	11,148	11,706	21,789
<i>Current Production (410 ADTPD)</i>	6,510	12,484	12,920	24,059
<i>Tier I Production (450 ADTPD)</i>	7,153	13,719	14,242	26,153
<i>Tier II Production (540 ADTPD)</i>	8,117	15,568	16,098	29,982



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

The 1/23/97 WDL contained the following seasonal limitations for BOD and TSS:

1/23/97 WDL Limitations	BOD Avg		BOD Max		TSS Avg		TSS Max	
		lbs/day		lbs/day		lbs/day		lbs/day
<u>Current</u> 430 ADTPD <i>June - Sept.</i> <i>Oct. - May</i>	---	4,231 5,760	---	8,500 9,987	---	10,980 12,920	---	18,000 20,450
<u>Tier I</u> 450 -540 ADTPD <i>June - Sept.</i> <i>Oct. - May</i>	---	4,654 6,336	---	9,350 10,986	---	12,078 14,212	---	19,800 22,495
<u>Tier II</u> >540 ADTPD <i>June - Sept.</i> <i>Oct. - May</i>	---	5,585 7,603	---	11,220 13,183	---	14,494 17,054	---	23,760 26,994

The Fact Sheet of the 1/23/97 license indicates the final license limits for BOD and TSS were based on the following:

*BOD & TSS:* *The effluent limitations for biochemical oxygen demand (BOD) and total suspended solids (TSS) are seasonal and are based on consideration of current discharge levels and the existing state of technology, including process and treatment methods at the mill.*

*On August 27, 1993, the EPA issued a Public Notice draft National Pollutant Discharge Elimination System (NPDES) permit for the LP&P facility. In the Fact Sheet, the EPA stated that the proposed BOD and TSS limitations in the permit were based on a Maine DEP "goodness of fit" analysis (past demonstrated performance) performed in 1990. The analysis utilized effluent data for the period 1988-1990. Since the purpose of the analysis was to evaluate demonstrated performance capabilities during periods when the treatment plant was operating as designed, periods of abnormal facility operation were discarded from the data set. This resulted in removal of 208 days from the BOD data set and 161 days from the TSS data set. Due to the significant amount of data removed from the set and further discussions with LP&P, the Department has reconsidered its position on establishing the limitations in this fashion.*

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

*LP&P requested the Department consider establishing BOD and TSS limitations for their facility based on a percentage of effluent guidelines consistent with limitations established or proposed for the other kraft mills in the State of Maine. Compilation of summer and winter time BOD and TSS limitations for six of the seven kraft mills in the State indicates equitable limitations for the LP&P facility are as follows:*

- a) Summertime monthly average BOD & TSS limitations have been reduced to 65% and 85% respectively, of effluent guidelines.*
- b) Monthly average wintertime and daily maximum summertime BOD & TSS limitations will remain as proposed in the August 1993 draft NPDES permit.*
- c) Wintertime daily maximum BOD & TSS have been increased to 80% and 85% respectively, of effluent guidelines.*

A review of the DMR data for the period January 2007 – November 2010 indicates the facility has discharged as follows:

<u>BOD Mass (lbs/day)</u>		
	<u>Month Avg.</u>	<u>Daily Max.</u>
<u>Range</u>		
(summer)	1,245 – 5,968 lbs/day	1,625 – 10,024 lbs/day
(non-summer)	1,339 – 4,708 lbs/day	1,891 – 13,308lbs/day
<u>Arithmetic mean</u>		
(summer)	2,693 lbs/day	4,469 lbs/day
(non-summer)	2,894 lbs/day	5,600 lbs/day
<u>TSS Mass (lbs/day)</u>		
	<u>Month Avg.</u>	<u>Daily Max.</u>
<u>Range</u>		
(summer)	3,320 – 7,255 lbs/day	4,664 – 13,330 lbs/day
(non-summer)	3,116 – 5,908 lbs/day	4,025 – 12,699 lbs/day
<u>Arithmetic mean</u>		
(summer)	4,686 lbs/day	8,246 lbs/day
(non-summer)	4,607 lbs/day	7,520 lbs/day

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

Correspondence with LPT in the fall of calendar year 2010 indicates production levels remain at or about 430 ADTPD. Given that current, Tier I and Tier II production levels remain as previously established, 430 ADTP, 450-540 ADTPD and >540 ADTPD, respectively, corresponding maximum mass effluent limits based on BPT standards found in federal regulation 40 CFR Part 430 subsequently promulgated on 4/18/98, may be calculated as follows:

Subpart B	BOD Avg		BOD Max		TSS Avg		TSS Max	
	lbs/ton	lbs/day	lbs/ton	lbs/day	lbs/ton	Lbs/day	lbs/ton	lbs/day
BPT limits	14.2	---	27.3	---	25.8	---	48	---
Current 430 ADTPD	---	6,106	---	11,739	---	11,094	---	20,640
<u>Tier I</u> 450 -540 ADTPD	---	6,390	---	12,285	---	11,610	---	21,600
<u>Tier II</u> >540 ADTPD	---	7,668	---	14,742	---	13,932	---	25,920

The permitting action is carrying forward the seasonal monthly average and daily maximum mass limitations for BOD and TSS from the 1/23/97 licensing action. Special Condition M, *Reopening of Permit For Modifications*, of this permitting action establishes a reopener clause specific to BOD limitations. The special condition reserves the Department's right to impose more stringent limitations if ambient water quality monitoring or future modeling indicates lower BOD limitations are necessary to meet applicable water standards.

- f. Temperature: The 8/23/02 licensing modification established a year-round daily maximum effluent temperature limit of 120° F (increased from 110° F in the 1/23/97 WDL) that is being carried forward in this permitting action.

Department Rule Chapter 582, *Regulations Relating To Temperature*, limits thermal discharges to an in-stream temperature increase ( $\Delta T$ ) of 0.5° F above the ambient receiving water temperature when the weekly average temperature of the receiving water is greater than or equal to 66° F or when the daily maximum temperature is greater than or equal to 73° F. The temperature thresholds are based on EPA water quality criterion for the protection of brook trout and Atlantic salmon (both species indigenous to the Penobscot River). The weekly average temperature of 66° F was derived to ensure normal growth of the brook trout and the daily maximum threshold temperature of 73° F protects for the survival of juveniles and adult Atlantic salmon during the summer months. The Department interprets the term "weekly average temperature" to mean a

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

seven (7) day rolling average. To promote consistency, the Department also interprets the  $\Delta T$  of 0.5° F as a weekly rolling average criterion when the receiving water temperature is  $\geq 66^\circ$  F and  $< 73^\circ$  F.

The 8/23/02 license modification contained the following italicized text;

*The licensee has requested an increase in the daily maximum temperature limit from 110°F to 120°F based on new information. To comply with the requirements in EPA's "Cluster Rule" (40 CFR, Part 430) promulgated in April of 1998, more specifically the sealed conveyance system "hardpiping" requirements, LP&P rebuilt most of the pulp mill's sewer system. This modification to the mill's sewer system is preventing some of the cooling that has historically taken place in the system and the final effluent temperature has increased.*

*An increase in effluent temperature of 10°F (110°F to 120°F) at full licensed flow (19.3 MGD) and a receiving water flow of 1883 cfs (70% of the 7Q10) will theoretically increase the receiving water by an additional 0.15°F after complete mixing. A review of the DMR data for the LP&P facility indicates the mean of the daily maximum flow discharged from Outfall #001 has been 11.0 MGD between 7/97 and 4/02 with a range from 9.3 MGD to 13.3 MGD. At 13.3 MGD and the same temperature increase of 10°F (110°F to 120°F) and a receiving water flow of 1883 cfs (70% of the 7Q10) will theoretically increase the receiving water by an additional 0.11°F after complete mixing. Both theoretical temperature increases can not be reliably measured with field instruments. It is noted that the point of complete mixing for the LP&P discharge is estimated to be at the Mohawk Rapids, approximately 4.5 miles downstream of the point of discharge. This 4.5 mile segment of the river has been defined as the zone of initial dilution (ZID) for the discharge.*

*Being that the previous daily maximum temperature limit was not a water quality based limit (as was the thermal load limitation) and the calculated temperature increase in the receiving water (based on full licensed flow and 120°F) is within the allowable temperature increase (0.5°F) of Chapter 582, the Department is hereby granting the licensee's request. With the seasonal thermal load limitation remaining the same, this license modification is equally protective of the classification standards of the receiving waters.*

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

g. Color: For the LPT mill, applicable sections of Maine law, 38 M.R.S.A., §414-C states that:

2) Best practicable treatment; color pollution. For the purposes of Section 414-A, Subsection 1, best practicable treatment for color pollution control for discharges of color pollutants from the kraft pulping process is:

A) For discharges licensed and in existence prior to July 1, 1989:

- 1) On July 1, 1998 and until December 31, 2000, 225 pounds or less of color pollutants per ton of unbleached pulp produced, measured on a quarterly average basis: and
- 2) On and after January 1, 2001, 150 pounds or less of color pollutants per ton of unbleached pulp produced, measured on a quarterly average basis.

A discharge from a kraft mill that is in compliance with this section is exempt from provisions of subsection 3.

- 3) An individual waste discharge may not increase the color of any water body by more than 20 color units. The total increase in color pollution units caused by all dischargers to the water body must be less than 40 color pollution units. This subsection applies to all flows greater than the minimum 30-day low flow that can be expected to occur with a frequency of once in 10 years (30Q10). A discharge that is in compliance with this subsection is exempt from the provisions of subsection 2. Such a discharge may not exceed 175 pounds of color pollutants per ton of unbleached pulp produced after January 1, 2001.

The 11/6/98 license modification established two tiers of limits for color. Beginning July 1, 1998 and lasting through December 31, 2000, a quarterly average water quality based mass limit of 322,380 lbs of color was established and beginning January 1, 2001, the facility was limited to a technology based limit of 175 pounds per ton of unbleached pulp. The limitation is being carried forward in this permitting action.

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

- h. Adsorbable organic halides (AOX): The previous licensing action established 1/Month monitoring and “report” only requirements for AOX. This permitting action is establishing monthly average and daily maximum mass limits for AOX based on Federal regulation found at 40 CFR Part 430. The regulation establishes production based BAT monthly average and daily maximum allowances of 0.623 and 0.951 kg/kkg (lbs per 1000 pounds) of unbleached pulp production that are being established in this permitting action.

A review of the Discharge Monitoring Report (DMR) data for the period January 2002 through the present indicates the mean daily maximum AOX concentration discharged has been 0.10 kg/kkg based on 105 data points. The federal regulations require 1/Day monitoring for AOX on the final outfall. However, given the fact that permittee has demonstrated that the monthly average and daily maximum AOX discharged has been 84% and 90% respectively, lower than the levels established in the federal regulation, this permitting action is establishing a monitoring frequency of 1/Quarter for AOX based on a best professional judgment of the monitoring frequency necessary to determine on-going compliance with the BAT thresholds in the federal regulation.

- j. COD: The previous licensing action did not establish effluent limitations or monitoring requirements for COD. Federal regulation 40 CFR Part 430 has reserved promulgating of specific final effluent limits for COD. The EPA’s Permit Guidance Document for implementing 40 CFR Part 430 recommends “... *monitoring of effluent for COD to develop baseline data for developing a COD limit for mills in the future and to provide COD data for helping the mill develop a pollution control strategy.*” The permittee has historical daily COD test results which indicates consistent monthly average results but have no correlation to BOD values obtained during the same timeframe. Therefore, this permit does not establish limitations or monitoring requirements until the EPA formally promulgates a performance standard for COD.
- k. Total phosphorus – The previous licensing action did not establish limitations or monitoring requirements for total phosphorus. However, due to historic episodic algal blooms and measured excursions of Class B dissolved oxygen standards on the Penobscot River, the Department is establishing a monthly average water quality based mass limit of 68 lbs/day along with a monitoring frequency of 1/Week. The limitation was derived as follows:

$$(16.3 \text{ MGD})(8.34 \text{ lbs/gal.})(0.5 \text{ mg/L}) = 68 \text{ lbs/day}$$

Annual ambient water quality monitoring required by Special Condition L of this permit will assist the Department in future water quality assessment efforts to determine if Class B water quality standards are being achieved and maintained.

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

- l. pH Range: The previous licensing action established a pH range limit of 5.0 – 9.0 standard units that was based on federal regulation 40 CFR, Part 430. This permitting action is carrying the limit forward and continues to be consistent with the federal national effluent guidelines. This permitting action is also incorporating pH excursion provisions found in Department rule, Chapter 525, Section(4)§VIII 1 & 2. The rule states that for persons that monitor pH on a continuous basis, the total time during which the pH values may be outside the range of 5.0 – 9.0 standard units shall not exceed 7 hours and 26 minutes in any calendar month and no individual excursion from said pH range shall exceed 60 minutes.
- m. Mercury: Pursuant to Maine law, 38 M.R.S.A. §420 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee on May 23, 2000, thereby administratively modifying WDL # W000381-44-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 28.9 parts per trillion (ppt) and 43.3 ppt, respectively, and a minimum monitoring frequency requirement of four tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001. However, effective June 15, 2001, the Maine Legislature enacted Maine law, 38 M.R.S.A. §413, sub-§11 specifying that interim mercury limits and monitoring requirements remain in effect. It is noted that the mercury effluent limitations have not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit as the limits and monitoring frequencies are regulated separately through Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519. The interim mercury limits remain in effect and enforceable and modifications to the limits and/or monitoring frequencies will be formalized outside of this permitting document pursuant to Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519.

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 March 2006 through the present indicates the permittee has been in compliance with the interim limits for mercury as the results have ranged from 3.0 ppt to 27 ppt with an arithmetic mean of 11 ppt (n=21).

- n. 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.

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

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

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

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

Level I – chronic dilution factor of  $<20:1$ .

Level II – chronic dilution factor of  $\geq 20:1$  but  $<100:1$ .

Level III – chronic dilution factor  $\geq 100:1$  but  $<500:1$  or  $>500:1$  and  $Q \geq 1.0$  MGD

Level IV – chronic dilution  $>500:1$  and  $Q \leq 1.0$  MGD

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

**Screening level testing**

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

**Surveillance level testing**

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

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



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

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

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 (modified) and chronic critical ambient water quality criteria (AWQC) thresholds (3.7 and 0.9 mathematical inverse of the modified acute dilution factor 27.8:1 and the chronic dilution factor 108:1).

Given the absence of exceedences or reasonable potential to exceed critical WET thresholds, the licensee meets the waived surveillance level monitoring frequency 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 at a frequency of 1/Year 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)

### 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 licensing 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)

*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 D** 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 (total aluminum, total copper and total 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 licensee for operating at flows less than the licensed 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 E** 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 M, *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)

### 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 licensee's facility, historical averages for the pollutants of concern were calculated as follows:

### Aluminum

#### Mass limits

Mean concentration (n=8) = 804 ug/L or 0.804 mg/L

Permit flow limit = 16.3 MGD

Historical average mass = (0.804 mg/L)(8.34)(16.3 MGD) = 109.3 lbs/day

The 2/9/11 statistical evaluation indicates the historical average mass of aluminum discharged by the permittee's facility is 41.6% of the aluminum discharged by the facilities on the Penobscot River and its tributaries. Therefore, permittee's segment allocation for aluminum is calculated as 41.6% 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 1,126 lbs/day of aluminum at Bangor. Therefore, the mass segment allocation for aluminum for the permittee can be calculated as follows:

#### Monthly average mass for aluminum

(Chronic assimilative capacity mass)(% of total aluminum discharged)

(1,126 lbs/day)(0.416)= 468 lbs/day

Since the adoption of Chapter 530, the Department has developed a policy for establishing equitable concentration limits in licenses 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

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

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.

### Concentration limits

Monthly average concentration for aluminum;

$$\frac{468 \text{ lbs/day}}{(13.5 \text{ MGD}^{(1)})(8.34 \text{ lbs/gal.})} = 4.157 \text{ mg/L}$$

$$(4.157 \text{ mg/L})(1,000 \text{ ug/mg})(2) = 8,313 \text{ ug/L}$$

### Footnote

(1) A flow limitation of 13.5 MGD is being utilized in the calculation for establishing the concentration for the pollutants of concern as the facility is operating at the "current" level of production that is limited by a flow of 13.5 MGD

### Copper

#### Mass limits

Mean concentration (n=8) = 21.56 ug/L or 0.02156 mg/L

Permit flow limit = 16.3 MGD

Historical average mass = (0.02156 mg/L)(8.34)(16.3 MGD) = 2.93 lbs/day

The 2/9/11 statistical evaluation indicates the historical average mass of copper discharged by the permittee's facility is 19.73% of the copper discharged by the facilities on the Penobscot River and its tributaries. Therefore, the permittee's acute and chronic segment allocations for copper are calculated as 19.73% of the copper discharged on the Penobscot River and its tributaries. The Department has calculated an acute assimilative capacity of 35.94 lbs/day of copper at Bangor 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)  
 $(35.94 \text{ lbs/day})(0.1973) = 7.1 \text{ lbs/day}$

Monthly average: (Chronic assimilative capacity mass)(% of total copper discharged)  
 $(30.51 \text{ lbs/day})(0.1973) = 6.0 \text{ lbs/day}$

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

### Concentration limits:

Daily maximum mass limit = 7.1

$$\frac{(7.1 \text{ lbs/day})}{(8.34 \text{ lbs/gal})(13.5 \text{ MGD})} = 0.0631 \text{ mg/L}$$

$$(0.0631 \text{ mg/L})(1,000 \text{ ug/mg})(2) = 126 \text{ ug/L}$$

Monthly average mass limit = 6.0 lbs/day

$$\frac{(6.0 \text{ lbs/day})}{(8.34 \text{ lbs/gal})(13.5 \text{ MGD})} = 0.0533 \text{ mg/L}$$

$$(0.0533 \text{ mg/L})(1,000 \text{ ug/mg})(2) = 106 \text{ ug/L}$$

### Lead

#### Mass limits

Mean concentration (n=7) = 2.88 ug/L or 0.00288 mg/L

Permit flow limit = 16.3 MGD

Historical average mass = (0.00288 mg/L)(8.34)(16.3 MGD) = 0.39 lbs/day

The 2/9/11 statistical evaluation indicates the historical average mass of lead discharged by the permittee's facility is 10.44% of the lead discharged by the facilities on the Penobscot River and its tributaries. Therefore, permittee's segment allocation for lead is calculated as 10.44% 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

$$\begin{aligned} &(\text{Chronic assimilative capacity mass})(\% \text{ of total lead discharged}) \\ &(5.33 \text{ lbs/day})(0.1044) = 0.56 \text{ lbs/day} \end{aligned}$$

#### Concentration limits

Monthly average concentration for lead;

$$\frac{0.56 \text{ lbs/day}}{(13.5 \text{ MGD})(8.34 \text{ lbs/gal.})} = 0.00497 \text{ mg/L}$$

$$(0.00497 \text{ mg/L})(1,000 \text{ ug/mg})(2) = 9.9 \text{ or } 10 \text{ ug/L}$$

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

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 waiving surveillance level monitoring for analytical chemistry and priority pollutant testing for the first four years of the term of the permit. 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 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.

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.

### OUTFALL #100 (Bleach Plant)

In accordance with federal regulation 40 CFR Part 430, this permitting action is establishing limitations and monitoring requirements for an internal point source, the combined bleach plant filtrate effluents.

- o. Flow: The 11/6/98 license modification established a daily maximum reporting requirement for flow from the bleach plant. This permitting action is carrying that reporting requirement forward and specifying that the 1/day monitoring is only required when sampling for other parameters for Outfall #100 are being conducted.
- p. 2,3,7,8-TCDD (Dioxin): The 11/6/98 license modification established a daily maximum concentration limit of <10 ppq (pg/L) with a monitoring frequency of 2/Quarter for dioxin based on Maine law, 38 M.R.S.A., §420. The limit of 10 pg/L is also the ML (Minimum Level - the level at which the analytical system gives recognizable signals and an acceptable calibration point) for EPA Method 1613B. Federal regulation 40 CFR Part 430 establishes the same limitation and is therefore being carried forward in this permitting action.
- q. 2,3,7,8 TCDF (Furan): The previous licensing action established two tiers of daily maximum concentration limits for furan. The license established a limit of <100 ppq (pg/L) through December 31, 1999 and then was reduced to <10 ppq (pg/L) beginning January 1, 2000, based on Maine law, 38 M.R.S.A., §420. The monitoring frequency was established at 2/Quarter like dioxin. The limit of 10 pg/L is also the ML for furan for EPA Method 1613B. Federal regulation 40 CFR Part 430 establishes a daily maximum concentration limit of 31.9 pg/L. Being that Maine law is more stringent, the limit of <10 pg/L is being carried forward in this permitting action.

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

### OUTFALL #100 (Bleach Plant)

Federal regulation 40 CFR Part 430 does authorize the permitting authority to modify the monitoring frequency for dioxin and furans after five years of monitoring data (60 data points) for dioxin and furan has been collected. LPT has been monitoring the bleach plant effluent for dioxin and furan since 1998 and has more than 60 data points. The data collected to date indicates dioxin and furan have been less than the respective MLs of 10 ppq since the transition to the elimination of elemental chlorine from the bleaching process was completed in 1997. Therefore, the Department is modifying the 1/Month monitoring requirement in federal regulations by establishing a monitoring requirement of 1/Year for dioxin and furan. In lieu of the 1/Month monitoring requirement, Special Condition J, *Dioxin/Furan Certification*, of this permit requires the permittee to submit an annual certification indicating the bleaching process has not fundamentally changed from previous practices and therefore the formation of dioxin/furan compounds is highly unlikely.

- r. Twelve Chlorophenolics: The previous licensing did not establish limitations or monitoring requirements for the chlorophenolic compounds specified in this permitting action. Federal regulation 40 CFR Part 430 establishes monitoring for said parameters and applicable limitations. The limitations vary from 2.5 ug/L to 5.0 ug/L and are equivalent to the ML for each parameter using EPA Method 1653. A 2/year monitoring requirement is being established.
- s. Chloroform: The previous licensing action did not establish limitations or monitoring requirements for chloroform. This permitting action is establishing monthly average and daily maximum mass limits for chloroform based on federal regulation found at 40 CFR Part 430. The regulation establishes production based BAT monthly average and daily maximum allowances of 4.14 and 6.92 g/kg of unbleached pulp production that is being established in this permitting action. A monitoring requirement of 1/Quarter has been established based on the federal regulation.

## 7. BEST MANAGEMENT PRACTICES PLAN

Best Management Practices (BMPs) are specified at 40 CFR 430.03(d). The primary objective of the Best Management Practices is to prevent leaks and spills of spent pulping liquors, soap, and turpentine. The secondary objective is to contain, collect, and recover at the immediate process area, or otherwise control, those leaks, spills, and intentional diversions of spent pulping liquor, soap and turpentine that do occur. Toward those objectives, the permittee must implement the Best Management Practices (BMPs) specified in 40 CFR 430.03 (c). The conditions established in Special Condition G, *Best Management Practices*, of the permit are recommended by EPA Headquarters via a May 2000 Permit Guidance Document for the Pulp, Paper and Paperboard Manufacturing Point Source Category.



## **8. DISCHARGE IMPACT ON RECEIVING WATER QUALITY**

As permitted, the Department has determined that based on the information available to date, the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the Penobscot River to meet standards of its assigned classification. In addition, the Department has made the determination that water quality standards established in State law are protective of all cold water fish populations and that effluent monitoring of the discharge and ambient water quality monitoring of the receiving waters required by this permit serve as an interim Habitat Conservation Plan (HCP).

## **9. PUBLIC COMMENTS**

Public notice of this application was made in the Lincoln News newspaper on or about January 24, 2002. 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.

## **10. 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  
Electronic mail : [gregg.wood@maine.gov](mailto:gregg.wood@maine.gov)

Telephone: (207) 287-3901

## **11. RESPONSE TO COMMENTS**

During the period of April 13, 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 any comments from state or federal agencies on the draft permit. The Department did receive written comments from the permittee in a letter dated May 6, 2011. The comments did not result in any substantive change(s) in the terms and conditions of the permit. The Department also received written comments from the Penobscot Indian Nation (PIN) in a letter dated May 9, 2011, that warrants written responses. Therefore, the Department has prepared responses to those comments as follows:

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

**Comment #1:** The PIN questioned “...why the proposed Fact Sheet (Section 5 – Receiving Water Quality Conditions) makes no reference to impairment of fish consumption due to 2,3,7,8 TCDD/TCDF contamination; it only indicates due to the presence of PCB’s. The same 2008 Maine Integrated Water Quality Report referenced identifies impairment due to dioxin and PCBs (Table 4b). PIN contends that this information be included in the Fact Sheet to accurately characterize the receiving water conditions.”

**Response #1:** The Department agrees and page 8 of the Fact Sheet has been revised accordingly.

**Comment #2:** The PIN wrote “It is understandable the Lincoln Paper and Tissue would no longer be required to monitor at Outfall #002 if they no longer own the property. However, we believe it is important that monitoring continue at this outfall from the current landowner or whoever is considered to be the responsible party(s). The historic use of this property by the company (Lincoln Paper and Tissue and formerly Lincoln pulp and Paper) and the presence of dioxin in the leachate and storm water runoff warrant continued monitoring. If ME DEP is unable to require monitoring by the current landowner then Lincoln Paper and Tissue should continue the monitoring as it was once part of the mill property and waste stream.”

**Response #2:** As of the date of this permitting action it is unclear who the legal owner of the property is in which Outfall #002 is located but it is clear that LPT is not the owner. The Department cannot compel a permittee to monitor a site in a permitting action that the permittee does not have title, right or interest in. Therefore, the permit remains unchanged

As for the presence for dioxin, the Department is not aware of any recent analytical data that indicates the presence of dioxin. With the passage of the fish tissue testing referred to as the “above/below test” in 2003 and 2005 (see response #3 below), the Department has no reason to believe dioxin is being discharged from this outfall.

**Comment #3** – The PIN “...disagrees with the reduced monitoring frequency of only once per year for 2,3,7,8 TCDD and TCDF at Outfall #100. While this condition was carried over from the previous WDL, we are unaware of the 2007 administrative permit modification that reduced testing from 2/Quarter to 1/Year. We are pleased that monitoring results indicated non-detect levels of dioxin and furan at the bleach plant. However, given the health effects of dioxin and the fact the facility discharges directly into the PIN reservation where the tribe has sustenance fishing rights and where we carry out traditional cultural activities, we believe that continued monitoring is necessary to protect health of tribal members. We contend that annual monitoring of such a harmful chemical as dioxin is insufficient to adequately capture and characterize pulp and paper mill effluent. The tribe needs continued assurance that the facility is not discharging dioxins into its waters and exposing our people to the adverse health effects of dioxin.”

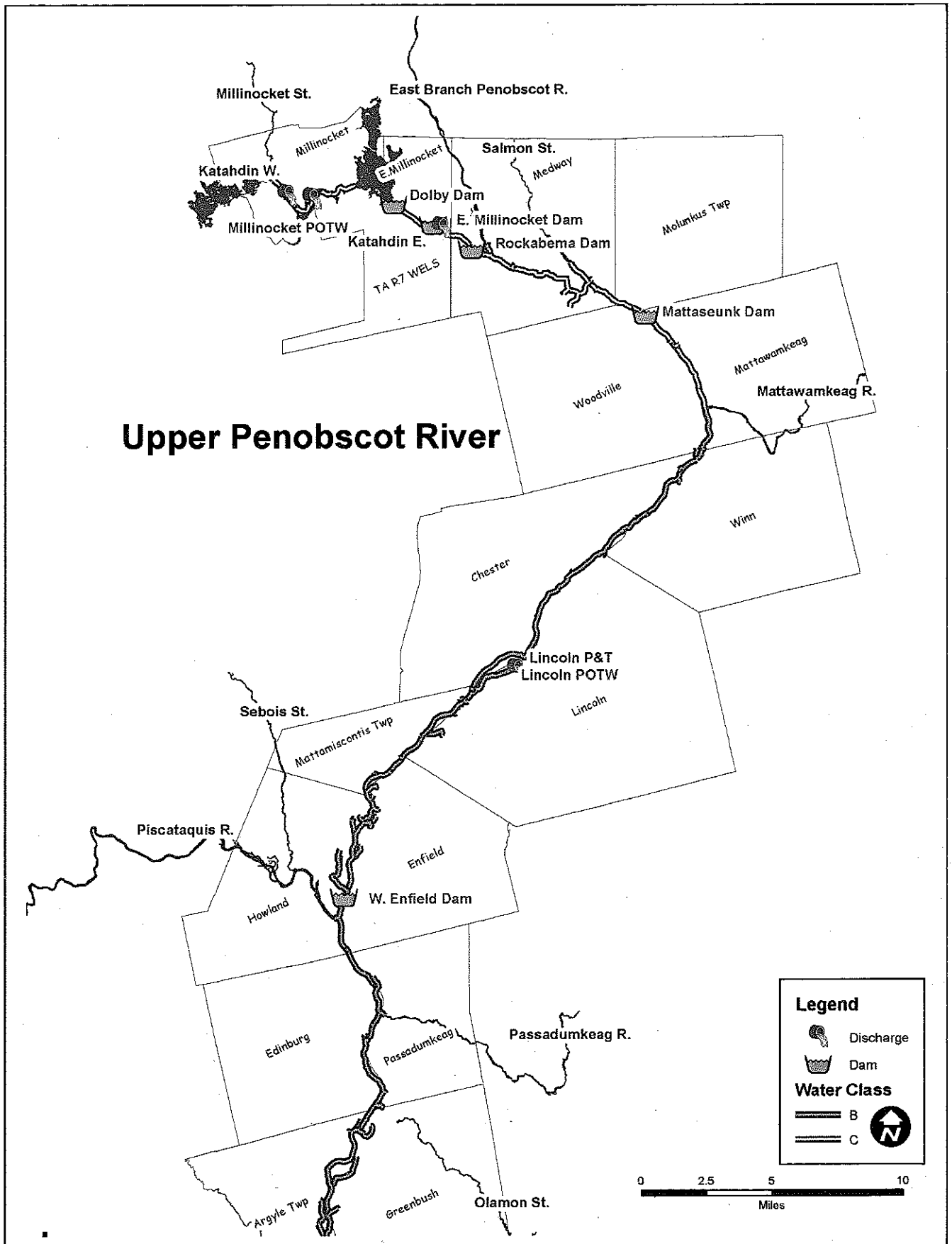
## 11. RESPONSE TO COMMENTS (cont'd)

**Response #3:** The permittee conducted 2/Quarter monitoring for 2,3,7,8 TCDD and 2,3,7,8 TCDF between June of 1998 – March 2007 and 1/Year monitoring in calendar years 2008- 2010. Seventy two (72) test results were reported as non-detect (ND) with detection levels ranging from 0.381 to 8.9 parts per quadrillion (ppq). One test result was reported at 5.99 ppq in March of 2005. The USEPA's minimum levels (MLs) of detection for 2,3,7,8 TCDD and 2,3,7,8 TCDF are 10 ppq. The USEPA's position on reported values less than the accepted ML are considered to be zero. Department rule 06-096 CMR Chapter 530, Surface Water Toxics Control Program, §2(C)(6) states in part "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." Therefore, all tests results for TCDD and TCDF submitted to the Department since March of 2003 indicate neither TCDD or TCDF is present bleach plant discharge.

The 2008 Dioxin Monitoring Report prepared by the Department contained the following italicized text; *"The mill {Lincoln} passed the A/B test in 2003 and 2005, and must demonstrate continuing compliance annually. Reduced discharge of dioxin from the mill has been documented by decreased concentrations of TCD and TCDF in sludge (Appendix 3) and in effluent (Appendix 4) since a change in the mill's bleaching process from chlorine based bleaching to primarily oxygen based bleaching in 1999. These results are consistent with the declining trend seen in fish, and the finding of no measurable discharge by 2005. The mill has demonstrated continued compliance with the 'no discharge' provision of the 1997 Dioxin law. In a letter dated December 12, 2008 the mill certified that it has met the performance criteria established by DEP for the bleaching process and defoamer usage (Appendix 7). Sampling bleach plant effluent was conducted in June 2008 documented that concentrations of both TCDD and TCDF were below detection at a low sample specific detection level (Appendix 4).*

Special Condition J, *Annual Dioxin/Furan Certification*, of the permit requires the permittee to annual certify that no major changes in the configuration of or operation of the bleach plant have taken place that would lend itself to changes in the characteristics of the discharge as it relates to the formation of dioxin/furan compounds. Given the consistency of the dioxin/furan test results cited in response #3 of this section and the requirement for the annual certification, the Department does not agree that maintaining a monitoring frequency of 2/quarter for dioxin and furan is necessary. Therefore, the monitoring frequency for dioxin and furan remains at 1/year.

# ATTACHMENT A



# ATTACHMENT B

2/4/2011

## WET TEST REPORT

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



LINCOLN PAPER and TISSUE LLC		NPDES= ME000200	Effluent Limit: Acute (%) = 0.924		Chronic (%) = 0.886	
Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	100	05/09/2006	0.924		
TROUT	C_NOEL	50	05/09/2006	0.886		
WATER FLEA	A_NOEL	100	05/09/2006	0.924		
WATER FLEA	C_NOEL	100	05/09/2006	0.886		

# **ATTACHMENT C**



5/17/2011

## PRIORITY POLLUTANT DATA SUMMARY



Date Range:

Facility Name: **LINCOLN I**NPDES: **ME0002003**

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
09/07/2006	9.70	10.60	13	9	0	0	0	4	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
11/16/2006	9.70	10.70	11	8	0	0	0	3	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
08/08/2007	11.30	12.10	13	9	0	0	0	4	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
09/08/2008	9.40	9.80	12	9	0	0	0	3	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
10/07/2009	10.10	11.70	12	9	0	0	0	3	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
11/14/2010	10.70	10.80	11	9	0	0	0	2	0	F	0

## Key:

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

5/17/2011

## FACILITY CHEMICAL DATA REPORT



Data Date Range:

Facility name: LINCOLN I

1

Permit Number: ME0002003

**Parameter: ALUMINUM**

Test date	Result (ug/l)	Lsthan
09/07/2006	340.000	N
11/16/2006	360.000	N
08/08/2007	650.000	N
09/08/2008	590.000	N
10/07/2009	2560.000	N
11/14/2010	966.000	N

**Parameter: AMMONIA**

Test date	Result (ug/l)	Lsthan
09/07/2006	3400.000	N
08/08/2007	100.000	Y
09/08/2008	830.000	N
10/07/2009	550.000	N
11/14/2010	1920.000	N

**Parameter: ARSENIC**

Test date	Result (ug/l)	Lsthan
09/07/2006	2.000	N
08/08/2007	1.000	Y
09/08/2008	5.000	Y
10/07/2009	5.000	Y
11/14/2010	5.000	Y

**Parameter: CADMIUM**

Test date	Result (ug/l)	Lsthan
09/07/2006	0.300	N
11/16/2006	0.700	N
08/08/2007	0.200	N
09/08/2008	1.100	N
10/07/2009	1.000	Y
11/14/2010	1.000	Y

**Parameter: CHLORINE**

Test date	Result (ug/l)	Lsthan
09/07/2006	20.000	Y
11/16/2006	30.000	N
08/08/2007	30.000	N

**Parameter: CHROMIUM**

Test date	Result (ug/l)	Lsthan
09/07/2006	4.000	N
11/16/2006	3.000	N
08/08/2007	4.000	N
09/08/2008	10.000	Y
10/07/2009	10.000	Y
11/14/2010	10.000	Y

**Parameter: COPPER**

Test date	Result (ug/l)	Lsthan
09/07/2006	21.000	N
11/16/2006	1.000	N
08/08/2007	32.000	N
09/08/2008	3.000	Y
10/07/2009	39.000	N

Parameter: CYANIDE

11/14/2010	58.000	N
Test date	Result (ug/l)	Lsthan
09/07/2006	3.000	N
11/16/2006	4.000	N
08/08/2007	4.000	N
09/08/2008	5.000	Y
10/07/2009	5.000	Y
11/14/2010	5.000	Y

Parameter: LEAD

Test date	Result (ug/l)	Lsthan
09/07/2006	1.000	N
11/16/2006	2.000	N
08/08/2007	6.000	N
09/08/2008	5.000	N
10/07/2009	3.000	N
11/14/2010	3.000	N

Parameter: MERCURY

Test date	Result (ug/l)	Lsthan
07/26/2006	0.008	N
10/17/2006	0.013	N
01/17/2007	0.007	N
04/12/2007	0.003	N
07/11/2007	0.014	N
10/03/2007	0.012	N
01/16/2008	0.010	N
04/09/2008	0.022	N
08/07/2008	0.027	N
10/08/2008	0.021	N
01/07/2009	0.013	N
05/06/2009	0.011	N
07/15/2009	0.011	N
10/07/2009	0.015	N
01/13/2010	0.006	N
04/08/2010	0.011	N
07/07/2010	0.005	N
10/05/2010	0.006	N
01/05/2011	0.019	N

Parameter: NICKEL

Test date	Result (ug/l)	Lsthan
09/07/2006	15.000	N
11/16/2006	4.000	N
08/08/2007	13.000	N
09/08/2008	5.000	Y
10/07/2009	7.000	N
11/14/2010	5.000	Y

Parameter: SILVER

Test date	Result (ug/l)	Lsthan
09/07/2006	1.100	N
11/16/2006	0.500	N
08/08/2007	0.300	Y
09/08/2008	1.000	Y
10/07/2009	1.000	Y
11/14/2010	1.000	Y

**Parameter:** ZINC

**Test date**

**Result (ug/l)**

**Lsthan**

09/07/2006

33.000

N

11/16/2006

65.000

N

08/08/2007

91.000

N

09/08/2008

74.000

N

10/07/2009

77.000

N

11/14/2010

67.000

N

# ATTACHMENT D

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

DATE: October 2008

TO: Interested Parties

FROM: Dennis Merrill, DEP

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

\*\*\*\*\*

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

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

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

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

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

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

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

## Maine Department of Environmental Protection

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

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

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

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

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

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

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

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

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

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

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

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

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

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



Maine Department of Environmental Protection

Working Definitions of Terms Used in the DeTox System.

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

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

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

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

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

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

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

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

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

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

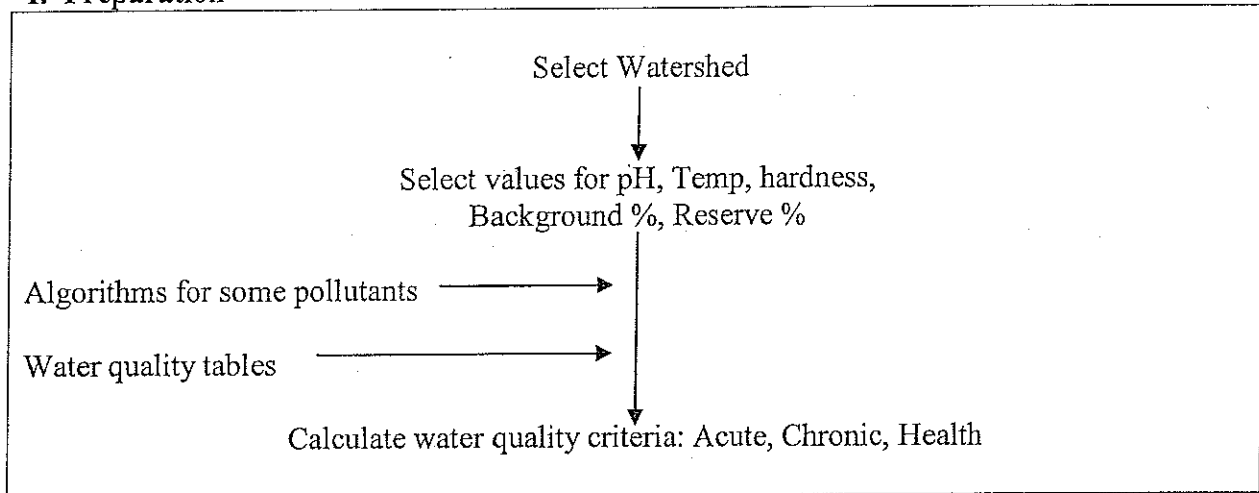
*Segment allocation.* One of three ways of developing an *allocation*. The amount is set by multiplying a facility's *historical discharge percentage* for a specific pollutant by the *assimilative capacity* for that pollutant and criterion. A facility will have different allocation percentages for each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

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

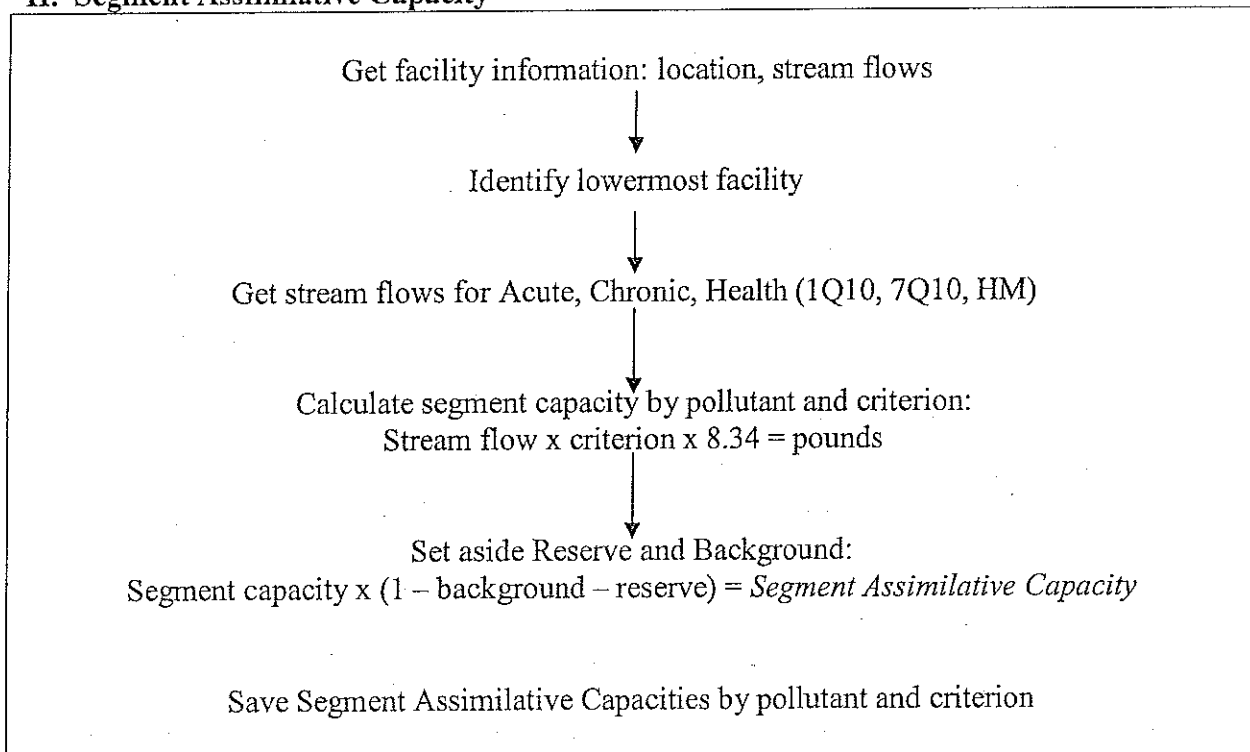
*Water quality criteria.* Standards for acceptable in-stream or ambient levels of pollutants. These are established in the Department's Chapter 584 and are expressed as concentrations in ug/L. There may be separate standards for acute and chronic protection aquatic life and/or human health. Each criterion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

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

## I. Preparation

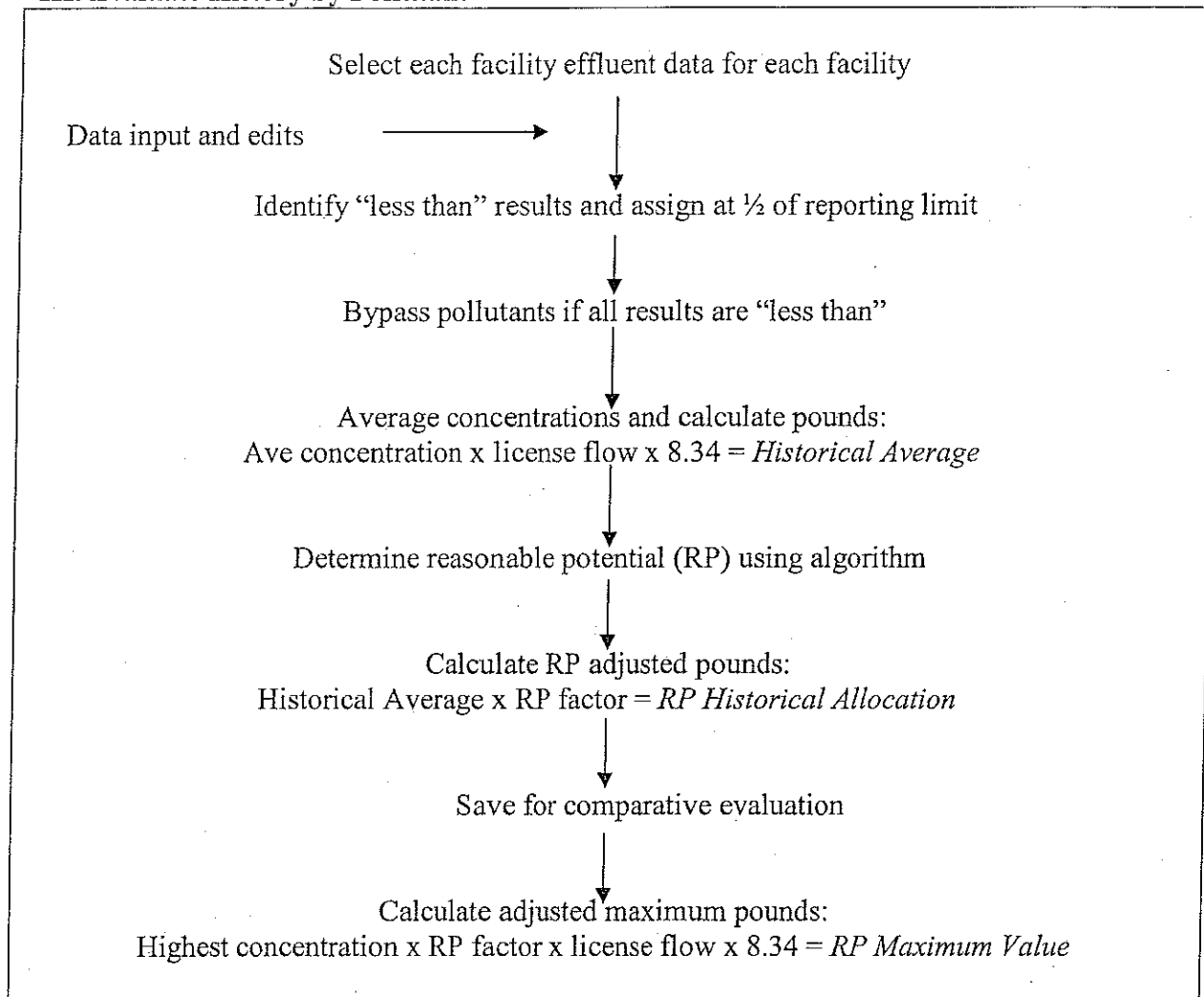


## II. Segment Assimilative Capacity

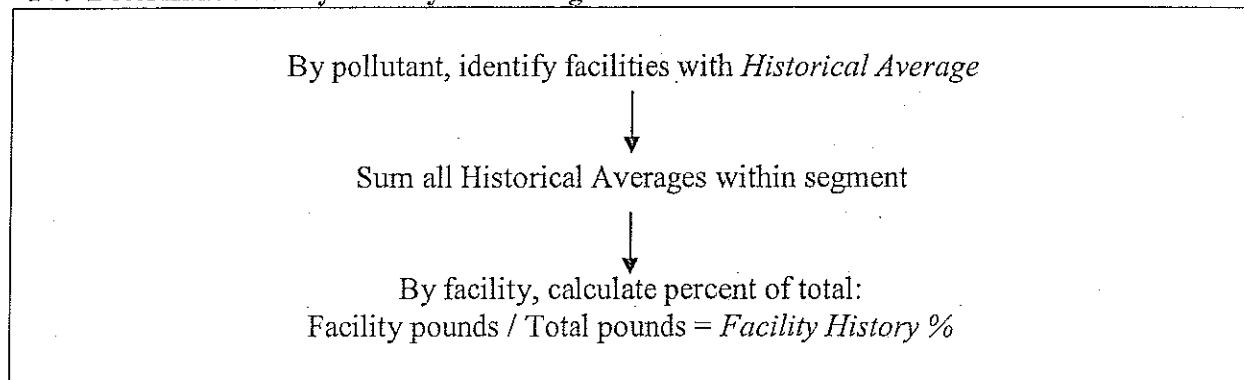


Maine Department of Environmental Protection  
General Processing Steps in "DeTox"

**III. Evaluate History by Pollutant**

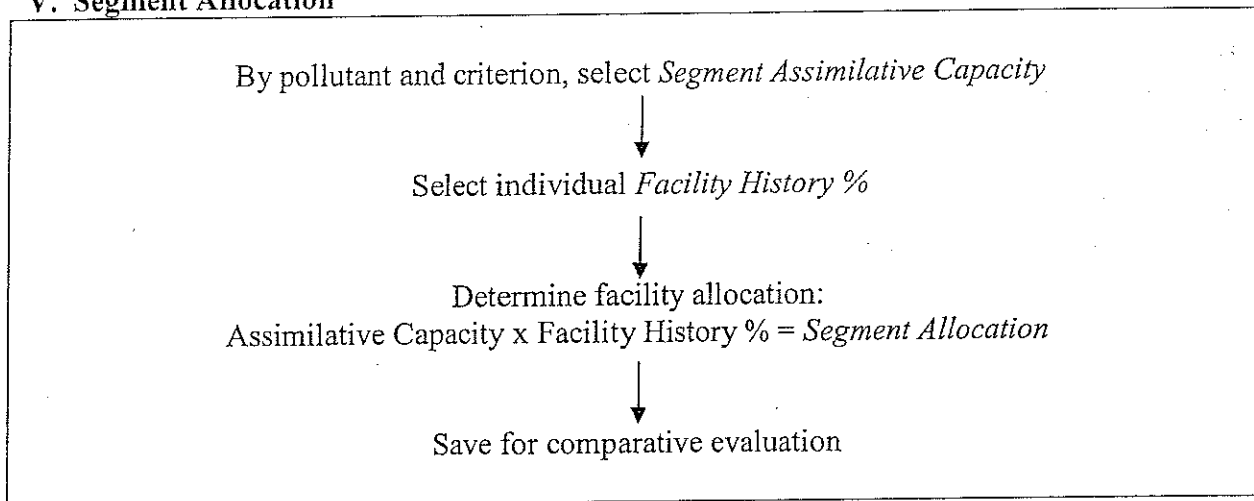


**IV. Determine Facility History Percentage**

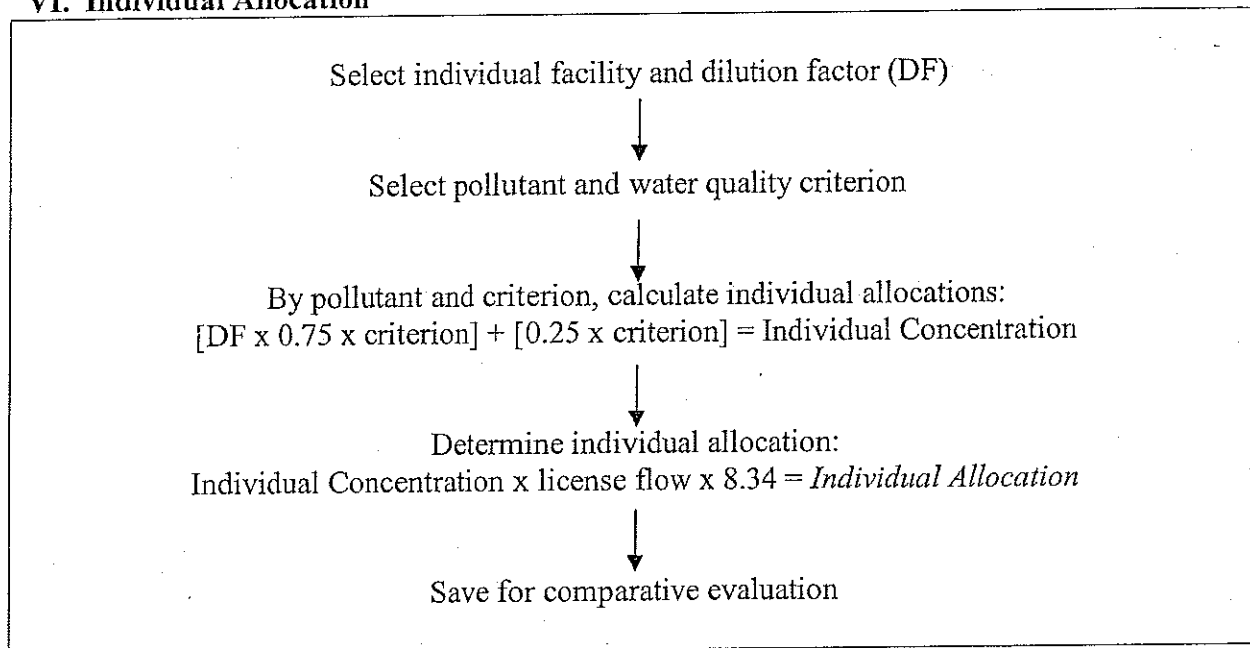


Maine Department of Environmental Protection  
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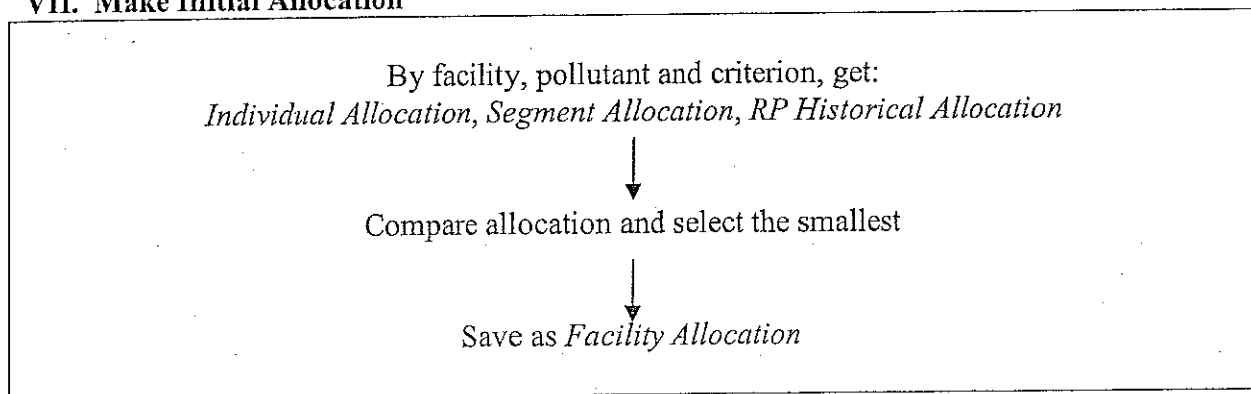
**V. Segment Allocation**



**VI. Individual Allocation**

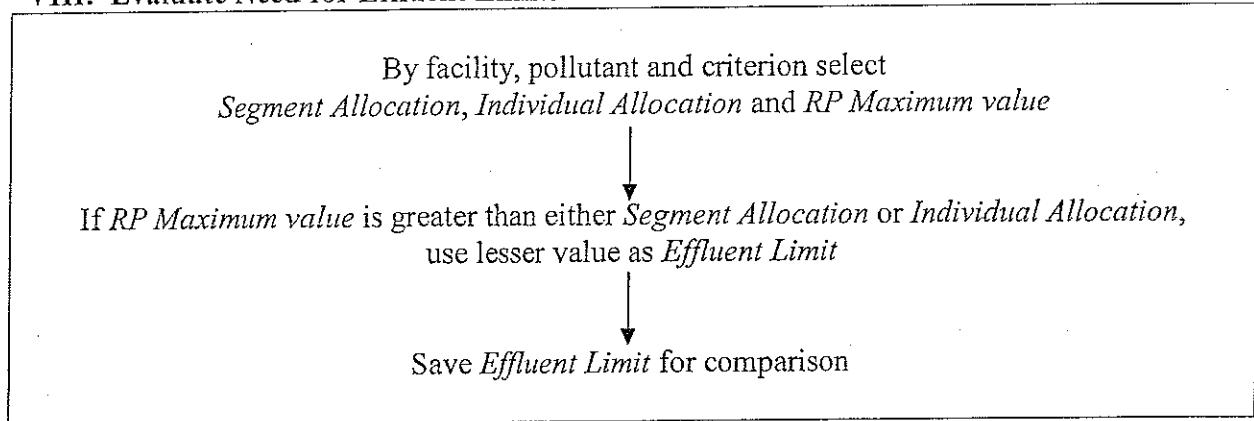


**VII. Make Initial Allocation**

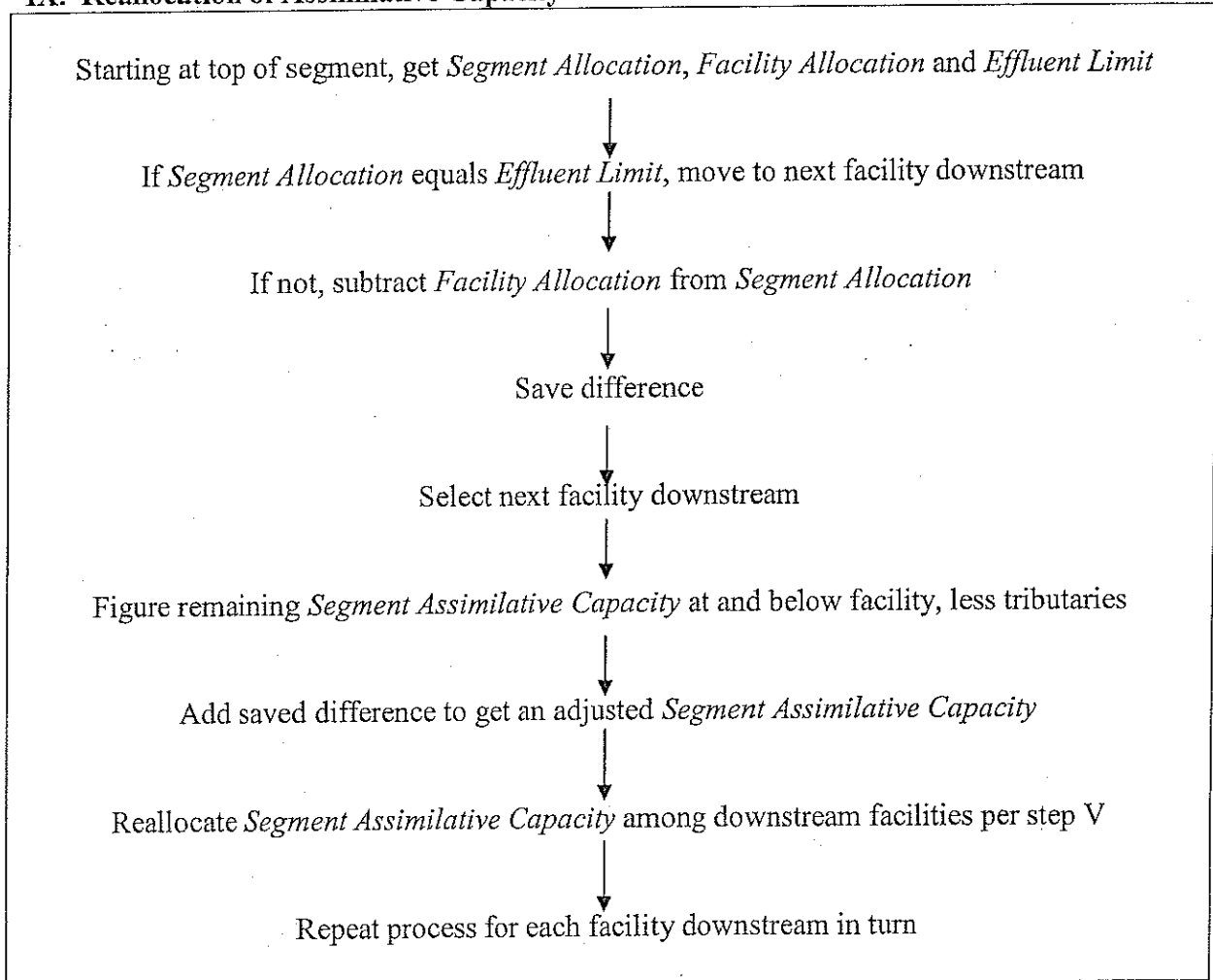


Maine Department of Environmental Protection  
General Processing Steps in "DeTox"

**VIII. Evaluate Need for Effluent Limits**



**IX. Reallocation of Assimilative Capacity**



# **ATTACHMENT E**

## 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 creditable 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 F

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

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

Since the effective date of your permit have there been:	<b>NO</b>	<b>YES</b> (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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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### A. GENERAL PROVISIONS

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

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

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

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

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

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

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

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

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

## **B. OPERATION AND MAINTENANCE OF FACILITIES**

### **1. General facility requirements.**

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

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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maximize removal of pollutants unless authorization to the contrary is obtained from the Department.

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

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

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

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

### **5. Bypasses.**

(a) Definitions.

- (i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
- (ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.

(c) Notice.

- (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.



MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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

**6. Upsets.**

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

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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### C. MONITORING AND RECORDS

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

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

### **3. Monitoring and records.**

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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**D. REPORTING REQUIREMENTS**

**1. Reporting requirements.**

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

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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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).

## MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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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.

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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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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