STATE OF MAINE

Department of Environmental Protection

Paul R. LePage
GOVERNOR

Patricia W. Aho
COMMISSIONER

June 2, 2014

Mr. Jay Beaudoin
Environmental Superintendent
Woodland Pulp LLC
144 Main Street
Baileyville, ME. 04694

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0001872
Maine Waste Discharge License (WDL) Application #W002766-5N-J-R
Final Permit/License

Dear Jay:

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

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

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

Sincerely,

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

Enc.
cc: Stacie Beyer, DEP/EMRO
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

WOODLAND PULP LLC	)	MAINE POLLUTANT DISCHARGE
BAILEYVILLE, WASHINGTON COUNTY, ME.	)	ELIMINATION SYSTEM PERMIT
PULP & PAPER MANUFACTURING FACILITY	)	AND
ME0001872	)	WASTE DISCHARGE LICENSE
W002766-5N-J-R **APPROVAL**	)	**RENEWAL**

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 all applicable regulations, the Department of Environmental Protection (Department hereinafter) has considered the application of WOODLAND PULP LLC (permittee hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The permittee filed a timely and complete application with the Department for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0001872/Maine Waste Discharge License (WDL) #W002766-5N-E-R (permit hereinafter) which was issued by the Department to Domtar Maine LLC, on May 31, 2005, and expired on May 31, 2010. The May 31, 2005, permit authorized the daily maximum discharge of 40 million gallons per day of treated process waste water, treated sanitary waste waters, treated landfill leachate, treated residuals storage pads leachate and other miscellaneous waste waters associated with the kraft pulp and papermaking process and related operations, and a monthly average discharge of 5.6 MGD of treated storm water runoff and a non-contact cooling waters to the St. Croix River, Class C, in Baileyville, Maine.

It is noted the May 31, 2005, permit was subsequently modified on June 23, 2008, to reduce monitoring frequencies for biochemical oxygen demand (BOD), total suspended solids (TSS), chemical oxygen demand (COD), pH and temperature and established a more stringent water quality based limit for inorganic arsenic. The permit was modified again on June 27, 2008, to reduce the monitoring frequencies for adsorbable organic halides (AOX), chloroform and the twelve chlorinated phenolic compounds. The permit was modified again on September 10, 2013, to eliminate limitations and monitoring requirements for total arsenic and inorganic arsenic as well as the schedule of compliance for inorganic arsenic based on a more current statistical evaluation utilizing new ambient water quality criteria for inorganic arsenic approved by the USEPA on May 16, 2013. It is also noted the company name Domtar Maine LLC was changed to Woodland Pulp LLC in 2010.

MODIFICATIONS REQUESTED

1. Establish a monthly average flow limitation of 30 MGD and change the daily maximum flow limit from 40 MGD to a "report" only requirement.

2. Establish a schedule of compliance for water quality based mass and concentration limitations for cadmium.

3. Increase the monthly average flow limitation and daily maximum temperature limit for Outfall #003 as a result of a new water balance at the facility.

PERMIT SUMMARY

This permit is carrying forward all the terms and conditions of the 5/31/05 MEPDES permit and the three subsequent modifications of 6/23/08, 6/28/08 and 9/10/13 except that this permit:

1. Establishes a monthly average flow limitation of 30 MGD for Outfall #001 and changes the daily maximum flow limit from 40 MGD to a "report" only requirement based on a request by the permittee.

2. Establishes new dilution factors associated with the discharge from Outfall #001 given the revised monthly average flow limitation.

3. Eliminates the acute no observed effect level (A-NOEL) and chronic no observed effect level (C-NOEL) water quality based limits of 33% and 8.3% respectively, for the water flea as there are no test results in the most current 60 months that exceed or have a reasonable potential to exceed the critical A-NOEL or C-NOEL thresholds.

4. Eliminates the monthly average and daily maximum water quality based mass and concentration limits for cyanide as there are no test results in the most current 60 month period that exceed or have a reasonable potential to exceed the acute and or chronic ambient water quality criteria (AWQC) for cyanide and silver.

5. Revises the monthly average and/or daily maximum water quality based mass and concentration limits for cadmium, copper, and zinc based on more stringent AWQC and or the methodology of watershed permitting for toxics pollutants.

6. Establishes a schedule to come into compliance with water quality based limitations for cadmium.

PERMIT SUMMARY (cont'd)

7. Increases the monthly average flow limit from 3.6 MGD to 15.0 MGD and the daily maximum temperature from 95°F to 110°F for Outfall #003, that consists of condensate, cooling waters and storm water. It is noted the overall thermal load discharged from the mill complex is no greater as a result of these increases in flow and temperature as the permittee is simply conveying cooling waters that were once discharged via Outfall #001 to Outfall #003.

8. Reducing the monitoring frequency for TSS from 5/Week to 2/Week based on a statistical evaluation of the compliance data for the period January 2010 – July 2013.

9. Increases the monthly average and daily maximum technology based limitations for adsorbable organic halides (AOX) for Outfall #001 and chloroform for Outfalls #100 and #200 collectively based on a 5.7 % increase in production at the mill.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated April 17, 2014, 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 natural resource, that water quality will be maintained and protected;

   (c) Where the standards of classification of the receiving water body are met or 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

CONCLUSIONS (cont'd)

(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 WOODLAND PULP LLC to discharge a monthly average flow of 30 MGD of treated process waste water, treated sanitary waste waters, treated landfill leachate, treated residuals storage pads leachate, treated storm water, non-contact cooling waters and other miscellaneous waste waters associated with the kraft pulp and papermaking process and related operations to the St. Croix River, Class C, 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 this permit, the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S.A. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (effective April 1, 2003)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS 2ND DAY OF June, 2014.
DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Kuhns
For Patricia W. Aho, Commissioner

Filed
JUN 02 2014
State of Maine
Board of Environmental Protection

Date of initial receipt of application December 3, 2009.
Date of application acceptance December 4, 2009.

Date filed with Board of Environmental Protection _____

This Order prepared by GREGG WOOD, BUREAU OF LAND & WATER QUALITY
ME0001872 2014 6/2/14

SPECIAL CONDITIONS
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Beginning with the effective date of this permit, the permittee is authorized to discharge secondary treated waste waters from **Outfall #001,** bleach plant effluent (internal waste streams) from **Outfalls #100 & #200**, condensate, cooling waters (and where applicable, storm water) from **Outfalls #002 & #003**, and a total thermal load from **Outfall #00T** (administrative) to the St. Croix River. Such discharges shall be limited and monitored by the permittee as specified below.

OUTFALL #001 – Secondary treated waste waters

Effluent Characteristic	Discharge Limitations					Minimum Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow (MGD) *[50050]*	30 MGD *[03]*	Report MGD *[03]*	—	—	—	Continuous *[99/99]*	Recorder*[RC]*
BOD_5 *[00310]*							
June 1 – Sept. 30	8,400 #/day	17,000 #/day	---	---	---	2/Week	Composite
June 1 – Sept. 30	---	12,400 #/day(1)	---	---	---	2/Week	Composite
Oct 1 – May 31	12,000 #/day *[26]*	17,000 #/day *[26]*	---	—	---	2/Week *[02/07]*	Composite *[24]*
TSS *[00530]*							
Year-round	18,600 #/day *[26]*	31,000 #/day *[26]*	---	---	---	2/Week *[02/07]*	Composite *[24]*
Temperature *[00011]*							
June 1 – Sept. 30	---	---	---	---	100°F *[15]*	5/Week *[05/07]*	Measure *[MS]*
Oct. 1 – May 31	---	---	---	---	Report °F *[15]*	1/Week *[01/07]*	Measure *[MS]*
Adsorbable Organic Halides(2) (AOX) *[03594]*	1,869 #/day *[26]*	2,853 #/day *[26]*	---	---	---	1/Month *[01/30]*	Composite *[24]*
Chemical Oxygen Demand(COD) *[81017]*	Report (#/day) *[26]*	Report (#/day) *[26]*	---	---	---	5/Week *[05/07]*	Composite *[24]*
pH (Std. Unit) *[00400]*	---	---	---	—	5.0 – 9.0 SU(3) *[12]*	5/Week *[05/07]*	Grab *[GR]*

SPECIAL CONDITIONS
OUTFALL #001 – Secondary treated waste waters (cont'd)

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Color *[00084]*	150 lbs/ton(4) *[42]*	---	---	---	---	---	3/Week *[03/07]*	Calculate *[CA]*
Cadmium (Total) *[01027]*	Report lbs./day *[26]*	---	Report lbs./day *[26]*	Report ug/L *[28]*	---	Report ug/L *[28]*	1/Quarter *[01/90]*	Composite *[24]*
Cadmium (Total) *[01027]* **Beginning March 1, 2018**	0.34 lbs./day *[26]*	---	0.44 lbs./day *[26]*	Report ug/L *[28]*	---	Report ug/L *[28]*	1/Quarter *[01/90]*	Composite *[24]*
Copper (Total) *[01042]*	---	---	3.2 lbs./day *[26]*	---	---	Report ug/L *[28]*	1/Quarter *[01/90]*	Composite *[24]*
Lead (Total) *[01077]*	1.7 lbs/day *[26]*	---	---	Report ug/L *[28]*	---	---	1/Quarter *[01/90]*	Composite *[24]*
Mercury (Total) (5) *[50286]*	---	---	---	35.5 ng/L *[3M]*	---	53.3 ng/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*
Phosphorus (Total) (16) *[00665]* St. Croix River (background) **June 1 – September 30, 2014**	---	---	---	Report ug/L *[28]*	---	Report ug/L *[28]*	1/Week *[01/07]*	Grab *[GR]*
Zinc (Total) *[01092]*	---	---	32 lbs./day *[26]*	---	---	Report ug/L *[28]*	1/Month *[01/30]*	Composite *[24]*

SPECIAL CONDITIONS

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

SURVEILLANCE LEVEL - Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit).

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity[6]						
Acute – NOEL						
Ceriodaphnia dubia (Water flea) *[TDA3B]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Grab *[GR]*
Salvelinus fontinalis (Brook trout) *[TDA6F]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Grab *[GR]*
Chronic – NOEL						
Ceriodaphnia dubia (Water flea) *[TBP3B]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Grab *[GR]*
Salvelinus fontinalis (Brook trout) *[TBQ6F]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Grab *[GR]*
Analytical chemistry[7] *[51168]*	---	---	---	Report ug/L *[28]*	1/Year *[01/YR]*	Composite/Grab *[24]*

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

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity[6]						
Acute – NOEL						
Ceriodaphnia dubia (Water flea) *[TDA3B]*	---	---	---	Report % *[23]*	1/Quarter *[01/90]*	Grab *[GR]*
Salvelinus fontinalis (Brook trout) *[TDA6F]*	---	---	---	Report % *[23]*	1/Quarter *[01/90]*	Grab *[GR]*
Chronic – NOEL						
Ceriodaphnia dubia (Water flea) *[TBP3B]*	---	---	---	Report % *[23]*	1/Quarter *[01/90]*	Grab *[GR]*
Salvelinus fontinalis (Brook trout) *[TBQ6F]*	---	---	---	Report % *[23]*	1/Quarter *[0190]*	Grab *[GR]*
Analytical chemistry[7] *[51168]*	---	---	---	Report ug/L *[28]*	1/Quarter *[01/90]*	Composite/Grab *[24]*
Priority Pollutant [8] *[50008]*	---	---	---	Report ug/L *[28]*	1/Year *[01/YR]*	Composite/Grab *[24]*

OUTFALL #100 (Bleach Plant) Acid Sewer

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample TypeB as specified
Flow *[50050]*	Report MGD *[03]*	Report MGD *[03]*	---	---	1/Day[9] *[01/01]*	Recorder *[RC]*
2,3,7,8 TCDD (Dioxin)[10] *[34675]*	---	---	---	<10 pg/L[11] *[3L]*	1/Year *[01/YR]*	Composite *[24]*
2,3,7,8 TCDF (Furan)[10] *[38691]*	---	---	---	<10 pg/L[11] *[3L]*	1/Year *[01/YR]*	Composite *[24]*
Trichlorosyringol[12] *[73054]*	---	---	---	<2.5 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
3,4,5-Trichlorocatechol[12] *[73037]*	---	---	---	<5.0 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
3,4,,6- Trichlorocatechol[12] *[51024]*	---	---	---	<5.0 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
3,4,5-Trichloroguaiacol[12] *[61024]*	---	---	---	<2.5 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
3,4,6-Trichloroguaiacol[12] *[51022]*	---	---	---	<2.5 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
4,5,6-Trichloroguaiacol[12] *[73088]*	---	---	---	<2.5 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
2,4,5-Trichlorophenol[12] *[61023]*	---	---	---	<2.5 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
2,4,6-Trichlorophenol[12] *[34621]*	---	---	---	<2.5 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
Tetrachlorocatechol[12] *[79850]*	---	---	---	<5.0 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
Tetrachloroguaiacol[12] *[73047]*	---	---	---	<5.0 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
2,3,4,6-Tetrachlorophenol[12] *[77770]*	---	---	---	<2.5 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
Pentachlorophenol[12] *[39032]*	---	---	---	<5.0 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
Chloroform[13] *[32106]*	12.4 #/day	20.7 #/day	---	---	1/Year *[01/YR]*	Grab *[24]*

OUTFALL #200 (Bleach Plant) Alkaline Sewer

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average as specified	**Daily Maximum** as specified	**Monthly Average** as specified	**Daily Maximum** as specified	**Measurement Frequency** As specified	**Sample TypeB** as specified
Flow *[50050]*	Report MGD *[03]*	Report MGD *[03]*	---	---	1/Day[9] *[01/01]*	Recorder *[RC]*
2,3,7,8 TCDD (Dioxin)[10] *[34675]*	---	---	---	<10 pg/L[11] *[3L]*	1/Year *[01/YR]*	Composite *[24]*
2,3,7,8 TCDF (Furan)[10] *[38691]*	---	---	---	<10 pg/L[11] *[3L]*	1/Year *[01/YR]*	Composite *[24]*
Trichlorosyringol[12] *[73054]*	---	---	---	<2.5 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
3,4,5-Trichlorocatechol[12] *[73037]*	---	---	---	<5.0 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
3,4,,6- Trichlorocatechol[12] *[51024]*	---	---	---	<5.0 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
3,4,5-Trichloroguaiacol[12] *[61024]*	---	---	---	<2.5 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
3,4,6-Trichloroguaiacol[12] *[51022]*	---	---	---	<2.5 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
4,5,6-Trichloroguaiacol[12] *[73088]*	---	---	---	<2.5 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
2,4,5-Trichlorophenol[12] *[61023]*	---	---	---	<2.5 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
2,4,6-Trichlorophenol[12] *[34621]*	---	---	---	<2.5 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
Tetrachlorocatechol[12] *[79850]*	---	---	---	<5.0 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
Tetrachloroguaiacol[12] *[73047]*	---	---	---	<5.0 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
2,3,4,6-Tetrachlorophenol[12] *[77770]*	---	---	---	<2.5 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
Pentachlorophenol[12] *[39032]*	---	---	---	<5.0 ug/L[11] *[28]*	1/Year *[01/YR]*	Composite *[24]*
Chloroform[13] *[32106]*	12.4 #/day	20.7 #/day	---	---	1/Year *[01/YR]*	Grab *[24]*

SPECIAL CONDITIONS

OUTFALL #002 – Condensate, cooling waters and storm water

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow *[50050]*						
June 1 – Sept. 30	2.0 MGD *[03]*	Report MGD *[03]*	---	---	5/Week *[05/07]*	Measure *[MS]*
Oct 1 – May 31	2.0 MGD *[03]*	Report MGD *[03]*	---	---	1/Week *[01/07]*	Measure *[MS]*
Temperature *[00011]*						
June 1 – Sept. 30	---	---	---	105°F *[15]*	5/Week *[05/07]*	Measure *[MS]*
Oct 1 – May 31	---	---	---	105°F *[15]*	1/Week *[01/07]*	Measure *[MS]*
pH (Standard Units) *[00400]*	---	---	---	5.0 – 9.0 SU(3) *[12]*	5/Week *[05/07]*	Grab *[GR]*

OUTFALL #003 – Condensate, cooling waters and storm water

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow *[50050]*	15.0 MGD *[03]*	Report MGD *[03]*	---	---	1/Discharge Day *[01/DD]*	Measure *[MS]*
Temperature *[00011]*	---	---	---	110°F *[15]*	1/Discharge Day *[01/DD]*	Measure *[MS]*
pH (Standard Units) *[00400]*	---	---	---	5.0 – 9.0 SU(3) *[12]*	1/Discharge Day *[01/DD]*	Grab *[GR]*
Zinc (Total) *[01092]* *(September 2014–August 2015)*	---	---	---	Report mg/L *[28]*	1/Month *[01/30]*	Grab *[GR]*

SPECIAL CONDITIONS

OUTFALL #00T – Total thermal load calculated from Outfalls #001, #002 and #003

Effluent Characteristic	Discharge Limitations					Minimum Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Thermal Discharge *June 1 – Sept. 30* *[00017]*	---	---	---	8.00 EE9[14,15] BTUs/Day *[34]*	9.20 EE9[14] BTUs/Day *[34]*	5/Week *[05/07]*	Calculate *[CA]*

SPECIAL CONDITIONS

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

Outfalls #001, #002, #003, #100 & #200

Footnotes:

Effluent sampling for Outfall #001 and Outfall #002 shall be sampled for all parameters after the respective parshall flumes on a year-round basis. Any change in sampling location(s) must be reviewed and approved by the Department in writing. Effluent composite sampling may be time based 75 ml aliquot sampling at a minimum of 96, 15-minute intervals over each individual 24-hour period.

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) **BOD_5 - Between June 1 and September 30 of each year**, the daily maximum mass limitation is reduced to 12,400 lbs/day when the St. Croix River flow falls below 750 cfs as documented by the U.S.G.S. gauging station below the Woodland dam.

(2) **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 metric tons of brown stock entering the bleach plant at or just prior to the stage where chlorine or chlorine based compounds are first added.

SPECIAL CONDITIONS

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

Footnotes:

Outfalls #001, #002, #003, #100 & #200

(3) **pH** - For Outfall #001, criteria found at Department rule Chapter 525 (4)(VIII)(A) (1&2) regarding pH limitations under continuous monitoring is applicable to these discharges when continuous monitoring is utilized.

For Outfalls 002 and 003, specified pH sample type is a grab, but the permittee has the option of installing and utilizing continuous monitoring if desired. If continuous monitoring is used the criteria specified for Outfall #001 above are applicable.

For all three outfalls, the pH of the effluent shall not be more than 0.5 standard units outside the background (precipitation/ambient receiving water) pH.

(4) **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 is expressed as lbs/ton of unbleached pulp produced entering the bleach plant at or just prior to the stage where chlorine based compounds are first added. A color pollution unit is equivalent to a platinum cobalt color unit as described in NCASI Technical Document #253. A pound 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.

(5) **Mercury** – All mercury sampling (1/Year) 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 B**, *Effluent Mercury Test Report*, of this permit for the Department's form for reporting mercury test results.

Compliance with the monthly average limitation established in Special Condition A of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.

SPECIAL CONDITIONS

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

Footnotes:

Outfalls #001, #002, #003, #100 & #200

(6) **WET** - Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions set at levels to bracket the acute and chronic critical water quality threshold dilution factors of 22% and 5.6 % respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level (or concentration), 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 modified acute and chronic thresholds were derived as the mathematical inverse of the applicable acute and chronic dilution factors of 4.6:1 and 18.3.1 respectively.

a. **Surveillance level testing** - Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee shall conduct surveillance level WET testing at a minimum frequency of once per year (1/Year) for the water flea (*Ceriodaphnia dubia*) and once per year (1/Year) for the brook trout (*Salvelinus fontinalis*). Testing on the brook trout shall be conducted in a different calendar quarter of each year such that a test is conducted in all four quarters during the term of the permit.

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

WET test results, once received by the permittee from the laboratory, must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability from the laboratory before submitting them. The permittee shall evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 22% and 5.6% respectively. See **Attachment C** of this permit for a copy of the Department's WET report form.

SPECIAL CONDITIONS

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

Outfalls #001, #002, #003, #100 & #200

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 as modified by Department protocol for the brook trout.

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.

Each time a WET test is performed, the permittee shall sample and analyze for the WET Chemistry and Analytical Chemistry parameters of the Department form entitled, *Maine Department of Environmental Protection, WET and Chemical Specific Data Report Form*. See **Attachment A** of this permit.

(7) **Analytical chemistry** – Refers to a suite of chemical tests in **Attachment A** of the permit

i. **Surveillance level testing** – Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee shall conduct analytical chemistry testing at a minimum frequency of once per year (1/Year). As with WET testing, testing shall be conducted in a different calendar quarter of each year.

ii. **Screening level testing** – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee shall conduct analytical chemistry testing at a minimum frequency of once per calendar quarter (1/Quarter) for four consecutive calendar quarters.

(8) **Priority pollutant testing** – Refers to a suite of chemical tests in **Attachment A** of the permit.

i. **Surveillance level testing** - Department rule Chapter 530, *Surface Water Toxics Control Program*, does not establish routine surveillance level priority pollutant testing.

SPECIAL CONDITIONS

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

Outfalls #001, #002, #003, #100 & #200

Footnotes:

ii. **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee shall conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year).

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. See **Attachment A** of this permit for a list of the Department's reporting levels (RLs) of detection. All test results, even those detected below the Department's reporting limit shall be reported to the Department. Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department, possible exceedences of the acute, chronic or human health AWQC as established in 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" for monitoring not required this period.

(9) **1/Day Sampling** – The permittee is only required to calculate and report flows on days when sampling is being conducted.

(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 1613, Revision B. See Special Condition J, *Dioxin/Furan Certification* of this permit for annual certification requirements.

(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.

SPECIAL CONDITIONS

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

Outfalls #001, #002, #003, #100 & #200

Footnotes:

(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 monthly average and daily maximum mass limits apply to the two bleach plant discharging points (Outfall #100 & #200) collectively.** The preferred analytical method to be used for chloroform is EPA Method 1624B for which a ML of 20 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 period not to exceed 32 hours where a minimum of six (6) grab samples are collected, each grab sample being at least three (3) hours apart but no more than 16 hours apart.

(14) **Thermal Loading** - 8.00 EE9 and 9.20 EE9 represent 8.00×10^9 and 9.2×10^9 BTUs/day. See Special Condition H of this permit for the equation to calculate the thermal loading.

(15) **Thermal Loading** - The weekly average limitation of 8.00×10^9 BTU's/Day is a weekly rolling average limitation.

(16) **Phosphorus (Total)** – Receiving water samples shall be collected above the Woodland Dam. The permittee shall report the flow of the receiving water at the time of sampling.

B. NARRATIVE EFFLUENT LIMITATIONS FOR ALL OUTFALLS

1. The effluent shall not contain a visible oil sheen, foam, or floating solids which would impair the usages designated for 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 for the classification of the receiving waters.

3. The discharge shall not impart color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their class.

4. Notwithstanding specific conditions of this permit, the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

SPECIAL CONDITIONS

C. TREATMENT PLANT OPERATOR

The person who has the management responsibility over the treatment facility must hold a **Grade V** certificate (or higher) 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.

E. UNAUTHORIZED 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 December 3, 2009; 2) the terms and conditions of this permit; and 3) only from Outfalls #001,#002, #003 and #100 and #200 (internal waste streams). Discharges of waste water from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5)(*Bypass*) of this permit.

SPECIAL CONDITIONS

F. OPERATION & MAINTENANCE (O&M) PLAN

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

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

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

G. ZONE OF INITIAL DILUTION & MIXING ZONE

The zone of initial dilution for the thermal discharge from the Woodland mill is described as beginning at Outfall #001 and extending downstream to the Baring railroad trestle, a distance of approximately 5.3 miles.

The mixing zone established by the Department for the thermal discharge from the Woodland mill is described as beginning at the Baring railroad trestle and extending downstream to the Milltown dam at the head of tide, approximately 4.0 miles. See **Attachment D** of this permit for a map illustrating the zone of initial dilution and mixing zone.

The receiving waters shall not be tested for temperature violations within the designated zone of initial dilution or the established mixing zone.

SPECIAL CONDITIONS

H. THERMAL LOAD

The weekly rolling average thermal load limitation of 8.00×10^9 BTU's/day and a daily maximum limitation of 9.2×10^9 BTU's/day for Outfall 001, 002, and 003 (collectively) are in effect between June 1 and September 30 of each year. Between June 1 and September 30 of each year, the Qr, Qe, Te and Tr shall be recorded on a daily basis with the ambient river temperature being measured at the river water intake at the mill, and the total thermal load from the mill shall be calculated on a daily basis in accordance with the following formula:

$$[(Qe_{001})(Te_{001}\text{-}Tr)+(Qe_{002})(Te_{002}\text{-}Tr)+(Qe_{003})(Te_{003}\text{-}Tr)](8.34\ lb/gal)= \Sigma BTU/day$$

Qe = Effluent flow in gallons (each outfall).
Te = Effluent temperature in °F (each outfall).
Tr = Upstream river water (intake) temperature in °F.

For each operating day during the applicable limitation period, the permittee shall calculate the River Temperature Increase (RTI) on a daily basis in accordance with the following formula:

$$RTI\ (^{\circ}F) = \frac{(Qe_{001})\ (Te_{001}\text{-}Tr) + (Qe_{002})\ (Te_{002}\text{-}Tr) + (Qe_{003})\ (Te_{003}\text{-}Tr)}{Qr}$$

where,

Qr = River flow in cfs or MGD as measured at the U.S.G.S. gauging station at the mill.
Qe = Effluent flow in like units as Qr from each outfall.
Te = Effluent temperature in °F for each outfall.
Tr = Upstream river water (intake) temperature in °F.

The daily recorded and calculated values shall be reported to the Department as an attachment to the Discharge Monitoring Reports (DMR's) for the months of June, July, August and September of each year.

EXAMPLE - DMR REPORTING FORM ATTACHMENT

Date	Qr (MGD)	Qe (MGD)	Tr(°F)	Te(°F)	PRTI(°F)	Heat(BTU's)
6/1/05	1,620	30.83	67	91	0.45	6.17×10^9

The permittee shall continue to investigate water reuse projects within the mill and waste water treatment technology alternatives to reduce the thermal discharge to the St. Croix River. **The permittee shall submit a summary of the projects undertaken during the term of this permit as an exhibit in the next application for permit renewal.** The report shall list the individual projects and quantify the heat load in BTUs/day that was removed from the discharge point(s).

SPECIAL CONDITIONS

I. DIOXIN/FURAN CERTIFICATION

In lieu of 1/Month (40 CFR Part 430) monitoring of the bleach plant waste stream for 2,3,7,8 TCDD (dioxin) and 2,3,7,8 TCDF (furan), **by December 31 of each calendar year *(ICIS Code 75305),*** the permittee shall sample (1Year) and report the results for said parameters and provide the Department with a certification stating:

a. Elemental chlorine or hypochlorite was not used in the bleaching of pulp.

b. The chlorine dioxide (ClO2) generating plant has been operated in a manner which minimizes or eliminates byproduct elemental chlorine generation per the manufacturer's/supplier's recommendations.

c. Defoamers or other additives with known dioxin precursors have not been utilized.

d. Fundamental design changes to the ClO2 stages of the bleach plant have been reported to the Department and said reports have explained the reason(s) for the change and any possible adverse consequences if any.

e. ClO2 production or consumption based on a per-ton of pulp basis has been within or below the historical range that has been shown to not discharge dioxin.

J. 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 and 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 permittee 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.

SPECIAL CONDITIONS

J. BEST MANAGEMENT PRACTICES PLAN (cont'd)

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 permittee is not required to obtain approval from the Department 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.

f. Although exceedence of the action level will not constitute violations of the permit, failure to take actions required by 40 CFR Part 430.03 as soon as practicable will be a violation.

g. The permittee must report to the Department, the results of the daily monitoring conducted pursuant to 40 CFR Part 430.03. Such reports must include a summary of the monitoring results, the number and dates of exceedence(s) of the applicable action levels, and brief descriptions of any corrective actions taken to respond to such exceedence(s). **Submission of such reports shall be at least 1/year with the December DMR** ***(ICIS Code 06001)***

K. SCHEDULE OF COMPLIANCE – CADMIUM

Beginning upon issuance of this permit, the permittee shall identify sources of and begin investigating source reduction opportunities to mitigate the discharge of total cadmium such that compliance with the water quality based mass limits for cadmium established in this permit or alternate limitations established in any subsequent modification thereof are achieved prior to the expiration date of this permit.

On or before November 30, 2014, ***(ICIS 00201)*** the permittee shall submit to the Department for review and approval, a Site Specific Criteria Development Plan for any parameter that the permittee is seeking an alternate ambient water quality criteria for.

On or before December 31, 2014, ***(ICIS 02999)*** the permittee shall submit to the Department for review, a progress report summarizing the source reduction opportunities investigated since March 1, 2014, for mitigating the discharge of total cadmium.

SPECIAL CONDITIONS

K. SCHEDULE OF COMPLIANCE – CADMIUM

On or before June 30, 2015, ***(ICIS 00201)*** the permittee shall submit to the Department for review, a feasibility study containing a scope of work and schedule of practicable process modifications and treatment options for mitigating the discharge of total cadmium.

On or before December 31, 2015, ***(ICIS 02999)*** the permittee shall submit to the Department for review, a progress report containing a scope of work and schedule for the implementation of source reduction and or treatment options selected to mitigate the discharge of total cadmium and a progress report on the development of alternate ambient water quality criteria for parameters cited in the November 30, 2014 Site Specific Criteria Development Plan submission.

On or before December 31, 2016, ***(ICIS 02999)*** the permittee shall submit a progress report containing a scope of work, schedule and progress on the implementation of source reduction and or treatment options selected to mitigate the discharge of total cadmium and a progress report on the development of alternate ambient water quality criteria for parameters cited in the November 30, 2014 Site Specific Criteria Development Plan submission.

On or before December 31, 2017, ***(ICIS 02999)*** the permittee shall submit a progress report on the implementation of source reduction and or treatment options selected to mitigate the discharge of total cadmium and a progress report on the development of alternate ambient water quality criteria for parameters cited in the November 30, 2014 Site Specific Criteria Development Plan submission.

On or before March 1, 2018, ***(ICIS 75305)*** the permittee shall be in compliance with the water quality based mass limitations for total cadmium established in this permit or alternate limitations established in any subsequent modification thereof.

L. 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 ***[ICIS Code 75305]***: See **Attachment F** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

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

(b) Changes in the operation of the treatment works that may increase the toxicity of the discharge; and

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

SPECIAL CONDITIONS

L. ANNUAL 06-096 CMR 530(2)(D)(4) STATEMENT FOR REDUCED/WAIVED TOXICS TESTING (cont'd0

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.

M. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and postmarked on or before the thirteenth (13th) 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 (15th) 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:

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

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 15th day of the month following the completed reporting period. Hard Copy documentation submitted in support of the eDMR must be postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office such that it is received by the Department on or before the fifteenth (15th) day of the month following the completed reporting period. Electronic documentation in support of the eDMR must be submitted not later than close of business on the 15th day of the month following the completed reporting period.

SPECIAL CONDITIONS

N. 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. The permittee may also initiate permit reopening and modification by request to the Department.

O. SEVERABILITY

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

ATTACHMENT A

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

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

Licensed Flow (MGD)		Flow for Day (MGD)[1]		Flow Avg. for Month (MGD)[2]	
Acute dilution factor					
Chronic dilution factor		Date Sample Collected		Date Sample Analyzed	
Human health dilution factor					
Criteria type: M(arine) or F(resh)	f	Laboratory		Telephone	
		Address			
Last Revision - February 4, 2014		Lab Contact		Lab ID #	

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

FRESH WATER VERSION

Please see the footnotes on the last page.

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

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

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

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.

BN	FLUORANTHENE	5									
BN	FLUORENE	5									
BN	HEXACHLOROBENZENE	5									
BN	HEXACHLOROBUTADIENE	5									
BN	HEXACHLOROCYCLOPENTADIENE	10									
BN	HEXACHLOROETHANE	5									
BN	INDENO(1,2,3-CD)PYRENE	5									
BN	ISOPHORONE	5									
BN	N-NITROSODI-N-PROPYLAMINE	10									
BN	N-NITROSODIMETHYLAMINE	5									
BN	N-NITROSODIPHENYLAMINE	5									
BN	NAPHTHALENE	5									
BN	NITROBENZENE	5									
BN	PHENANTHRENE	5									
BN	PYRENE	5									
P	4,4'-DDD	0.05									
P	4,4'-DDE	0.05									
P	4,4'-DDT	0.05									
P	A-BHC	0.2									
P	A-ENDOSULFAN	0.05									
P	ALDRIN	0.15									
P	B-BHC	0.05									
P	B-ENDOSULFAN	0.05									
P	CHLORDANE	0.1									
P	D-BHC	0.05									
P	DIELDRIN	0.05									
P	ENDOSULFAN SULFATE	0.1									
P	ENDRIN	0.05									
P	ENDRIN ALDEHYDE	0.05									
P	G-BHC	0.15									
P	HEPTACHLOR	0.15									
P	HEPTACHLOR EPOXIDE	0.1									
P	PCB-1016	0.3									
P	PCB-1221	0.3									
P	PCB-1232	0.3									
P	PCB-1242	0.3									
P	PCB-1248	0.3									
P	PCB-1254	0.3									
P	PCB-1260	0.2									
P	TOXAPHENE	1									
V	1,1,1-TRICHLOROETHANE	5									
V	1,1,2,2-TETRACHLOROETHANE	7									
V	1,1,2-TRICHLOROETHANE	5									
V	1,1-DICHLOROETHANE	5									
V	1,1-DICHLOROETHYLENE (1,1-dichloroethene)	3									
V	1,2-DICHLOROETHANE	3									
V	1,2-DICHLOROPROPANE	6									
V	1,2-TRANS-DICHLOROETHYLENE (1,2-trans-dichloroethene)	5									
V	1,3-DICHLOROPROPYLENE (1,3-dichloropropene)	5									
V	2-CHLOROETHYLVINYL ETHER	20									

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.

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

Notes:

(1) Flow average for day pertains to WET/PP composite sample day.

(2) Flow average for month is for month in which WET/PP sample was taken.

(3) Analytical chemistry parameters must be done as part of the WET test chemistry.

(3a) Cyanide, Available (Cyanide Amenable to Chlorination) is not an analytical chemistry parameter, but may be required by certain discharge permits .

(4) Priority Pollutants should be reported in micrograms per liter (ug/L).

(5) Mercury is often reported in nanograms per liter (ng/L) by the contract laboratory, so be sure to convert to micrograms per liter on this spreadsheet.

(6) Effluent Limits are calculated based on dilution factor, background allocation (10%) and water quality reserves (15% - to allow for new or changed discharges or non-point sources).

(7) Possible Exceedence determinations are done for a single sample only on a mass basis using the actual pounds discharged. This analysis does not consider watershed wide allocations for fresh water discharges.

(8) These tests are optional for the receiving water. However, where possible samples of the receiving water should be preserved and saved for the duration of the WET test. In the event of questions about the receiving water's possible effect on the WET results, chemistry tests should then be conducted.

(9) pH and Total Residual Chlorine must be conducted at the time of sample collection. Tests for Total Residual Chlorine need be conducted only when an effluent has been chlorinated or residual chlorine is believed to be present for any other reason.

ATTACHMENT B

Maine Department of Environmental Protection

Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____

Pipe # _____

Purpose of this test:
- ☐ Initial limit determination
- ☐ Compliance monitoring for: year _____ calendar quarter _____
- ☐ Supplemental or extra test

SAMPLE COLLECTION INFORMATION

Sampling Date: ___ ___ ___ (mm dd yy) Sampling time: _____ AM/PM

Sampling Location:

Weather Conditions: _____

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

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

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

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

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

Please Enter Effluent Limits for your facility

Effluent Limits: **Average =** _____ ng/L **Maximum =** _____ ng/L

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

CERTIFICATION

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

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT 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 _____ (mm/dd/yy) Date Tested _____ (mm/dd/yy)

Chlorinated? _____ Dechlorinated? _____

Results — **% effluent**

	water flea	trout
A-NOEL		
C-NOEL		

Effluent Limitations

A-NOEL	
C-NOEL	

Data summary

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

place * next to values statistically different from controls

for trout show final wt and % incr for both controls

Reference toxicant

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

Comments _____

Laboratory conducting test

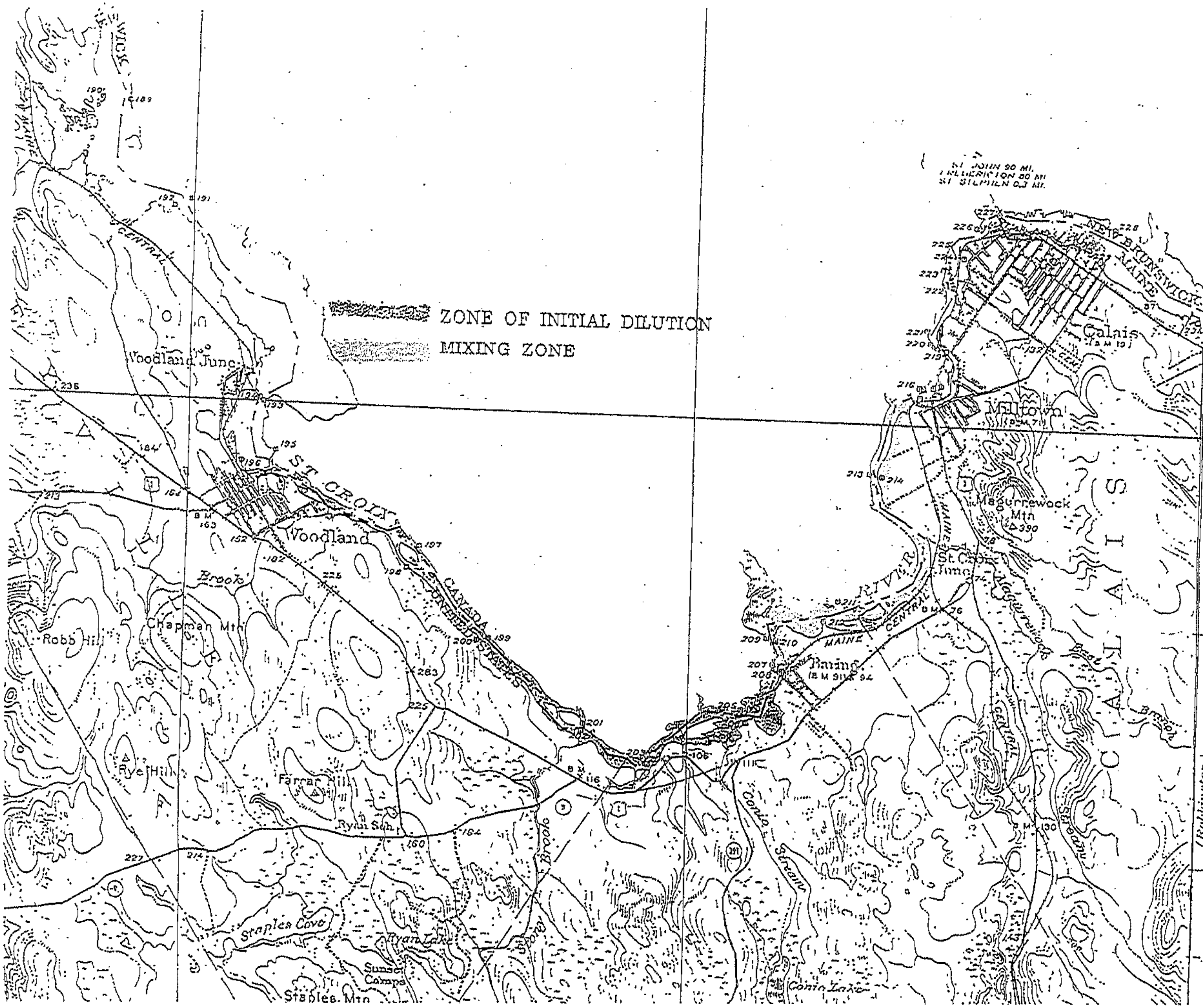
Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

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

ATTACHMENT D


ZONE OF INITIAL DILUTION
MIXING ZONE
ST. CROIX
RIVER
CANADA
UNITED STATES
Woodland
Woodland Junc.
Calais
Milltown
Baring
St. Croix Junc.
Magurrewock Mtn
NEW BRUNSWICK
MAINE
MAINE CENTRAL
Chapman Mtn
Robb Hill
Rye Hill
Farrar Hill
Ryan Sch.
Staples Cove
Ryan Lake
Sunset Camps
Staples Mtn
Conic Stream
Conic Lake
Brook
ST JOHN 90 MI.
ST STEPHEN 0.3 MI.
DEVILS HEAD 1:24 000
(Robbinston)

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Date: **April 17, 2014**

PERMIT NUMBER: **ME0001872**
LICENSE NUMBER: **W002766-5N-J-R**

NAME AND ADDRESS OF APPLICANT:

WOODLAND PULP LLC
144 Main Street
Baileyville, Maine 04694

COUNTY: **Washington County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

144 Main Street
Baileyville, Maine 04694

RECEIVING WATER AND CLASSIFICATION: **St. Croix River/ Class C**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Jay Beaudoin**
Environmental Superintendent
(207) 427-4005
jay.beaudoin@woodlandpulp.com

1. APPLICATION SUMMARY

a. Application: Woodland Pulp LLC (Woodland Mill/Woodland Pulp/permittee hereinafter) has filed a timely and complete application with the Department for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0001872/Maine Waste Discharge License (WDL) #W002766-5N-E-R (permit hereinafter) which was issued by the Department on May 31, 2005, and expired on May 31, 2010. The May 31, 2005, permit authorized the daily maximum discharge of 40 million gallons per day (MGD) of treated process waste water, treated sanitary waste waters, treated landfill leachate, treated residuals storage pads leachate and other miscellaneous waste waters associated with the kraft pulp and papermaking process and related operations, and a monthly average discharge of 5.6 MGD of treated storm water runoff and a non-contact cooling waters to St. Croix River, Class C, in Baileyville, Maine. See **Attachment A** of this Fact Sheet for a location map.

1. APPLICATION SUMMARY (cont'd)

It is noted the 5/31/05 permit was subsequently modified on June 23, 2008, to reduce monitoring frequencies for biochemical oxygen demand (BOD) total suspended solids (TSS), chemical oxygen demand (COD), pH and temperature and established a more stringent water quality based limit for inorganic arsenic. The permit was modified on June 27, 2008, to reduce the monitoring frequencies for adsorbable organic halides (AOX), chloroform and the twelve chlorinated phenolic compounds. The permit was modified again on September 10, 2013, to eliminate limitations and monitoring requirements for total arsenic and inorganic arsenic as well as the schedule of compliance for inorganic arsenic based on a more current statistical evaluation utilizing a new ambient water quality criterion for inorganic arsenic approved by the USEPA on May 16, 2013.

b. Source Description: This permit regulates three discharge points designated as Outfalls #001, #002 and #003 from the permittee's kraft pulp mill to the St. Croix River in Baileyville. The permittee has reported that the mill has the capacity to produce up to 1,600 short tons/day of unbleached kraft pulp. The long-term sustainable average production is in the range of 1,400 - 1,500 short tons/day. It is noted, the facility no longer produces uncoated fine paper as the No. 4paper machine was permanently shut down in July of 2007. The mill typically processes hardwood pulp with periodic runs of softwood species.

Outfall #001 - Waste waters discharged from this outfall include treated process water, treated sanitary waste waters, treated landfill leachate, treated storm water runoff, treated residuals storage pad leachate and treated miscellaneous waste water associated with the pulping process.

Outfall #002 - Waste waters discharged from this outfall include air compressor room cooling water, storm water from the converting building and paper warehouse roof drains and air conditioning condensate water.

Outfall #003 - Waste waters discharged from this outfall consist of turbine, evaporator and bleach plant cooling water. Water taken in from the river directly or after treatment in the mill's water treatment plant pass through non-contact heat exchangers on various parts of process equipment. The outfall has historically only discharged intermittently during the summer months to rid the cooling water systems of excess heat, although the mill has noted the potential for this discharge to be needed during other periods. The excess heat is due to a combination of reduced quantity of intake flow from the St. Croix as a result of increased return warm water for reuse as well as elevated temperatures of the intake water. The increased temperatures hinder the mill's process feedwater's ability to cool equipment efficiently. Outfall #003 either discharges separately to the St. Croix River or to the foam pond where it is commingled with treated process water effluent prior to discharge through Outfall #001.

1. APPLICATION SUMMARY (cont'd)

It is noted the mill has been elemental chlorine free (ECF) since 1997. The historic bleaching sequence used is a five-stage process in the following order: Do-Eop-D1-E2-D2 where the first stage Do is an acidic wash with chlorine dioxide bleaching, followed in the second stage by the addition of a caustic wash (NaOH) fortified with hydrogen peroxide and liquid oxygen (Eop). The third stage, D1, is a second acidic wash with chlorine dioxide followed by a fourth stage caustic wash (NaOH) and the fifth and final stage being an acidic chlorine dioxide wash. Alternatively, beginning in 2013, the mill can use a three-stage bleaching sequence. The order of the three stage bleaching sequence is WE-DE-Dp or D-Eop-Dop.

Enzymes derived from white rot fungus may also be added in the brownstock prior to the first bleached stage to facilitate bleaching and reduce chemical usage. These enzymes are derived from nature. The wash waters from subsequent acidic and caustic stages flow counter currently to the previous corresponding stage of like pH to minimize water and chemical usage. Residuals and purge flows for acidic stages discharge to the mill acid sewer and those from the caustic stages discharge to the mill alkaline sewer. More wash flow is used and thus more purge and residual discharge occurs from the alkaline stages. Accordingly, the flows for this sewer are about 3 times the volume of the acidic sewer flows. See **Attachment B** of this Fact Sheet for a schematic of the mill process.

b. Waste Water Treatment:

OUTFALL 001

The mill's main lift pumping station receives about 15.5 MGD of wastewater from the Mill's Pulp Dryer (2 MGD), Steam and Power (4.0 MGD), and Kraft Mill (10.0 MGD) collectively. Composite samplers, in-line and sewer flow measurement equipment are maintained and operated in each of these process areas to assess daily effluent contributions.

At the main lift station, two 200 horsepower (hp) pumps, convey wastewater through a 30" force main to the mill primary clarifier. A third 200 hp pump is available for back up. Pumps are routinely cycled (two on, one off) typically on a weekly basis for scheduled preventative maintenance. Prior to pump suction, a manually cleaned bar screen is utilized to separate trash and debris from the influent.

A composite sampler is maintained and operated here to assess influent loading to the primary clarifier. This composite sampler was one of several discussed in this narrative that were installed in 1996 as part of a system wide effort to improve sewer sampling efficiency and uptime as well as reduce labor and maintenance associated with process samplers.

Each pump utilizes a separate independent electrical feed circuit to minimize potential for pump downtime due to electrical failure.

1. APPLICATION SUMMARY (cont'd)

The primary clarifier is a 190-foot diameter Dorr-Oliver unit. The clarifier volume is approximately 2.5 million gallons (MG) with a 3-hour retention time. In addition to effluent from the main lift station, approximately 1.5 MGD of wastewater from the mills #3 Recovery Boiler is discharged to the launder ring or alternatively the clarifier center well, and approximately 0.5 MGD of sand filter backwash from the mill's process water treatment plant is discharged to the clarifier through the underflow header. A composite sampler and on-line sewer flow measurement equipment are located in the recovery boiler area to assess effluent contributions from this area. Approximately 0.3 -1.4 MGD of clarifier effluent or degremont system treated water sourced from the river and pH adjusted with weak wash or caustic is cycled through the mills #9 Power Boiler's wet scrubber and returned to the clarifier center well. Approximately 0.7 MGD of sand filter backwash is typically recycled and reused in the water treatment plant.

A composite sampler is maintained and operated on the primary clarifier discharge to assess treatment efficiencies and partial secondary influent loading. In 2006, the clarifier's original mechanical rake drive was replaced with an original equipment manufacturers (OEM) modern hydraulic drive. A new corrosion-resistant walkway to the center well was also installed to replace the original. This upgrade resulted in improved rake reliability, reduced maintenance and eliminated outdated mercury switches and lubricant types and methods that posed a risk of spillage.

These projects have improved clarifier performance (approximately 20%) and reduced final treated effluent aluminum concentrations (by approximately 2 ppm or >350 lbs/day).

Approximately 2 MGD of acidic effluent from the mill's bleach plant, 1.0 MGD of wastewater and spent residuals (lime mud/grits) from the mill's lime kiln/recaust and 0.070 MGD of treated sanitary wastewater is discharged to the mill's acid sewer. Composite samplers and sewer flow measurement equipment are maintained and operated on the acid and kiln/recaust sewers to assess effluent contributions from these areas.

Alternatively, the kiln/recaust flow is routed to the "color" clarifier for residual removal and effluent reuse in the manufacturing process. The acid sewer bypasses the primary clarifier, mixing with clarified effluent just prior to the secondary pump house wetwell. The "color" clarifier was originally utilized to remove color from woodyard effluent through the addition of slaked lime. In 1980 the mill's groundwood operation was discontinued and the color clarifier was inactivated. This clarifier was rebuilt in 1996, converted and reconfigured to receive the kiln/recaust sewer flow. Cooling water from the kiln/recaust area is segregated and discharged to the acid sewer. The remaining sewer flow is routed to the color clarifier where residuals are removed through settling and clarification. These residuals are periodically sewered to the secondary system through the clarifier's underflow pumping arrangement. Clarified

1. APPLICATION SUMMARY (cont'd)

effluent from the color clarifier is returned to the kiln for reuse. When either storage capacity limits are reached or maintenance on the system process is necessary, the kiln/recaust sewer flow is rerouted to the acid sewer, or discharged to the alkaline/acid mix chamber from the clarifier. Discharge flow from the clarifier can also be metered to the mix chamber to provide secondary influent pH control. A composite sampler and sewer flow measurement equipment is maintained and operated on the color clarifier discharge to assess effluent contributions when discharging.

Sanitary waste water is discharged into acidic effluent in the mill's acid sewer to provide effluent disinfection.

Settled sludge from the mill's primary clarifier is pumped to an FKC Screw press (installed 1996). Approximately 10 - 20 truckloads per day of dewatered primary sludge at 40% (or more) solids are trucked approximately 3 miles to the mill's secure landfill, or alternatively, burned as fuel in the #9 Power Boiler. Other fuel sources utilized in this boiler include bark, tire derived fuels, and #6 fuel oil. Approximately 0.14 MGD of effluent from dewatering is returned to the primary clarifier, or discharged to the spill pond and secondary wet well.

Town-supplied potable water (from the Baileyville aquifer) and St. Croix river water are used for potable water, eye washes, fire protection, cooling, air conditioning and other miscellaneous sources. Approximately, 0.5 MGD from these sources is passed through the main lift and 0.3 MGD enters the system at the secondary wetwell.

From the secondary pump house, approximately 21.4 MGD of partially treated effluent is pumped approximately 2.3 miles upgradient (125 feet of head) through a 48" force main. Two 1000 hp variable speed pumps are utilized to convey the effluent to the treatment lagoons. A third 1000 hp variable speed pump is available for backup. Pumps are routinely cycled (two on, one off) weekly for scheduled preventative maintenance. Each pump utilizes a separate independent electrical feed circuit to minimize potential for pump downtime due to electrical failure. A composite sampler and on-line temperature and flow measurement equipment are operated and maintained here to assess total secondary influent loading.

A 3.4 mile pipeline was installed November 1991 to convey leachate and storm water (68 acre area) from the Mill's #3 Landfill Site to the Mill's Wastewater Treatment Plant.

Two 25 hp 450 gallon per minute (gpm) pumps convey leachate through an 8" forcemain approximately 7600 feet. Prior to the cessation of the forcemain at a terminus manhole, a 3" intercepting forcemain formerly conveyed approximately 0.036 MGD of board dryer

1. APPLICATION SUMMARY (cont'd)

precipitator blowdown from a now closed and dismantled Oriented Strand Board facility. This connection was demolished in 2012. From the terminus manhole, landfill leachate and stormwater flows by gravity through a 6,400 foot 10" gravity pipeline. At a connecting manhole near the mill the wastewater flows by gravity through a 3,300 foot 16" pipe. Final discharge is at the mill's secondary pump house wetwell. Leachate is sampled quarterly through a comprehensive surface and groundwater monitoring program to assess effluent contributions and as a base for facility hydro-geological analysis.

At the secondary pumphouse wet well approximately 0.21 MGD (77 MG total for 2008) of #3 landfill wastewater is intermixed with mill process wastewater and conveyed to the mill secondary treatment plant. At the landfill, leachate and stormwater are collected in a double-lined (HDPE & clay/till) 2-acre stabilization pond prior to conveyance through the pipeline. Some settling occurs in this basin and during high flow periods hay bales and other sediment controls are utilized at the facility to minimize sediment conveyance. An adjacent 1-acre lined (clay/till)and vegetated storage pond provides additional storage and a 2-acre lined (clay/till) vegetated surge area provides emergency capacity. Emergency spillways are located at the 2-acre stabilization pond and at the surge area. Any emergency overflows from the stabilization pond discharge to adjacent field area and woodland, significant volumes would be expected to eventually discharge to adjacent wetlands and the river.

Any emergency overflows from the surge area discharge directly to a wetland and then to the St. Croix River. No overflows have occurred during the past decade from these points. Although not anticipated, any overflows that do occur would be subject to appropriate spill reporting requirements as outlined in Special Condition E of the Woodland Pulp permit.

A double-lined (HDPE & clay/till) spill containment pond was installed in 1989 to collect spills and overflows from the mill process area. A 30 inch gravity flow pipeline intercepts spills and overflows from the northern mill process area. This area includes the main lift station, stock storage and liquor storage tanks. Any large spills or overflows emanating from this area are conveyed to the spill pond through this pipeline. Total pipeline capacity is approximately 12,000 gpm. Storm water (1.2 MGD per 2-Yr. Storm) in this area, (approximately 18 acres) is pumped through the mill's main lift station to the mill's primary clarifier. The pipeline utilizes gravity to ensure spill collection during a power outage. The pipeline is larger than needed for flow reasons alone, so that it may be periodically inspected. The containment pond has a capacity of 1.4 MGs and covers a 3,400 square yard area (0.7-acre). It is constructed amid a section of the former effluent foam pond located just prior to outfall 001. The foam pond became superfluous when the secondary treatment lagoons came on line in the late 1970's. A rip-rap lined earthen dike separates the containment pond from the treated effluent flow to the outfall.

1. APPLICATION SUMMARY (cont'd)

The spill pond also collects any spills and/or overflows from the secondary pump house, kiln/recaust area tank storage, primary clarifier and process water treatment, as well as area stormwater (1.1 MGD per 2-Yr. Storm) (approximately 16.9 acres total). An emergency spillway is located along the earthen dike separating the spill pond and the remaining portion of the foam pond. No emergency discharge through this spillway has occurred during the term of the existing permit. Any discharge occurring would flow through and be monitored by the main process outfall (001) discharge. If this occurred appropriate notifications regarding system bypass are required by Special Condition E of this permit.

Two Fairbanks - Morse duplex submersible pump stations pump underdrain and spill pond liquids to the primary clarifier center well. Each under drain pump has a capacity of 50 gpm and each return pump has a capacity of 1400 gpm. To maximize system reliability, pumps at each station are powered by separate electrical feed circuits.

Mill effluent pumped to the treatment lagoons initially discharges to a 16.4 MG capacity anaerobic settling pond with a 10-hour retention time. Periodically, settled material (primarily sewered spent lime/grits) is either mechanically or hydraulically dredged and placed in an adjacent 8-acre dewatering basin called the decant area or in a smaller 2-acre area called the baby decant. Dewatering occurs by gravity. Effluent from the dewatering of this material is returned by gravity flow to the settling pond.

From the settling pond, process effluent flows to the first of two facultative aeration basins operated in series. The first aeration basin utilizes fixed low speed 100 hp platform aerators and high speed 75 hp floating aerators for dissolved oxygen input. The platform aerators date from the 1970's. A large motor and gear reducer are used to turn a large hollow cone fixed with a series of vertical paddles. These units require periodic lubrication and are expensive to maintain and replace. They also use more energy to provide the same oxygen equivalent transfer of a modern 75 hp floating aerator design. The cost to rebuild the motor and gear reducer on one of these fixed units is more than three times the cost of a floating unit. Accordingly, as these units fail and/or as parts in inventory are consumed, floating units are purchased to replace them.

The first aeration basin has a current retention half-life of 4 days and a measured water volume (2013) of 225 MGs and a measured sludge volume (2013)of 552,441 cubic yards. The 2013 measured sludge volume is a 57.1% decrease from that measured in 1996. Two diversion curtains were installed in 1994 to increase basin detention time and optimize treatment. Thirty thousand cubic yards of sludge was also removed from this basin in 1996 as part of the effluent return line project (see below). As part of the wastewater system optimization initiative a 3.6 MGD recycle pump system was installed in 1994 to recycle effluent from the outlet of this basin back to the inlet. In 2009, the intake location of this pump was changed to the second basin outlet. The purpose of this change was to make use of residual nutrients, thus reducing effluent nutrient concentrations and costs associated with nutrient addition and providing a supplemental feed to the first basin for increase treatment efficiency. The first basin provides the majority of this system's BOD

1. APPLICATION SUMMARY (cont'd)

treatment. In-line monitoring of the liquid level and aerator and pump status is conducted at this point, referred to as the Divider Dike. Basin midpoint dissolved oxygen, temperature, BOD, COD, nutrients, and TSS parameters are routinely conducted at the Divider Dike as well. Curtains in this cell are inspected by divers, typically on an annual or semi annual basis.

The second aeration basin has five 75 hp high speed floating aerators, a 141 MG capacity, and a residence time of about three days. To prevent short-circuiting through this cell and optimize treatment, two diversion curtains were installed in 1986. These curtains were reconfigured and extended in 1994. A portion of one curtain was converted to a baffle at that time as well.

As part of the wastewater optimization initiative the original outfall to the river from this cell was discontinued and a new one was designed and constructed. The new outfall was installed in 1996. Diversion curtains were reconfigured and added on to optimize retention and treatment (settling). One of the old curtains just prior to the new outfall location was also converted to a baffle to facilitate settling and decrease the potential for scouring. This work increased actual detention time in this basin by ½ day. Redesign of the outfall also decreased opportunity for *Ceriodaphnia dubia* (water fleas) and bottom sludge (during spring and fall overturns) to be discharged with the effluent. Both of these conditions had been previously problematic on occasion resulting in periods of elevated TSS values for the facility. Monitoring for dissolved oxygen, temperature, TSS, Nutrients, BOD, COD and water level is routinely conducted at this outfall.

A polymer addition facility is located on the westerly shore of the second basin. Historically polymer has been added through feed lines from the polymer building to first aeration basin's number 11 aerator (just prior to effluent discharge to the second aeration basin) and the second aeration basin's number 15 aerator (just prior to second cell quiescent area). Polymer addition was utilized infrequently in a short duration episodic manner beginning in the mid 1980's and occurring last in 1994. In 1994, approximately 0.5 million dollars was expended through a variety of vendors, methods and polymer types in an attempt to settle TSS in the basin. No method available at that time was found to be cost effective or beneficial in regards to enhancing TSS settling during high TSS/Low settling efficiency plant upsets. These type of upsets were found to result from periods of organic loading above design for more than one system detention time coupled with short circuiting and/or low system detention time. The suspended solids produced in the system as a result of these circumstances are stressed and thus lack polysaccharides, are small and fine in size and are well dispersed. Settling efficiencies across the second basin drop to less than 50%. Normally solids are coagulated which is a facilitated product of the solids having a polysaccharide exterior coating, a larger size and a propensity to be attracted to each other. Polymer was not effective in improving settling in such conditions. However, increasing system detention time, reducing short circuiting, decreasing plant load and controlling the

1. APPLICATION SUMMARY (cont'd)

duration of abnormal loading has resulted in the elimination of these types of events since the mid 1990's. It has been noted that these improvements have also resulted in the basins cannibalizing of the accumulated organic sludge. Between 1996 and 2013 sludge volume in basin #1 decreased by 57.1% and sludge volume in basin #2 decreased by 71.5%.

Effluent from the second aeration basin flows by gravity through a 48" line to the foam pond located approximately two miles downgradient at the mill. Final discharge is through a 5 foot Parshall Flume to the St. Croix River. An ultrasonic continuous flow meter and a 24-hour composite sample collection system are utilized to monitor effluent quality at the Parshall flume. Grab samples for other parameters such as temperature and pH are routinely taken as well as laboratory samples for other parameters such as BOD, TSS, COD, AOX and metals. All on-line data from this location, as well as aerator status, lagoon level, dissolved oxygen (DO) and manually entered aeration basin loading and effluent data, and process area sewer information is available on a 24-hour basis to all mill employees through a plant database system. This network system was installed in 1994 as part of the facility's pollution prevention and wastewater system optimization program.

Following the Parshall flume and just prior to final discharge, effluent is allowed to cascade into a foam retaining structure. The purpose of this structure is to contain foam resulting from the cascading effluent and minimize the possibility of recurrence downstream. Defoamer has been infrequently added at the lagoon outfall to further minimize foam discharge. Historically defoamer use would be considered only during periods (generally, summer months) when the appearance of foam in the receiving stream may be perceived as adverse by members of the public. Defoamer has not been added here at anytime in the past two decades.

In January 1997, a diffusion pressure washer system went on-line in the Mill's Kraft Pulp Manufacturing area. This system adds an additional step to the process which allows the recycle and reuse of up to 2.9 MGD of highly organic black liquor filtrate. More than two-thirds of this filtrate was formerly sewered.

The recycle and reuse of this volume of filtrate has resulted in Kraft Mill effluent BOD (1.7 lbs/ton),effluent color (total color now consistently <225 lbs/ton) and total plant loadings to the secondary system 50-60% of design (reductions >40-50% of former).

Three stage bleaching sequence modification in 2013 increased recycle and reuse of additional filtrate water volume.

1. APPLICATION SUMMARY (cont'd)

OUTFALL 002

This outfall consists of air conditioning condensate, steam condensate, stormwater from area roofs and other small volume miscellaneous water sources, such as potable water from sinks. The intake for this outfall is at the Woodland Dam, with water coming from the impoundment. When mechanical filtration is utilized, sticks and other floating debris are screened from the intake water. River water is then cycled through heat exchangers on the facility air compressor bank and discharged through this outfall. Alternatively, river water processed through the mill's degremont water treatment plant can be cycled through these heat exchangers and discharged through this outfall. The air compressor bank heat exchanger discharge flows can also be routed to the mill's main treatment plant. Presently, flows are routed to the mill treatment system to minimize the potential for oil sheens and as a result of plant volume reductions following the paper machine shut down. Roof drains from an 18,000 square foot roof above the mill's paper warehouse and converting operations, air conditioner cooling condensation from the area, and other miscellaneous small flows either intermix with the air compressor discharge, or if this discharge is routed to the main treatment plant, form the entire discharge through this outfall. When the air compressor bank cooling water is discharging through this outfall an average flow of approximately 0.45 MGD is discharged to the St. Croix River at the tailrace. Precipitation can increase this into the 1 MGD range. Absent, the air compressor bank flow, normal cooling and miscellaneous small flows average 10,000-20,000 gallons per day. Precipitation can bring this up to 0.5 MGD or more.

OUTFALL 003

This outfall consists of either St. Croix River water treated and clarified in the Mill's Degremont process intake water treatment plant, fire water sourced directly from the river or Baileyville potable water. Treated Mill process water utilized for cooling purposes (turbine surface condensers, heat exchangers) normally flows to a warm water storage tank for use in the mill manufacturing process. Periodically an excess of warm water at a lower than desirable temperature (90°F-110°F) is produced. Excess warm water is either sewered or returned to the degremont plant for reuse. Regional climatic influence during July, August and early September often results in an increase in intake river water temperature. The combination of return warm water, increased river intake water temperature and subsequent decreased intake flow (intake volume requirements are reduced by the warm water return) hinders the availability of the mill's process feedwater to cool equipment efficiently. The addition of cooling towers has resulted in the capacity to cool and reuse more than 12.5 MGs per day that was previously sewered. There remains the potential that malfunctions or upsets may necessitate the need to discharge some of these flows through this outfall. This outfall also allows for the discharge of cooling water from mill electrical room and other air conditioners during outages or other maintenance and/or upset

1. APPLICATION SUMMARY (cont'd)

conditions. To avoid unnecessary, costly or problematic treatment, transport and associated potential impacts, Outfall 003 allows the option of a direct discharge. Over the term of the last permit, this discharge has been temporary and seasonal during the Mill's annual outage for air conditioner cooling water flows.

OUTFALL 100

This outfall is an internal waste stream consisting of the Mill's Bleach Plant acidic effluent. Flows are typically in the 2-3 MGD range. Countercurrent washing, chemical application control, elemental chlorine-free bleaching and other modern bleaching equipment and techniques are used to minimize pollutant generation.

OUTFALL 200

This outfall is an internal waste stream consisting of the Mill's Bleach Plant alkaline effluent. Flows are typically in the 6-15 MGD range. Pressure diffusion washing, filtrate recycle and other modern kraft pulping equipment and techniques are used to minimize pollutant generation.

2. MODIFICATIONS REQUESTED

a. For Outfall #001, establish a monthly average flow limitation of 30 MGD and change the daily maximum flow limit from 40 MGD to a "report" only requirement.

b. For Outfall #001, establish a schedule of compliance for water quality based mass and concentration limitations for arsenic, cadmium, copper, lead, silver and zinc.

c. Increase the monthly average flow limitation and daily maximum temperature limit for Outfall #003 as a result of a new water balance at the facility.

3. PERMIT SUMMARY

a. Terms and Conditions - This permit is carrying forward all the terms and conditions of the 5/31/05 MEPDES permit and the three subsequent modifications of 6/23/08, 6/28/10 and 9/10/13 except that this permit:

1. Establishes a monthly average flow limitation of 30 MGD for Outfall #001 and changes the daily maximum flow limit from 40 MGD to a "report" only requirement based on a request by the permittee.

2. Establishes new dilution factors associated with the discharge from Outfall #001 given the revised monthly average flow limitation.

3. PERMIT SUMMARY (cont'd)

3. Eliminates the acute no observed effect level (A-NOEL) and chronic no observed effect level (C-NOEL) water quality based limits of 33% and 8.3% respectively, for the water flea as there are no test results in the most current 60 months that exceed or have a reasonable potential to exceed the critical A-NOEL or C-NOEL thresholds.

4. Eliminates the monthly average and daily maximum water quality based mass and concentration limits for cyanide as there are no test results in the most current 60 month period that exceed or have a reasonable potential to exceed the acute and or chronic ambient water quality criteria (AWQC) for cyanide and silver.

5. Revises the monthly average and or daily maximum water quality based mass and concentration limits for cadmium, copper and zinc based on more stringent AWQC and or the methodology of watershed permitting for toxics pollutants.

6. Establishes a schedule to come into compliance with water quality based limitations for cadmium.

7. Increases the monthly average flow limit from 3.6 MGD to 15.0 MGD and the daily maximum temperature from 95°F to 110°F for Outfall #003, that consists of condensate, cooling waters and storm water. It is noted the overall thermal load discharged from the mill complex is no greater as a result of these increases in flow and temperature as the permittee is simply conveying cooling waters that were once discharged via Outfall #001 to Outfall #003.

8. Reduces the monitoring frequency for TSS from 5/Week to 2/Week based on a statistical evaluation of the compliance data for the period January 2009 – November 2011.

9. Increases the monthly average and daily maximum technology based limitations for adsorbable organic halides (AOX) for Outfall #001 and chloroform for Outfalls #100 and #200 collectively based on a 5.7 % increase in production at the mill.

3. PERMIT SUMMARY (cont'd)

b. History: - The most recent significant and relevant regulatory actions for the Woodland mill are as follows:

February 24, 1987 – The EPA issued a renewal of NPDES permit #ME0001872 in the name of the Georgia-Pacific Corporation (GPC) for a five-year term.

September 27, 1987 – The Department issued WDL #W002766-44-A-R to the GPC for a five-year term.

September 30, 1993 – The EPA issued a renewal of NPDES permit #ME0001872 in the name of the GPC for a five-year term. The company appealed portions of this permit on November 1, 1993, and requested an evidentiary hearing in regards to limitations and monitoring requirements for dioxin, furan, aluminum, whole effluent toxicity, heat and color contained in the permit. EPA neither denied nor granted such a hearing and thus these permit conditions never became effective and those permit conditions and the appeal have since expired.

March 4, 1996 - The Department issued Order #W002766-51-A-N that established a thermal mixing zone in the St. Croix River for the GPC discharge.

May 17, 1996 – The Department issued a renewal of the WDL by issuing WDL #W002766-44-C-R to the GPC for a five-year term.

August 18, 1999 – The Department administratively modified the 5/17/96 WDL to implement new legislation regarding color, dioxin and furan limitations found at Maine law, 38 M.R.S.A., §414-C and §420.

May 23, 2000 – The EPA issued a formal draft NPDES permit in the name of GPC for a 30-day public comment period with a deadline of June 22, 2000, for comments. The permit was significantly different than permits issued to the GPC in the past as the permit contained terms and conditions implementing the Cluster Rule promulgated by the EPA on April 15, 1998.

June 20, 2000 – The Department administratively modified the 5/17/96 WDL by establishing interim mean and maximum concentration limitations of 35.5 ng/L and 53.3 ng/L, respectively, for mercury. A monitoring and reporting requirement of 4 /year with a minimum of 60 days between sampling events was also established.

June 22, 2000 – The GPC submitted a letter to the EPA commenting on the 5/23/00 draft NPDES permit. It is noted EPA never issued the NPDES permit as a final document due to issues surrounding the delegation of the NPDES permitting program to the State of Maine.

3. PERMIT SUMMARY (cont'd)

October 20, 2000 - The Department and the GPC entered into an Administrative Consent Agreement and Enforcement Order which resolved outstanding waste water discharge violations at the Woodland mill for the period January 1, 1999 through August 1, 2000. Paragraph 34.B, Order 1 of that agreement required GPC to develop an internal reporting procedure to the mill's environmental management for all non-hazardous spills greater than 100 gallons. This condition remains in effect until the Department orders otherwise and is independent of this permitting action. All other conditions pertained to specific time frames and have been resolved or otherwise completed.

January 12, 2001 - The State of Maine received authorization from the USEPA to administer the NPDES program in Maine.

May 16, 2001 - The GPC submitted a timely application to the Department to renew the WDL last issued for the mill on May 17, 1996.

June 14, 2001 – The Department received an application from the Domtar Maine Corporation (Domtar) to transfer all active Maine licenses, modifications, condition compliance orders, all other approvals and all applications pending in the name of the GPC relating to a pulp and papermaking facility in Baileyville, Maine. It is noted Domtar and the GPC entered into a purchase and sale agreement for the Baileyville mill on June 1, 2001. The sale was completed in August 2001.

July 19, 2001 – The Department issued an Order transferring all Department licenses for Air, Site Location, NRPA, Solid Waste, Waste Water and Tax Exemption from GPC to Domtar.

February 15, 2002 – The Department issued a proposed draft MEPDES permit/WDL for the Domtar mill. The Department received written comments on the draft permit/license from the Natural Resources Council of Maine (NRCM), the Passamaquoddy Tribal Government and Maine's Department of Inland Fisheries and Wildlife.

November 15, 2002 – A meeting was held between the permittee, the NRCM, the Passamaquoddy Tribal government and various State and federal agencies to discuss the 2/15/02 proposed MEPDES permit/WDL and the written comments received by the Department on the draft MEPDES permit/WDL.

May 31, 2005 – The Department issued combination MEPDES permit #ME0001872/WDL #W002766-5N-E-R for a five year term.

April 10, 2006 – The Department modified the 5/31/05 MEPDES permit by establishing appropriate monitoring requirements for whole effluent toxicity (WET), analytical chemistry testing and priority pollutant testing pursuant to a new Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, promulgated on October 12, 2005.

3. PERMIT SUMMARY (cont'd)

June 23, 2008 – The Department modified the 5/31/05 MEPDES permit by reducing the monitoring frequencies for biochemical oxygen demand (BOD), total suspended solids (TSS), chemical oxygen demand (COD), pH and temperature and established a more stringent water quality based limit for inorganic arsenic.

June 27, 2008 - The Department modified the 5/31/05 MEPDES permit by reducing the monitoring frequencies for adsorbable organic halides (AOX), chloroform and the twelve chlorinated phenolic compounds.

December 12, 2009 – Domtar submitted a timely and complete application to the Department to renew the MEPDES permit for the Baileyville mill.

October 19, 2010 – Woodland Pulp LLC submitted a letter to the Department explaining a name change at the mill. The letter states, *"... this is to confirm that on September 30, 2010, Domtar Corporation sold the membership interests of the Domtar Maine LLC (formerly known as Domtar Maine Corporation and the holder of all DEP permits for the Woodland Mill) to International Grand Investment Corporation (IGIC).. As part of this transaction, there was no change in the legal entity that owns the Woodland Mill facilities and property that are the subject of the Mill's DEP permits. Domtar Maine LLC did however change its name to Woodland Pulp LLC immediately upon closure of the transaction."*

February 6, 2012 - The Department issued a modification of MEPDES permit #ME0001872/WDL #W002766-5N-E-R for a reduction in the mercury testing frequency for total mercury from 4/Year to 1/Year based on *Certain deposits and discharges prohibited*, 38 M.R.S.A., § 420 sub-§1-B(F).

September 10, 2013 – The Department issued a minor revision of the MEPDES permit/WDL that eliminated the monitoring requirement for total arsenic and the water quality based limitations and monitoring requirements for inorganic arsenic based on the results of a more current statistical evaluation. The statistical evaluation results indicate the test results on file for arsenic no longer exceed or have a reasonable potential to exceed applicable AWQC.

4. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S.A. §467(13)(A)(4) indicates that the St. Croix River at the point of discharge is classified as a Class C waterway. Maine law, 38 M.R.S.A. §465(4) contains the classification standards for Class C waters as follows;

Maine law 38 M.R.S.A. §465(4)(B) (as amended via P.L. 2005, Chapter 409) states in part, *The dissolved oxygen content of Class C water may be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival*

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

of early life stages, that water quality sufficient for these purposes must be maintained. In order to provide additional protection for the growth of indigenous fish, the following standards apply.

(1) The 30-day average dissolved oxygen criterion of a Class C water is 6.5 parts per million using a temperature of 22 degrees centigrade or the ambient temperature of the water body, whichever is less, if:

(a) A license or water quality certificate other than a general permit was issued prior to March 16, 2004 for the Class C water and was not based on a 6.5 parts per million 30-day average dissolved oxygen criterion; or

(b) A discharge or a hydropower project was in existence on March 16, 2005 and required but did not have a license or water quality certificate other than a general permit for the Class C water.

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

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

Maine law 38 M.R.S.A. §465(4) (as amended via P.L. 2005, Chapter 409) also states in part *Discharges to Class C waters may cause some changes to aquatic life, provided that the receiving waters shall be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community.*

Maine law 38 M.R.S.A, §464(13) states, *"Measurement of dissolved oxygen in riverine impoundments. Compliance with dissolved oxygen criteria in existing riverine impoundments must be measured as follows.*

A. Compliance with dissolved oxygen criteria may not be measured within 0.5 meters of the bottom of existing riverine impoundments

B. Where mixing is inhibited due to thermal stratification in an existing riverine impoundment, compliance with numeric dissolved oxygen criteria may not be measured below the higher of:

(1) The point of thermal stratification when such stratification occurs; or

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

(2) The point proposed by the department as an alternative depth for a specific riverine impoundment based on all factors included in section 466, subsection 11-A and for which a use attainability analysis is conducted if required by the United States Environmental Protection Agency

For purposes of this paragraph, "thermal stratification" means a change of temperature of at least one degree Celsius per meter of depth, causing water below this point in an impoundment to become isolated and not mix with water above this point in the impoundment.

C. Where mixing is inhibited due to natural topographical features in an existing riverine impoundment, compliance with numeric dissolved oxygen criteria may not be measured within that portion of the impoundment that is topographically isolated. Such natural topographic features may include, but not be limited to, natural deep holes or river bottom sills.

Notwithstanding the provisions of this subsection, dissolved oxygen concentrations in existing riverine impoundments must be sufficient to support existing and designated uses of these waters. For purposes of this subsection, "existing riverine impoundments" means all impoundments of rivers and streams in existence as of January 1, 2001 and not otherwise classified as GPA.

5. CONDITIONS OF PERMITS

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

6. RECEIVING WATER QUALITY CONDITIONS

All freshwaters in the State of Maine are listed as *Category 4-A: Waters Impaired By Atmospheric Deposition of Mercury*, in a document entitled, *2012 Integrated Water Quality Monitoring and Assessment Report,* published by the Department. 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.

6. RECEIVING WATER QUALITY CONDITIONS (cont'd)

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 8(l) of this Fact Sheet.

On March 4, 1996, the Department issued WDL #W002766-51-A-N which established a formal mixing zone for the thermal discharge from the Baileyville mill. Special Condition A of that order established weekly rolling average and daily maximum thermal limitations consistent with Maine Law, 38 M.R.S.A. §464 (4)(I) (since repealed). As a result of the establishment of the mixing zone, the St. Croix River was removed from the 303(d) list in the 1998 State of Maine Water Quality Assessment (305b) Report. For the purposes of this permitting action, the St. Croix River is attaining the standards of its assigned classification.

In an effort to facilitate the establishment of water quality standards for the province of New Brunswick, (which at least meet those in place for the State of Maine), the St. Croix International Waterway Commission conducted biological and chemical testing of the river in the mid-2000's. For the receiving water segment below the Woodland mill, preliminary results indicate Class B attainment in the areas sampled. In addition, the Department conducted the first of several scheduled ambient water quality sampling events in the St. Croix River during the summer of calendar year 2004. The sampling was conducted to update the Department's water quality model developed in the early 1980's. A final data report was issued in calendar 2005 but the Department has yet to re-calibrate the model.

7. RIVER FLOW

River flows at the point of discharge are regulated by upstream hydropower dam operations at Grand Falls and at Woodland. Additional upstream storage dam locations which contribute to river flows at the point of discharge include; Forest City, Vanceboro, Canoose, Clifford, West Grand, and Sysladobsis. An earthen dam at Farm Cove prevents uncontrolled discharge of impounded waters. This dam maintains a small constant flow to a brook flowing into Big Lake then on to Grand Falls Flowage. Woodland Pulp owns and operates all nine of these facilities. A run-of-river hydro power generating facility is located downstream of the mill in the Milltown area of St. Stephen, New Brunswick. This facility depends on upstream flow releases to generate power and is outside the jurisdiction of the United States. The FERC licenses for the West Grand and Forest City projects are in effect and valid through August 2000, with annual licenses issued by the FERC pending final resolution and relicensing

7. RIVER FLOW (cont'd)

The Vanceboro Project is licensed by FERC through 2016. FERC's 1997 decision did not include any direct review or discussion on decisions relative to this project, however the rehearing and appeal process does consider this project as all of these including Grand Falls are auxiliary to and interconnected with the Woodland dam in design and operation such that they form one complete unit of development. The Grand Falls and Woodland Projects were authorized by an Act of Congress prior to Part 1 of the Federal Power Act of 1920. Therefore, FERC jurisdiction does not apply. The Canoose Dam is entirely in Canada, outside the jurisdiction of the United States. The Clifford Lake Dam is a small facility associated with the Grand Falls Project.

The Board of Control of the St. Croix River International Joint Commission (IJC) has the authority to establish (and has established) minimum and maximum levels and flows at Forest City, Vanceboro, and Grand Falls Projects all of which are on the US / Canada boundary. The Woodland Dam which is also on the US / Canada boundary is exempt from IJC jurisdiction because its construction predates the IJC's implementing Act (Boundary Water Treaty Act of 1909).

The IJC currently has issued orders for a minimum flow of 75 cubic feet per second (cfs) at Forest City and a minimum flow of 200 cfs at Vanceboro. As noted, the IJC orders also include maximum and minimum water levels at those dams. In addition, a minimum and maximum lake level is specified by order for Grand Falls Dam but no flow specification is made. The minimum hydropower generation design flow for this facility and Woodland Dambelow is 750 cfs. As early as the 1860's State Governmental surveys identified the St. Croix as having a dependable flow of around 1,000 cfs and it was on this basis that the lower minimum design flow was specified. This minimum design flow was utilized to design the system's integrated operation. The Board has not issued an order for the Woodland Dam. Over the last ten years, USGS records at the Baring gauging station, located 5.3 miles below Woodland Dam and the point of the Woodland Mill discharge, show that a 7-day minimum of 850 cfs has been consistently maintained. (Note: During the drought of 2002 the DEP authorized a late winter minimum flow of 500- 550 cfs to conserve lake system water. While 750 cfs was achievable, environmental conditions at this time of year allowed a compromise to avoid summer public water use conflicts. The Department agreed that this emergency flow was not representative of a true minimum and accordingly would not be utilized as such for licensing and other assessment purposes.) The 1987 EPA permit and State WDL required the GPC to provide a minimum flow of 750 cfs at Baring from June 1 through September 30 as a condition of permit and license. The permittee has indicated that the IJC formerly specified a minimum flow of 750 cfs as a daily mean flow and not an instantaneous flow as specified in the 1987 EPA permit and 1996 State WDL. The permittee has provided the Department with a lengthy and well documented history of the flow management plan for the river indicating that minimum flow at and below the

7. RIVER FLOW (cont'd)

Woodland mill in said plan is 850 cfs. Consistent flows in the lower river equal to or higher than this value have been the basis for the construction and operation of the dams on the watershed since the early 1800's. The three power generating dams constructed in the early 1900's were also designed accordingly. As a result, 850 cfs is being utilized as the low flow (7Q10) in calculating applicable dilution factors and corresponding water quality based limits in this permitting action. Should the IJC or other regulatory authorities with appropriate jurisdiction establish a minimum flow regime lower or higher than 750 cfs, this permit may be re-opened (after notice to the permittee) pursuant to Special Condition O of this permit, to re-evaluate effects on water quality and the environment, the applicable dilution factors and water quality based limits.

8. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Regulatory Basis: The discharge from the permittee's 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 Woodland facility are limited to Subpart B, *Bleached Papergrade and Soda*. The NEGs 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 or daily maximum mass limits based on production of pulp and paper produced or concentration limitations based on BPT, BCT or BAT. Allowances for alternate monitoring certifications and frequencies are also provided for, subject to certain conditions.

b. Production: This permitting action is utilizing a long-term sustained average production figure of 1,500 short tons/day of bleached kraft market pulp produced as being representative of long-term average pulp production. The design capacity of the pulp mill is 1,600 short tons/day. It is noted the previous permitting action considered 366 tons/day of uncoated paper production as being representative of paper production at that time but the paper machines were permanently shut down in July of 2007. In early 2013, the permittee indicated there are short term plans to install two new tissue machines, each with a capacity of approximately 180 tons for a total of 360 tons of tissue per day. If the project is realized, production for the mill will be back to pre-2007 levels.

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

OUTFALL #001 (Final effluent)

c. Flow – The previous permitting action established a daily maximum flow limitation of 40 MGD. The permittee has requested the Department consider changing the limitation to a "report" requirement and established a monthly average flow limit of 30 MGD. Doing so makes the permit consistent with other permits for kraft pulp and paper mills issued by the Department and will result in slightly higher dilution factors pursuant to the criteria for establishing dilution factors in Department rule 06-096 CMR, Chapter 530. Therefore, this permitting action is establishing a monthly average flow limitations of 30 MGD and eliminating the daily maximum flow limitation of 40 MGD in the previous permitting action and requiring the permittee to report the daily maximum flow for each month.

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2010 – July 2013 indicates flow values have been reported as follows:

Flow (DMRs=43)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	Report	20.5 – 31.9	24.8
Daily Maximum	40	26.0 - 40.0	30.9

d. Dilution Factors: Dilution factors associated with the discharge from the mill's waste water treatment facility were derived in accordance with freshwater protocols established in Department rule 06-096 CMR Chapter 530. With a permitted monthly average flow of 30.0 MGD and a regulated river flow of 850 cfs, dilution calculations are:

$$\text{Dilution Factor} = \frac{\text{River Flow (cfs)(Conv. Factor)}}{\text{Plant Flow}}$$

Acute: 1Q10 = 850 cfs $\Rightarrow \frac{(850 \text{ cfs})(0.6464)}{30.0 \text{ MGD}} = 18.3{:}1$

Modified Acute[(1)]
¼1Q10 = 212 cfs $\Rightarrow \frac{(212 \text{ cfs})(0.6464)}{30.0 \text{ MGD}} = 4.6{:}1$

Chronic: 7Q10 = 850 cfs $\Rightarrow \frac{(850 \text{ cfs})(0.6464)}{30.0 \text{ MGD}} = 18.3{:}1$

Harmonic Mean: = 1,812 cfs $\Rightarrow \frac{(1{,}812 \text{ cfs})(0.6464)}{30.0 \text{ MGD}} = 39{:}1$

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

OUTFALL #001 (Final effluent)

Footnotes:

(1) Chapter 530 (4)(B)(1) states that analyses using numeric acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent potential substantial acute toxicity within any mixing zone. The 1Q10 is the lowest one day flow over a ten-year recurrence interval. The regulation goes on to say that where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design, up to including all of it. The Department made the determination in the previous permitting action (and maintains this same position in this permitting action) that the discharge, which is a bank outfall, does not receive rapid and complete mixing with the receiving water. Therefore, the default stream flow of 1/4 of the 1Q10 is applicable in acute statistical evaluations pursuant to Department rule 06-096 CMR Chapter 530.

e. Biochemical oxygen demand (BOD) & Total suspended solids (TSS):

The following table contains the monthly average and daily maximum BOD and TSS limitations as calculated utilizing the BPT effluent limitations in the National Effluent Guidelines (NEGs) found at 40 CFR Part 430, Sub-part B.

Final Prod.	Subpart B	BOD Avg		BOD Max		TSS Avg		TSS Max	
		kg/kkg	lbs/day	kg/kkg	lbs/day	kg/kkg	lbs/day	kg/kkg	lbs/day
1,500	B-Mkt Bl Kft	8.05	24,150	15.45	46,350	16.4	49,200	30.4	91,200

This permitting action is carrying forward all seasonal BOD and year-round TSS limits from the previous permitting action. Excepting the summer monthly average limits, the BOD limits were derived from Department modeling of the river as part of the St. Croix River Waste Load Allocation published by the Department in 1986 which demonstrated that minimum dissolved oxygen standards for Class C waters would not be maintained during the summer months at the year-round BOD_5 loadings from Outfall 001. The summer monthly average limit of 8,400 lbs/day for BOD was derived from modeling conducted by the Department in 1992, which demonstrated improved river water quality would be maintained with this discharge limitation using a 7Q10 river flow of 750 cfs which USGS records show had been maintained. The TSS limitations were established in a 1985 WDL licensing action by the Department and were derived as a result of the aforementioned 1986 waste load allocation. All BOD and TSS limits are well below NEG limits as calculated above for the specified production level.

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

OUTFALL #001 (Final effluent)

A review of the monthly DMR data for the period January 2010 – July 2013 (excluding months of May and June 2009) indicates BOD and TSS values have been reported as follows:

BOD (June 1 – September 30)

BOD Mass (DMRs =14)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	8,400	2,775 – 5,355	4,140
Daily Maximum	17,000	3,949 – 8,888	6,079

BOD (October 1 – May 31)

BOD Mass (DMRs=29)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	12,000	3,696 – 11,085	5,195
Daily Maximum	17,000	5,152 – 21,627	8,732

TSS (Year-round)

TSS mass (DMRs=43)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	18,600	2,340 – 13,412	4,874
Daily Maximum	31,000	4,087 – 55,942	10,016

This permitting action is carrying forward the 2/week monitoring frequency for BOD given the historical compliance record and the fact that chemical oxygen demand (COD) is being tested for 5/Week. The permittee has more than eighteen (18) years of effluent COD data that demonstrates a good correlation between BOD and COD values whereby the ratio of COD to BOD is consistently between the range of 0.27 and 0.30.

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

OUTFALL #001 (Final effluent)

As for TSS, the previous permitting action established a monitoring frequency of 5/Week. On July 31, 2006, the U.S. EPA issued a memorandum to the Water Division Directors in all ten regions of the U.S. reminding them to convey to NPDES permitting authorities that facilities subject to Effluent Limitations Guidelines (ELGs) for Pulp and Paper Mills covered under 40 CFR Part 430 (promulgated by the EPA on April 15, 2008) were eligible for monitoring frequency reductions where appropriate. 40 CFR, Part 430 specified monitoring frequencies that were required for a five-year period with the preamble of Part 430 clarifying that permit writers can require less frequent monitoring after the compulsory five-year period. The EPA recommends the use of a document entitled, "*Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies*" (USEPA 1996) as the basis for determining these reduced monitoring frequencies. Monitoring requirements are not considered effluent limitations under section 402(o) of the Clean Water Act and therefore, anti-backsliding prohibitions would not be triggered by reductions in monitoring frequencies

The EPA Guidance indicates "*...the basic premise underlying a performance-based reduction approach is that maintaining a low average discharge relative to the permit limits results in a low probability of the occurrence of a violation for a wide range of sampling frequencies.*" The monitoring frequency reductions in EPA's guidance were designed to maintain approximately the same level of reported violations as that experienced with the existing baseline sampling frequency in the permit. To establish baseline performance the long term average (LTA) discharge rate for each parameter is calculated using the most recent two-year data set of monthly average effluent data representative of current operating conditions. The LTA/permit limit ratio is calculated and then compared to the matrix in Table I of EPA's guidance to determine the potential monitoring frequency reduction. It is noted Table I of EPA's guidance was derived from a probability table that used an 80% effluent variability or coefficient of variation (cv). The permitting authority can consider even further reductions in the monitoring frequencies if the actual cv for the facility is significantly lower than the default 80% utilized by the EPA in Table I.

In addition to the parameter-by-parameter performance history via the statistical evaluation cited above, the EPA recommends the permitting authority shall take into consideration the facility enforcement history and the parameter-by-parameter compliance history and factors specific to the State or facility. If the facility has already been given monitoring reductions due to superior performance, the baseline may be a previous permit.

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

OUTFALL #001 (Final effluent)

Although EPA's 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering the most current 33 months of data (January 2009 – November 2011).

The review of the monitoring data for TSS on page 22 of this Fact Sheet indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 4,874 lbs/day
Monthly average limit = 18,600 lbs/day
Current monitoring frequency = 5/Week

$$\text{Ratio} = \frac{4{,}874 \text{ lbs/day}}{18{,}600 \text{ lbs/day}} = 26\%$$

According to Table I of the EPA Guidance, a 5/Week monitoring requirement can be reduced to 2/Week. Therefore, the TSS monitoring frequency has been reduced to 2/Week in this permitting action.

f. Temperature: The previous permitting action established a seasonal (June 1 – Sept 30) daily maximum technology based effluent temperature limit of 100 °F that is being carried forward in this permitting action. For the remainder of the year (October 1 – September 30) the previous permit established a daily maximum report only requirement.

A review of the monthly DMR data for the period January 2010 – July 2013 indicates temperature values have been reported as follows:

Temperature (June 1 – September 30)

Temperature (DMRs=14)

Value	Limit (°F)	Range (°F)	Average (°F)
Daily Maximum	100	86.3 – 94.5	91

Temperature (October 1 – May 31)

Temperature (DMRs=29)

Value	Limit (°F)	Range (°F)	Average (°F)
Daily Maximum	Report	65.9 – 90.8	77

See an additional discussion under the section entitled *Thermal Load* of this Fact Sheet for Outfall #00T.

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

OUTFALL #001 (Final effluent)

g. pH Range: The previous permitting 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 NEGs.

A review of the monthly DMR data for the period January 2010 – July 2013 indicates pH values have been reported as follows:

pH (DMRs = 35)

Value	Limit (su)	Minimum (SU)	Maximum (su)
Range	5.0 – 9.0	6.6	8.3

h. Adsorbable organic halogens (AOX): The 5/31/05 permit established monthly average and daily maximum technology based 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 kg/kkg and 0.951 kg/kkg (lbs per 1000 pounds) respectively, of unbleached pulp production. With an unbleached kraft production of 1,500 tons/day the limits are calculated as follows:

1,500 tons/day X 0.623 lbs/1000 lbs X 2000 lbs/ton = 1,869 lbs /day
1,500 tons/day X 0.951 lbs/1000 lbs X 2000 lbs/ton = 2,853 lbs /day

The 5/31/05 permitting action established a 3/Week monitoring requirement for AOX. On June 27, 2008, the Department issued a minor revision of the 5/31/05 permit by reducing the monitoring frequency to 2/Month. The Fact Sheet of the 6/27/08 minor revision stated;

> *"The permittee has reported the monthly average LTA* [long term average] *for the most current 30-month period is 301 lbs/day. The monthly average limit is 1,763 lbs/day resulting in a LTA/permit limit ration of 0.17 or 17%. The cv* [coefficient of variation] *for the data set is 0.09 or 9%. For a LTA/permit limit ratio ranging from <25% Table I of the EPA Guidance recommends a monitoring frequency of 1/Week. The Department is reducing the monitoring frequency to 2/Month based on a best professional judgment taking into consideration the significantly lower calculated cv of 80%."*

A review of the DMR data for the period January 2010 – July 2013 indicates AOX values have been reported as follows:

AOX mass (DMRs=42)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	1,763	102 – 744	266
Daily Maximum	2,691	106 - 795	273

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

OUTFALL #001 (Final effluent)

In a letter dated February 26, 2013, the permittee has requested a monitoring frequency reduction from 2/Month to 1/Month based on its excellent compliance history for AOX.

Though EPA's 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering the most current 43 months of data (January 2010 – July 2013).

The review of the monitoring data above indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 266 lbs/day
Monthly average limit = 1,763 lbs/day
Current monitoring frequency = 2/Month

$$\text{Ratio} = \frac{266 \text{ lbs/day}}{1{,}763 \text{ lbs/day}} = 15\%$$

According to Table I of the EPA Guidance, a 2/Month monitoring requirement can be reduced to 1/Quarter. The Department is making a best professional judgment that a monitoring frequency of 1/Quarter may not be sufficient to determine on-going compliance at the facility. The Department recently adopted a policy to not reduce monitoring frequencies to more than 50% of their current monitoring frequency. Therefore, the monitoring frequency for AOX has been reduced to 1/Month in this permitting action which is consistent with the permittee's request.

i. Chemical oxygen demand (COD): The 5/31/05 permitting action did not establish final effluent limitations for COD. Pursuant to 40 CFR Part 430, the 5/31/05 permitting action established a monthly average and daily maximum mass reporting requirement with a monitoring frequency of 1/Day. The monitoring frequency was reduced from 1/Day to 5/Week in a 6/23/08 minor revision issued by the Department.

It is noted that the USEPA is continuing to review the applicability of COD limitations with no final determination as of the date of this permitting action as whether or not to promulgate numeric limitations. If such a determination is made, the permit may be reopened (subject to Special Condition O) and modified accordingly.

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

OUTFALL #001 (Final effluent)

A review of the DMR data for the period January 2010 – July 2013 indicates COD values have been reported as follows:

COD mass (DMRs=42)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	Report	33,632 – 108,562	59,800
Daily Maximum	Report	53,776 – 159,061	85,050

j. Color: For the Woodland Pulp 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 5/31/05 permitting action established a monthly average technology based mass limit of 150 pounds per ton of unbleached pulp along with a monitoring frequency of 3/week that are being carried forward in this permitting action.

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

OUTFALL #001 (Final effluent)

A review of the DMR data for the period January 2010 – July 2013 indicates color values have been reported as follows:

Color (DMRs=14)

Value	Limit (lbs/ton)	Range (lbs/ton)	Average (lbs/ton)
Monthly average	150	77 - 256	121

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

WET, priority pollutant and analytical chemistry testing as required by Department rule 06-096 CMR 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 Department rule 06-096 CMR Chapter 584.

Department rule 06-096 CMR Chapter 530 establishes four categories of testing requirements based predominately on the chronic dilution factor. The categories are as follows:

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

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

OUTFALL #001 (Final effluent)

Department rule 06-096 CMR Chapter 530 (1)(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the Department rule 06-096 CMR Chapter 530 criteria, the permittee's facility falls into the Level I frequency category as the facility has a chronic dilution factor of <20:1. Department rule 06-096 CMR Chapter 530(1)(D)(1) specifies that routine screening and surveillance level testing requirements are as follows:

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

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

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

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

A review of the data on file with the Department indicates that to date, the permittee has fulfilled the WET and chemical-specific testing requirements of Department rule 06-096 CMR Chapter 530. See **Attachment C** of this Fact Sheet for dates and test results for WET and **Attachment D** of this Fact Sheet for chemical specific testing dates and results of pollutants of concern.

Department rule 06-096 CMR Chapter 530(D)(3)(c) states in part *"Dischargers in Level I may reduce surveillance testing to one WET or specific chemical series per year provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E)."*

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

OUTFALL #001 (Final effluent)

Department rule 06-096 CMR 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.*"

Department rule 06-096 CMR Chapter 530 §3 states, "*The Department shall establish appropriate discharge prohibitions, effluent limits and monitoring requirements in waste discharge licenses if a discharge contains pollutants that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an ambient excursion in excess of a numeric or narrative water quality criteria or that may impair existing or designated uses. The licensee must also control whole effluent toxicity (WET) when discharges cause, have a reasonable potential to cause, or contribute to an ambient excursion above the narrative water quality criteria. "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 – The previous permitting action establish an acute-no observed effect level (A-NOEL) limit of 33% and a chronic-no observed effect level (C-NOEL) limit of 8.3% for the water flea (*Ceriodaphnia dubia*) as a statistical evaluation at that time indicated the discharge exceeded or had a reasonable potential to exceed critical acute and chronic WET thresholds associated with the applicable dilution factors at that time (acute 3.0:1, chronic 12.1:1). Section 8(c) of this Fact Sheet establishes new dilution factors as follows; acute 4.6:1, chronic 18.1:1. Therefore, the new critical water quality thresholds are as follows; 22% and 5.6%

On September 19, 2013, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department in accordance with the statistical approach specified in Department rule 06-096 CMR Chapter 530. The 9/19/13 statistical evaluation indicates the discharge from the permittee's waste water treatment facility does not have any A-NOEL or C-NOEL test results for the water flea or the brook trout that exceed or have a reasonable potential to exceed the critical A-NOEL threshold of 22% or the critical C-NOEL threshold of 5.6%. As a result, this permit is establishing reduced surveillance level A-NOEL and C-NOEL WET testing to 1/Year pursuant to Department rule 06-096 CMR Chapter 530(D)(3)(c).

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

OUTFALL #001 (Final effluent)

Department rule 06-096 CMR Chapter 530(2)(D)(4) states;

> *(4) All dischargers having waived or reduced testing must file statements with the Department on or before December 31 of each year describing the following.*
>
> *(a) Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;*
> *(b)Changes in the operation of the treatment works that may increase the toxicity of the discharge; and*
> *(c) Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge.*

Given the permittee qualifies for the reduced surveillance level WET testing frequency provision found at Department rule 06-096 CMR Chapter 530 §2(D)(3), Special Condition L, *06-096 CMR 530(2)(D)(4), Statement For Reduced/Waived Toxics Testing* of this permit requires the permittee to file said statement.

Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee shall revert to a default screening level WET testing of 1/Quarter WET testing for both the water flea and brook trout.

Analytical chemistry and priority pollutant testing

Department rule 06-096 CMR Chapter 530 §4(C), states "*The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions The Department shall use the same general methods as those in section 4(D) to determine background concentrations. For pollutants not listed by the Department, an assumed concentration of 10% of the applicable water quality criteria must be used in calculations.*" The Department has limited information on the background levels of metals in the water column in the St Croix River in the vicinity of the permittee's outfall. Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

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

OUTFALL #001 (Final effluent)

Department rule 06-096 CMR 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.* However, in May 2012, Maine law 38 M.R.S.A. §464, ¶¶ J was enacted which reads as follows, *"For the purpose of calculating waste discharge license limits for toxic substances, the department may use any unallocated assimilative capacity that the department has set aside for future growth if the use of that unallocated assimilative capacity would avoid an exceedance of applicable ambient water quality criteria or a determination by the department of a reasonable potential to exceed ambient water quality criteria.."*

On September 19, 2013, the Department conducted statistical evaluations based on 15% of the ambient water quality criteria reserve being withheld and 0% of the reserve of the criteria being withheld (Report ID #622) to determine if the unallocated assimilative capacity would avoid an exceedance or reasonable potential to exceed applicable ambient water quality criteria for toxic pollutants. Report ID #622 indicates allocating the 15% reserve does avoid a number of reasonable potentials to exceed applicable AWQC for the parameters of concern. Therefore, the department is utilizing the full 15% of the unallocated assimilative capacity in the statistical evaluation when establishing limits for toxic pollutants in waste discharge licenses for facilities in the St. Croix River watershed.

Department rule 06-096 CMR 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."*

Department rule 06-096 CMR 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.*

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

OUTFALL #001 (Final effluent)

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

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

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

Chemical Specific

The Woodland Pulp facility and two municipal waste water treatment facilities (Baileyville and Calais) that are subject to Department rule 06-096 CMR Chapter 530 testing requirements discharge to the St. Croix River. The Calais facility is the most downstream facility and the Woodland Pulp facility is the most upstream facility. As previously cited, Department rule 06-096 CMR Chapter 530 requires that AWQC must be met in the St. Croix River taking into consideration historic discharge levels for all three facilities as well as an allocation dedicated to background (10%) of applicable AWQC) and a reserve (0%).

As with WET test results, the Department conducted a statistical evaluation on 9/19/13 (Report ID #622) on the most recent 60-months of analytical chemistry and priority pollutant data on file at the Department. The 9/19/13 statistical evaluation indicates the discharge from the permittee's facility exceeds or has a reasonable potential to exceed applicable ambient water quality criteria for cadmium, copper, lead and zinc. As for the remaining parameters on the chemical specific list, the 9/19/13 statistical evaluation indicates the remaining parameters do not exceed or have a reasonable potential to exceed acute, chronic or human health AWQC.

The statistical evaluation indicates the Baileyville facility and the Calais facility are not discharging any pollutants that exceed or have a reasonable potential to exceed applicable AWQC.

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

OUTFALL #001 (Final effluent)

Department guidance that establishes protocols for establishing waste load allocations based on mass discharged can be found as **Attachment E** of this Fact Sheet. The guidance states that the most protective of water quality becomes the facility's allocation. According to the 9/19/13 statistical evaluation, cadmium (chronic) and lead (chronic) are to be limited based on the segment allocation method and cadmium, copper and zinc (all acute) are to be limited based on the individual allocation method.

Department rule 06-096 CMR 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.*" However, in May 2012, Maine law 38 M.R.S.A. §464, ¶¶ K was enacted which reads as follows, "*Unless otherwise required by an applicable effluent limitation guideline adopted by the department, any limitations for metals in a waste discharge license may be expressed only as mass-based limits.*" There are no applicable effluent limitation guidelines adopted by the Department or the USEPA for metals for dischargers subject to federal regulation, Effluent Limitations Guidelines (ELGs) for Pulp and Paper Mills covered under 40 CFR Part 430 (promulgated by the EPA on April 15, 2008). Therefore, concentration limits for pollutants identified in Report ID 622 that exceed or have a reasonable potential to exceed applicable ambient water quality criteria are not being established in this permitting action.

Segment allocation methodology

Cadmium Total (chronic)

Historical Average:

For the segment allocation methodology, the historical average quantity (mass) for each pollutant of concern for each facility is calculated as the arithmetic mean of the concentration values reported for each pollutant, a conversion factor of 8.34 lbs/gallon and the monthly average permit limit for flow. For the permittee's facility, historical averages for cadmium (chronic) were calculated as follows:

Mean concentration (n=18) = 1.4 ug/L or 0.0014 mg/L
Permit flow limit = 30 MGD
Historical average mass = (0.0014 mg/L)(8.34)(30 MGD) = 0.36 lbs/day

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

OUTFALL #001 (Final effluent)

Segment allocation methodology

The 9/19/13 statistical evaluation indicates the historical average mass of cadmium discharged by the permittee is 100% of the cadmium discharged by the three facilities on the St. Croix River. Therefore, the permittee's segment allocation for cadmium is calculated as 100% of the chronic assimilative capacity of the river at Calais as Calais is the most downstream facility in the St. Croix watershed. The assimilative capacity at Calais is calculated as follows:

7Q10 = 850 cfs (0.6464) = 549.44 MGD
Chronic AWQC = 0.08 ug/L or 0.00008 mg/L

Taking into consideration 0% of the AWQC reserve and 10% for background, the assimilative capacity is:

Chronic = (0.00008 mg/L)(0.90)(8.34 lbs/gal)(549 MGD) = 0.33 lbs/day

The monthly average mass limitation for cadmium is calculated as follows:

Monthly average: (Chronic assimilative capacity mass)(% of cadmium discharged)
(0.33 lbs/day)(1.0) = **0.33 lbs/day**

Lead Total (chronic)

Mean concentration (n=18) = 3.8 ug/L or 0.0038 mg/L
Permit flow limit = 30 MGD
Historical average mass = (0.0038 mg/L)(8.34)(30 MGD) = 0.95 lbs/day

The 9/19/13 statistical evaluation indicates the historical average mass of lead discharged by the permittee is 100% of the lead discharged by the three facilities on the St. Croix River. Therefore, the permittee's segment allocation for lead is calculated as 100% of the chronic assimilative capacity of the river at Calais as Calais is the most downstream facility in the St. Croix watershed. The assimilative capacity at Calais is calculated as follows:

7Q10 = 850 cfs (0.6464) = 549.44 MGD
Chronic AWQC = 0.41 ug/L or 0.00041 mg/L

Taking into consideration 0% of the AWQC reserve and 10% for background, the assimilative capacity is:

Chronic = (0.00041 mg/L)(0.90)(8.34 lbs/gal)(549.44 MGD) = 1.7 lbs/day

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

OUTFALL #001 (Final effluent)

Segment allocation methodology

The monthly average mass limitation for lead is calculated as follows:

Monthly average: (Chronic assimilative capacity mass)(% of lead discharged)
(1.7 lbs/day)(1.0) = **1.7 lbs/day**

Individual allocation methodology

Cadmium Total (acute)

Taking into consideration 0% of the AWQC reserve and 10% for background;

EOP concentration = [Dilution factor x 0.90 x AWQC in ug/L] + [0.10 x AWQC in ug/L]

$$\text{Mass limit} = \frac{(\text{EOP concentration in ug/L})(8.34 \text{ lbs/gal})(\text{Permit flow limit in MGD})}{1000 \text{ ug/mg}}$$

Acute AWQC = 0.42 ug/L
Acute dilution factor: 4.6:1

EOP concentration= [(4.6 x 0.90 x 0.42 ug/L) + (0.10 x 0.42 ug/L)] = 1.78 ug/L

$$\text{Mass limit} = \frac{(1.78 \text{ ug/L})(8.34 \text{ lbs/gal})(30 \text{ MGD})}{1000 \text{ ug/mg}} = \mathbf{0.44 \text{ lbs/day}}$$

Copper Total (acute)

Taking into consideration 0% of the AWQC reserve and 10% for background;

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

$$\text{Mass limit} = \frac{(\text{EOP concentration in ug/L})(8.34 \text{ lbs/gal})(\text{Permit flow limit in MGD})}{1000 \text{ ug/mg}}$$

Acute AWQC = 3.07 ug/L or 0.00307 mg/L
Acute dilution factor: 4.6:1

EOP concentration= [(4.6 x 0.90 x 3.07 ug/L) + (0.10 x 3.07 ug/L)] = 13.0 ug/L

$$\text{Mass limit} = \frac{(13.0 \text{ ug/L})(8.34 \text{ lbs/gal})(30 \text{ MGD})}{1000 \text{ ug/mg}} = \mathbf{3.2 \text{ lbs/day}}$$

8. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS ()

OUTFALL #001 (Final effluent)

Individual allocation methodology

Zinc Total (acute)

Taking into consideration 0% of the AWQC reserve and 10% for background;

EOP concentration = [Dilution factor x 0.90 x AWQC in ug/L] + [0.10 x AWQC in ug/L]

$$\text{Mass limit} = \frac{(\text{EOP concentration in ug/L})(8.34 \text{ lbs/gal})(\text{Permit flow limit in MGD})}{1000 \text{ ug/mg}}$$

Acute AWQC = 30.6 ug/L
Acute dilution factor: 4.6:1

EOP concentration= [(4.6 x 0.90 x 30.6 ug/L) + (0.10 x 30.6 ug/L)] = 130 ug/L

$$\text{Mass limit} = \frac{(130 \text{ ug/L})(8.34 \text{ lbs/gal})(30 \text{ MGD})}{1000 \text{ ug/mg}} = \mathbf{32 \text{ lbs/day}}$$

Department rule 06-096 CMR Chapter 530 does not establish monitoring frequencies for parameters that exceed or have a reasonable potential to exceed AWQC. Monitoring frequencies are established on case by case basis given the timing, severity and frequency of occurrences of the exceedences or reasonable potential to exceed applicable critical water quality thresholds. Given the historic on-going compliance issues associated with zinc, the Department is making a best professional judgment to carry forward the monitoring frequency of 1/Month from the previous permitting action. For cadmium, copper and lead this permitting action is making a best professional judgment to establish the monitoring frequencies at the routine surveillance level frequency of 1/Quarter specified in Department rule 06-096 CMR Chapter 530.

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 establishing a reduced surveillance level reporting and monitoring frequency of 1/Year for analytical chemistry testing for the first three years and the fifth year 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)(3) and Special Condition M, *06-096 CMR 530(2)(D)(4), Statement For Reduced/Waived Toxics Testing* of this permit.

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

OUTFALL #001 (Final effluent)

Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee shall conduct default screening level analytical chemistry testing at 1/Quarter and priority pollutant testing of 1/Year.

Aluminum (Total)

The Georgia Pacific Corporation (former owner of the Woodland Pulp Mill) conducted a study in 1995 and 1996 to develop a site specific AWQC for total aluminum. The results of the study were published in a document entitled, *Aluminum Water Effect Ratio for Georgia Pacific Corporation Woodland, Maine Pulp & Paper Operations Discharge and St. Croix River,* dated November 1996. On June 5, 1997, the Department issued a white paper recommending approval of a WER of 6.1. On March 2, 1998, the EPA issued a letter to the Department in which in concurred that a WER of 6.1 would be appropriate based on the results of the testing in GP's November 1996 report. As a result, the chronic AWQC for the St. Croix River was established as 530 ug/L and shall be utilized in all statistical evaluations.

l. Mercury: Pursuant to Maine law, 38 M.R.S.A. § 413 and § 420 and Department rule 06-096 CMR Chapter 519 (last amended October 6, 2001), the Department issued a Notice of Interim Limits for the Discharge of Mercury to the permittee on June 20, 2000, thereby administratively modifying MEPDES #ME0001872/ WDL # W002766-5N-E-R by establishing interim average and maximum effluent concentration limits of 35.5 parts per trillion (ppt) and 53.3 ppt, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury.

A review of the Department's data base for the period January 2007 through the present indicates the permittee has been in compliance with the interim limits for mercury as results have been reported with a range from 1.0 ppt to 20.6 ppt with an arithmetic mean (n=28) of 3.8 ppt.

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

OUTFALL #001 (Final effluent)

The monitoring data for total mercury indicates the ratios (expressed in percent) of the long term effluent average to the average limit can be calculated as follows:

Mercury

Long term average = 3.8 ng/L
Average limit = 35.5 ng/L
Current monitoring frequency = 4/Year

$$\text{Ratio} = \frac{3.8 \text{ ng/L}}{35.5 \text{ ng/L}} = 11\%$$

Pursuant to Maine law 38 M.R.S.A. §420, sub-§1-B, ¶F, and a minor permit revision issued on February 6, 2012, this permitting action is carrying forward a reduced monitoring frequency of 1/Year given the permittee has maintained at least 5 years of mercury testing data.

m. Total Phosphorus: Department rule 06-096 CMR, Chapter 523 specifies that water quality based limits are necessary when it has been determined that a discharge has a reasonable potential to cause or contribute to an excursion above any State water quality standard including State narrative criteria.[1] In addition, 06-096 CMR Chapter 523 specifies that water quality based limits may be based upon criterion derived from a proposed State criterion, or an explicit State policy or regulation interpreting its narrative water quality criterion, supplemented with other relevant information which may include: EPA's Water Quality Standards Handbook, October 1983, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration, and current EPA criteria documents.[2]

USEPA's Quality Criteria for Water 1986 (Gold Book) puts forth an in-stream phosphorus concentration recommendation of less than 100 µg/L (0.1 mg/L) in streams or other flowing waters not discharging directly to lakes or impoundments, to prevent nuisance algal growth. The use of the 0.1 mg/L Gold Book value is consistent with the requirements of 06-096 CMR Chapter 523 noted above for use in a reasonable potential (RP) calculation.

[1] *Waste Discharge License Conditions,* 06-096 CMR 523(5)(d)(1)(i) (effective date January 12, 2001)
[2] 06-096 CMR 523(5)(d)(1)(vi)(A)

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

OUTFALL #001 (Final effluent)

Based on the above rationale, the Department has chosen to utilize the Gold Book value of 100 ug/L. It is the Department's intent to continue to make determinations of actual attainment or impairment based upon environmental response indicators from specific water bodies. The use of the Gold Book value of 100 ug/L for use in the RP calculation will enable the Department to establish water quality based limits in a manner that is reasonable and that appropriately establishes the potential for impairment, while providing an opportunity to acquire environmental response indicator data, numeric nutrient indicator data, and facility data as needed to refine the establishment of site specific water quality based limits for phosphorus. Therefore, this permit may be reopened during the term of the permit to modify any reasonable potential calculation, phosphorus limits, or monitoring requirements based on site-specific data.

The permittee has been conducting total phosphorus testing since calendar year 2007 with a total of 549 test results. The arithmetic mean concentration discharged for the six-year period is 0.3 mg/L and is considered representative of the discharge from the mill. For the background concentration in the St. Croix, the only information the Department has are test results obtained by the Department in 1983 that indicate the background total phosphorus concentration is 12 ug/L. Using the following calculation and criteria, the mill does not exhibit a reasonable potential to exceed the EPA's Gold Book value of 0.1 mg/L for phosphorus or the Department's Chapter 583 draft criteria of 30 ug/L

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

Qe = effluent flow i.e. facility design flow	=	30 MGD
Ce = effluent pollutant concentration	=	0.3 mg/L
Qs = 7Q10 flow of receiving water	=	549 MGD
Cs = upstream concentration	=	0.012 mg/L
Qr = receiving water flow	=	549 MGD
Cr = receiving water concentration		

$$Cr = \frac{(30\ MGD \times 0.3\ mg/L) + (519\ MGD \times 0.012\ mg/L)}{549\ MGD} = 0.028\ mg/L$$

Cr = 0.028 mg/L < 0.1 mg/L ⇒ No Reasonable Potential
Cr = 0.028 mg/L < 0.030 mg/L⇒ No Reasonable Potential

Therefore, no end-of-pipe limitations or monitoring requirements for total phosphorus are being established in this permitting action. However, given the total phosphorus background concentration for the St. Croix River was last obtained in 1983, this permit requires the permittee to obtain background total phosphorus concentrations at a frequency of 1/Week between June 1 – September 30 of calendar year 2014.

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

OUTFALL #100 (Bleach Plant Acid Sewer) & OUTFALL #200 (Alkaline Sewer)

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

n. Flow: The previous permitting action established a monthly average reporting requirement for flow from the bleach plant. The permit required estimating the flow when sampling for pollutants as the permittee demonstrated at that time that installing continuous flow measurement was disproportionate to EPA's cost estimates proposed in the draft regulation due to the age of mill, and the configuration of the bleach plant sewers. The permittee has since installed continuous flow measuring devices on the bleach plant sewers.

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2010 – July 2013 indicates flow values have been reported as follows:

Flow - Outfall 100 (DMRs=43)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	Report	1.6 – 13.7	2.5
Daily Maximum	Report	2.0 – 16.8	3.2

Flow - Outfall 200 (DMRs=43)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	Report	1.8 – 17.9	11.3
Daily Maximum	Report	2.4 – 20.6	14.0

o. 2,3,7,8-TCDD (Dioxin): The previous permitting action established a daily maximum technology based concentration limit of <10 ppq (pg/L) with a monitoring frequency of 1/Year 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 1613. Federal regulation 40 CFR Part 430 establishes the same limitation and is therefore being carried forward in this permitting action.

A review of the monthly Discharge Monitoring Report (DMR) data for the period April 2010 – May 2013 indicates values have been reported as follows:

2,3.7,8 TCDD(Dioxin) - Outfall 100 (DMRs=5)

Value	Limit (pg/L)	Range (pg/L)	Mean (pg/L)
Daily Maximum	<10	<1.0 - <10	5.9

2,3.7,8 TCDD(Dioxin) - Outfall 200 (DMRs=5)

Value	Limit (pg/L)	Range (pg/L)	Mean (pg/L)
Daily Maximum	<10	<1.0 - <10	5.9

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

OUTFALL #100 (Bleach Plant Acid Sewer) & OUTFALL #200 (Alkaline Sewer)

p. 2,3,7,8 TCDF (Furan): The previous permitting action established a daily maximum technology based concentration limit of <10 ppq (pg/L) based on Maine law, 38 M.R.S.A., §420. The monitoring frequency was established at 1/Year like dioxin. The limit of 10 pg/L is also the ML for furan for EPA Method 1613. 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.

A review of the monthly Discharge Monitoring Report (DMR) data for the period April 2010 – May 2013 indicates values have been reported as follows:

2,3.7,8 TCDF(Furan) - Outfall 100 (DMRs=5)

Value	Limit (pg/L)	Range (pg/L)	Mean (pg/L)
Daily Maximum	<10	<1.0 - <10	5.9

2,3.7,8 TCDF(Furan) - Outfall 200 (DMRs=5)

Value	Limit (pg/L)	Range (pg/L)	Mean (pg/L)
Daily Maximum	<10	<1.0 - <10	5.9

Special Condition I, *Dioxin/Furan Certification*, of this permit requires the permittee to submit an annual certification indicating the bleaching process has not changed from previous practices and therefore the formation of dioxin/furan compounds is highly unlikely.

It is noted, Maine law 38 M.R.S.A., §420(2)(I)(3) states that - *After December 31, 2002, a mill may not discharge dioxin into its receiving waters. For purposes of this subparagraph, a mill is considered to have discharged dioxin into its receiving waters if 2, 3, 7, 8 - tetrachlorodibenzo-p-dioxin or 2, 3, 7, 8 - tetrachlorodibenzo-p-furan is detected in any of the mill's internal waste streams of its bleach plant and in a confirmatory sample at levels exceeding 10 picograms per liter, unless the Department adopts a lower detection level by rule, which is a routine technical rule pursuant to*

Title 5, chapter 375, subchapter II-A, or a lower detection level by incorporation of a method in use by the United States Environmental Protection Agency, or if levels of dioxin, as defined in section 420-A, subsection 1 detected in fish tissue sampled below the mill's wastewater outfall are higher than levels in fish tissue sampled at an upstream reference site not affected by the mill's discharge or on the basis of a comparable surrogate procedure acceptable to the commissioner. The commissioner shall consult with the technical advisory group established in section 420-B, subsection 1, paragraph B, subparagraph (5) in making this determination and in evaluating

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

OUTFALL #100 (Bleach Plant Acid Sewer) & OUTFALL #200 (Alkaline Sewer)

surrogate procedures. The fish-tissue sampling test must be performed with differences between the average concentrations of dioxin in the fish samples taken upstream and downstream from the mill measured with at least 95% statistical confidence. If the mill fails to meet the fish-tissue sampling-result requirements in this subparagraph and does not demonstrate by December 31, 2003 to the commissioner's satisfaction that its wastewater discharge is not the source of elevated dioxin concentrations in fish below the mill, then the commissioner may pursue any remedy authorized by law.

Based on fish tissue sampling dating back to 1997 as part of the Dioxin Monitoring Program pursuant to Maine law 38 M.R.S.A., §420-A, the Department has made the determination that the discharge from the Woodland Pulp facility is in compliance with Maine law 38 M.R.S.A., §420(2)(I)(3).

q. Twelve Chlorophenolics: Pursuant to federal regulation 40 CFR Part 430 the previous permitting action established technology based concentration 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 1/Month monitoring requirement was also established based on the federal regulation but was reduced to 2/Year in a 6/27/08 minor revision. The limitations are being carried forward in this permitting action but the monitoring frequency is being reduced from 2/Year to 1/Year as none of the twelve parameters have ever been reported at or above their respective ML's. This monitoring frequency is consistent with the recently issued discharge permits for other kraft mills.

r. Chloroform: The previous permitting action established 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 g/kkg and 6.92 g/kkg of unbleached pulp production. With an unbleached kraft production of 1,500 short tons/day the limits are calculated as follows:

1,500 short tons/day x 4.14 g/kkg x 0.907 kkg/ton x 1.0 lbs/ 454g = 12.4 lbs /day
1,500 short tons/day x 6.92 g/kkg x 0.907 kkg/ton x 1.0 lbs/ 454g = 20.7 lbs /day

The monthly average and daily maximum mass limits apply to the two bleach plant waste streams collectively. A monitoring requirement of 1/Week was established in the 5/31/05 permit based on the federal regulation but was reduced to 1/Quarter in a 6/27/08 minor revision.

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

OUTFALL #100 (Bleach Plant Acid Sewer) & OUTFALL #200 (Alkaline Sewer)

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2010 – July 2013 indicates chloroform values have been reported as follows:

Chloroform - Outfall 100 & Outfall 200 (DMRs=12)

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	12.4	0.03 – 1.69	0.39
Daily Maximum	20.7	0.10 – 5.31	0.82

Though EPA's 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering the most current 43 months of data (January 2010 – July 2013).

The review of the monitoring data above indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 0.39 lbs/day
Monthly average limit = 12.4 lbs/day
Current monitoring frequency = 1/Quarter

$$\text{Ratio} = \frac{0.39 \text{ lbs/day}}{12.4 \text{ lbs/day}} = 3.1\%$$

According to Table I of the EPA Guidance, a 1/Quarter monitoring requirement can be reduced where there are unusual circumstances of reliable performance at the requisite levels and outstanding compliance/enforcement histories. Given the 3.1% ratio calculated above and the excellent compliance history since 2005, the Department is making a best professional judgment to reduce the monitoring frequency from 1/Quarter to 1/Year. This monitoring frequency is consistent with the recently issued discharge permits for other kraft mills.

OUTFALL #002 – (Miscellaneous)

Outfall #002 consists of river intake filter backwash waters, air compressor room cooling waters, storm water from the converting building and paper warehouse roof drains and air conditioning condensate waters.

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

OUTFALL #100 (Bleach Plant Acid Sewer) & OUTFALL #200 (Alkaline Sewer)

s. Flow: The previous permitting action established a daily maximum flow limitation of 2.0 MGD with seasonal monitoring frequencies which are being carried forward in this permitting action as it remains representative of the flow from this outfall.

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2010 – July 2013 indicates flow values have been reported as follows:

Flow (DMRs=43)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	2.0	0.01 – 0.02	0.01
Daily maximum	Report	0.01 – 0.15	0.03

t. Temperature: The previous permitting action established a year-round daily maximum temperature limit of 95° F with seasonal monitoring requirements that are being carried forward in this permitting action as it remains representative of the temperature from this outfall.

OUTFALL #002 – (Miscellaneous)

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2010 – July 2013 indicates temperature values have been reported as follows:

Temperature (DMRs=43)

Value	Limit (°F)	Range (°F)	Average (°F)
Daily Maximum	95	54 - 117	81

u. pH range: The previous permitting action established a daily maximum pH range limitation of 5.0 –9.0 standard units with a footnote exempting the permittee from violations of the limit if the discharge was within 0.5 standard units of the pH of the precipitation or ambient receiving water pH. This limitation and provision for exceedences are being carried forward in this permitting action.

OUTFALL #003 (Cooling Waters)

Outfall #003 consists of an intermittent discharge of steam electric power system turbine condensate cooling evaporator and bleach plant cooling waters, however, these waters are normally recycled after passing through cooling towers or else diverted to be used as process water. Outfall #003 has discharged very infrequently over the past eleven years. The permittee has requested the Department increase the monthly average flow limitation and daily maximum temperature limits for this outfall as a result of a new water balance for

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

OUTFALL #003 (Cooling Waters)

the mill. The permittee is requesting authorization to convey cooling waters currently being discharged through Outfall #001 to Outfall #003. Increasing the flow and temperature limits for Outfall #003 will not result in an increase in the thermal load discharged by the mill as a whole. It is simply discharging the cooling water through another permitted outfall.

v. Flow: The previous permitting action established a daily maximum flow monitoring requirement and monthly average flow limitation of 3.6 MGD which was representative of the estimated flow from the outfall at that time. Given the request by the permittee cited above, this permitting action is increasing the monthly average flow limitation to 15.0 MGD.

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2010 – July 2013 indicates flow values have been reported as follows:

Flow (DMRs=1)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	3.6	0.092 – 0.092	0.092
Daily maximum	Report	0.125 – 0.125	0.125

w. Temperature: The previous permitting action established a year-round daily maximum temperature limit of 95° F that was considered to be representative of the temperature from the outfall at that time. Given the request by the permittee cited on the previous page, this permitting action is increasing the daily maximum temperature limitation to 110 ° F.

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2010 – July2013 indicates temperature values have been reported as follows:

Temperature (DMRs=1)

Value	Limit (°F)	Range (°F)	Average (°F)
Daily Maximum	95	96.6 – 96.6	96.6

x. pH range: The previous permitting action established a daily maximum pH range limitation of 5.0 –9.0 standard units with a footnote exempting the permittee from violations of the limit if the discharge was within 0.5 standard units of the pH of the precipitation or the ambient receiving water pH. This limitation and provision for exceedences are being carried forward in this permitting action.

y. Zinc (Total) - This permitting action is establishing a daily maximum mass and concentration reporting requirement for the period September 1, 2014 – August 31, 2015, given the diversion of cooling water from Outfall #001 to Outfall #003. Outfall #001 has historically had elevated levels of total zinc being discharged. Monitoring Outfall #003 for zinc will enable the Department and the permittee to determine if the cooling water is contributing the historic zinc discharge levels.

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

OUTFALL #00T (Seasonal thermal load limitation)

This "outfall" is not a physical outfall structure discharging to a receiving water but an administrative "outfall" utilized to track thermal loadings rejected collectively from the mill to the St. Croix River by the three outfalls described above.

A 1996 licensing action established seasonal weekly average and daily maximum thermal load limitations expressed in British Thermal Units (BTUs)/Day and established a formal thermal mixing zone, both of which are being carried forward in this permitting action. The thermal load limitations for the mill were established in accordance with Maine law, 38 M.R.S.A., §464(4)(I)(since repealed). The monthly average limit of 2.76×10^{10} BTUs/day was based on the mill's past demonstrated performance as stipulated in 38 M.R.S.A., §464(4)(I) and the daily maximum limit of 3.17×10^{10} BTUs/day was established at 1.15 times the monthly average limit also in accordance with 38 M.R.S.A., §464(4)(I).

Department rule 06-096 CMR Chapter 582, *Regulations Relating To Temperature*, limits thermal discharges to an in-stream temperature increase (ΔT) 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 St. Croix River). The weekly average temperature of 66° F was derived to protect for normal growth of the brook trout and the daily maximum threshold temperature of 73° F protects for the survival of juvenile and adult Atlantic salmon during the summer months. As a point of clarification, the Department interprets the term "weekly average temperature" to mean a seven (7) day rolling average. To promote consistency, the Department also interprets the ΔT of 0.5° F as a weekly rolling average criterion when the receiving water temperature is $\geq$66° F and <73° F. When the receiving water temperature is $\geq$73° F compliance with the ΔT of 0.5° F is evaluated on a daily basis.

To comply with Department rule 06-096 CMR Chapter 582, the Woodland Pulp mill would be limited to a thermal load of 2.29×10^9 Btu/day based on the following calculation:

$$(549{,}000{,}000 \text{ gal})(0.5\ ^{\circ}\text{F})(8.34) = 2.29 \times 10^{9} \text{ BTUs/day}$$

This is the heat load that would theoretically cause the St. Croix River temperature to increase by 0.5 °F (after complete mixing) at a river flow of 850 cfs (549 MGD).

Maine law, 38 M.R.S.A., §464(4)(I) stated in part that dischargers must demonstrate to the satisfaction of the Department that they are unable to meet the standards in the existing temperature rule after application of best practicable treatment (BPT). In supplemental information to their 1996 application for establishing the mixing zone, the Georgia Pacific Corporation (GPC – former owner of the mill at the time) identified numerous temperature

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

OUTFALL #00T (Seasonal thermal load limitation)

reduction projects and waste water treatment minimization practices including paper machine whitewater and condensate recycling, recycling of bleach plant filtrate, steam condensate reuse, evaporator condensate recycling to the bleach plant and digestor area heat exchangers. The GPC also indicated that it was proceeding with installation of two cooling towers for the purpose of cooling certain process water streams for reuse. These measures demonstrated to the satisfaction of the Department that the mill was applying BPT to the discharge.

Maine law, 38 M.R.S.A., §464(4)(I) also stated that the quantity of heat discharged during a 7-day period may not exceed the maximum heat discharged in any 7-day period between January 1, 1989 and January 11, 1995 and that the amount of heat discharged on any single day may not exceed 1.15 times the maximum 7-day day average. The 7-day maximum quantity of heat discharged must protect existing uses.

Maine law, 38 M.R.S.A., §451 states that after adoption of any classification by the Legislature for surface waters or tidal flats or sections thereof, it is unlawful for any person, firm, corporation, municipality, association, partnership, quasi-municipal body, state agency or other legal entity to dispose of any pollutants, either alone or in conjunction with another or others, in such manner as will, after reasonable opportunity for dilution, diffusion or mixture with the receiving waters or heat transfer to the atmosphere, lower the quality of those waters below the minimum requirements of such classifications, or where mixing zones have been established by the department, so lower the quality of those waters outside such zones, notwithstanding any exemptions or licenses which may have been granted or issued under §413 to §414-B.

Maine law, 38 M.R.S.A., §451 also states that, after opportunity for hearing, the Department may establish by order, a mixing zone with respect to any discharge for which a license has been issued pursuant to §414.

Maine law, 38 M.R.S.A., §451 also states that the purpose of a mixing zone is to allow a reasonable opportunity for dilution, diffusion or mixture of pollutants with the receiving waters before the receiving waters below or surrounding a discharge will be tested for classification violations. In determining the extent of any mixing zone to be established under this section, the Department may require from the applicant testimony concerning the nature and rate of the discharge; the nature and rate of existing discharges to the waterway; the size of the waterway and the rate of flow therein; any relevant seasonal, climatic, tidal and natural variations in such size, flow, nature and rate; the uses of the waterways in the vicinity of the discharge, and such other and further evidence as in the Department's judgment will enable it to establish a reasonable mixing zone for such discharge. An order establishing a mixing zone may provide that the extent thereof varies in order to take into account seasonal, climatic, tidal and natural variations in the size and flow of, and the nature and rate of, discharges to the waterway.

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

OUTFALL #00T (Seasonal thermal load limitation)

Under the guidance of the Department, the GPC conducted a thermal survey of the St. Croix River between June 29, 1989, and August 17, 1989, in an attempt to identify any applicable thermal impact to the St. Croix River from the waste water being discharged from the Woodland mill. The study area covered approximately 8.1 miles ranging from the mill's Outfall #001 downstream to the Milltown bridge. The time frame selected to study the receiving waters was chosen as it was thought to be the period most representative of when the river would reach its maximum temperatures and thus have the greatest impact on cold water fisheries. During the study, the river flow averaged 1,892 cfs at the U.S.G.S. gauging station at Baring, with an average mill effluent flow of 29.5 MGD. The report concluded that based on the data collected in the study, complete mixing of the mill effluent with the receiving water (horizontally and vertically) occurs at the Baring railroad trestle approximately 5.3 miles downstream of Outfall #001.

The GPC's February 1993 document entitled *Application Support Document For a Thermal Mixing Zone in the St. Croix River"* stated that the 1989 thermal study indicated that the Outfall #001 discharge increased the river temperature of a portion of the receiving water immediately downstream of the outfall by a maximum of 2.8°F. The report also indicates that diurnal fluctuations during the study period varied by as much as 2°F from mid-morning to mid-afternoon.

The Department's Bureau of Land & Water Quality's Division of Environmental and Assessment (DEA) evaluated and commented on the 1989 thermal study results in a May 24, 1990 intra-Departmental memorandum. The Department stated that because St. Croix River flows were much higher than the minimum required flow of 750 cfs between June 1 and September 30, it was difficult to gauge the effect of the discharge on the river during low flow conditions. The Department utilized the model QUAL2E to determine the impact at 7Q10 flows (750 cfs) and at maximum effluent discharge flow of 40 MGD. GPC's data was used to calibrate the model. The model predicted that at the point of complete mix [zone of initial dilution (ZID)], approximately 5.3 miles downstream of Outfall #001, under low flow conditions, the ΔT was 1.1°F. The model also predicted that at the Milltown bridge (approximately 8.1 miles downstream) the ΔT was reduced to 0.7°F.

The Department and the GPC concurred that it was (and still is) extremely difficult to separate out what portion of the ΔT is due to the thermal discharge from the mill and what portion is due to diurnal fluctuations. As a result, it was agreed that establishment of a formal mixing zone would be the preferred option to address the thermal discharge issue. As a result, on March 4, 1996, the Department issued #W002766-51-A-N that established a ZID and a mixing zone for heat only. The WDL stated that the receiving waters are not to be tested for temperature violations within the designated zone of initial dilution or the established mixing zone.

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

OUTFALL #00T (Seasonal thermal load limitation)

The Department and the GPC agreed that the point of complete mix occurs at the Baring railroad trestle approximately 5.3 miles downstream of the mill's Outfall #001. This segment of the river will be considered to be the zone of initial dilution for the thermal discharge.

The mixing zone established by the Department for the thermal discharge from the Woodland mill is described as beginning at the Baring railroad trestle and extending downstream approximately 4.0 miles to the Milltown dam at the head of tide.

Special Condition M of Department WDL #W002766-44-C-R issued on May 16, 1996 required the licensee to "*...continue to investigate water reuse projects within the mill and waste water treatment technology alternatives to reduce the thermal discharge to the St. Croix River. The licensee shall submit a summary of the projects undertaken during the term of this license as an exhibit in the next application for license renewal. The report shall list the individual projects and quantify the heat load in BTU's/day that was removed from the discharge point(s).*"

Prior to submission of the May 16, 2001, application for permit/license renewal, the permittee was instructed by the Department to delay the submittal of the information required by Special Condition M due to the anticipated delay in issuing a new permit. The objective was to gather more current thermal discharge data and information to give the Department the most current update of projects undertaken to reduce heat rejected to the river.

In addition to Special Condition M, the Department requested the permittee to update the thermal data calculations for the period 2001-2003 (inclusively) to be consistent with the criteria in Maine law, 38 M.R.S.A., §464(4)(I) in establishing the thermal limits in the previous licensing action. Maine law, 38 M.R.S.A., §464(4)(I) stated that the quantity of heat discharged during a 7-day period may not exceed the maximum heat discharged in any 7-day period between January 1, 1989 and January 11, 1995 and that the amount of heat discharged on any single day may not exceed 1.15 times the maximum 7-day day average. The 7-day maximum quantity of heat discharged must protect existing uses.

On January 25, 2002, Domtar submitted information to the Department as to pollution prevention and or treatment technology alternatives to reduce the thermal load discharged to the St. Croix River and comply with Special Condition M of WDL #W002766-44-C-R. Domtar's text is as follows:

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

OUTFALL #00T (Seasonal thermal load limitation)

In the fall of 1996 the Woodland Pulp and Paper Mill installed four cooling towers at a cost of $2.0 million. The mill had originally anticipated the installation of two towers but opted for four to minimize the thermal impact of our waste discharge license WDL#W0002766-44-C-R. Two of the cooling towers were installed in the finish products area and the additional two towers in the water treatment department.

OPERATIONAL ISSUES FOR FINISH PRODUCTS COOLING TOWERS

The finished product cooling towers were placed into continuous service on June 7, 1997. The towers received hot fine fiber-laden effluent from the vacuum pumps of #4 paper machine and the pulp dryer, cooled and filtered then recycled the water back to the vacuum pumps on both machines. During the initial operation of the cooling towers the incoming temperature ran at approximately 120° F and the towers were able to cool the effluent to 71° F before reusing it on the vacuum pumps. The towers were able to recycle 1.4 million gallons per day from#4 paper machine and 0.6 million gallons per day for the pulp dryer.

The finished products cooling towers had operational trouble from the initial startup. We experienced two shut downs of the paper machine due to lack of seal water to the vacuum pumps. This issue was resolved quickly and operations fine-tuned the water pressures to minimize real and perceived effects of the recycled cooling water. On the pulp dryer side, there was considerable concern over separator pit level and it was believed that the cooling water was affecting drying on the pulp machine. Both finish products cooling towers operated intermittently at best.

The cooling towers showed signs of plugging after several months of on and off operation. The vacuum seal water lines plugged regularly, which caused the cooling towers to be taken off-line several times. The towers were treated with a biocide and a defoamer on a continual basis while in use. In addition, the cooled recycle water was treated with a corrosion inhibitor to protect the vacuum pumps. The paper machine cooling tower was difficult to keep clean with several inches of filler from the machine white water covering the base of the tower. The pulp dryer cooling tower was also difficult to keep clean because of microbiological growth on the filter media.

RESULTS OF FINISH PRODUCTS COOLING TOWERS

After a year and a half trial and error, both the paper machine and pulp machine cooling towers were retired from their original scope. In August of 1998 a team was formed and a series of meetings held to find an alternative use for the finish products cooling tower. Note: The Woodland Pulp Mill has indicated that no final determination on best alternative use for these units have been made as of this permitting action. Implementation and construction related to any such alternative is further limited at this time by business conditions.

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

OUTFALL #00T (Seasonal thermal load limitation)

OPERATIONAL ISSUES AND RESULTS FOR THE WATER TREATMENT COOLING TOWERS

The cooling towers in the water treatment facility were designed to cool the warm water produced by the heat exchangers on the black liquor evaporators and the digester heat exchanger . This cooled water is then combined with mill degremont water to be used in the mill processes. During the initial start up of the water treatment cooling towers the only operational problem encountered was that the flow to the towers was restricted to 8.0 million gallons by the piping. The piping was corrected at a cost of $600,000 and this resulted in a dramatic increase to 13.0 million gallons per day.

SUMMARY

Although the mill originally opted to construct four cooling tower and we ended up with only two towers operating the two operating towers have been maximized to more than compensate for the two finish products towers that are currently idle.

Subsequent mandates in State Law along with the production increases have place a greater demand on our ability to reduce the thermal loading on the St. Croix River. The most significant change in our process was the addition of a state mandated CLO2 plant in 1998. The CLO2 plant requires two large chillers to cool mill water from approximately 70° F to 35-40° F during the summer months.

During the period of analysis (1996-2001) the upstream river flows (which are affected by precipitation) and corresponding temperatures varied such that determination of total mill contribution to final BTU loading is difficult. It is evident however that the increase in BTU loading since 1998 is not entirely associated with the new chiller operation but rather also influenced by precipitation related river flow reductions and corresponding ambient temperature increases. A related process variable that has contributed to the BTU loading has been a need to increase thermally produced electricity resulting from lost hydro power opportunities during this period due to lower river flows. Thermally generated electricity from the Mill's No. 11 steam turbine was increased to compensate for reduction in the generation of hydro electricity.

In summary, when we compare BTU loading from 1996 to 2001 we see that the loading is very similar. The addition of the CLO2 plant, increase in thermally generated electricity, and the decrease in Hydro generated electricity have all played an important role in the increase thermal loading since 1998. This loading increase can be seen clearly on graph "Combined 001 and 002 BTU for ME0001872", which is included.

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

OUTFALL #00T (Seasonal thermal load limitation)

The permittee submitted updated thermal calculations to the Department to comply with Special Condition M of WDL #W002766-44-C-R. The calculations indicate that for the summer months (June – September) between June 2001 and September of 2003, the highest 7-day quantity of heat collectively discharged was 0.800×10^{10} BTU/day or 8.00×10^{9} BTUs/day. As previously stated to comply with Department rule Chapter 582, the Woodland Pulp mill would be limited to a thermal load of 4.17×10^{9} BTUs/day. Therefore, in keeping with the methodology established in the Maine law, 38 M.R.S.A., §464(4)(I) (since repealed) the Department reduced the weekly average heat load limitation from 2.76×10^{10} BTU/day to 8.00×10^{9} BTUs/day and reduced the daily maximum heat load limitation from 3.17×10^{10} BTU/day to 9.21×10^{9} BTU/day in the 5/31/05 permitting action. As with previous legislation, the daily maximum limitation was derived by multiplying the weekly average heat load of 8.00×10^{9} BTU/day by a factor of 1.15. Both limitations are being carried forward in this permitting action as they remain representative of the thermal discharge from the mill.

Special Condition J, *Zone of Initial Dilution and Mixing Zone*, of the 2005 MEPDES permit required the permittee to conduct continuous instream monitoring (at least one upstream station and two downstream stations) between June 1 and September 30 of each year to assist in determining 1) the impact (or lack thereof) of the thermal discharge on the receiving water, 2) the physical characteristics of the mixing zone and,
3) whether the continuous instream monitoring is necessary for the following year.

The last monitoring report was submitted to the Department in April of 2012. The Department reviewed the report and concluded:

The data show that the temperature of the St. Croix River is affected by several factors including the discharge of heat and color from the Woodland Pulp LLC pulp and Paper mill and hydrography of the river. A mass balance using effluent temperature and river flow to calculate predicted river temperature increase (PRTI) demonstrated that for several days during 2011 the thermal discharge resulted in an increase in temperature greater than would be allowed under DEP's temperature rule, if not for the existence of a mixing zone where the rule does not apply. Ambient temperature data documented even higher increases likely due to combined effects of color and hydrography. Due to the timing of the study, higher flows and temperatures were lower than would occur during critical summer conditions so that AWQC were not always exceeded. Nevertheless, at low flow and high temperature, there would be more exceedances.

From the temperature data collected it appears that mixing in not complete at the Baring trestle but is essentially complete by Milltown. The color data and specific conductance data corroborate this conclusion. The data also show that the discharge does have a thermal impact on the river as determined by elevated temperatures at Baring and even to Milltown. To better delineate the extent of the point of complete mixing, additional sampling stations would be needed between Baring and Milltown.

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

OUTFALL #00T (Seasonal thermal load limitation)

Special Condition H of this permitting action requires the permittee to continue to investigate water reuse projects within the mill and waste water treatment technology alternatives to reduce the thermal discharge to the St. Croix River. The permittee shall submit a summary of the projects undertaken during the term of this permit as an exhibit in the next application for permit renewal. The report shall list the individual projects and quantify the heat load in BTU's/day that was removed from the discharge point(s).

9. BEST MANAGEMENT PRACTICES PLAN

Best Management Practices (BMPs) are specified at 40 CFR 430.03(d). The primary objective of the BMPs 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 J 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.

10. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the St. Croix River to meet standards of its assigned Class C 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).

11. PUBLIC COMMENTS

Public notice of this application was made in the Calais advertiser and Quoddy Times newspapers on or about December 10, 2009. 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.

12. DEPARTMENT CONTACTS

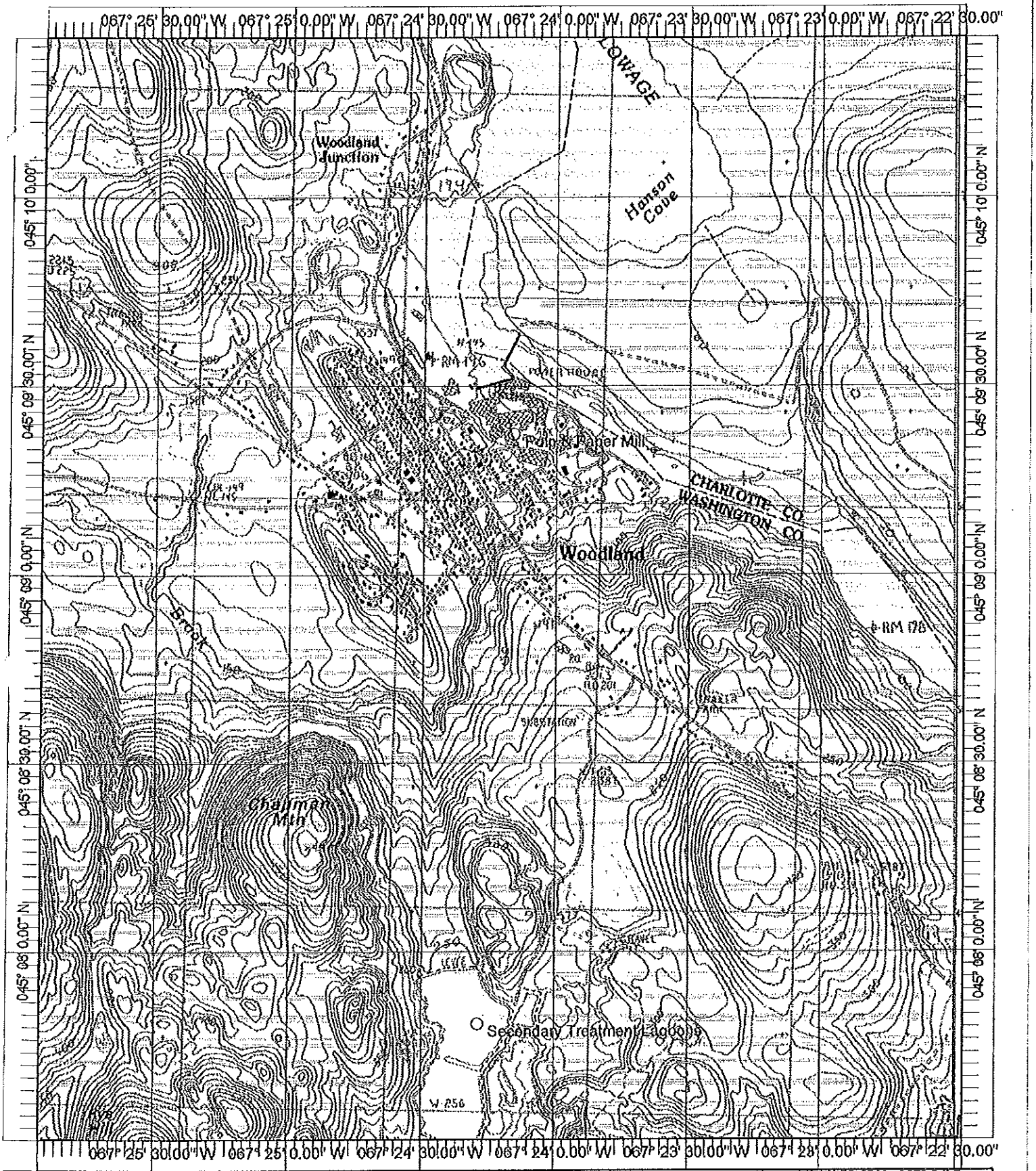
Additional information concerning this permitting action may be obtained from and written comments should be sent to:

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 Telephone: (207) 287-7693
E-mail: gregg.wood@maine.gov Fax: (207) 287-3435

13. RESPONSE TO COMMENTS

During the period of April 19, 2014, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department did not receive comments from the permittee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the permit. Therefore, the Department has not prepared a Response to Comments.

ATTACHMENT A



<Default> - 4 Markers, Length = 7 miles, 4956 fee
Mill Landfill Disposal Site - 045° 11' 07.9" N, 0
Pulp_Paper Mill - 045° 09' 22.3" N, 067° 24' 0
Secondary Treatment Lagoons - 045° 07' 48
OSB_CNS Mill's - 045° 10' 52.0" N, 067° 24' 5

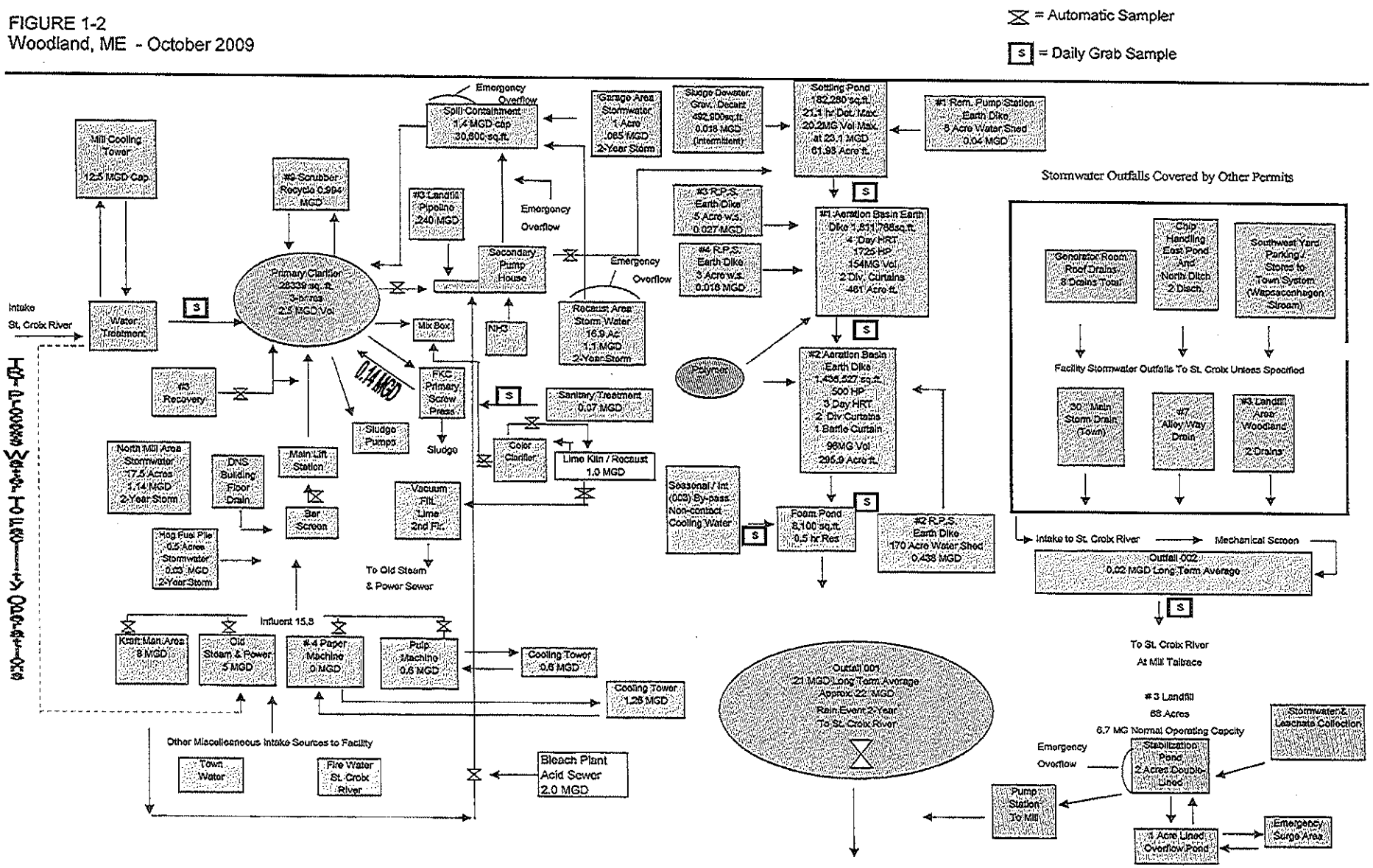
Name: WOODLAND
Date: 10/27/98
Scale: 1 Inch equals 2000 feet

Location: 045° 08' 57.8" N 067° 24' 12.0" W
Caption: Georgia - Pacific's Pulp_Paper Mill and Secondary Treatment Lagoons

ATTACHMENT B

Domtar Maine LLC
MED071742225
W002766-5N-H-M
W002766-5N-I-H
ME0001872

FIGURE 1-2
Woodland, ME - October 2009



ATTACHMENT C

WET TEST REPORT

Data for tests conducted for the period
05/Feb/2008 - 05/Feb/2013

WOODLAND PULP NPDES= ME0000187 Effluent Limit: Acute (%) = 5.460 Chronic (%) = 5.460

Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	37.50	04/21/2008	5.460		
TROUT	A_NOEL	70	02/02/2009	5.460		
TROUT	A_NOEL	100	04/08/2009	5.460		
TROUT	A_NOEL	100	09/14/2009	5.460		
TROUT	A_NOEL	100	12/07/2009	5.460		
TROUT	A_NOEL	100	05/10/2010	5.460		
TROUT	A_NOEL	100	07/11/2011	5.460		
TROUT	C_NOEL	25	04/21/2008	5.460		
TROUT	C_NOEL	25	02/02/2009	5.460		
TROUT	C_NOEL	100	09/14/2009	5.460		
TROUT	C_NOEL	50	12/07/2009	5.460		
TROUT	C_NOEL	100	05/10/2010	5.460		
TROUT	C_NOEL	100	07/11/2011	5.460		
WATER FLEA	A_NOEL	100	04/21/2008	5.460		
WATER FLEA	A_NOEL	100	09/15/2008	5.460		
WATER FLEA	A_NOEL	100	02/02/2009	5.460		
WATER FLEA	A_NOEL	100	04/08/2009	5.460		
WATER FLEA	A_NOEL	100	09/14/2009	5.460		
WATER FLEA	A_NOEL	100	12/07/2009	5.460		
WATER FLEA	A_NOEL	100	05/10/2010	5.460		
WATER FLEA	A_NOEL	100	11/15/2010	5.460		
WATER FLEA	A_NOEL	100	02/14/2011	5.460		
WATER FLEA	A_NOEL	100	07/11/2011	5.460		
WATER FLEA	A_NOEL	100	04/18/2012	5.460		
WATER FLEA	C_NOEL	100	04/21/2008	5.460		
WATER FLEA	C_NOEL	25	09/15/2008	5.460		
WATER FLEA	C_NOEL	50	02/02/2009	5.460		
WATER FLEA	C_NOEL	25	04/08/2009	5.460		
WATER FLEA	C_NOEL	50	09/14/2009	5.460		
WATER FLEA	C_NOEL	25	12/07/2009	5.460		
WATER FLEA	C_NOEL	50	05/10/2010	5.460		
WATER FLEA	C_NOEL	50	11/15/2010	5.460		
WATER FLEA	C_NOEL	25	02/14/2011	5.460		
WATER FLEA	C_NOEL	50	07/11/2011	5.460		
WATER FLEA	C_NOEL	25	04/18/2012	5.460		

ATTACHMENT D

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 01/Feb/2008 - 01/Feb/2013

Facility Name: **WOODLAND PULP** NPDES: **ME0001872**

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
04/21/2008	23.20	21.30	21	10	0	0	0	11	0	F	0
09/15/2008	21.80	21.10	21	10	0	0	0	11	0	F	0
02/02/2009	21.50	22.50	3	3	0	0	0	0	0	F	0
04/06/2009	21.10	24.00	133	14	28	46	25	9	11	F	0
09/14/2009	23.30	23.70	23	10	0	0	0	13	0	F	0
12/07/2009	22.96	23.20	21	10	0	0	0	11	0	F	0
05/10/2010	24.90	25.80	21	10	0	0	0	11	0	F	0
11/15/2010	25.85	28.60	20	10	0	0	0	10	0	F	0
02/14/2011	24.40	25.00	21	10	0	0	0	11	0	F	0
05/01/2011	24.50	21.30	1	1	0	0	0	0	0	F	0
06/01/2011	29.10	30.00	6	6	0	0	0	0	0	F	0
06/02/2011	29.10	29.20	1	1	0	0	0	0	0	F	0
07/05/2011	29.40	30.80	1	1	0	0	0	0	0	F	0

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
07/11/2011	29.40	25.80	21	10	0	0	0	11	0	F	0
08/16/2011	29.30	31.50	1	1	0	0	0	0	0	F	0
09/05/2011	25.10	31.30	1	1	0	0	0	0	0	F	0
09/06/2011	25.10	31.20	1	1	0	0	0	0	0	F	0
10/02/2011	27.98	31.50	1	1	0	0	0	0	0	F	0
11/02/2011	24.90	21.80	1	1	0	0	0	0	0	F	0
11/06/2011	24.90	23.60	5	5	0	0	0	0	0	F	0
11/07/2011	24.90	24.60	1	1	0	0	0	0	0	F	0
12/04/2011	24.00	24.80	1	1	0	0	0	0	0	F	0
01/03/2012	22.80	26.00	1	1	0	0	0	0	0	F	0
02/03/2012	22.80	21.90	1	1	0	0	0	0	0	F	0
03/05/2012	24.00	23.80	5	5	0	0	0	0	0	F	0
03/06/2012	24.00	24.20	1	1	0	0	0	0	0	F	0
03/15/2012	24.00	23.00	1	1	0	0	0	0	0	F	0
04/18/2012	20.80	28.20	1	1	0	0	0	0	0	F	0

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
04/25/2012	20.80	3.40	21	10	0	0	0	11	0	F	0
05/01/2012	28.60	19.70	1	1	0	0	0	0	0	F	0
06/11/2012	29.50	30.30	5	5	0	0	0	0	0	F	0
06/12/2012	29.50	30.20	2	2	0	0	0	0	0	F	0
07/04/2012	28.90	21.40	1	1	0	0	0	0	0	F	0
08/15/2012	31.90	31.60	1	1	0	0	0	0	0	F	0
08/20/2012	31.90	32.60	6	6	0	0	0	0	0	F	0
09/05/2012	34.40	39.10	1	1	0	0	0	0	0	F	0
10/02/2012	25.50	25.90	1	1	0	0	0	0	0	F	0
11/03/2012	22.80	23.20	1	1	0	0	0	0	0	F	0

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

FACILITY CHEMICAL DATA REPORT

Data Date Range: 06/Feb/2008 - 06/Feb/2013

Facility name: **WOODLAND PULP** Permit Number: **ME0001872**

Parameter: ARSENIC	**Test date**	**Result (ug/l)**	**Lsthan**
	04/21/2008	2.000	N
	09/15/2008	5.000	N
	02/02/2009	4.000	N
	04/06/2009	2.000	Y
	09/14/2009	2.000	N
	12/07/2009	25.000	N
	05/10/2010	18.000	N
	11/15/2010	5.000	N
	02/14/2011	4.000	N
	06/01/2011	7.000	N
	07/11/2011	3.000	N
	11/06/2011	5.000	N
	03/05/2012	8.000	N
	04/25/2012	8.000	N
	06/11/2012	3.000	Y
	08/20/2012	3.000	Y

Parameter: CADMIUM	**Test date**	**Result (ug/l)**	**Lsthan**
	04/21/2008	0.200	Y
	09/15/2008	2.000	N
	04/06/2009	1.400	N
	09/14/2009	1.500	N
	12/07/2009	1.500	N
	05/10/2010	0.200	Y
	11/15/2010	1.300	N
	02/14/2011	1.100	N
	06/01/2011	0.900	N
	07/11/2011	0.200	N
	11/06/2011	0.200	Y
	03/05/2012	2.000	N
	04/25/2012	2.100	N
	06/11/2012	2.000	N
	08/20/2012	1.200	N

2/5/2013

FACILITY CHEMICAL DATA REPORT

Data Date Range: 05/Feb/2008-05/Feb/2013

Facility name: **WOODLAND PULP** Permit Number: **ME0001872**

Parameter: COPPER

Test date	Result (ug/l)	Lsthan
04/21/2008	7.000	N
09/15/2008	3.000	N
04/06/2009	5.000	N
09/14/2009	5.000	N
12/07/2009	3.000	N
05/10/2010	1.000	Y
11/15/2010	1.000	N
02/14/2011	3.000	N
06/01/2011	4.000	N
07/11/2011	10.000	N
11/06/2011	4.000	N
03/05/2012	7.000	N
04/25/2012	3.000	N
06/11/2012	1.000	Y
08/20/2012	1.000	Y

Parameter: LEAD

Test date	Result (ug/l)	Lsthan
04/21/2008	4.000	N
09/15/2008	4.000	N
04/06/2009	3.000	N
09/14/2009	8.000	N
12/07/2009	2.000	N
05/10/2010	1.000	Y
11/15/2010	5.000	N
02/14/2011	5.000	N
06/01/2011	8.000	N
07/11/2011	4.000	N
11/06/2011	3.000	N
03/05/2012	1.000	Y
04/25/2012	6.000	N
06/11/2012	4.000	N
08/20/2012	1.000	Y

FACILITY CHEMICAL DATA REPORT

Data Date Range: 05/Feb/2008 - 05/Feb/2013

Facility name: **WOODLAND PULP** Permit Number: **ME0001872**

Parameter: SILVER	Test date	Result (ug/l)	Lsthan
	04/21/2008	0.700	N
	09/15/2008	0.500	N
	02/02/2009	1.000	N
	04/06/2009	0.300	Y
	09/14/2009	0.300	Y
	12/07/2009	0.300	Y
	05/10/2010	0.300	Y
	11/15/2010	0.300	Y
	02/14/2011	0.300	Y
	06/01/2011	1.000	Y
	07/11/2011	0.300	Y
	11/06/2011	0.300	Y
	03/05/2012	0.300	Y
	04/25/2012	0.300	Y
	06/11/2012	0.300	Y
	08/20/2012	0.300	Y

Parameter: ZINC	Test date	Result (ug/l)	Lsthan
	04/21/2008	140.000	N
	09/15/2008	127.000	N
	04/06/2009	219.000	N
	09/14/2009	107.000	N
	12/07/2009	98.000	N
	05/10/2010	93.000	N
	11/15/2010	85.000	N
	02/14/2011	87.000	N
	05/01/2011	87.000	N
	06/02/2011	110.000	N
	07/05/2011	116.000	N
	07/11/2011	129.000	N
	08/16/2011	97.000	N
	09/05/2011	128.000	N
	10/02/2011	117.000	N
	11/02/2011	102.000	N
	12/04/2011	131.000	N
	01/03/2012	146.000	N
	02/03/2012	173.000	N
	03/15/2012	199.000	N
	04/18/2012	192.000	N
	04/25/2012	144.000	N
	05/01/2012	137.000	N
	06/12/2012	146.000	N
	07/04/2012	114.000	N
	08/15/2012	82.000	N
	09/05/2012	120.000	N
	10/02/2012	102.000	N
	11/03/2012	113.000	N

ATTACHMENT E

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

DATE: October 2008

TO: Interested Parties

FROM: Dennis Merrill, DEP

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

****

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

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

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

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

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

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

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

Maine Department of Environmental Protection

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maine Department of Environmental Protection

Working Definitions of Terms Used in the DeTox System.

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

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

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

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

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

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

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

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

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

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

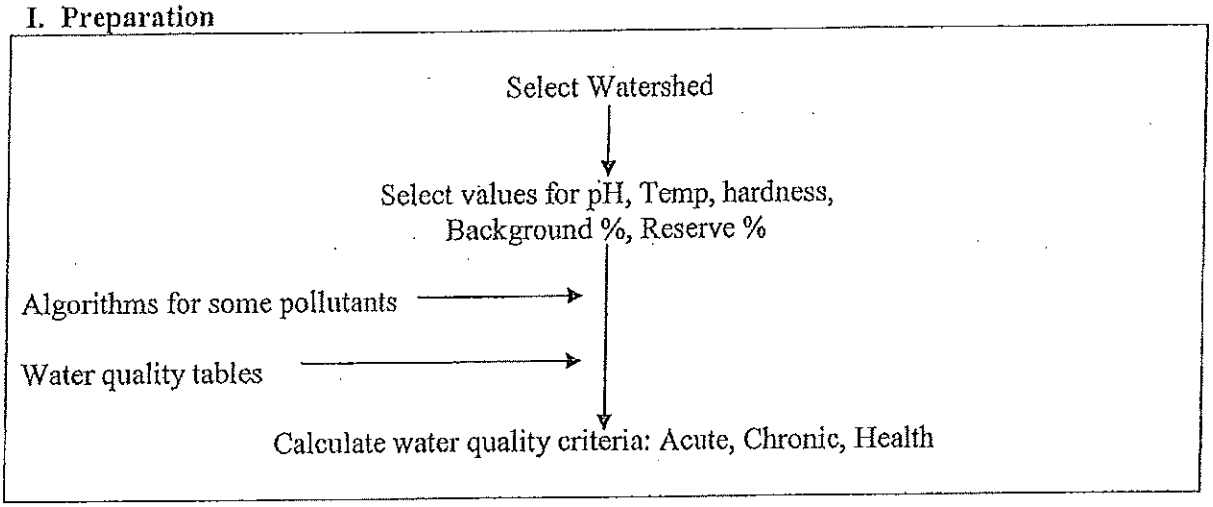
Segment allocation. One of three ways of developing an *allocation.* The amount is set by multiplying a facility's *historical discharge percentage* for a specific pollutant by the *assimilative capacity* for that pollutant and criterion. A facility will have different allocation percentages for each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

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

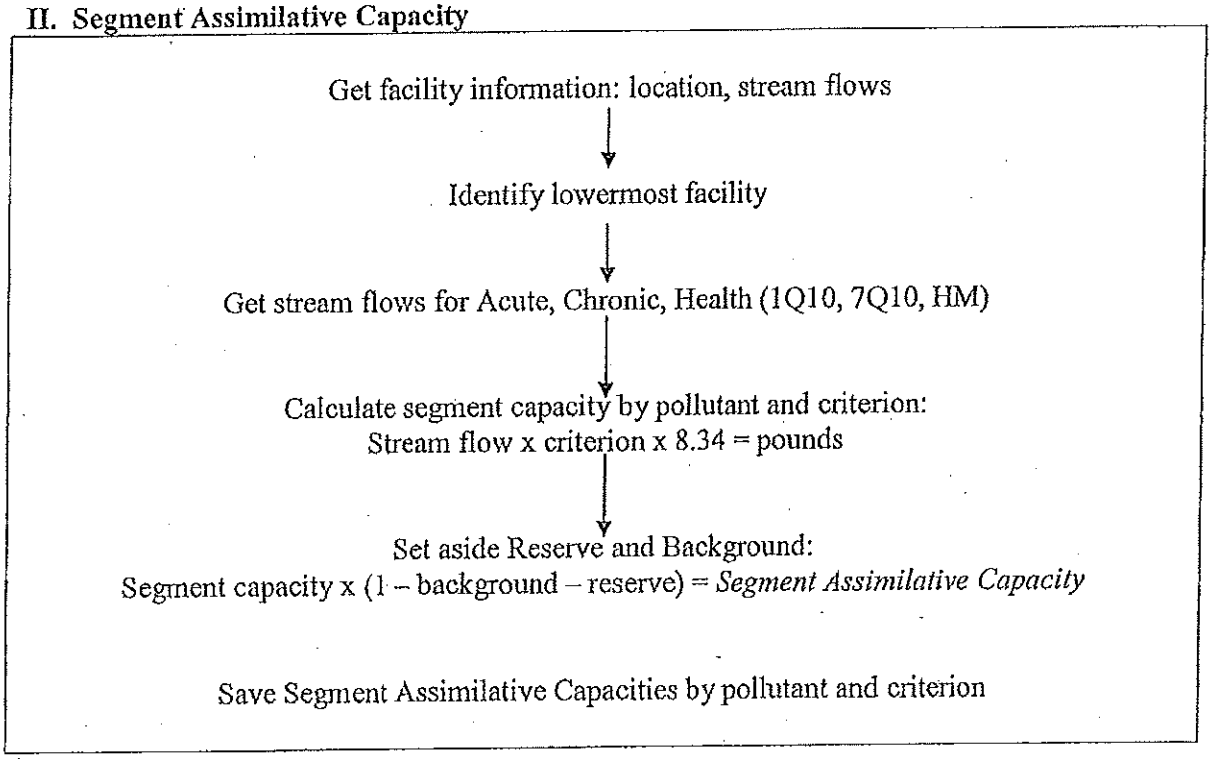
Water quality criteria. Standards for acceptable in-stream or ambient levels of pollutants. These are established in the Department's Chapter 584 and are expressed as concentrations in ug/L. There may be separate standards for acute and chronic protection aquatic life and/or human health. Each criterion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

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

I. Preparation

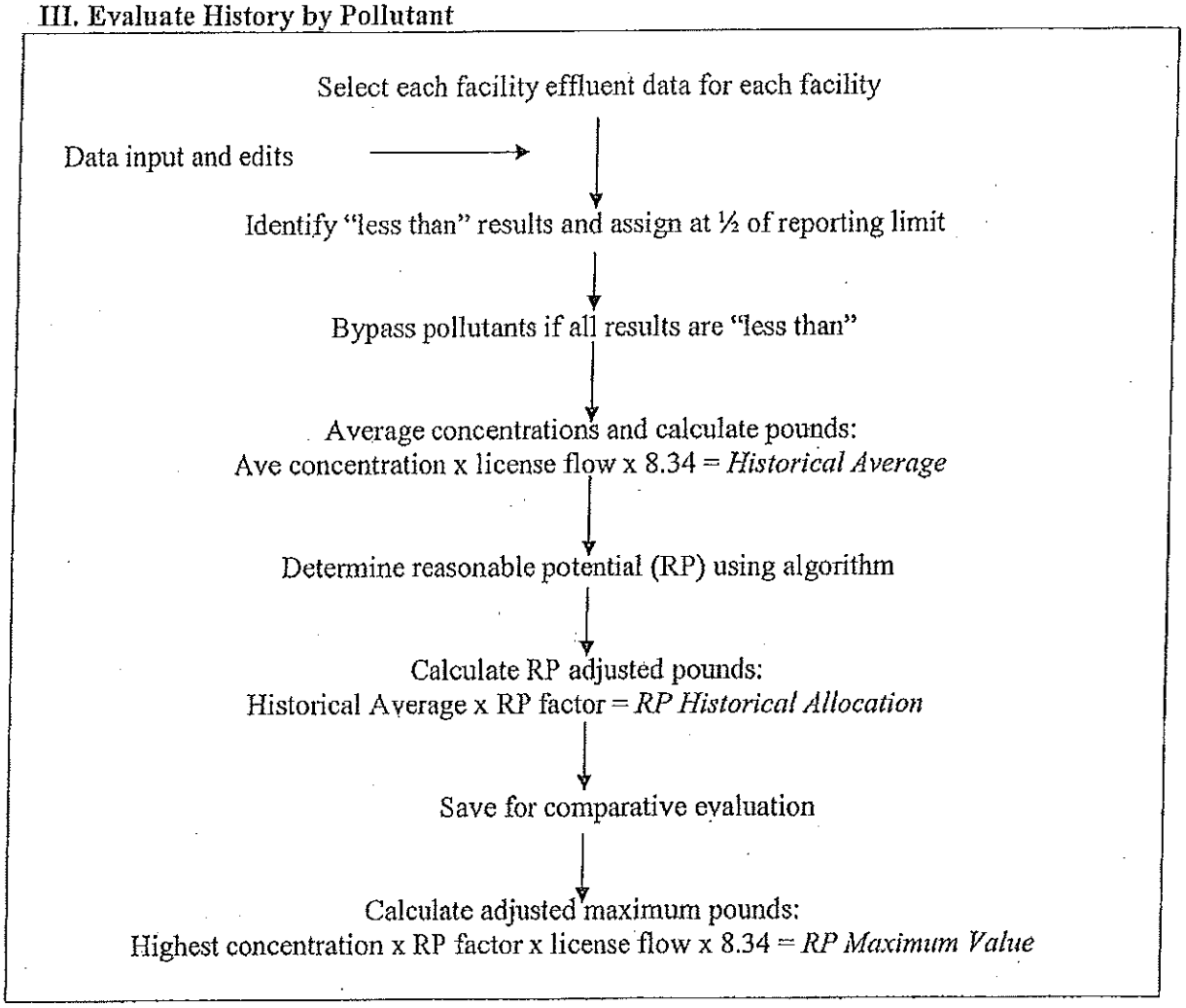


II. Segment Assimilative Capacity

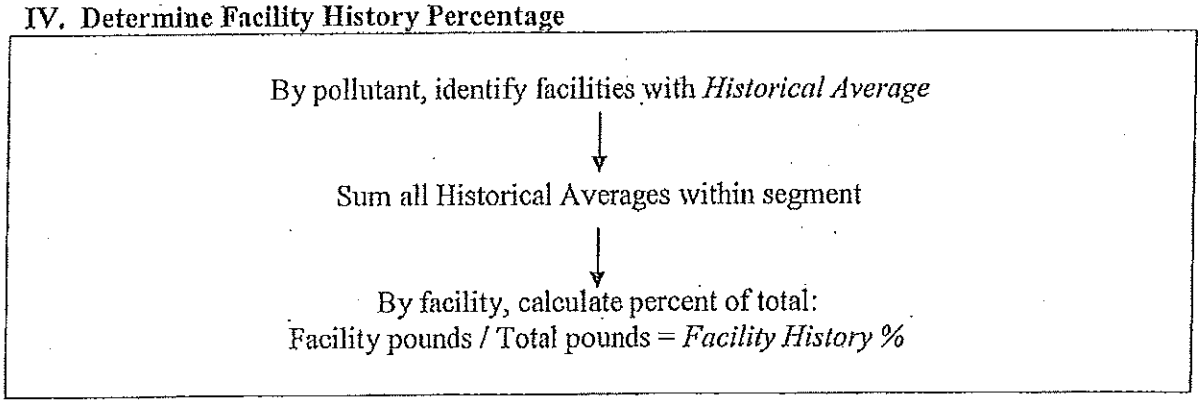


Maine Department of Environmental Protection
General Processing Steps in "DeTox"

III. Evaluate History by Pollutant



IV. Determine Facility History Percentage



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

V. Segment Allocation

By pollutant and criterion, select *Segment Assimilative Capacity*

↓

Select individual *Facility History %*

↓

Determine facility allocation:
Assimilative Capacity x Facility History % = *Segment Allocation*

↓

Save for comparative evaluation

VI. Individual Allocation

Select individual facility and dilution factor (DF)

↓

Select pollutant and water quality criterion

↓

By pollutant and criterion, calculate individual allocations:
[DF x 0.75 x criterion] + [0.25 x criterion] = Individual Concentration

↓

Determine individual allocation:
Individual Concentration x license flow x 8.34 = *Individual Allocation*

↓

Save for comparative evaluation

VII. Make Initial Allocation

By facility, pollutant and criterion, get:
Individual Allocation, Segment Allocation, RP Historical Allocation

↓

Compare allocation and select the smallest

↓

Save as *Facility Allocation*

VIII. Evaluate Need for Effluent Limits

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

↓

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

↓

Save *Effluent Limit* for comparison

IX. Reallocation of Assimilative Capacity

Starting at top of segment, get *Segment Allocation*, *Facility Allocation* and *Effluent Limit*

↓

If *Segment Allocation* equals *Effluent Limit*, move to next facility downstream

↓

If not, subtract *Facility Allocation* from *Segment Allocation*

↓

Save difference

↓

Select next facility downstream

↓

Figure remaining *Segment Assimilative Capacity* at and below facility, less tributaries

↓

Add saved difference to get an adjusted *Segment Assimilative Capacity*

↓

Reallocate *Segment Assimilative Capacity* among downstream facilities per step V

↓

Repeat process for each facility downstream in turn

ATTACHMENT F

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
Commissioner

MEPDES#_____Facility Name_____

Since the effective date of your permit, have there been;		NO	YES Describe in comments section
1	Increases in the number, types, and flows of industrial, commercial, or domestic discharges to the facility that in the judgment of the Department may cause the receiving water to become toxic?	☐	☐
2	Changes in the condition or operations of the facility that may increase the toxicity of the discharge?	☐	☐
3	Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge?	☐	☐
4	Increases in the type or volume of hauled wastes accepted by the facility?	☐	☐

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

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

This form may be used to meet the requirements of Chapter 530.2(D)(4). This Chapter requires all dischargers having waived or reduced toxic testing to file a statement with the Department describing changes to the waste being contributed to their system as outlined above. As an alternative, the discharger may submit a signed letter containing the same information.

Scheduled Toxicity Testing for the next calendar year

Test Conducted	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
WET Testing	☐	☐	☐	☐
Priority Pollutant Testing	☐	☐	☐	☐
Analytical Chemistry	☐	☐	☐	☐
Other toxic parameters [1]	☐	☐	☐	☐

Please place an "X" in each of the boxes that apply to when you will be conducting any one of the three test types during the next calendar year.

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

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

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

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

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

web site: www.maine.gov/dep

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

CONTENTS

A. GENERAL PROVISIONS

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

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

(a) They are not

(i) Designated as toxic or hazardous under the provisions of Sections 307 and 311, respectively, of the Federal Water Pollution Control Act; Title 38, Section 420, Maine Revised Statutes; or other applicable State Law; or
(ii) Known to be hazardous or toxic by the licensee.

(b) The discharge of such materials will not violate applicable water quality standards.

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

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

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

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

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

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

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

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

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

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

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

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

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

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

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

(b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.

(c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.

(d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.

(e) The permittee shall install flow measuring facilities of a design approved by the Department.

(f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.

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

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

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

5. Bypasses.

(a) Definitions.

(i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

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

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

(c) Notice.

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

(ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D(1)(f), below. (24-hour notice).

(d) Prohibition of bypass.

(i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
(C) The permittee submitted notices as required under paragraph (c) of this section.

(ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (d)(i) of this section.

6. Upsets.

(a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;
(ii) The permitted facility was at the time being properly operated; and
(iii) The permittee submitted notice of the upset as required in paragraph D(1)(f) , below. (24 hour notice).
(iv) The permittee complied with any remedial measures required under paragraph B(4).

(d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

(c) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;
(ii) The individual(s) who performed the sampling or measurements;
(iii) The date(s) analyses were performed;
(iv) The individual(s) who performed the analyses;
(v) The analytical techniques or methods used; and
(vi) The results of such analyses.

(d) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit.

(e) State law provides that any person who tampers with or renders inaccurate any monitoring devices or method required by any provision of law, or any order, rule license, permit approval or decision is subject to the penalties set forth in 38 MRSA, §349.

D. REPORTING REQUIREMENTS

1. Reporting requirements.

(a) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).

(iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

(b) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Transfers. This permit is not transferable to any person except upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.

(d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

(e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(f) Twenty-four hour reporting.

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance

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

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

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit.
(B) Any upset which exceeds any effluent limitation in the permit.
(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

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

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

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

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

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

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

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

(i) One hundred micrograms per liter (100 ug/l);
(ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

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

(i) Five hundred micrograms per liter (500 ug/l);
(ii) One milligram per liter (1 mg/l) for antimony;
(iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

5. Publicly owned treatment works.

(a) All POTWs must provide adequate notice to the Department of the following:

(i) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA or Chapter 528 if it were directly discharging those pollutants.
(ii) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
(iii) For purposes of this paragraph, adequate notice shall include information on (A) the quality and quantity of effluent introduced into the POTW, and (B) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(b) When the effluent discharged by a POTW for a period of three consecutive months exceeds 80 percent of the permitted flow, the permittee shall submit to the Department a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

E. OTHER REQUIREMENTS

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

(a) For municipal sources. During power failure, all wastewaters which are normally treated shall receive a minimum of primary treatment and disinfection. Unless otherwise approved, alternate power supplies shall be provided for pumping stations and treatment facilities. Alternate power supplies shall be on-site generating units or an outside power source which is separate and independent from sources used for normal operation of the wastewater facilities.

(b) For industrial and commercial sources. The permittee shall either maintain an alternative power source sufficient to operate the wastewater pumping and treatment facilities or halt, reduce or otherwise control production and or all discharges upon reduction or loss of power to the wastewater pumping or treatment facilities.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012 **Contact: (207) 287-2811**

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's ("DEP") Commissioner: (1) in an administrative process before the Board of Environmental Protection ("Board"); or (2) in a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S.A. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S.A. § 480-HH(1) or a general permit for a tidal energy demonstration project (38 M.R.S.A. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This INFORMATION SHEET, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S.A. §§ 341-D(4) & 346, the *Maine Administrative Procedure Act*, 5 M.R.S.A. § 11001, and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 CMR 2 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days of the date on which the Commissioner's decision was filed with the Board will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by the Board's receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner a copy of the appeal documents and if the person appealing is not the applicant in the license proceeding at issue the applicant must also be sent a copy of the appeal documents. All of the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time submitted:

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

Other Considerations in Appealing a Decision to the Board

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

What to Expect Once You File a Timely Appeal with the Board

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

II. JUDICIAL APPEALS

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

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

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

ADDITIONAL INFORMATION

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

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