August 29, 2008

Mr. James Mitchell
Site Manager
Louisiana Pacific Corporation
P.O. Box 849
187 Track Road
Baileyville, ME. 04694

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0022063
Maine Waste Discharge License (WDL) Application #W000508-5O-G-R
**Final Permit/License**

Dear Mr. Mitchell:

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

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

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

Sincerely,

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

Enc.
cc: Tanya Hovell, DEP/EMRO
Sandy Lao, USEPA

**IN THE MATTER OF**

| | | |
|---|---|---|
| LOUISIANA PACIFIC CORPORATION | ) | MAINE POLLUTANT DISCHARGE |
| BAILEYVILLE, WASHINGTON COUNTY | ) | ELIMINATION SYSTEM PERMIT |
| NON- CONTACT COOLING WATER | ) | AND |
| ME0022063 | ) | WASTE DISCHARGE LICENSE |
| W000508-5O-G-R | ) | |
| **APPROVAL** | ) | **RENEWAL** |

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, et seq. and Maine Law 38 M.R.S.A., Section 414-A et seq., and applicable regulations, the Department of Environmental Protection (Department hereinafter) has considered the application of the LOUISIANA PACIFIC CORPORATION (LPC hereinafter), with its supportive data and other related materials on file and FINDS THE FOLLOWING FACTS:

## APPLICATION SUMMARY

The LPC has filed a timely and complete application with the Department to renew combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0022063/ Maine Waste Discharge License (WDL) #W000508-5O-F-M (permit hereinafter) which was issued by the Department on June 10, 2003 for a five-year term. The permit approved the discharge of up to a monthly average flow of 15.0 million gallons per day (MGD) of non-contact cooling water and up to 0.160 MGD of miscellaneous non-process waste waters (primarily boiler blowdown and water softener backwash) from an oriented strand board (OSD) manufacturing facility to the St. Croix River, Class C, in Baileyville, Maine.

It is noted the OSB manufacturing facility has been shutdown since June of 2001 and as a result, monitoring requirements for Outfall #001 in the 6/10/03 permit were suspended by the Department in a letter dated September 15, 2006. The permittee has provided the Department with documentation that it has signed a letter of intent (dated June 17, 2008) with an interested party to purchase the manufacturing facility.

## PERMIT SUMMARY

This permit carries forward all terms and conditions of the June 10, 2003 permit. The permittee and the potential buyer of the facility have been put on notice by the Department that if and when the facility commences operations in the future, the Department will review said operations to determine if this permit should be modified to establish terms and conditions consistent with the activities performed at the facility. See Special Condition G, *Commencement of Operations*, of this permit.

**CONCLUSIONS**

BASED on the findings in the attached Fact Sheet dated July 28, 2008, 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 MRSA Section 464(4)(F), will be met, in that:

    a. Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;

    b. Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;

    c. The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

    d. Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and

    e. Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

**ACTION**

THEREFORE, the Department APPROVES the above noted application of the LOUISIANA PACIFIC CORPORATION, to discharge up to a monthly flow of 15.0 MGD of non-contact cooling waters and up to a monthly average of 0.160 MGD of miscellaneous non-process waste waters to the St. Croix River, Class C, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

1. "*Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits*," revised July 1, 2002, copy attached.

2. The attached Special Conditions, including any effluent limitations and monitoring requirements.

3. The permit expires five years from the date of signature below.

DONE AND DATED AT AUGUSTA, MAINE, THIS 3rd DAY OF September, 2008.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
David P. Littell, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application June 10, 2008.

Date of application acceptance June 11, 2008.

Date filed with Board of Environmental Protection _____

This order prepared by Gregg Wood, Bureau of Land and Water Quality.

ME0022063 2008 8/28/08

## SPECIAL CONDITIONS

## A. LIMITATIONS AND MONITORING REQUIREMENTS

1. Beginning upon issuance of this permit, the permittee is authorized to discharge from **OUTFALL #001** to the St. Croix River. Such discharges shall be limited and monitored by the permittee as specified below:

**OUTFALL #001 - Boiler blowdown, softener backwash, cooling waters and miscellaneous non-process waste waters.**

| Effluent Characteristic | Discharge Limitations | | | | 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]* | 0.160 MGD *[03]* | Report (MGD) | --- | --- | 1/Day *[01/01]* | Measured *[MS]* |
| Biochemical Oxygen Demand ($BOD_5$) *[00310]* | 67 #/day *[26]* | --- | --- | 50 mg/L *[19]* | 1/Month *[01/30]* | Grab *[GR]* |
| Total Suspended Solids (TSS) *[00530]* | 80 #/day *[26]* | --- | --- | 60 mg/L *[19]* | 1/Month *[01/30]* | Grab *[GR]* |
| Settleable Solids *[00545]* | --- | --- | --- | 0.5 ml/L *[25]* | 1/Month *[01/30]* | Grab *[GR]* |
| Oil & Grease *[50060]* | --- | --- | --- | 15 mg/L *[19]* | 1/Month *[01/30]* | Grab *[GR]* |
| pH (Std. Units) *[00400]* | --- | --- | --- | 6.0-8.5 SU *[12]* | 1/Month *[01/30]* | Grab *[GR]* |

**The italicized numeric values bracketed in the table above and the tables that follow are not limitations but code numbers that Department personnel utilized to code the monthly Discharge Monitoring Reports (DMR's).**

## SPECIAL CONDITIONS

## A. LIMITATIONS AND MONITORING REQUIREMENTS

2. Beginning upon issuance of this permit, the permittee is authorized to discharge from **OUTFALL #002** to the St. Croix River. Such discharges shall be limited and monitored by the permittee as specified below:

**OUTFALL #002 - Non-contact cooling waters**

| | **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]* | 15.0 MGD *[03]* | Report MGD *[03]* | --- | --- | --- | 1/Day *[01/01]* | Calculate *[CA]* |
| Temperature *[00011]* | | | | | | | |
| *June 1 – September 30* | --- | --- | --- | --- | 110°F *[15]* | Continuous*[99/99]* | Record *[RC]* |
| *October 1 – May 31* | --- | --- | --- | --- | 110°F *[15]* | 1/Week *[01/07]* | Grab *[GR]* |
| Thermal Load *[00017]* | | | | | | | |
| *June 1 – September 30* | --- | --- | --- | 2.02EE9(1) Btu's/Day *[34]* | 2.02 EE9(2) Btu's/Day *[34]* | 1/Day*[01/01]* | Calculate *[CA]* |
| Temperature Difference *[70013]* | | | | | | | |
| *June 1 – September 30* | --- | --- | --- | --- | 0.5°F(2) *[15]* | 1/Day *[01/01]* | Calculate *[CA]* |
| pH (Std. Unit) *[00400]* | --- | --- | --- | --- | 6.0- – 8.5 SU *[12]* | 1/Month *[01/30]* | Grab *[GR]* |

**The pH of the effluent shall not be less than or greater than standard units unless exceedences are due to natural causes in the ambient receiving waters or precipitation. In such cases, the effluent discharge shall not be more than 0.5 standard units outside the background pH. Background sampling shall be conducted at the facility's intake sampling station on the same day as sampling of the effluent is conducted.**

**SPECIAL CONDITIONS**

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

Footnotes:

**Sampling Locations:**

**Outfall #001** – Sampling for all parameters in Special Condition A(1) of this permit shall be conducted at the terminus of the culvert from the detention pond.

**Outfall #002** - Sampling for all parameters in Special Condition A(2) of this permit shall be conducted at the outfall pump station. Sampling for upstream and downstream receiving water temperature to comply with Special Conditions E and F of the permit shall be conducted as follows: Upstream (intake for the LPC mill) downstream (intake for the Domtar mill).

Any change in the sampling locations must be pre-approved by the Department.

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

All testing shall be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve the most current minimum reporting levels (RL) of detection as specified by the Department. All detectable analytical test results shall be reported to the Department including results which are detected below the Department's respective RL's. If the concentration result is at or above the respective RL's, the concentration shall be reported at that level. If applicable, the mass shall be calculated based on the detected concentration and the flow discharged for the day in which the sample was taken. If the analytical test result is below the respective RL's, the concentration result shall be reported as <X where X is the detection level achieved by the laboratory for that test. Because a mass cannot be calculated with a less than value, report less than the applicable permit mass limit.

(1) **Thermal Load** - This is a weekly rolling average thermal load limitation that becomes effective when the weekly rolling average temperature of the intake water from the St. Croix River is greater than or equal to 66°F and less than 73°F. For Discharge Monitoring Report (DMR) reporting purposes, report the thermal load associated with the highest seven (7) consecutive days during a calendar month. See Special Condition E of this permit for the equation to calculate the thermal load. If the weekly rolling average receiving water temperature is not ≥66ºF during a month between June and September (inclusive) the permittee shall report "NODI-9" on the applicable monthly DMR.

## SPECIAL CONDITIONS

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

Footnotes:

(2) **Thermal Load** - This is a daily maximum thermal load limitation that becomes effective when the temperature of the intake water from the St. Croix River is greater than or equal to 73°F. For DMR reporting purposes, report the highest daily thermal load (expressed as BTU's/Day) during a calendar month. When the receiving water temperature is ≥73°F and the flow is below the regulated low flow of 750 cfs (484 MGD), the permittee is limited to a predicted river temperature increase (PRTI or ΔT) of 0.5°F. See Special Condition E of this permit for the equation to calculate the PRTI.

### B. NARRATIVE EFFLUENT LIMITATIONS

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

2. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated by the classification of the receiving waters.

3. The discharge shall not cause visible discoloration or turbidity in the receiving waters which would impair the usages designated by the classification of the receiving waters.

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

### C. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from Outfall #001 and Outfall #002. Discharges of waste water from any other point source are not authorized under this permit, but shall be reported in accordance with Standards Condition B(5)(*Bypass*) of this permit.

### D. NOTIFICATION REQUIREMENT

In accordance with Standard Condition D, the permittee shall notify the Department of the any substantial change in the volume or character of pollutants being discharged.

**SPECIAL CONDITIONS**

**E. THERMAL LOAD**

During the period June 1 to September 30, the permittee is limited to a weekly rolling average thermal load of 2.02 x $10^9$ BTU's/Day when the weekly rolling average receiving water temperature is ≥66°F and <73°F, and limited to a daily maximum thermal load of 2.02 x $10^9$ BTU's/Day when the receiving water temperature is ≥73°F. For each operating day during the applicable limitation period, the permittee shall calculate the thermal load rejected from Outfall #002 to the receiving waters according to the following equation:

Thermal Load (Btu/day) = $[(Qe_{002})\ (Te_{002}\text{-}Tr)]$ (8.34 lbs/gal) where,

Qe = Effluent flow in gallons
Te = Effluent temperature in $^oF$.
Tr = Upstream river water (intake for LPC mill) temperature in $^oF$

When the receiving water temperature is ≥73°F and the flow is below the regulated low flow of 750 cfs (484 MGD), the permittee is limited to a daily thermal load that will not increase the receiving water temperature (ΔT) by more than 0.5ºF. The permittee shall monitor the discharge from Outfall #002 and the receiving water on a daily basis for the parameters in the equations below.

For each operating day during the applicable limitation period, the permittee shall calculate the Predicted River Temperature Increase (PRTI) from Outfall #002 to the receiving waters according to the following equation:

$$PRTI\ (^oF) = \frac{(Qe_{002})\ (Te_{002}\text{-}Tr)}{Qr}$$

where,

Qr = River flow as measured at the gauging station at the Domtar mill approximately two miles downstream of the LPC mill complex. (cfs or MGD, must be consistent with the Qe units)
Qe = Effluent flow in (cfs or MGD, must be consistent with the Qr units)
Te = Effluent temperature in $^oF$
Tr = Upstream river water (intake for LPC mill) temperature in $^oF$

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.

**SPECIAL CONDITIONS**

**E. THERMAL LOAD (cont'd)**

Example DMR Reporting Form Attachment

| Date | Qr (MGD) | Qe (MGD) | Tr(°F) | Te(°F) | PRTI(°F)[(1)] | Heat(BTU's) |
|---|---|---|---|---|---|---|
| 6/1/02 | 405 | 11.5 | 75°F | 91°F | 0.45°F | $1.5 \times 10^9$ |

Footnotes:

(1) Applicable only when the receiving water is ≥73°F and the flow is below the regulated flow of 750 cfs (484 MGD).

**F. AMBIENT TEMPERATURE MONITORING**

Between June 1 and September 30 of each year, the permittee shall continuously monitor the upstream ambient temperature of the receiving water (intake for LPC mill) and downstream receiving water temperature at the end of the zone of initial dilution (intake for the Domtar mill at the Woodland Dam) to verify the ΔT of ≤0.5° F is being achieved.

The permittee shall supplement the reporting format cited above with additional columns to record Td (intake for the Domtar mill at the Woodland Dam) and the ARTI (actual river temperature increase).

**G. COMMENCEMENT OF OPERATIONS**

**At a minimum of forty five (45) days prior to commencing production/operations**, the permittee must meet with the Department's permitting and compliance inspection staff to review applicability of the permit limitations, monitoring requirements and reporting requirements. Should the Department determine the proposed production/operations are significantly different than what has been presented in the 6/10/08 application materials, the Department may require the permittee to submit a revised application to modify the permit.

## SPECIAL CONDITIONS

### H. 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 provide by the Department and **postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's 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 Discharge Monitoring Report and all other reports required herein shall be submitted to the following address:

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

### I. REOPENING OF PERMIT FOR MODIFICATIONS

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

### J. SEVERABILITY

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

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

**FACT SHEET**

Date: **July 28 2008**

PERMIT NUMBER: **ME0022063**
LICENSE NUMBER: **W000508-5O-G-R**

NAME AND ADDRESS OF APPLICANT:

**Louisiana Pacific Corporation**
**Woodland OSB**
**P.O. Box 849**
**Baileyville, ME. 04694**

COUNTY: **Washington County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**187 Track Road**
**Baileyville, ME. 04694**

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

COGNIZANT OFFICIAL AND TELEPHONE #: **Mr. James Mitchell, Site Manager**
**((207) 427-3362**
**James.mitchell@lpcorp.com**

## 1. APPLICATION SUMMARY

a. Application - The LPC has filed a timely and complete application with the Department to renew combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0022063/ Maine Waste Discharge License (WDL) #W000508-5O-F-M (permit hereinafter) which was issued by the Department on June 10, 2003 for a five-year term. The permit approved the discharge of up to a monthly average flow of 15.0 million gallons per day (MGD) of non-contact cooling water and up to 0.160 MGD of miscellaneous non-process waste waters (primarily boiler blowdown and water softener backwash) from an oriented strand board (OSD) manufacturing facility to the 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 OSB manufacturing facility has been shutdown since June of 2001 and as a result, monitoring requirements for Outfall #001 in the 6/10/03 permit were suspended by the Department in a letter dated September 15, 2006. The permittee has provided the Department with documentation that it has signed a letter of intent (dated June 17, 2008) with an interested party to purchase the manufacturing facility.

The Fact Sheet of the 6/10/03 permit contained the following italicized text:

*b.* <u>Source Description</u>*: When the Georgia Pacific Corporation owned and operated the Baileyville mill, the facility was comprised of two separate manufacturing operations on a common site. One manufacturing facility was a stud mill that produced approximately 70 million board feet per year of spruce and fir 2" x 4" studs while another facility manufactured 4' x 8' sheets of oriented strand board (OSB) a product similar to plywood. Both facilities have been shutdown for the past two years. The LPC proposes to reopen the OSB plant in June of 2003 but the future of the stud mill is questionable.*[ The mill never reopened]

*The mill complex has two outfalls that discharge to the St. Croix River. A centrally located wood fired boiler operates continually suppling steam, compressed air and electricity to both mills. The electrical output of the power plant and the electrical demand of the complex are balanced with excess electricity consumed by the Domtar pulp and paper mill two miles downstream.*

*Outfall #001 waste waters are directly related to the operation of the boiler, which include boiler blowdown, sand filter and softener backwashes, floor rinses, greywater from sinks and drinking water sources within the boiler building. Minor contributions to Outfall #001 include air compressor coils and runoff from occasional use of water spray on the saw log decks and adjacent storage area. The water spray wetted the logs during dry periods and minimized saw blade wear. The average daily flow associated with the aforementioned sources has been approximately 60,000 gallons per day but can be as high as 160,000 gpd.*

*Outfall #002 waste waters consist of non-contact cooling water used to condense low pressure steam from the outlet of the turbine back to water before being returned to the boiler. The cooling water source is the St. Croix River and the discharge flow has historically been reported to be approximately 14 MGD. Also contributing to this outfall are small sump pumps within pump-houses which discharge infiltration/seepage water, pump packing, seal water, and other miscellaneous minor water from the pump-house interior.*

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

*Former Outfall #003 is a storm water outfall. Storm water is generated from 29 acres of unpaved area which is comprised of lawn areas, wooded areas, log storage areas, the boiler fuel pile and adjacent fields. Also contributing to this outfall is storm water associated with six acres of impervious area including facility parking, a paved access road and salable lumber storage. This discharge has been eliminated from this individual MEPDES permit as the discharge is already, and more appropriately, regulated under EPA's Multi-Sector General Permit last issued in October of 2000.*

*The permittee has requested the inclusion of two minor discharges in this permitting action. One source is storm water and ground water from a vehicle scale pit. The permittee has indicated the discharge does not come into contact with any pollutants such as lubricating fluids or oil and grease as the purpose of the discharge is to remove ground water and storm water from the pit to prevent corrosion of the springs for the scale. The intermittent flow is discharged to the surface of the land, a grassy area adjacent to the facilities sub-surface waste water disposal system.*

*The second minor discharge is a discharge of non-contact cooling water used to cool two moisture meters. The cooling water is discharged to the surface of the land adjacent to the OSB building via a ¼ inch diameter pipe.*

[It is noted the Department considered these two minor discharges as being *de minimis* in nature and did not establish limitations or monitoring requirements for these waste streams.]

c. <u>Waste Water Treatment</u>: *Boiler building waste waters discharge through Outfall #001 receive a primary level of treatment. Waste waters exit the boiler building and pass through an oil/water separator before being conveyed to a settling/stabilization pond. The pond is approximately four (4) feet deep with a surface area of approximately 3,000 square feet. The final outfall pipe is a 12-inch diameter corrugated metal pipe with a grease trapped outlet. The pipe outlets three (3) feet above the surface of the receiving waters and meanders through a vegetated channel to the river.*

*Outfall #002 receives no treatment as the waste waters are non-contact cooling waters that are uncontaminated except for heat. The outfall pipe is a 24-inch diameter steel pipe equipped with a stilling basin. The pipe outlets two (2) feet above the surface of the receiving waters.*

*Discharge Monitoring Report data for the period calendar 1999 to the time of shutdown indicates the permittee has been in compliance with all the limitations and monitoring requirements for Outfalls #001 and #002.*

*Sanitary waste waters generated at the mill complex are disposed of in a conventional on-site subsurface disposal system.*

## 2. PERMIT SUMMARY

a. Terms and conditions - This permit carries forward all terms and conditions of the June 10, 2003 permit. The permittee and the potential buyer of the facility have been put on notice by the Department that if and when the facility commences operations in the future, the Department will review said operations to determine if this permit should be modified to establish terms and conditions consistent with the activities performed at the facility. See Special Condition H, *Commencement of Operations*, of this permit.

b. History: Most recent relevant licensing/permitting or other actions include the following:

*October 21, 1976* – The USEPA issued National Pollutant Discharge Elimination System (NPDES) permit #ME0022603 for a five-year term.

*November 3, 1994* - The Department issued WDL #W000508-42-B-R.

*November 22, 1996* - The Department issued a letter to the GPC that administratively modified WDL #W000508-42-B-R to correct a typographical error in the flow limitation for Outfall #001.

*September 4, 1998* - The Department issued WDL #W000508-5O-C-M which modified the 11/3/94 WDL by increasing the mass and concentration limits for biochemical oxygen demand (BOD) and total suspended solids (TSS) for Outfall #001 and referenced minor contributing flows to Outfalls #001 and #003.

*September 13, 1999* – The Department issued a renewal of the WDL (#W000508-5O-D-R) for a five year term.

*January 12, 2001* – The State of Maine received authorization from the EPA to administer the NPDES permit program in Maine. From that date forward, the program has been referred to as the MEPDES permit program and ME0022603 remains the primary reference number for the facility.

*September 13, 2002* – The Georgia Pacific Corporation sold the Baileyville OSB/stud mill to the Louisiana Pacific Corporation.

*January 28, 2003* – The LPC filed an application with the Department to transfer all licenses and permits for the mill complex. Licenses and permits issued to date have been issued in the name of the former owner of the facility, the Georgia Pacific Corporation. The “global” transfer of the licenses and permits (other than this permit) will be issued under a separate Department document.

## 2. PERMIT SUMMARY (cont'd)

*June 10, 2003* – The Department issued combination MEPDES permit #ME0022603/WDL #W000508-5O-B-R for a five-year term. The 11/21/76 NPDES permit issued by the EPA was terminated upon issuance of the MEPDES permit.

*June 10, 2008* – LPC submitted a timely and complete application to Department to renew the MEPDES for the facility.

## 3. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S.A., §467(13)(A)(3) indicates that the Woodland Lake impoundment of the St. Croix River main stem is classified as a Class C waterway. Maine law, 38 M.R.S.A., §465(4) contains the classification standards for Class C waterways.

## 4. RECEIVING WATER QUALITY CONDITIONS:

A document entitled, 2006 Integrated Water Quality Monitoring and Assessment Report, often referred to as the 305(b) Report, published by the Department indicates that Woodland Lake impoundment is attaining the designated uses of its assigned classification.

## 5. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The Fact Sheet of the 6/10/03 permit contained the following italicized text:

a. ***Outfall #001*** *- Boiler blowdown, softener backwash, cooling waters and miscellaneous non-process waste waters.*

*The monthly average and daily maximum mass and or concentration limits established for flow, biochemical oxygen demand, total suspended solids, settleable solids oil & grease and pH in the previous licensing action are being carried forward in this permitting action. The limits were based on best professional judgment of best practicable treatment for the sources of waste waters being generated. A review of the Discharge Monitoring Report (DMR) data for this outfall for the three period prior to shutdown indicates the former owner of the facility was in compliance with all limitations.*

*Being that the facility has been shutdown for the better part of two years, and the LPC does not intend to resume operations of the stud mill in the foreseeable future, not all sources of waste waters previously regulated will be realized. Therefore, the Department may re-evaluate the applicability of the parameters, limitations and monitoring requirements for this outfall after two years of operations of the mill complex.*

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

*b.* ***Outfall #002*** *– Non-contact cooling waters*

1. *Flow- The daily average flow limitation of 15.0 MGD in the previous licensing action is being carried forward in this permitting action. The LPC has indicated that the flow limitation should be representative of future operations of the OSB manufacturing facility.*

2. *Temperature/Thermal Load – The previous licensing action established a year-round daily maximum temperature limit of 96°F.*

   *Department Rule Chapter 582, Regulations Relating To Temperature, states in part that no discharge shall cause the ambient temperature of any freshwater body, as measured outside a mixing zone, to be raised more than 5° F. In no event shall any discharge cause the temperature of any freshwater body to exceed 85° F at a point outside a mixing zone. In addition the rule 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 provide for normal growth of the brook trout and the daily maximum threshold temperature of 73° F protects for the survival of juveniles and adult Atlantic salmon during the summer months. 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 ≥66° F and <73° F. When the receiving water temperature is ≥73° F compliance with the ΔT of 0.5° F is evaluated on a daily basis.*

   *Compliance with the weekly rolling average and daily maximum ΔT of 0.5° F is determined by calculating the thermal load (expressed in BTU's/day) associated with the regulated river flow (750 cfs = 484 MGD), actual river temperature, actual discharge flow and actual discharge temperature from the mill. It is noted the 750 cfs is considered the regulated low flow due to the fact the St. Croix River is, and has been for over twenty five years via the International Joint Commission (IJC), been managed to provide 750 cfs at the USGS gauge at Baring (#10121000) as a minimum flow. When the receiving water temperature is ≥73° F and the receiving water flow is below the regulated low flow of 750 cfs, compliance with the ΔT of 0.5° F is evaluated on a daily basis using the actual receiving water flow, actual receiving water temperature, actual discharge flow and actual discharge temperature from the mill.*

## 5. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

*The calculations that follow are to determine the assimilative capacity of the receiving water during summer and non-summer seasons:*

*[Critical river flow (MGD)] x [Allowable temperature difference (°F)] x 8.34 = Allowable thermal load expressed in BTU's/Day.*

*Non-summer (October 1st – May 14th)*

*(484,000,000 gallons) (5.0°F)(8.34 lbs/gal) = 2.02 x $10^{10}$ BTU's/Day*

*The permittee has requested the Department increase the non-summer discharge temperature limitation from 96°F in the previous licensing action to 110°F due to proposed changes in the operations at the facility (primarily increased production) once it goes back on-line. Assuming the St. Croix River temperature is 35°F, the discharge temperature is at the full permitted flow of 15 MGD and 110°F, the thermal load discharged would be:*

*(15,000,000 gal)(110°F - 35°F)(8.34 lbs/gal) = 9.38 x $10^{9}$ BTU's/Day*

*The predicted river temperature increase (PRTI) at the full permitted flow and temperature and the regulated low flow conditions in the St. Croix River is:*

$$PRTI\ (^{o}F) = \frac{Qe\ (Te - Tr)}{Qr}$$ *where,*

*Qr = River flow in gpd*
*Qe = Effluent flow in gpd*
*Te = Effluent temperature in $^{o}F$*
*Tr = Upstream river water (intake) temperature in $^{o}F$*

$$\frac{(15{,}000{,}000\ gal)(110°F - 35°F)}{484{,}000{,}000\ gal} = 2.3°F$$

*Therefore, increasing the daily maximum temperature from 96°F to 110°F will not result in degradation of the receiving below the standards of its ascribed classification.*

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

*Summer (May 15th – September 30th)*

*(484,000,000 gallons) (0.5°F)(8.34 lbs/gal) = 2.02 x $10^9$ BTU's/Day*

*The previous licensing action established a summer (May 15th – September 30th) temperature difference limitation (ΔT) of 16°F between the temperature of the intake water and effluent temperature. The limitation was based on the assumption the receiving water was at or above the critical temperature threshold of 66°F and the facility was discharging at the full licensed flow of 15.0 MGD. Rearranging the equation above and solving for the ΔT:*

$$\frac{2.02 \times 10^9 \text{ BTU's/Day}}{15{,}000{,}000 \text{ gallons} \times 8.34 \text{ lbs/gal}} = 16°F$$

*The LPC has requested the Department delete this limitation as it unnecessarily constrains the discharge at times when the discharge flow is less than the permitted flow of 15 MGD. As calculated above, once the receiving water temperature is at the critical threshold of 66°F the discharge temperature would be limited to 82°F regardless of the discharge flow. A more applicable limitation such as a thermal load limitation will provide the facility the flexibility to trade-off flow and temperature and still be protective of ambient water quality criteria.*

*Therefore, this permitting action is eliminating the ΔT of 16°F and establishing a summertime thermal load limitation of 2.02 x $10^9$ BTU's/Day that is to be calculated on a daily basis between June 1st and September 30th. The thermal load limitation is a weekly rolling average limitation when the receiving water is greater than or equal to 66°F and less than 73°F and is a daily maximum limitation when the receiving water is greater than or equal to 73°F.*

*Special Condition H, Ambient Temperature Monitoring, of this permit requires the permittee to monitor upstream and downstream receiving water temperature to verify that the ΔT of ≤0.5° F in Department rule Chapter 582 is being achieved during the summer months. The Department is utilizing the Woodland Dam as the endpoint of the zone of initial dilution as during low flow conditions approaching 750 cfs, most if not all the flow in the St. Croix River passes through the turbines of the Woodland Dam. This two mile segment of river is considered to be the area of reasonable opportunity for heat transfer to the atmosphere provided by Maine law 38 M.R.S.A., §451.*

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

*c.* ***Outfall #003 – Storm water runoff***

*The only water discharge from this outfall is storm water runoff from a sedimentation pond that collects storm water runoff from the mill complex. Discharges from this point source are normally regulated by an EPA Multi-Sector General Permit (MSGP). The mill complex is covered by two MSGP's (MER05A681 and MER05A679) issued in January 2001 and December 2000 respectively.*

Being that LPC and a potential buyer have not finalized the sale of the facility and it is unknown what process(es) will be brought back on line, Special Condition G, *Commencement of Operations* of this facility requires that:

**At a minimum of forty five (45) days prior to commencing production/operations**, the permittee must meet with the Department's permitting and compliance inspection staff to review applicability of the permit limitations, monitoring requirements and reporting requirements. Should the Department determine the proposed production/operations are significantly different than what has been presented in the 6/10/08 application materials, the Department may require the permittee to submit a revised application to modify the permit.

## 6. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has made a determination that the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the waterbody to meet standards for Class C classification. However, should the ambient temperature monitoring data collected pursuant to Special Condition F of this permit demonstrate the $\Delta T$ of $\leq 0.5°$ F is not maintained during June 1 – September 30$^{th}$ of each year, this permit may be reopened pursuant to Special Condition I, *Reopening the Permit For Modifications*, to incorporate more stringent limitations and/or monitoring requirements to achieve the standard.

## 7. PUBLIC COMMENTS

Public notice of this application was made in the local newspaper on or about June 8, 2008. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

## 8. 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

## 9. RESPONSE TO COMMENTS

During the period of July 28, 2008, 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 LPC 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.