



STATE OF MAINE
Department of Environmental Protection

Paul R. LePage
GOVERNOR

James Brooks
ACTING COMMISSIONER

May 24, 2011

Mr. William Parker
Environmental Manager
Boralex Fort Fairfield LP
P.O. Box 430
Fort Fairfield, ME. 04742

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0023329
Maine Waste Discharge License (WDL) Application #W007365-5S-F-R
Final MEPDES Permit/WDL

Dear Mr. Parker:

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 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,

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

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

Enc.

cc: Sean Bernard, DEP/NMRO
Sandy Mojica, USEPA



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

DEPARTMENT ORDER

IN THE MATTER OF

BORALEX FORT FAIRFIELD LP)	MAINE POLLUTANT DISCHARGE
FORT FAIRFIELD, AROOSTOOK COUNTY)	ELIMINATION SYSTEM PERMIT
ELECTRIC GENERATING STATION)	AND
ME0023329)	WASTE DISCHARGE LICENSE
W007365-5S-F-R)	RENEWAL
APPROVAL)	

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, §1251, *et seq.*, and Maine law, 38 M.R.S.A., §414-A *et seq.*, and applicable regulations, the Maine Department of Environmental Protection (Department hereinafter) has considered the application of BORALEX FORT FAIRFIELD LP (Boralex/permittee hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

Boralex has submitted a timely and complete application to the Department for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0023329/ Maine Waste Discharge License (WDL) W007365-5S-D-R (permit hereinafter) which was issued by the Department on June 16, 2006, for a five-year term. The MEPDES permit authorized the monthly average discharge of up to 68,160 gallons per day (GPD) and a daily maximum of up to 138,000 GPD of non-contact cooling water, facility process waste water, woodpile leachate, site runoff, and storm water runoff from a wood-fired electrical generating station to the Aroostook River, Class C, in Fort Fairfield, Maine.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the previous permitting action except that this permitting action is removing the requirements for a storm water pollution prevention plan (SWPPP) as the facility is covered for storm water discharges via the Department's Multi Sector General Permit via facility number MER05B842.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated April 20, 2011, and subject to the Conditions listed below, the Department makes the following conclusions:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
3. The provisions of the State's antidegradation policy, 38 M.R.S.A. §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 water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharge will be subject to effluent limitations that require application of best practicable treatment as defined in Maine law, 38 M.R.S.A., §414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the above noted application of BORALEX FORT FAIRFIELD LP to discharge a monthly average flow of up to 68,160 gallons per day (GPD) and a daily maximum flow of up to 138,000 GPD of non-contact cooling water, wood fuel storage area leachate, site runoff, cooling tower mist and storm water from a treatment lagoon to the Aroostook River, Class C, in Fort Fairfield, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

1. *“Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits,”* revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years thereafter. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of the this permit, the terms and conditions of the this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act, 5 M.R.S.A. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (effective April 1, 2003)*].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: February 14, 2011
Date of application acceptance: February 28, 2011

This Order prepared by Gregg Wood, BUREAU OF LAND & WATER QUALITY
ME0023329 2011 5/22/11

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Beginning the effective date of this permit, the permittee is authorized to discharge **non-contact cooling water, wood fuel storage area leachate, site runoff, cooling tower mist, and storm water via Outfall #001A** to the Aroostook River at Fort Fairfield. Such discharges shall be limited and monitored by the permittee as specified below^{(1), (2)}:

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	<u>Monthly Average</u> as specified	<u>Daily Maximum</u> as specified	<u>Monthly Average</u> as specified	<u>Daily Maximum</u> as specified	<u>Measurement Frequency</u> as specified	<u>Sample Type</u> as specified
Flow <i>[50050]</i>	68,160 gpd <i>[07]</i>	138,000 gpd <i>[07]</i>	---	---	Continuous <i>[99/99]</i>	Recorder <i>[RC]</i>
TSS <i>[00530]</i>	17 lbs./day <i>[26]</i>	57 lbs./day <i>[26]</i>	30 mg/L <i>[19]</i>	100 mg/L <i>[19]</i>	1/Month <i>[01/30]</i>	Grab <i>[GR]</i>
Oil & Grease <i>[00552]</i>	---	---	15 mg/L <i>[19]</i>	15 mg/L <i>[19]</i>	1/Month <i>[01/30]</i>	Grab <i>[GR]</i>
Free Available Chlorine⁽³⁾ <i>[50064]</i>	---	---	0.2 mg/L <i>[19]</i>	0.5 mg/L <i>[19]</i>	1/Day <i>[01/01]</i>	Grab <i>[GR]</i>
Temperature⁽⁴⁾ <i>[00011]</i>	---	---	---	85 ⁰ F <i>[15]</i>	Continuous <i>[99/99]</i>	Recorder <i>[RC]</i>
Total Chromium <i>[01034]</i>	0.1 lbs./day <i>[26]</i>	0.2 lbs./day <i>[26]</i>	0.2 mg/L <i>[19]</i>	0.2 mg/L <i>[19]</i>	1/Quarter <i>[01/90]</i>	Grab <i>[GR]</i>
Total Zinc <i>[01092]</i>	0.6 lbs./day <i>[26]</i>	1.2 lbs./day <i>[26]</i>	1.0 mg/L <i>[19]</i>	1.0 mg/L <i>[19]</i>	1/Quarter <i>[01/90]</i>	Grab <i>[GR]</i>
pH⁽⁵⁾ <i>[00400]</i>	---	---	---	6.0 – 9.0 SU <i>[12]</i>	Continuous <i>[99/99]</i>	Recorder <i>[RC]</i>

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

Footnotes: See Page 5 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

Footnotes:

1. **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 submitted 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 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.

2. **Priority Pollutants** – Pursuant to 40 CFR Part 423.13(d)(1), there shall be no detectable levels of the 126 priority pollutants as specified in *Appendix A to Part 423 – 126 Priority Pollutants*.
3. **Free available chlorine** – Pursuant to 40 CFR, Part 423.12(b)(8), neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available chlorine nor total residual chlorine at any time unless the utility can demonstrate to the Department that the units cannot operate at or below this level of chlorination.
4. **Temperature Monitoring** – Temperature monitoring for Outfall #001A is required during the months of June, July, and August of each year only.
5. **pH Range Limitation** – The total time during which the pH values are outside the required range of 6.0 – 9.0 SU shall not exceed 7 hours and 26 minutes in any calendar month and no individual excursion from the 6.0 – 9.0 SU range limitation shall exceed 60 minutes in duration.

SPECIAL CONDITIONS

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: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on February 28, 2011, 2) the terms and conditions of this permit; and 3) only from the outfalls cited in this permit. Discharges of waste water from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5)(*Bypass*) of this permit.

D. NOTIFICATION REQUIREMENTS

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

1. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system by a source introducing pollutants to the system at the time of permit issuance.
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 impact of the change in the quantity or quality of the waste water to be discharged from the treatment system.

SPECIAL CONDITIONS

E. MERCURY

All mercury sampling (2/Year) required by this permit or required to determine compliance with interim limitations established pursuant to Department rule Chapter 519, shall be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis shall be conducted in accordance with EPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See **Attachment B**, *Effluent Mercury Test Report*, of this permit for the Department's form for reporting mercury test results.

F. OPERATIONS AND MAINTENANCE (O&M) PLAN

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

By December 31 of each year, or within 90 days of any process changes or minor equipment upgrades, the permittee shall evaluate and modify the O&M Plan including site plan(s) and schematic(s) for the 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 (excepting the current yet to be completed substantial upgrade), the permittee shall submit the updated O&M Plan to their Department inspector for review and comment.

SPECIAL CONDITIONS

G. 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 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 DMR and all other reports required herein shall be submitted to the Department assigned inspector (unless otherwise specified by the Department) at the following address:

Department of Environmental Protection
Northern Maine Regional Office
Bureau of Land and Water Quality
Division of Water Quality Management
1235 Central Park Drive
Skyway Park
Presque Isle, Maine 04769

Alternatively, if you are submitting an electronic Discharge Monitoring Report (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.

H. REOPENING OF PERMIT FOR MODIFICATION

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.

I. SEVERABILITY

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

ATTACHMENT A

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

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

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

Licensed Flow (MGD) Flow for Day (MGD) ⁽¹⁾ Flow Avg. for Month (MGD) ⁽²⁾
 Acute dilution factor Date Sample Collected Date Sample Analyzed
 Chronic dilution factor
 Human health dilution factor
 Criteria type: M(marine) or F(fresh)

Laboratory Address _____ Telephone _____
 Lab Contact _____ Lab ID # _____

FRESH WATER VERSION

Please see the footnotes on the last page.

WHOLE EFFLUENT TOXICITY	Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)	Effluent Limits, %		Possible Exceedance ⁽⁷⁾	
			Acute	Chronic	Reporting Limit Check	Health
Trout - Acute						
Trout - Chronic						
Water Flea - Acute						
Water Flea - Chronic						
WET CHEMISTRY						
pH (S.U.) ⁽⁹⁾	(8)					
Total Organic Carbon (mg/L)	(8)					
Total Solids (mg/L)						
Total Suspended Solids (mg/L)						
Alkalinity (mg/L)	(8)					
Specific Conductance (umhos)						
Total Hardness (mg/L)	(8)					
Total Magnesium (mg/L)	(8)					
Total Calcium (mg/L)	(8)					
ANALYTICAL CHEMISTRY ⁽³⁾						
Also do these tests on the effluent with WET. Testing on the receiving water is optional						
TOTAL RESIDUAL CHLORINE (mg/L) ⁽⁹⁾	NA					
AMMONIA	NA					
ALUMINUM	NA					
ARSENIC	5					
CADMIUM	1					
CHROMIUM	10					
COPPER	3					
CYANIDE	5					
LEAD	3					
NICKEL	5					
SILVER	1					
ZINC	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.

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

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

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

Notes:

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

Comments:

ATTACHMENT B

Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____
 Pipe # _____

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

SAMPLE COLLECTION INFORMATION

Sampling Date:

mm	dd	yy

 Sampling time: _____ AM/PM

Sampling Location: _____

Weather Conditions: _____

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

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

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

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

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

Please Enter Effluent Limits for your facility

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

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

CERTIFICATION

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

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

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

FACT SHEET

DATE: **April 20, 2011**

PERMIT NUMBER: **ME0023329**
WASTE DISCHARGE LICENSE: **W007365-5S-E-R**

NAME AND ADDRESS OF APPLICANT:

**BORALEX FORT FAIRFIELD LP
P.O. Box 430
Fort Fairfield, ME. 04742**

COUNTY: **Aroostook County**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):

**BORALEX FORT FAIRFIELD LP
Cheney Grove Road
Fort Fairfield, ME. 04742**

RECEIVING WATER/CLASSIFICATION: **Aroostook River/Class C**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. William Parker, Env. Mgr.**
(207) 473-7592 ext. 206
e-mail: william.parker@boralex.com

1. APPLICATION SUMMARY

- a. Application: Boralex Fort Fairfield LP (Boralex/permittee hereinafter) has submitted a timely and complete application to the Department for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0023329/ Maine Waste Discharge License (WDL) W007365-5S-D-R (permit hereinafter) which was issued by the Department on June 16, 2006, for a five-year term. The MEPDES permit authorized the monthly average discharge of up to 68,160 gallons per day (GPD) and a daily maximum of up to 138,000 GPD of non-contact cooling water, facility process waste water, woodpile leachate, site runoff, and storm water runoff from a wood-fired electrical generating station to the Aroostook River, Class C, in Fort Fairfield, Maine. A map showing the location of the Boralex facility and receiving waters is included as Fact Sheet **Attachment A**.

1. APPLICATION SUMMARY (cont'd)

b. Source Description:

Power Plant

Boralex Fort Fairfield, Inc. operates a 30-megawatt steam electric power generating station fueled by biomass wood fuels in the Town of Fort Fairfield, Maine. The facility is owned by Boralex, Inc. of Kingsey Falls, Quebec, Canada.

Biomass fuel utilized at Boralex Fort Fairfield consists of conventional wood fuel which is processed off-site. Non-wood related productions are not utilized or permitted for use at the Fort Fairfield facility. Biomass fuel is delivered by enclosed trailer truck to the facility. The facility's fuel receiving system consists of two truck dumpers. Fuel is conveyed to the fuel storage areas by way of fuel yard equipment and is then transferred via fuel reclaiming equipment, additional covered conveyors, and an enclosed steam boiler feed system to the boiler furnace.

The facility's ash removal system consists of an ash conditioning system, enclosed conveyors, and an enclosed ash storage system.

Storm Water and Wood Fuel Storage Area Leachate

Storm water runoff is generated by an approximately 13.2-acre portion of the facility, of which 3.05 acres is considered impervious area. Two log storage areas, which occupy approximately 2.7 acres of land, contribute to storm water and leachate runoff. This portion of the facility generates approximately 69,000 gallons of storm water runoff per day based on calculations for anticipated runoff from a 25-year storm event.

Boralex is currently permitted for the discharge of storm water runoff from the site via the Department's Storm Water Multi-Sector General Permit with a facility number of The Department confirmed coverage under the MSGP by assigning a facility number of MER05B842.

Sanitary waste water generated at Boralex is conveyed to the Fort Fairfield Utilities District for treatment.

1. APPLICATION SUMMARY (cont'd)

c. Wastewater Treatment:

Power Plant

Ground water (drilled well source) and municipal water are utilized for cooling tower and process make-up water. Process make-up water is conveyed through a water treatment plant consisting of an activated carbon filter (to remove chlorine and organics) a cation exchanger, an anion exchanger, and a mixed media exchanger. Demineralized water is stored in a 26,000-gallon demineralized water storage tank and is subsequently transferred to a 26,000-gallon condensate storage tank for use as make-up water for the boiler system. Boiler feedwater is treated with di- and tri-sodium phosphate (to reduce scale forming minerals) and caustic (to maintain boiler water pH). The boiler system maintains a continuous blowdown of approximately 5 gallons per minute (GPM), which is directed to a boiler blowdown tank for condensation. During periods of cool weather, boiler blowdown is directed to the cooling tower system to assist in ice reduction of the cooling tower. During periods of warm weather, the blowdown is directed to a 740,000-gallon capacity wastewater treatment/detention lagoon for settling and thermal impact reduction.

The activated carbon filters are cleaned routinely by backwashing to remove accumulated contaminants. Cation resin regeneration is performed utilizing a weak sulfuric acid solution followed by a rinse cycle using demineralized water to remove any residual acid. The anion resin regeneration is performed utilizing a weak caustic solution followed by a rinse cycle using demineralized water. Mixed exchanger bed regeneration utilizes both sulfuric acid and caustic solutions. Wastewater generated by these processes is conveyed to a 7,900-gallon capacity, enclosed neutralization tank where acid or caustic are added for pH neutralization. Neutralized wastewater is conveyed to the facility's wastewater lagoon.

Cooling tower make-up water is treated through a decarbonation process to reduce the concentration of scale-forming mineral contaminants and alkalinity in the make-up water. The weak acid cation exchanger utilizes carboxylic resin, which must be regenerated with a weak sulfuric acid solution to remove mineral contaminants. Wastewater generated by this process is directed to a 19,000-gallon capacity, enclosed neutralization tank for pH adjustment through addition of a caustic solution, aeration, and recirculation. Neutralized wastewater is conveyed to the facility's wastewater lagoon. Circulation make-up water is also treated with phosphates and dispersants to control scale production and a bromine-based biocide for control of biological growth. An algacide is only used when excessive growth occurs, typically during the summer months. The cooling water system is a closed cycle recirculating system with an induction type cooling water tower. The system maintains a continuous blowdown of approximately 18 gpm, which is directed to an auxiliary cooling water system as its cooling medium. Auxiliary system blowdown is conveyed to the facility's wastewater lagoon. Incidental amounts of cooling tower mist are deposited around the facility and may be discharged with storm water runoff from the site.

1. APPLICATION SUMMARY (cont'd)

Storm Water and Wood Fuel Storage Leachate

No structural treatment systems other than detention ponds are in place to treat storm water runoff associated with industrial activities at the site. To the extent practical, best management practices (BMPs) are incorporated to limit the potential for contaminants entering storm water discharge. Final effluent from the 740,000-gallon, lined wastewater lagoon is conveyed for discharge to the Aroostook River via Outfall #001A.

2. PERMIT SUMMARY

- a. Terms and conditions - This permitting action is carrying forward all the terms and conditions of the previous permitting action except that this permitting action is removing the requirements for a storm water pollution prevention plan (SWPPP) as the facility is covered for storm water discharges via the Department's Multi Sector General Permit with a facility number of MER05B842.
- b. History: This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the facility currently operated by Boralex Fort Fairfield, Inc.

June 21, 1996 – The USEPA issued a renewal of National Pollutant Discharge Elimination System (NPDES) permit #ME0023329 to the Aroostook Valley Electric Company (AVEC). The 6/21/00 permit superseded the NPDES permit issued to this facility by the USEPA on September 29, 1987 (earliest NPDES permit on file with the Department).

May 23, 2000 – Pursuant to Maine law, 38 M.R.S.A. §420 and §413 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL #W007365-57-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 72.5 parts per trillion (ppt) and 108.7 ppt, respectively, and a minimum monitoring frequency requirement of 2 tests per year for mercury. It is noted the limitations have not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit as limitations and monitoring frequencies are regulated separately through Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519. However, the interim limitations remain in effect and enforceable and any modifications to the limits and or monitoring requirements will be formalized outside of this permitting document.

2. PERMIT SUMMARY (cont'd)

January 12, 2001 – The Department received authorization from the U.S. Environmental Protection Agency (USEPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine, excluding areas of special interest to Maine Indian Tribes. From that point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program.

April 23, 2001 – The Department issued WDL #W007365-5O-C-R / MEPDES permit #ME0023329 to Aroostook Valley Electric Company (AVEC) for a five year term. The 4/23/01 permit superseded WDL #W007365-57-B-R issued on October 28, 1994 and WDL #W007365-43-A-N issued to Fairfield Energy Venture, L.P. on June 17, 1987.

February 7, 2006 – Boralex Fort Fairfield, Inc. submitted a timely and complete General Application to the Department for transfer (from AVEC) and renewal of the 4/2301 MEPDES permit. The application was accepted for processing on February 10, 2006 and was assigned WDL #W007365-5S-D-R / MEPDES #ME0023329.

May 2, 2006 – Boralex submitted to the Department, for review and acceptance, a Notice of Intent (NOI) to Comply with the Maine Multi-Sector General Permit (MSGP) for Storm Water Discharges Associated with Industrial Activity. The Department confirmed coverage under the MSGP by assigning a facility number of MER05B842 in a letter dated February 8, 2007.

June 16, 2006 – The Department issued combination MEPDES permit/WDL #W007365-5S-D-R, for a five-year term.

February 14, 2001 – Boralex submitted a timely and complete application to the Department to renew the 6/16/06 MEPDES permit/WDL.

3. CONDITIONS OF PERMIT

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 Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S.A., Section 467(C)(1)(f) classifies the Aroostook River at the point of discharge as Class C waters. Maine law, 38 M.R.S.A., Section 465(4) describes the standards for Class C waters as follows;

A. *Class C waters must be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as a habitat for fish and other aquatic life.*

B. *The dissolved oxygen content of Class C water may be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained. In order to provide additional protection for the growth of indigenous fish, the following standards apply.*

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

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

(b) *A discharge or a hydropower project was in existence on March 16, 2005 and required but did not have a license or water quality certificate other than a general permit for the Class C water. This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004.*

(2) *In Class C waters not governed by subparagraph (1), dissolved oxygen may not be less than 6.5 parts per million as a 30-day average based upon a temperature of 24 degrees centigrade or the ambient temperature of the water body, whichever is less. This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004. The department may negotiate and enter into agreements with licensees and water quality certificate holders in order to provide further protection for the growth of indigenous fish. Agreements entered into under this paragraph are enforceable as department orders according to the provisions of sections 347-A to 349.*

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

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

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

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2008 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, indicates the Aroostook River below the Boralex discharge is meeting the standards of its assigned classification. The Report lists all of Maine's fresh waters as, "Category 4A: Waters Impaired by Atmospheric Deposition of Mercury." Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states a regional scale total maximum daily load (TMDL) has been approved by the EPA as Maine has already instituted statewide programs for removal and reduction of mercury sources.

The Department has no information at this time that the discharge from Boralex Fort Fairfield will cause or contribute to the failure of the receiving water to meet the designated uses of its assigned classification.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Applicability of National Effluent Guidelines: The USEPA has promulgated effluent guidelines for the *Steam Electric Generating Point Source Category* at 40 CFR Part 423. Boralex Fort Fairfield's discharge via Outfall #001A is subject to these guidelines. Applicable sections of 40 CFR Part 423 include:

40 CFR Part 423.12(b)(3): Limits TSS and oil and grease from low volume waste sources
40 CFR Part 423.12(b)(7): Limits free available chlorine in cooling tower blowdown
40 CFR Part 423.13(d)(1): Limits total chromium and total zinc in cooling tower blowdown

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

- b. Flow: The previous permitting action established monthly average and daily maximum discharge flow limitations of 68,160 gallons per day (gpd) and 138,000 gpd, respectively, for Outfall #001A. These limits were based on 1) the 68,160 gpd of wastewater generated by boiler system make-up water (non-contact cooling water), boiler blowdown and system wash water, cooling tower make-up water (non-contact cooling water), cooling tower blowdown, ion exchange backwash wastewater, and leachate from the wood storage area; and 2) the 69,000 gpd of storm water runoff from approximately 13.2 acres of developed area on the facility grounds. The non-process waste streams and the storm water runoff are conveyed and commingled in the facility's wastewater lagoon prior to discharge. Thus, the daily maximum discharge limitation of 138,000 gpd is based on the approximately 69,000 gpd of non-process wastewater plus the approximately 69,000 gpd of storm water runoff. This permitting action is carrying forward both the monthly average and daily maximum discharge flow limitations as they remain representative of wastewater flows conveyed to Outfall #001A. This permitting action is carrying forward the continuous discharge flow monitoring requirement.

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2007 – October 2010 indicates the facility has been in compliance with the limitation 100% of the time as flows from Outfall #001A have been reported as follows;

Flow (DMRs=46)

Value	Limit (gpd)	Range (gpd)	Mean (gpd)
Monthly Average	68,160	33,044 – 75,394	52,881
Daily Maximum	138,000	62,785 – 126,040	83,617

- b. Dilution Factors: Dilution factors associated with the permitted discharge flow of 138,000 GPD (0.138 million gallons per day, MGD) from the Boralex facility were derived in accordance with Department rule, 06-096 CMR, Chapter 530 Section 4.A *Surface Water Toxics Control Program* and were calculated as follows:

$$\text{Acute } \frac{1}{4} \text{ 1Q10} = 41.9 \text{ cfs} \quad \Rightarrow \frac{(41.9 \text{ cfs})(0.6464) + 0.138 \text{ MGD}}{0.138 \text{ MGD}} = 197:1$$

$$\text{Acute: 1Q10} = 167.5 \text{ cfs} \quad \Rightarrow \frac{(167.5 \text{ cfs})(0.6464) + 0.138 \text{ MGD}}{0.138 \text{ MGD}} = 786:1$$

$$\text{Chronic: 7Q10} = 197.0 \text{ cfs} \quad \Rightarrow \frac{(197.0 \text{ cfs})(0.6464) + 0.138 \text{ MGD}}{0.138 \text{ MGD}} = 924:1$$

$$\text{Harmonic Mean} = 591.0 \text{ cfs} \quad \Rightarrow \frac{(591.0 \text{ cfs})(0.6464) + 0.138 \text{ MGD}}{0.138 \text{ MGD}} = 2,769:1$$

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

Department rule Chapter 530 Section 4.B.1 states,

Analyses using numerical acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone and to ensure a zone of passage of at least 3/4 of the cross-sectional area of any stream as required by Chapter 581. 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 flow, up to and including all of it, as long as the required zone of passage is maintained.

Boralex has not provided the Department with information as to the actual mixing characteristics of the discharge; therefore, the Department is utilizing the default stream flow of 1/4 of the 1Q10 in acute evaluations.

- d. Total Suspended Solids (TSS): The previous permitting action established technology-based monthly average concentration and mass limits of 30 mg/L and 17 lbs./day, respectively, for TSS. The previous permitting action established technology-based daily maximum concentration and mass limits of 100 mg/L and 57 lbs./day, respectively, for TSS. The concentration limitations are based on the best practicable control technology currently available (BPT) effluent guidelines promulgated at 40 CFR Part 423.12(b)(3) and are being carried forward in this permitting action. The technology based mass limits are also being carried forward in this permitting action and were derived as follows:

$$\text{Monthly Average: } (30 \text{ mg/L})(8.34)(0.068160 \text{ MGD}) = 17 \text{ lbs./day}$$

$$\text{Daily Maximum: } (100 \text{ mg/L})(8.34)(0.068160 \text{ MGD}) = 57 \text{ lbs/day}$$

A review of the monthly Discharge Monitoring Report (DMR) data for the period April 2007 – October 2010 indicates the facility has been in compliance with the limitation 100% of the time as concentration and mass values for Outfall #001A have been reported as follows;

TSS Concentration (DMRs=46)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	2 - 11	5
Daily Maximum	100	2 - 11	5

TSS Mass (DMRs=46)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	17	1 - 6	3
Daily Maximum	57	1 - 6	3

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

The previous permitting action established a minimum monitoring frequency requirement of once per month for TSS, which is being carried forward in this permitting action as a Department best professional judgment determination of the minimum level of monitoring necessary to assess compliance with the numeric limitations established in this permitting action. This permitting action is revising the sample type from 24-hour composite to grab.

- e. Free Available Chlorine (FAC): The previous permitting action established monthly average and daily maximum concentration limitations of 0.20 mg/L and 0.5 mg/L for FAC pursuant to BPT effluent guidelines promulgated at 40 CFR Part 423.12(b)(7). Typically, the Department establishes limitations for the discharge of total residual chlorine (TRC) to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. In the case of the discharge from Boralex and the effluent guidelines, this permitting action is establishing limitations for FAC to protect receiving water quality from the discharge of chlorine in toxics amounts. Department permitting actions impose the more stringent of either a water quality-based limitations for Total Residual Chlorine (TRC) or BPT-based limitations for FAC.

End-of-pipe acute and chronic water quality based concentration thresholds for TRC may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	Modified A & C Dilution Factors	Calculated	
			Acute Threshold	Chronic Threshold
0.019 mg/L	0.011 mg/L	197:1 (Mod. A) 924:1 (C)	3.7 mg/L	10.2 mg/L

The BPT-based daily maximum concentration limitation of 0.5 mg/L for FAC is more stringent than the calculated acute water quality-based threshold of 3.7 mg/L for TRC and is therefore being carried forward in this permitting action. The BPT-based monthly average concentration limit of 0.2 mg/L for FAC is more stringent than the calculated chronic water quality-based threshold of 10.2 mg/L for TRC and is therefore being carried forward in this permitting action.

The minimum monitoring frequency requirement of once per month for FAC based on a Department best professional judgment determination of the minimum level of monitoring necessary to assess compliance with the numeric limitations is being carried forward in this permitting action.

A review of the monthly Discharge Monitoring Report (DMR) data for the period April 2007 – October 2010 indicates the facility has been in compliance with the limitations 100% of the time as concentration values have been reported as follows;

FAC Concentration (DMRs=46)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	0.2	0.001 – 0.02	0.012
Daily Maximum	0.5	0.003 – 0.06	0.03

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

- f. Oil and Grease: The previous permitting action established a Department water quality based daily maximum concentration limitation of 15 mg/L for oil and grease. Effluent guidelines promulgated at 40 CFR Part 423.12(b)(3) establish monthly average and daily maximum concentration limitations of 15 mg/L and 20 mg/L, respectively, for oil and grease. The concentration limits was based on a Department best professional judgment of the level at which an oil sheen will be visible and is consistent with other permitting actions.

A review of the monthly Discharge Monitoring Report (DMR) data for the period April 2007 – October 2010 indicates the facility has been in compliance with the limitation 100% of the time as concentration values have been reported as follows;

Oil & grease Concentration (DMRs=46)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	15	1 – 6	3
Daily Maximum	15	1 - 6	3

- g. Temperature: The previous permitting action established a daily maximum temperature limitation of 85 degrees Fahrenheit (85°F) and specified that compliance with this limitation shall be based on continuous temperature measurements taken within the wastewater lagoon during the critical water season months of June, July and August of each year. Department rule, 06-096 CMR, Chapter 582, *Regulations Relating to Temperature*, state, in part,

No discharge of pollutants shall cause the ambient temperature of any freshwater body, as measured outside a mixing zone, to be raised more than 5 degrees Fahrenheit or more than 3 degrees Fahrenheit in the epilimnion (upper mixed layer) of any lake or pond. In no event shall any discharge cause the temperature of any freshwater body to exceed 85 degrees Fahrenheit at a point outside a mixing zone established by the Board, nor shall such discharge cause the temperature of any waters to exceed the U.S. Environmental Protection Agency's national ambient water quality criteria established to protect all species of fish that are indigenous to the receiving waters at any point outside a mixing zone established by the Board. Site specific criteria, generated from a study conducted according to DEP approved methods for indigenous species of fish as defined in 38 M.R.S.A. Sec. 466, may be substituted for national ambient water quality criteria, so long as the site specific criteria are no less protective of species found to be indigenous to those waters, and so long as the public participation requirements of federal and state law, including those found at 40 CFR Part 25, have been met. When the ambient temperature of any body of water naturally exceeds the limits set forth in this section, no thermal discharge may be allowed which alone or in combination with other discharges would raise the ambient temperature of the receiving water more than 0.5 Degrees

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

Fahrenheit above the temperature which would naturally occur outside a mixing zone established by the Board.

In the previous permitting action, the Department had determined that with an effluent temperature of 85°F, average discharge rate of 68,160 GPD, and a 7Q10 river flow of 197 cubic feet per second, the calculated river potential change (ΔT) would be 0.01 degrees F. This ΔT is less than the 0.5 degrees F threshold established in Chapter 582 and, thus, is protective of receiving water quality and designated uses.

A review of the monthly Discharge Monitoring Report (DMR) data for the period June 2007 – August 2010 indicates the facility has been in compliance with the limitation 100% of the time as summertime discharge temperatures have been reported as follows;

Temperature (DMRs=11)

Value	Limit (°F)	Range (°F)	Mean (°F)
Daily Maximum	85	68 – 77	73

This permitting action is carrying forward the continuous lagoon temperature monitoring requirement during the months of June, July and August of each year.

- h. **pH:** The previous permitting action established, and this permitting action is carrying forward, a BPT-based pH limit of 6.0 – 9.0 standard units, which is based on the effluent guideline limitations promulgated at 40 CFR Part 423.12(b)(1), and a continuous monitoring requirement. Department rule, Chapter 525 subsection 4.VIII states, in part, that where a permittee continuously measures the pH of wastewater pursuant to a requirement NPDES permit, the permittee shall maintain the pH of such wastewater within the range set forth in the applicable effluent limitations guidelines, except excursions from the range are permitted subject to the following limitations:

- (1) The total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and
- (2) No individual excursion from the range of pH values shall exceed 60 minutes.

Special Condition A, *Effluent Limitations and Monitoring Requirements*, of this permit provides for excursions from the pH range limitation as described above pursuant to Department rule Chapter 525.

A review of the DMR data for the period January 2007 – May 2010 indicates the permittee has been in compliance with the pH limitations 100% of the time in said period as pH values have ranged from 6.0 standard units (su) to 9.0 su.

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

- i. Total Chromium: The previous permitting action established monthly average and daily maximum concentration limits of 0.2 mg/L for total chromium based on promulgated effluent guideline limitations for total chromium found at 40 CFR Part 423.13(d)(1), which are applicable to the discharge of wastewater from the Boralex facility. The previous permit also established technology based monthly average and daily maximum limitations of 0.1 lbs/day and 0.2 lbs/day respectively as Department rule Chapter 523, *Waste Discharge License Conditions*, Section 6, *Calculating NPDES permit conditions*, sub-section f(2) states that "... pollutants limited in terms of mass additionally may be limited in terms of other units of measurement and the permit shall require the permittee to comply with both limitations." The mass limitations for total chromium were derived as follows:

Monthly Average Chromium Mass Limit: $(0.2 \text{ mg/L})(8.34)(0.068160 \text{ MGD}) = 0.1 \text{ lbs./day}$

Daily Maximum Chromium Mass Limit: $(0.2 \text{ mg/L})(8.34)(0.138 \text{ MGD}) = 0.2 \text{ lbs/day}$

A review of the monthly Discharge Monitoring Report (DMR) data for the period April 2007 – October 2010 indicates the facility has been in compliance with the limitation 100% of the time as concentration and mass values for Outfall #001E have been reported as follows;

Chromium Concentration (DMRs=14)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	0.2	0.015 – 0.05	0.018
Daily Maximum	0.2	0.015 – 0.05	0.018

Chromium Mass (DMRs=14)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	0.1	0.005 – 0.024	0.008
Daily Maximum	0.2	0.005 – 0.024	0.008

The previous permitting action established a minimum monitoring frequency requirement of once per calendar quarter for total chromium that is being carried forward in this permitting action and was based on a Department best professional judgment determination of the minimum level of monitoring necessary to assess compliance with the numeric limitations.

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

- j. Total Zinc: The previous permitting action established monthly average and daily maximum concentration limits of 0.1 mg/L for total zinc based on promulgated effluent guideline limitations for total zinc found at 40 CFR Part 423.13(d)(1), which are applicable to the discharge of wastewater from the Boralex facility. The previous permit also established technology based monthly average and daily maximum limitations of 0.6 lbs/day and 1.2 lbs/day respectively as Department rule Chapter 523, *Waste Discharge License Conditions*, Section 6, *Calculating NPDES permit conditions*, sub-section f(2) states that "... pollutants limited in terms of mass additionally may be limited in terms of other units of measurement and the permit shall require the permittee to comply with both limitations." The mass limitations for total zinc were derived as follows:

Monthly Average Zinc Mass Limit: $(1.0 \text{ mg/L})(8.34)(0.068160 \text{ MGD}) = 0.6 \text{ lbs/day}$

Daily Maximum Zinc Mass Limit: $(1.0 \text{ mg/L})(8.34)(0.138 \text{ MGD}) = 1.2 \text{ lbs/day}$

A review of the monthly Discharge Monitoring Report (DMR) data for the period April 2007 – October 2010 indicates the facility has been in compliance with the limitation 100% of the time as concentration and mass values for Outfall #001E have been reported as follows;

Zinc Concentration (DMRs=13)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	0.1	0.024 – 0.056	0.031
Daily Maximum	0.1	0.024 – 0.056	0.031

Zinc Mass (DMRs=13)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	0.6	0.008 – 0.034	0.015
Daily Maximum	1.2	0.008 – 0.034	0.015

The previous permitting action established a minimum monitoring frequency requirement of once per calendar quarter for total chromium that is being carried forward in this permitting action and was based on a Department best professional judgment determination of the minimum level of monitoring necessary to assess compliance with the numeric limitations.

- k. Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing: Maine law, 38 M.R.S.A., §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 rule, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program* (toxics rule) sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated

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

uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

Chapter 530 Section (2)(A) specifies the dischargers subject to the rule as, “*all licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedences of narrative or numerical water quality criteria.*”

Boralex does not discharge industrial process wastewater or domestic wastes as defined by Chapter 530. Further, 40 CFR Part 423.13(d)(1) and Special Condition A of this permit specify that there shall be no detectable levels of the 126 priority pollutants as specified in *Appendix A to Part 423 – 126 Priority Pollutants*. The Department has no information at this time that the discharge from Boralex contains toxic compounds in toxic amounts and is not requiring the facility to perform WET, priority pollutant, or analytical chemistry testing. However, in accordance with Special Condition H, *Reopening of Permit For Modifications*, of this permit, the Department reserves the right to reopen this permit at any time and with notice to the permittee to establish toxics testing requirements pursuant to Chapter 530 based on new information regarding the sources or characterization of wastewater discharged via Outfall #001A.

1. Mercury: Pursuant to Maine law, 38 M.R.S.A. §420 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W007365-5S-C-R by establishing interim average and maximum effluent concentration limits of 72.5 parts per trillion (ppt) and 108.7 ppt, respectively, and a minimum monitoring frequency requirement of two (2) tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001. However, effective June 15, 2001, the Maine Legislature enacted Maine law, 38 M.R.S.A. §413, sub-§11 specifying that interim mercury limits and monitoring requirements remain in effect. It is noted that the mercury effluent limitations have not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit as the limits and monitoring frequencies are regulated separately through Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519. The interim mercury limits remain in effect and enforceable and modifications to the limits and/or monitoring frequencies will be formalized outside of this permitting document pursuant to Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519.

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

Maine law 38 M.R.S.A., §420 1-B,(B)(1) states that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413, subsection 11. A review of the Department's database for the previous 72-month period indicates mercury test results reported have ranged from 4.6 ppt to 89 ppt with an arithmetic mean (n=14) of 16.2 ppt.

7. 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 water body to meet standards for Class C classification.

8. PUBLIC COMMENTS

Public notice of this application was made in the Star Herald newspaper on or about February 9, 2011. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

9. DEPARTMENT CONTACTS

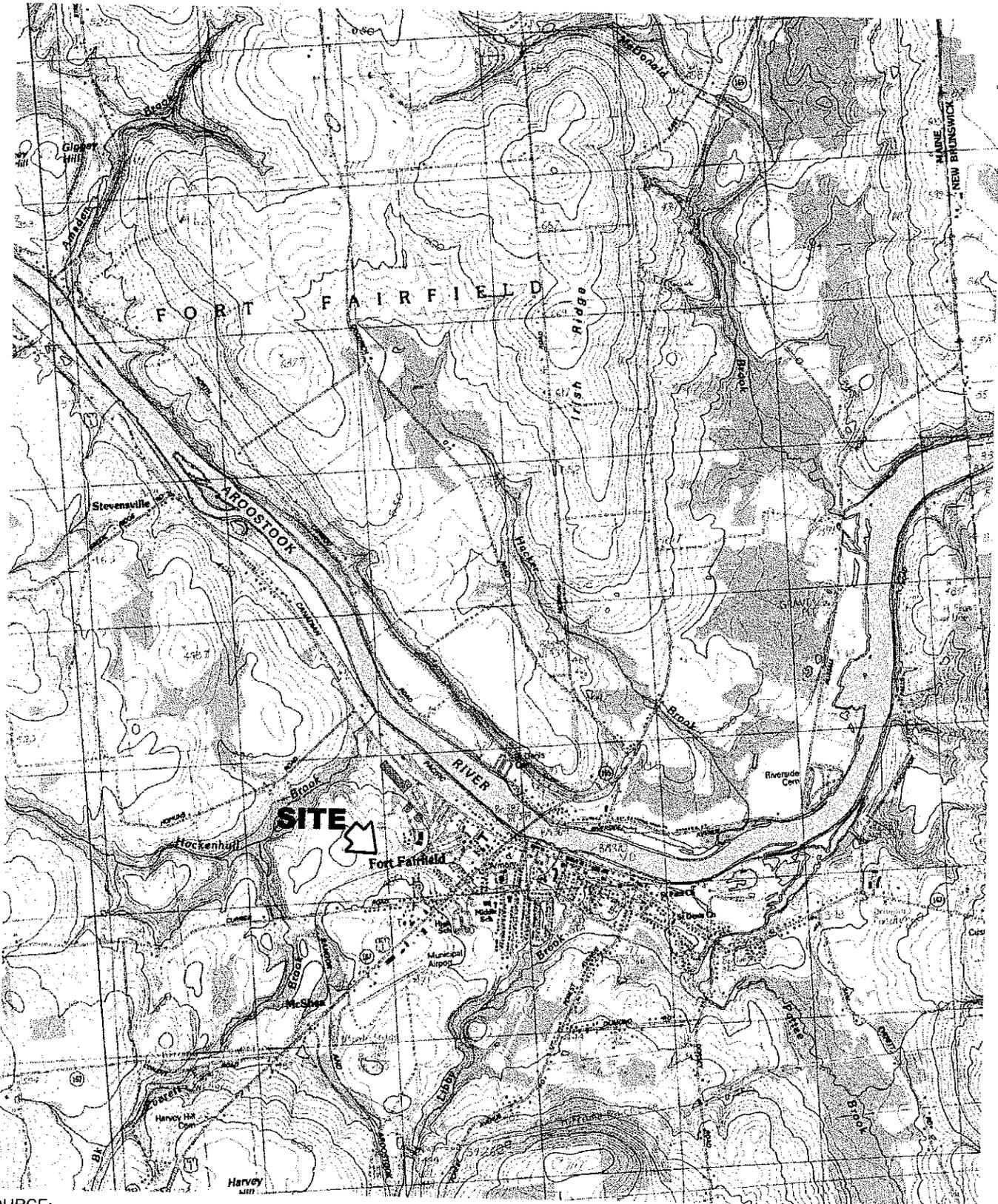
Additional information concerning this permitting action may be obtained from, and written comments sent to:

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

10. RESPONSE TO COMMENTS

During the period of April 20, 2011, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department did not receive comments from the permittee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the permit. Therefore, the Department has not prepared a Response to Comments.

ATTACHMENT A



SOURCE:
 U.S.G.S. TOPOGRAPHIC QUADRANGLE
 FORT FAIRFIELD
 © 1:24,000

ENGINEERS • SURVEYORS
 465 So. Main Street, P.O. Box 639, Brewer, ME 04412
 Tel: 207-989-4824 Fax 207-989-4881

**BORALEX
 FORT FAIRFIELD, MAINE
 LOCATION MAP**

11/29/06
 1606



MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

CONTENTS

SECTION	TOPIC	PAGE
A	GENERAL PROVISIONS	
1	General compliance	2
2	Other materials	2
3	Duty to Comply	2
4	Duty to provide information	2
5	Permit actions	2
6	Reopener clause	2
7	Oil and hazardous substances	2
8	Property rights	3
9	Confidentiality	3
10	Duty to reapply	3
11	Other laws	3
12	Inspection and entry	3
B	OPERATION AND MAINTENANCE OF FACILITIES	
1	General facility requirements	3
2	Proper operation and maintenance	4
3	Need to halt reduce not a defense	4
4	Duty to mitigate	4
5	Bypasses	4
6	Upsets	5
C	MONITORING AND RECORDS	
1	General requirements	6
2	Representative sampling	6
3	Monitoring and records	6
D	REPORTING REQUIREMENTS	
1	Reporting requirements	7
2	Signatory requirement	8
3	Availability of reports	8
4	Existing manufacturing, commercial, mining, and silvicultural dischargers	8
5	Publicly owned treatment works	9
E	OTHER PROVISIONS	
1	Emergency action - power failure	9
2	Spill prevention	10
3	Removed substances	10
4	Connection to municipal sewer	10
F	DEFINITIONS	10

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

A. GENERAL PROVISIONS

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

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

B. OPERATION AND MAINTENANCE OF FACILITIES

1. General facility requirements.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

5. Bypasses.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

6. Upsets.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

5. Publicly owned treatment works.

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

E. OTHER REQUIREMENTS

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

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

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



DEP INFORMATION SHEET

Appealing a Commissioner's Licensing Decision

Dated: May 2004

Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner: (1) in an administrative process before the Board of Environmental Protection (Board); or (2) in a judicial process before Maine's Superior Court. This INFORMATION SHEET, in conjunction with consulting statutory and regulatory provisions referred to herein, can help aggrieved persons with understanding their rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

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

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

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

HOW TO SUBMIT AN APPEAL TO THE BOARD

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

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

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

1. *Aggrieved Status.* Standing to maintain an appeal requires the appellant to show they are particularly injured by the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.

5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
7. *New or additional evidence to be offered.* The Board may allow new or additional evidence as part of an appeal only when the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or show that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2, Section 24(B)(5).

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

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

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

The Board will formally acknowledge initiation of the appeals procedure, including the name of the DEP project manager assigned to the specific appeal, within 15 days of receiving a timely filing. The notice of appeal, all materials accepted by the Board Chair as additional evidence, and any materials submitted in response to the appeal will be sent to Board members along with a briefing and recommendation from DEP staff. Parties filing appeals and interested persons are notified in advance of the final date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision. The Board will notify parties to an appeal and interested persons of its decision.

II. APPEALS TO MAINE SUPERIOR COURT

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

ADDITIONAL INFORMATION

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

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.
