

STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

October 11, 2016

Mr. Kevin Paradis
MFGR, LLC
1564 King Street
Enfield, CT. 06082
e-mail: kevinparadis.mfgr@gmail.com

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0002020
Maine Waste Discharge License (WDL) Application #W002226-5O-O-R
Final Permit

Dear Mr. Paradis:

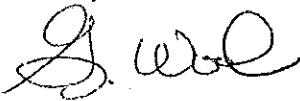
Enclosed please find a copy of your **final** MEPDES permit and Maine WDL **renewal** which was approved by the Department of Environmental Protection. Please read this permit/license renewal and its attached conditions carefully. Compliance with this permit/license will protect water quality.

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. Your Department compliance inspector copied below is also a resource that can assist you with compliance. Please do not hesitate to contact them with any questions.

Thank you for your efforts to protect and improve the waters of the great state of Maine!

Sincerely,



Gregg Wood
Division of Water Quality Management
Bureau of Water Quality

Enc.

cc: Gary Brooks, DEP/EMRO Lori Mitchell, DEP/CMRO
Sandy Mojica, USEPA Olga Vergara, USEPA

Marelyn Vega, USEPA

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826

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

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

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



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

DEPARTMENT ORDER

IN THE MATTER OF

MFGR, LLC) MAINE POLLUTANT DISCHARGE
NON-PROCESS INDUSTRIAL/COMMERCIAL) ELIMINATION SYSTEM PERMIT
OLD TOWN, PENOBSCOT COUNTY, MAINE) AND
ME0002020) WASTE DISCHARGE LICENSE
W002226-5O-O-R APPROVAL) RENEWAL

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

APPLICATION SUMMARY

MFGR has filed an application with the Department to renew Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0002020/Maine Waste Discharge License (WDL) #W002226-5N-H-R that was issued by the Department on May 19, 2011, and is due to expire on May 19, 2016. The May 19, 2011, permit was issued to Red Shield Acquisition LLC. The mill located in Old Town, Maine manufactured an average of 566 tons/day bleached kraft market pulp. The permit authorized the monthly average discharge of 24.4 million gallons per day (MGD) of treated process waters (including storm water and transported wastes) and other waste waters associated with the pulp and papermaking process, non-contact cooling waters, turbine condensing waters and filter backwash waters from three outfalls to the Penobscot River.

On December 4, 2014, the May 19, 2011, permit was transferred from Red Shield Acquisition LCC to Expera Old Town, LLC. On October 2, 2015, Expera terminated all pulp and or papermaking operations at the Old Town mill due to poor economic conditions. The waste water treatment facility continues to operate but the waste water characteristics are no longer representative of a kraft pulp mill operation as sources of waste water are primarily storm water, landfill leachate from the Juniper Ridge Landfill, waste water from the commercial LaBree's Bakery, filter backwash from the Orono-Veazie Water District and septage dewatering filtrate, leachate and storm water runoff from a composting facility.

APPLICATION SUMMARY (cont'd)

MFGR LLC's MEPDES permit qualifies for a re-classification from a major facility to a minor facility given the cessation of production at the facility, the reduction in conventional pollutant loading, lack of reasonable potential for toxicity, and lack of public health impacts associated with the current discharge. Therefore, this minor revision is re-classifying the MEPDES permit from a major facility to a minor facility by changing the type code for the facility from "5N" (major industrial facility process wastewater) to a "5O" (minor industrial facility process wastewater).

Should the facility resume pulp and or paper making operations at the former mill, realize a significant increase in conventional pollutant loading, a reasonable potential to exceed ambient water quality criteria or impact to public health above current levels, the classification for the facility may revert back to a major facility.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated September 7, 2016, 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., Section 464(4)(F), will be met, in that:
 - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
 - (c) 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

CONCLUSIONS (cont'd)

- (e) Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
- 4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

ACTION

THEREFORE, the Department APPROVES the above noted application of the MFGR LLC, to discharge treated storm water, landfill leachate, waste water from a commercial bakery, filter backwash from a water treatment plant, and septage dewatering filtrate, leachate and storm water runoff from a composting facility to the Penobscot River, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

- 1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits," revised July 1, 2002, copy attached.
- 2. The attached Special Conditions, including effluent limitations and monitoring requirements.
- 3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years thereafter. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of 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. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (amended October 19, 2015)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS 12th DAY OF October 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Kuhns
for Paul Mercer, Commissioner

Date of initial receipt of application: March 17, 2016

Date of application acceptance: March 17, 2016

Date filed with Board of Environmental Protection _____

This order prepared by Gregg Wood, Bureau of Water Quality
ME0002020 2016 10/4/16

Filed
OCT 17 2016
State of Maine Board of Environmental Protection

SPECIAL CONDITION

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- The permittee is authorized to discharge secondary treated waste waters from **Outfall #001** to the Penobscot River. Such discharges shall be limited and monitored by the permittee as specified below. The italicized numeric values in brackets in the table below and the tables that follow are not limitations but are code numbers used by Department personnel to code Discharge Monitoring Reports (DMR's).

OUTFALL #001 – Secondary treated waste waters

Effluent Characteristic	Discharge Limitations			Monitoring Requirements		
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow ^[50050]	2.0 MGD ^[03]	Report MGD ^[03]	----	----	Continuous ^[9999]	Recorder ^[RC]
pH ^[00400]	----	----	----	6.0 – 9.0 SU ^[12]	1/Week ^[0107]	Grab ^[GR]
BOD ₅ ^[00310]	667 lbs/day ^[26]	1,334 lbs/day ^[26]	Report mg/L ^[19]	Report mg/L ^[19]	1/Week ^[0107]	Composite ^[24]
TSS ^[00530]	1,735 lbs/day ^[26]	3,670 lbs/day ^[26]	Report mg/L ^[19]	Report mg/L ^[19]	1/Week ^[0107]	Composite ^[24]
Ammonia (as N) ^[00610]	----	----	4.9 mg/L ^[19]	10 mg/L ^[19]	1/Year ^[01YR]	Composite ^[24]
Zinc (Total) ^[01021]	----	----	110 ug/L ^[28]	200 ug/L ^[28]	1/Year ^[01YR]	Composite ^[24]
α Terpineol ^[31031]	----	----	16 ug/L ^[28]	33 ug/L ^[28]	1/Year ^[01YR]	Composite ^[24]
Benzoic acid ^[77247]	----	----	71 ug/L ^[28]	120 ug/L ^[28]	1/Year ^[01YR]	Composite ^[24]
ρ Cresol ^[79778]	----	----	14 ug/L ^[28]	25 ug/L ^[28]	1/Year ^[01YR]	Composite ^[24]
Phenol (Total) ^[03604]	----	----	15 ug/L ^[28]	26 ug/L ^[28]	1/Year ^[01YR]	Composite ^[24]
Mercury (Total) ⁽¹⁾ ^[71900]	----	----	18.5 ng/L ^[3M]	27.8 ng/L ^[3M]	1/Year ^[01YR]	Grab ^[GR]

SPECIAL CONDITION

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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

Effluent Characteristic	Discharge Limitations			Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Measurement Frequency	Sample Type
Whole Effluent Toxicity⁽²⁾ <u>Acute - NOEL</u> Ceriodaphnia dubia (Water flea) [7DA38] Salvelinus fontinalis (Brook trout) [7DA6F]	---	---	-- ---	1/Year [01YR] 1/Year [01YR]	24-Hour Composite [24]
Chronic - NOEL Ceriodaphnia dubia (Water flea) [7BP38] Salvelinus fontinalis (Brook trout) [7BC6F] Analytical chemistry ^(3,5) [51477]	---	---	--- ---	1/Year [01YR] 1/Year [01YR] 1/Quarter [01QTR]	24-Hour Composite [24] 24-Hour Composite/Grab [24]
Priority Pollutants ^(4,5) [50008]	---	---	---	1/Year [01YR]	24-Hour Composite/Grab [24]

SPECIAL CONDITIONS

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

Footnotes:

Monitoring location– All effluent monitoring shall be conducted at a location following the last treatment unit in the treatment process as to be representative of end-of-pipe effluent characteristics. Any change in sampling location must be approved by the Department in writing.

Sampling - Sampling and analysis must be conducted in accordance with; a) methods approved in 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Human Services for waste water testing. Samples that are analyzed by laboratories at a waste water treatment facility licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 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 April 1, 2010). 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 this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

1. **Mercury** – The permittee must conduct all mercury monitoring required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the USEPA's "clean sampling techniques" found in USEPA Method 1669, *Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels*. All mercury analysis must be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry*. See **Attachment A** of this permit for a Department report form for mercury test results. Compliance with the monthly average limitation established in Special Condition A of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.
2. **Whole effluent toxicity (WET) testing** - Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical modified acute and chronic thresholds of 0.5% and 0.1% respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction or growth as the end points. The critical acute and chronic thresholds were derived as the mathematical inverses of the applicable modified acute and chronic dilution factors of 204:1 and 906:1, respectively.

SPECIAL CONDITIONS

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

Footnotes:

- a. **Surveillance level testing** – Surveillance level testing is waived per 06-096 CMR 530 (2)(D)(3)(b).
- b. **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level WET testing at a minimum frequency of once per year (1/Year) for both species. Acute and chronic tests shall be conducted on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*).

WET test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the laboratory reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedances of the critical modified acute and chronic water quality thresholds of 0.5% and 0.1%, respectively.

Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following U.S.E.P.A. methods manuals as modified by Department protocol for salmonids. See **Attachment B** of this permit for the Department protocol.

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

Results of WET tests must be reported on the “Whole Effluent Toxicity Report Fresh Waters” form included as **Attachment C** of this permit each time a WET test is performed. The permittee is required to analyze the effluent for the analytical chemistry parameters specified on the “WET and Chemical Specific Data Report Form” form included as **Attachment D** of this permit each time a WET test is performed.

SPECIAL CONDITIONS

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

Footnotes:

3. **Analytical chemistry** – Refers to a suite of chemical tests listed in **Attachment D** of this permit.
 - a. **Surveillance level testing** – Surveillance level testing is waived per 06-096 CMR 530 (2)(D)(3)(b).
 - b. **Screening level testing** – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct analytical chemistry testing at a minimum frequency of once per calendar quarter (1/Quarter) for four consecutive calendar quarters.
4. **Priority pollutant testing** – Refers to a suite of chemical tests listed in **Attachment D** of this permit.

Screening level testing - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year). Surveillance level priority pollutant testing is not required pursuant to 06-096 CMR 530 (2)(D).

5. **Priority pollutant and analytical chemistry** - Testing must be conducted on samples collected at the same time as those collected for whole effluent toxicity tests when applicable. Priority pollutant and analytical chemistry testing must be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve minimum reporting levels of detection as specified by the Department.

Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department, possible exceedances of the acute, chronic or human health AWQC as established in 06-096 CMR 584. For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "N-9" monitoring not required this period.

SPECIAL CONDITIONS

B. NARRATIVE EFFLUENT LIMITATIONS

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

C. TREATMENT PLANT OPERATOR

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

D. NOTIFICATION REQUIREMENT

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

1. Any substantial change (realized or anticipated) in the volume or character of pollutants being introduced into the waste water collection and treatment system.
2. For the purposes of this section, adequate notice must include information on:
 - a. The quality and quantity of waste water introduced to the waste water collection and treatment system; and
 - b. Any anticipated change in the quality and quantity of the waste water to be discharged from the treatment system.

SPECIAL CONDITIONS

E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with; 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on March 17, 2016; 2) the terms and conditions of this permit, and 3) only from Outfall #001. Discharges of wastewater from any other point source are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit.

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

By December 31 of each calendar year [ICIS Code 75305], the permittee must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit. See **Attachment C** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

- (a) Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;
- (b) Changes in the operation of the treatment works that may increase the toxicity of the discharge; and
- (c) Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge.
- (d) Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge.
- (e) Increases in the type or volume of hauled wastes accepted by the facility.

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

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 a Department Regional Office such that the DMR's are received by the Department on or before the fifteenth (15th) day of the month following the completed reporting period. A signed copy of the DMR and all other reports required herein shall be submitted to the following address:

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

Alternatively, if you are submitting an electronic DMR, the completed DMR 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 DMR 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 DMR 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 MODIFICATIONS

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

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

Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____

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

SAMPLE COLLECTION INFORMATION

Sampling Date:	<input type="text"/>	<input type="text"/>	<input type="text"/>	Sampling time:	<input type="text"/>	AM/PM
	mm	dd	yy			
Sampling Location:	_____					
Weather Conditions:	_____					
Please describe any unusual conditions with the influent or at the facility during or preceding the time of sample collection:						
Optional test - not required but recommended where possible to allow for the most meaningful evaluation of mercury results:						
Suspended Solids	<input type="text"/>	mg/L	Sample type:	<input type="text"/>	Grab (recommended) or Composite	

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory:	_____					
Date of analysis:	<input type="text"/>	Result:	<input type="text"/>	ng/L (PPT)		
Please Enter Effluent Limits for your facility						
Effluent Limits:	Average =	<input type="text"/>	ng/L	Maximum =	<input type="text"/>	ng/L
Please attach any remarks or comments from the laboratory that may have a bearing on the results or their interpretation. If duplicate samples were taken at the same time please report the average.						

CERTIFICATION

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

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT B

Salmonid Survival and Growth Test

The Salmonid survival and growth test must follow the procedures for the fathead minnow larval survival and growth tests detailed in USEPA's freshwater acute and chronic methods manuals with the following Department modifications:

Species - Brook Trout, *Salvelinus fontinalis*, or other salmonid approved by the Department.

Age - Less than six months old for the first test each year and less than twelve months for subsequent tests.

Size - The largest fish must not be greater than 150% of the smallest.

Loading Rate - < 0.5 g/l/day

Feeding rate - 5% of body weight 3 times daily (15%/day)

Temperature - $12^{\circ} \pm 1^{\circ}\text{C}$

Dissolved Oxygen - 6.5 mg/l ,aeration if needed with large bubbles (> 1 mm diameter) at a rate of <100/min

Dilution Water - Receiving water upstream of discharge (or other ambient water approved by the Department)

Dilution Series - A minimum of 5 effluent concentrations (including the instream waste concentrations bracketing acute and chronic dilutions calculated pursuant to Section D); a receiving water control; and control of known suitable water quality

Duration - Acute = 48 hours
- Chronic = 10 days minimum

Test acceptability - Acute = minimum of 90% survival in 2 days
- Chronic = minimum of 80% survival in 10 days; minimum growth of 20 mg/gm/d dry weight in controls, (individual fish weighed, dried at 100°C to constant weight and weighed to 3 significant figures)

ATTACHMENT C

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

Facility Name _____ MEPDES Permit # _____

Facility Representative _____ Signature _____

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

Facility Telephone # _____ Date Collected _____ Date Tested _____
mm/dd/yy mm/dd/yy

Chlorinated? _____ Dechlorinated? _____

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

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

place * next to values statistically different from controls

for trout show final wt and % incr for both controls

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

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

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

ATTACHMENT D

Maine Department of Environmental Protection
WET and Chem

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

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

Licensed Flow (MGD) _____ Flow Avg. for Month (MGD)⁽²⁾ _____
 Acute dilution factor _____ Date Sample Collected _____
 Chronic dilution factor _____ Date Sample Analyzed _____
 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	Effluent Limits, %		Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)	Reporting Limit Check	Possible Exceedance (7)	
	Acute	Chronic				Acute	Chronic
Trout - Acute							
Trout - Chronic							
Water Flea - Acute							
Water Flea - Chronic							
WET CHEMISTRY							
pH (S.U.) (9)							
Total Organic Carbon (mg/L)			(8)				
Total Solids (mg/L)			(8)				
Total Suspended Solids (mg/L)			(8)				
Alkalinity (mg/L)			(8)				
Specific Conductance (umhos)			(8)				
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 optional WET. Testing on the receiving water is optional							
TOTAL RESIDUAL CHLORINE (mg/L) (3)	Reporting Limit	Effluent Limits, ug/L	Health (5)		Reporting Limit Check	Possible Exceedance (7)	
	0.05	Acute (6)	Chronic (6)	Health (5)	Acute	Chronic	Health
AMMONIA	NA			NA			
ALUMINUM	NA			(8)			
ARSENIC	5			(8)			
CADMIUM	1			(8)			
CHROMIUM	10			(8)			
COPPER	3			(8)			
CYANIDE, TOTAL	5			(8)			
CYANIDE, AVAILABLE (2a)	5			(8)			
LEAD	3			(8)			
NICKEL	5			(8)			
SILVER	1			(8)			
ZINC	5			(8)			

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)	
	Acute (6)	Chronic (6)	Chronic (6)	Health (6)		Acute	Chronic
M ANTIMONY	5						
M BERYLLIUM	2						
M MERCURY	0.2						
M SELENIUM	5						
M THALLIUM	4						
A 2,4,6-TRICHLOROPHENOL	5						
A 2,4-DICHLOROPHENOL	5						
A 2,4-DIMETHYLPHENOL	5						
A 2,4-DINITROPHENOL	45						
A 2-CHLOROPHENOL	5						
A 2-NITROPHENOL	5						
A 4,6 DINITRO-O-CRESOL (2-Methyl-4,6-dinitrophenol)	25						
A 4-NITROPHENOL	20						
A P-CHLORO-M-CRESOL (3-methyl-4-chlorophenol)-B30	5						
A PENTACHLOROPHENOL	20						
A PHENOL	5						
BN 1,2,4-TRICHLOROBENZENE	5						
BN 1,2-DICHLOROBENZENE	5						
BN 1,2-DIPHENYLHYDRAZINE	20						
BN 1,3-(M)DICHLOROBENZENE	5						
BN 1,4-(P)DICHLOROBENZENE	5						
BN 2,4-DINITROTOLUENE	6						
BN 2,6-DINITROTOLUENE	5						
BN 2-CHLORONAPHTHALENE	5						
BN 3,3'-DICHLOROBENZIDINE	16.5						
BN 3,4-BENZO(B)FLUORANTHENE	5						
BN 4-BROMOPHENYLPHENYL ETHER	5						
BN 4-CHLOROPHENYLPHENYL ETHER	5						
BN ACENAPHTHENE	5						
BN ACENAPHTHYLENE	5						
BN ANTHRACENE	5						
BN BENZIDINE	45						
BN BENZO(A)ANTHRACENE	8						
BN BENZO(A)PYRENE	5						
BN BENZO(G,H,I)PERYLENE	5						
BN BENZO(K)FLUORANTHENE	5						
BN BIS(2-CHLOROETHOXY)METHANE	5						
BN BIS(2-CHLOROETHYL)ETHER	6						
BN BIS(2-CHLOROISOPROPYL)ETHER	6						
BN BIS(2-ETHYLHEXYL)PHTHALATE	10						
BN BUTYLBENZYL PHTHALATE	5						
BN CHRYSENE	5						
BN DI-N-BUTYL PHTHALATE	5						
BN DI-N-OCTYL PHTHALATE	5						
BN DIBENZO(A,H)ANTHRACENE	5						
BN DIETHYL PHTHALATE	5						
BN DIMETHYL PHTHALATE	5						
BN FLUORANTHENE	5						

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

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

Notes:

- (1) Flow average for day pertains to WET/PP composite sample day.
- (2) Flow average for month is for month in which WET/PP sample was taken.
- (3) Analytical chemistry parameters must be done as part of the WET test chemistry.
- (3a) Cyanide, Available (Cyanide Amenable to Chlorination) is not an analytical chemistry parameter, but may be required by certain discharge permits.
- (4) Priority Pollutants should be reported in micrograms per liter (ug/L).

~~(5) Metals listed are reported in micrograms per liter (ug/L) by the contact laboratory so be sure to contact your program supervisor for the 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:

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STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. OPERATION AND MAINTENANCE OF FACILITIES

1. General facility requirements.

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

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

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

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

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

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

5. Bypasses.

(a) Definitions.

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

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

(c) Notice.

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

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

(d) Prohibition of bypass.

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

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(C) The permittee submitted notices as required under paragraph (c) of this section.

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

6. Upsets.

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

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

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

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;

(ii) The permitted facility was at the time being properly operated; and

(iii) The permittee submitted notice of the upset as required in paragraph D(1)(f), below. (24 hour notice).

(iv) The permittee complied with any remedial measures required under paragraph B(4).

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

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C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

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D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

5. Publicly owned treatment works.

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

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

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

E. OTHER REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

AND

MAINE WASTE DISCHARGE LICENSE

FACT SHEET

September 7, 2016

PERMIT NUMBER: ME0002020

LICENSE NUMBER: W002226-5O-O-R

NAME AND ADDRESS OF APPLICANT

**MFGR LLC
1564 King Street
Enfield, CT. 06082**

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

**FORMER EXPERA MILL COMPLEX
24 Portland Street
Old Town, Maine 04468**

COUNTY: Penobscot

RECEIVING WATERS/CLASSIFICATIONS: Penobscot River / Class B

**COGNIZANT OFFICIAL AND TELEPHONE NUMBER: Mr. Kevin Paradis
MFGR, LLC
(207) 951-2729
e-mail: kevinparadis.mfgr@gmail.com**

1. APPLICATION SUMMARY

MFGR LLC (MFGR/permittee hereinafter) has filed an application with the Department to renew Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0002020/Maine Waste Discharge License (WDL) #W002226-5N-H-R that was issued by the Department on May 19, 2011, and is due to expire on May 19, 2016. The May 19, 2011, permit was issued to Red Shield Acquisition LLC. The mill located in Old Town, Maine manufactured an average of 566 tons/day bleached kraft market pulp. The permit authorized the monthly average discharge of 24.4 million gallons per day (MGD) of treated process waters (including storm water and transported wastes) and other waste waters associated with the pulp and papermaking process, non-contact cooling waters, turbine condensing waters and filter backwash waters from three outfalls to the Penobscot River.

1. APPLICATION SUMMARY (cont'd)

On December 4, 2014, the May 19, 2011, permit was transferred from Red Shield Acquisition LCC to Expera Old Town, LLC. On October 2, 2015, Expera terminated all pulp and or papermaking operations at the Old Town mill due to poor economic conditions. The waste water treatment facility continues to operate but the waste water characteristics are no longer representative of a kraft pulp mill operation as sources of waste water are primarily storm water, landfill leachate from the Juniper Ridge Landfill, waste water from the commercial LaBree's Bakery, filter backwash from the Orono-Veazie Water District and septage dewatering filtrate, leachate and storm water runoff from a composting facility. The Juniper Ridge Landfill is owned by the State of Maine and is part of the solid waste disposal system within the state that provides for Maine's solid waste disposal needs. Juniper Ridge Landfill accepts residues from waste-to-energy facilities, construction/demolition debris and other wastes generated within the State. Juniper Ridge Landfill is operated by New England Waste Services of Maine, LLC, a subsidiary of Casella Waste Systems. See **Attachment A** of this Fact Sheet for a location map.

2. PERMIT SUMMARY

- a. Terms and Conditions: The terms and conditions of this permit are significantly different than the terms and conditions of the previous permit due to closure of the manufacturing facility.
- b. Regulatory History:

December 27, 1983 – The EPA issued a renewal of NPDES permit #ME0002020 for a five-year term. The permit was issued in the name of the James River Paper Company Inc.

August 19, 1992 – The EPA issued a renewal of NPDES permit #ME0002020 for a Five-year term. The permit was issued in the name of the James River Paper Company Inc.

September 18, 1992 -The James River Paper Company Inc. appealed the EPA's August 19, 1992 permit and requested an evidentiary hearing in regard to limitations and monitoring requirements for dioxin, furan, color, AOX, pH, whole effluent toxicity, fish analysis, a narrative condition regarding PCB discharges, and the narrative description for Outfall #002 contained in the permit. EPA neither denied nor granted such a hearing and thus the permit never became effective and the permit and the appeal have since expired. It is noted that the EPA and FJOC reached a settlement agreement in 1995 to address the appeal but the EPA never modified the NPDES permit to reflect the settlement agreement prior to the State of Maine receiving authorization to administer the NPDES permitting program. In order to resolve the appeal that was pending before the EPA's Environmental Appeals Board and to ensure the contested conditions of the NPDES permit remained in abeyance until the State of Maine issued a MEPDES permit,

2. PERMIT SUMMARY (cont'd)

the EPA withdrew the contested permit conditions pursuant to federal regulation, 40 CFR Part 124.19(d). The remaining terms and conditions of 9/18/92 NPDES permit remained in effect until the MEPDES permit is issued by the State. The Order to accept the removal of the contested permit conditions from FJOC's 1992 NPDES permit was accepted by the federal Environmental Appeals Board judge on May 30, 2001.

February 14, 1994 – The Department issued WDL #W002226-44-D-R for a five-year term.

December 1, 1995 – The EPA issued a formal draft permit modification for a 30-day public comment period. On January 3, 1996, the Department issued a Section 401 water quality certification of the permit. Due to comments received from the USF&WS, the Natural Resources Council of Maine (NRCM) and the Penobscot Indian Nation (PIN) on the draft permit, the permit modification was never issued as a final document.

June 27, 1997 – The James River Corporation submitted an application to the EPA to renew NPDES permit #ME0002020 for the Old Town mill. On July 9, 1997, the EPA issued a letter to the James River Corporation indicating the application was deemed complete for processing.

October 13, 1998 - The Department modified the 2/14/94 WDL by issuing WDL Modification #W002226-5N-E-M. The modification was initiated by the Department and was necessary to implement new legislation regarding color, dioxin and furan limitations found at Maine law, 38 M.R.S.A., §414-C and §420.

February 9, 1999 – The Fort James Operating Company submitted a timely application to the Department to renew the WDL for the Old Town mill.

May 23, 2000 – The Department administratively modified the WDL for the FJOC's Old Town mill by establishing interim limits for mercury pursuant to Maine law, 38 M.R.S.A., §420. The modification established a monthly average limit of 18.5 ng/L and a daily maximum limit of 27.8 ng/L.

August 6, 2002 – The Department issued combination MEPDES permit #ME0002020/WDL W002226-5H-F-R for a five year term.

July 16, 2004 – The Department administratively modified the 8/6/02 permit by suspending monitoring requirements for chloroform in lieu of a certification pursuant to federal regulation 40 CFR Part 430.02(f).

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

2. PERMIT SUMMARY (cont'd)

April 10, 2006 – The Department modified WDL #W002226-5N-F-R to incorporate the terms and conditions of Department rules Chapter 530 and Chapter 584 pertaining to whole effluent toxicity (WET) testing and ambient water quality criteria.

July 27, 2007 – Red Shield submitted a timely and complete application to the Department to renew the 8/2/07 MEPDES permit/WDL.

February 22, 2011 – Red Shield amended their application for renewal by submitting a Transported Waste Application to the Department. Red Shield has requested approval to accept filter backwash waters associated with a local drinking water supply treatment system.

February 22, 2011 – Red Shield amended their application for permit renewal by submitting information regarding waste streams to be treated for the Demonstration Scale Bio-refinery.

May 19, 2011 – The Department issued combination MEPDES permit ME0002020/WDL W00598-5N-N-R for a five year term.

December 4, 2014 – The May 19, 2011, MEPDES permit was transferred from Red Shield Acquisition LCC to Expera Old Town, LLC.

May 19, 2015 – The Department issued a modification of the May 19, 2011, permit by extending the deadline to come into compliance with the water quality based total phosphorus limit.

February 2, 2016 – The Department issued a modification of the May 19, 2011, permit that reduced the monitoring frequencies for biochemical oxygen demand (BOD), total suspended solids (TSS), temperature, pH, whole effluent toxicity (WET) testing and analytical chemistry. The modification also eliminated the technology based limits for adsorbable organic halogens (AOX) and the water quality based total phosphorus limit. All modifications were associated with the permanent shutdown of the kraft pulping operation and updated evaluation of annual ambient water quality monitoring data.

March 17, 2016 – MFGR LLC submitted an application to the Department to renew the MEPDES permit/WDL.

April 26, 2016 – The May 19, 2011, MEPDES permit was transferred from Expera Old Town, LLC to MFGR LLC.

3. CONDITIONS OF PERMITS

Conditions of licenses, 38 M.R.S. § 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, *Certain deposits and discharges prohibited*, 38 M.R.S., § 420 and 06-096 CMR 530 require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S. §467(7)(A)(5-7) classifies the main stem of the Penobscot River from the West Enfield dam to a line extended in an east west direction from a point 1.25 miles upstream of Reeds Brook in Hampden (including the Stillwater Branch), as a Class B waterway.

Maine law 38 M.R.S. §465(3) states in part, the following;

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

The dissolved oxygen content of Class B waters may not be less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration may not be less than 9.5 parts per million and the 1-day minimum dissolved oxygen concentration may not be less than 8.0 parts per million in identified fish spawning areas. Between May 15th and September 30th, the number of Escherichia coli bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 64 per 100 milliliters or an instantaneous level of 236 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures.

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

5. RECEIVING WATER QUALITY CONDITIONS

The following is an excerpt from the State of Maine 2012 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.

“In May 2011, MDEP completed the “Penobscot River Phosphorus Wasteload Allocation” (WLA) report which covered the area from Millinocket to Medway (West Branch Penobscot River) and further down to Bangor/Brewer (mainstem Penobscot River). The WLA report identified a total of four industrial dischargers and six significant municipal dischargers that contribute phosphorus to these segments and in combination cause the observed aquatic life impairments. The report established phosphorus limits for the industrial dischargers and MDEP determined that these reduced loadings would be sufficient to eliminate eutrophic conditions along the entire freshwater portion of the river. Between March and May 2011, MDEP issued MEPDES (Maine Pollutant Discharge Elimination System) permits to all ten dischargers identified in the WLA report. It is expected that the phosphorus limits established in the permits to industrial dischargers will result in the elimination of the aquatic life use impairments by 2016. Monitoring data collected in 2011 showed DO attainment in two critical reaches of the river; preliminary analysis of 2012 data covering the majority of the river also indicate attainment of DO criteria.”

An excerpt from the 2014 Penobscot River Phosphorus Waste Load Allocation Ambient Monitoring Plan Report dated June 2015 by the Department, states:

“No DO non-attainment was measured in association with the Penobscot River Ambient Monitoring Report (PRAMP) during 2014. All data were well above appropriate classification criteria. There were no measured diurnal DO swings that would suggest excessive nutrient enrichment (i.e., > 2.0 mg/L). The 2014 results provide good reason to be optimistic about continued DO attainment, but continued monitoring is recommended....”

The Department therefore delisted five Penobscot River segments, including the segment that contains the City of Brewer discharge, ABD Assessment Unit ME0102000513_234R02 (Main Stem (Penobscot), Veazie Dam to Reeds Brook) as “Category 4-B: Rivers and Streams Impaired by Pollutants – Pollution Control Requirements Reasonably Expected to Result in Attainment” for dissolved oxygen and nutrient/eutrophication biological indicators. A comment in the report states that the segment is “Expected to attain in 2016. Preliminary data from 2011 looks promising” for dissolved oxygen and nutrient/eutrophication biological indicators. The report also lists the segment in question in Category 4-B for dioxin (including 2,3,7,8-TCDD) and states “4-B Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/L detection limit), (2) no detection in fish tissue sampled below a mill’s outfall greater than upstream reference. Expected to attain standards in 2020.” This segment is also listed under “Category 5-D: Rivers and Streams Impaired by Legacy Pollutants” for polychlorinated biphenyls (PCBs).

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

The Report lists all of Maine's fresh waters as, "Category 4-A: 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, "All freshwaters are listed in Category 4A (Total Maximum Daily Load (TMDL) Completed) due to USEPA approval of a Regional Mercury TMDL." Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many fish from any given waters do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption.

Maine has already instituted statewide programs for removal and reduction of mercury sources. Pursuant to 38 M.R.S.A. § 420(1-B)(B), "a facility is not in violation of the ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413 subsection 11." The Department has established interim monthly average and daily maximum mercury concentration limits and reporting requirements for this facility pursuant to 06-096 CMR 519.

The Department is not aware of any information that the discharge from the permittee's facility will cause or contribute to the aforementioned impairments. If future water quality sampling or modeling runs determine that, at full permitted discharge limits, the permittee's discharge is causing or contributing to non-attainment, this permit will be reopened per Special Condition H, *Reopening of Permit For Modifications*, to impose more stringent limitations to meet water quality standards.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

Outfall #001A

Regulatory Basis: The discharge of landfill leachate is subject to National Effluent Guidelines (NEG's) found in Title 40, Code of Federal Regulations (CFR) Part 445, *Landfills Point Source Category*, Subpart B, *RCRA Subtitle D Non-Hazardous Waste Landfill*. NEG 40 CFR Part 445 is applicable given the landfill receives wastes generated by other industrial or commercial operations that are not directly associated with the landfill for the former paper manufacturing facility.

There are no NEG's for the bakery waste water, drinking water filter backwash or leachate/storm water associated with the commercial composting operation. Therefore, the Department is establishing technology based effluent limitations based on the NEG where applicable and technology based effluent limitations based on a past demonstrated performance of the treatment facility for the period January 2013 – February 2016.

- a. Flow: This permitting action is establishing a monthly average discharge flow limitation of 2.0 MGD based on information provided by the permittee of estimated quantities of flow generated by each waste stream.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- b. Dilution Factors: Dilution factors associated with the discharge from the waste water treatment facility were derived in accordance with freshwater protocols established in Department Rule Chapter 530, *Surface Water Toxics Control Program*, October of 2005. With a permitted treatment plant flow of 10 MGD, dilution calculations are:

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

$$\text{Acute: } 1\text{Q}10 = 2,527 \text{ cfs} \Rightarrow \frac{(2,527 \text{ cfs})(0.6464)}{2.0 \text{ MGD}} = 816:1$$

$$\begin{aligned} \text{Modified Acute}^{(1)} \\ \frac{1}{4}1\text{Q}10 = 632 \text{ cfs} \Rightarrow \frac{(632 \text{ cfs})(0.6464)}{2.0 \text{ MGD}} = 204:1 \end{aligned}$$

$$\text{Chronic: } 7\text{Q}10 = 2,802 \text{ cfs} \Rightarrow \frac{(2,802 \text{ cfs})(0.6464)}{2.0 \text{ MGD}} = 906:1$$

$$\text{Harmonic Mean: } = 8,404 \text{ cfs} \Rightarrow \frac{(8,404 \text{ cfs})(0.6464)}{2.0 \text{ MGD}} = 2,716:1$$

- (1) Chapter 530(4)(a) states that analyses using numeric acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone. The 1Q10 is lowest one day flow over a ten year recurrence interval. The regulation goes on to say that where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design, up to including all of it. Based on Department information as to the mixing characteristics of the discharge with the receiving water and a dye study conducted by the permittee in 1996, the Department has made the determination that the discharge does not receive rapid and complete mixing with the receiving water. Therefore, the default stream flow of 1/4 of the 1Q10 is applicable in acute statistical evaluations pursuant to Department Rule Chapter 530.
- (2) The harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3). This multiplying factor is based on guidelines for estimation of human health dilution presented in the USEPA publication *Technical Support Document for Water Quality-based Toxics Control* (Office of Water; EPA/505/2-90-001, page 88), and represents an estimation of harmonic mean flow on which human health dilutions are based in a riverine 7Q10 flow situation.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

Outfall #001A

- c. pH: This permitting action is establishing the technology-based pH range limit of 6.0 – 9.0 standard units (SU), based on the NEG found at 40 CFR, Part 445.21.

A summary of the effluent pH data as reported on the DMRs submitted to the Department for the period January 2013 through February 2016 is as follows:

pH (DMRs = 38)

Value	Limit (su)	Minimum (SU)	Maximum (su)
Range	6.0 – 8.5	6.1	9.1*

*The data indicates this value is the only excursion in the data set.

- d. Biochemical oxygen demand (BOD₅) & Total suspended solids (TSS) – The previous permit established seasonal BOD and TSS limitations based on a past demonstrated performance evaluation of the wastewater treatment plant at the mill. The Department considered the seasonal permit limits to be a best professional judgement (BPJ) of best practicable treatment (BPT. The limits were as follows:

	<u>BOD-5 (lb/day)</u>		<u>TSS (lb/day)</u>	
	Monthly <u>Average</u>	Daily <u>Maximum</u>	Monthly <u>Average</u>	Daily <u>Maximum</u>
Nov. 1 – May 31	8,850	18,000	22,475	42,000
June 1– Oct.31	7,500	18,000	20,000	35,000

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2013 – February 2016 indicates the year round discharge of BOD and TSS has been reported as follows:

BOD Mass (DMRs=38)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	7,500*	78 – 9,706	2,746
Daily Maximum	18,000*	78 – 16,369	5,510

TSS mass (DMRs=38)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	20,000*	457 – 11,897	5,345
Daily Maximum	35,000*	759 – 26,616	11,223

* The most stringent of the seasonal limitations.

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

National Effluent Guideline (NEG) found at 40 CFR, Part 445.21 establishes monthly average and daily maximum technology based concentration limits of 37 mg/L and 140 mg/L respectively for BOD. NEG 40 CFR, Part 445.21 establishes monthly average and daily maximum technology based concentration limits of 27 mg/L and 88 mg/L respectively for TSS.

However, given the other waste streams received and treated at the facility, the Department conducted a statistical evaluation on the discharge data for BOD & TSS for the period January 2013 – February 2016 to make a best professional judgment (BPJ) of best practicable treatment (BPT).

The evaluation determined the 95th percentile of the monthly average mass values and the 99th percentile of the daily maximum values. Due to shutdown periods in August – November of 2014 and again in November of 2015 – February 2016, these values were considered not to be representative of normal operating conditions and removed from the data sets. A summary of the results are as follows:

BOD

Monthly Average (95%) = 4,228 lbs/day
Daily Maximum (99%) = 9,651 lbs/day

TSS

Monthly Average (95%) = 10,813 lbs/day
Daily Maximum (99%) = 26,458 lbs/day

To determine BPT values, one must back-calculate the concentration values for the BOD and TSS based on a statistical evaluation of the monthly average and daily maximum flow values reported. A review of the flow values reported on the DMRs for the period January 2013 – February 2016 are as follows:

Flow (DMRs=38)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	24.4	2.70 – 13.1	8.5
Daily Maximum	Report	3.7 – 14.5	10.6

To be consistent with the statistical evaluation for BOD & TSS, the Department calculated the 95th and 99th percentiles for flow with removal of the data associated with shutdowns. The results are as follows:

Flow

Monthly Average (95%) = 12.5 MGD
Daily Maximum (99%) = 14.4 MGD

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

Concentration values representative of BPT are calculated as follows:

BOD

Monthly average: $\frac{4,228 \text{ lbs/day}}{(12.5 \text{ MGD})(8.34 \text{ lbs/day})} = 40 \text{ mg/L}$

Daily maximum: $\frac{9,651 \text{ lbs/day}}{(14.4 \text{ MGD})(8.34 \text{ lbs/day})} = 80 \text{ mg/L}$

TSS

Monthly average: $\frac{10,813 \text{ lbs/day}}{(12.5 \text{ MGD})(8.34 \text{ lbs/day})} = 104 \text{ mg/L}$

Daily maximum: $\frac{26,458 \text{ lbs/day}}{(14.4 \text{ MGD})(8.34 \text{ lbs/day})} = 220 \text{ mg/L}$

Final technology based mass limitations for BOD and TSS can be calculated as follows:

BOD

Monthly average: $(2.0 \text{ MGD})(8.34 \text{ lbs/day})(40 \text{ mg/L}) = 667 \text{ lbs/day}$

Daily maximum: $(2.0 \text{ MGD})(8.34 \text{ lbs/day})(80 \text{ mg/L}) = 1,334 \text{ lbs/day}$

TSS

Monthly average: $(2.0 \text{ MGD})(8.34 \text{ lbs/day})(104 \text{ mg/L}) = 1,735 \text{ lbs/day}$

Daily maximum: $(2.0 \text{ MGD})(8.34 \text{ lbs/day})(220 \text{ mg/L}) = 3,670 \text{ lbs/day}$

- e. Ammonia (as N) - NEG found at 40 CFR, Part 445.21 establishes monthly average and daily maximum technology based concentration limits of 4.9 mg/L and 10 mg/L respectively. Therefore, this permit establishes monthly average and daily maximum concentration limits of 4.9 mg/L and 10 mg/L respectively for ammonia.
- f. α -Terpineol - NEG found at 40 CFR, Part 445.21 establishes monthly average and daily maximum technology based concentration limits of 0.016 mg/L and 0.033 mg/L respectively. Therefore, this permit establishes monthly average and daily maximum concentration limits of 0.016 mg/L and 0.033 mg/L respectively for α -Terpineol.
- g. Benzoic acid - NEG found at 40 CFR, Part 445.21 establishes monthly average and daily maximum technology based concentration limits of 0.071 mg/L and 0.12 mg/L respectively. Therefore, this permit establishes monthly average and daily maximum concentration limits of 0.071 mg/L and 0.12 mg/L respectively for benzoic acid.

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

- h. p-Cresol - NEG found at 40 CFR, Part 445.21 establishes monthly average and daily maximum technology based concentration limits of 0.014 mg/L and 0.025 mg/L respectively. Therefore, this permit establishes monthly average and daily maximum concentration limits of 0.014 mg/L and 0.025 mg/L respectively for p-Cresol.
- i. Phenol - NEG found at 40 CFR, Part 445.21 establishes monthly average and daily maximum technology based concentration limits of 0.015 mg/L and 0.026 mg/L respectively. Therefore, this permit establishes monthly average and daily maximum concentration limits of 0.015 mg/L and 0.026 mg/L respectively for phenol.
- j. Zinc (Total) - NEG found at 40 CFR, Part 445.21 establishes monthly average and daily maximum technology based concentration limits of 0.11 mg/L and 0.2 mg/L respectively. Therefore, this permit establishes monthly average and daily maximum concentration limits of 0.11 mg/L and 0.2 mg/L respectively for total zinc.
- k. Whole Effluent Toxicity (WET) and Analytical Chemistry Testing – The previous permit established whole effluent toxicity (WET), analytical chemistry and priority pollutant testing in accordance with a Level III category pursuant to criteria established in 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*.

38 M.R.S., §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. 06-096 CMR 530 and 06-096 CMR 584 set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters. WET, priority pollutant and analytical chemistry testing as required by 06-096 CMR 530 are included in this permit in order to fully characterize the effluent. This permit also provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment and receiving water characteristics.

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on invertebrate and vertebrate species. Priority pollutant and analytical chemistry testing are required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health AWQC as established in 06-096 CMR 584.

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

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

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

06-096 CMR 530 (D)(1) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the 06-096 CMR 530 (D)(1) criteria, the permittee's facility falls into the Level III frequency category as the facility has a chronic dilution factor of >500:1 and $Q \geq 1.0$ MGD. 06-096 CMR 530 (D)(1) specifies that routine screening and surveillance level testing requirements are as follows:

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

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

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

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

06-096 CMR 530 (3)(b) states in part, *Dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3(E).*

06-096 CMR 530 (3) (E) states *“For effluent monitoring data and the variability of the pollutant in the effluent, the Department shall apply the statistical approach in Section 3.3.2 and Table 3-2 of USEPA's "Technical Support Document for Water Quality-Based Toxics Control" (USEPA Publication 505/2-90-001, March, 1991, EPA, Office of Water, Washington, D.C.) to data to determine whether water-quality based effluent limits must be included in a waste discharge license. Where it is determined through this approach*

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

that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedance of water quality criteria, appropriate water quality-based limits must be established in any licensing action."

06-096 CMR 530(3) states, "In determining if effluent limits are required, the Department shall consider all information on file and effluent testing conducted during the preceding 60 months. However, testing done in the performance of a Toxicity Reduction Evaluation (TRE) approved by the Department may be excluded from such evaluations."

WET evaluation

On 3/28/16, the Department conducted a statistical evaluation on the most recent 60 months of WET data that indicates the discharge does not have a reasonable potential (RP) to exceed the modified acute or chronic critical ambient water quality criteria (AWQC) thresholds (0.5% and 0.1%, respectively – mathematical inverses of the modified acute dilution factor of 204:1 and the chronic dilution factor of 906:1). As a result, this permitting action is not establishing numerical WET limitations.

As for testing frequencies, Chapter 530(2)(D)(3)(b) states in part that Level III facilities "... may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3(E)". Based on the results of the 3/28/16 statistical evaluation, the permittee qualifies for the testing waiver. Therefore, this permit action establishes a screening level WET testing requirements as follows:

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

Level	WET Testing
III	1 per year

06-096 CMR 530(2)(D)(4) states, "All dischargers having waived or reduced testing must file statements with the Department on or before December 31 of each year describing the following.

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

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

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

Special Condition F, 06-096 CMR 530(2)(D)(4) *Statement For Reduced/Waived Toxics Testing*, of this permitting action requires the permittee to file an annual certification with the Department. It is noted however that if future WET testing results indicate the discharge exceeds critical water quality thresholds this permit will be reopened pursuant to Special Condition H, *Reopening of Permit For Modification*, of this permit to establish applicable limitations and monitoring requirements.

Chemical evaluation

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

06-096 CMR 530 (4)(E), states "*In allocating assimilative capacity for toxic pollutants, the Department shall hold a portion of the total capacity in an unallocated reserve to allow for new or changed discharges and non-point source contributions. The unallocated reserve must be reviewed and restored as necessary at intervals of not more than five years. The water quality reserve must be not less than 15% of the total assimilative quantity. The Department may increase this amount where it has information that significant non-point sources of a pollutant are present in a watershed. The Department may allocate quantities held in water quality reserve to new or changed dischargers according to the principles of the State's anti-degradation policy described in 38 MRSA, section 464(4)(F). Notwithstanding the above, for the purpose of calculating waste discharge license limits for toxic substances, the department may use any unallocated assimilative capacity that the Department has set aside for future growth if the use of that unallocated assimilative capacity would avoid an exceedance of applicable ambient water quality criteria or a determination by the Department of a reasonable potential to exceed applicable water quality criteria.*"

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

06-096 CMR 530 (3)(E) states "... that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedance of water quality criteria, appropriate water quality-based limits must be established in any licensing action."

06-096 CMR 530 (4)(F) states in part "Where there is more than one discharge into the same fresh or estuarine receiving water or watershed, the Department shall consider the cumulative effects of those discharges when determining the need for and establishment of the level of effluent limits. The Department shall calculate the total allowable discharge quantity for specific pollutants, less the water quality reserve and background concentration, necessary to achieve or maintain water quality criteria at all points of discharge, and in the entire watershed. The total allowable discharge quantity for pollutants must be allocated consistent with the following principles.

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

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

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

See **Attachment B** of this Fact Sheet for Department guidance that establishes protocols for establishing waste load allocations. The guidance states that the most protective of water quality becomes the facility's allocation. According to the 3/28/16 statistical evaluation (Report ID #818), there are no pollutants that exceed or have a reasonable potential to exceed the acute, chronic or human health AWQC. As a result, the permittee qualifies for the waiver in surveillance level analytical chemistry testing. Screening level testing is being established as follows:

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

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

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

As with waived WET testing, the permittee must file an annual certification with the Department pursuant to Chapter 530 §2(D)(3) and Special Condition F, *06-096 CMR 530(2)(D)(4), Statement For Reduced/Waived Toxics Testing* of this permit.

It is noted however that if future WET or other chemical specific test results indicates the discharge exceeds critical water quality thresholds or AWQC, this permit will be reopened pursuant to Special Condition H, *Reopening of Permit For Modification*, of this permit to establish applicable limitations and monitoring requirements.

1. Mercury: On May 23, 2000, pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420, *Waste discharge licenses*, 38 M.R.S. §413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001), the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL #W000598 by establishing interim monthly average and daily maximum effluent concentration limits of 18.5 parts per trillion (ppt) and 27.8 ppt, respectively, and a minimum monitoring frequency requirement of four (4) 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. §413, sub-§11 specifying that interim mercury limits and monitoring requirements remain in effect. . On September 28, 2011, the Maine Legislature enacted, *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 sub-§ 1-B(F), allowing the Department to reduce mercury monitoring frequencies to once per year for facilities that maintain at least five (5) years of mercury testing data. The permittee met the data requirement and on February 6, 2012, the Department issued a permit modification revising the minimum mercury monitoring frequency from 4/Year to 1/Year.

Maine law, 38 M.R.S., §420 1-B,(B)(1) states that a facility is not in violation of the ambient water quality criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to § 413, subsection 11. A review of the Department's database for the period June 2011 – February 2015 (#DMRs=7) indicates mercury test results have ranged from 7.3 ng/L to 31.3 ng/L with an arithmetic mean of 14.4 ng/L. The mercury effluent limitations have been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit.

7. IMPACTS TO 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 B classification.

8. PUBLIC COMMENTS

Public notice of this application was made in the *Bangor Daily News* newspaper on or about March 10, 2016. 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 *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

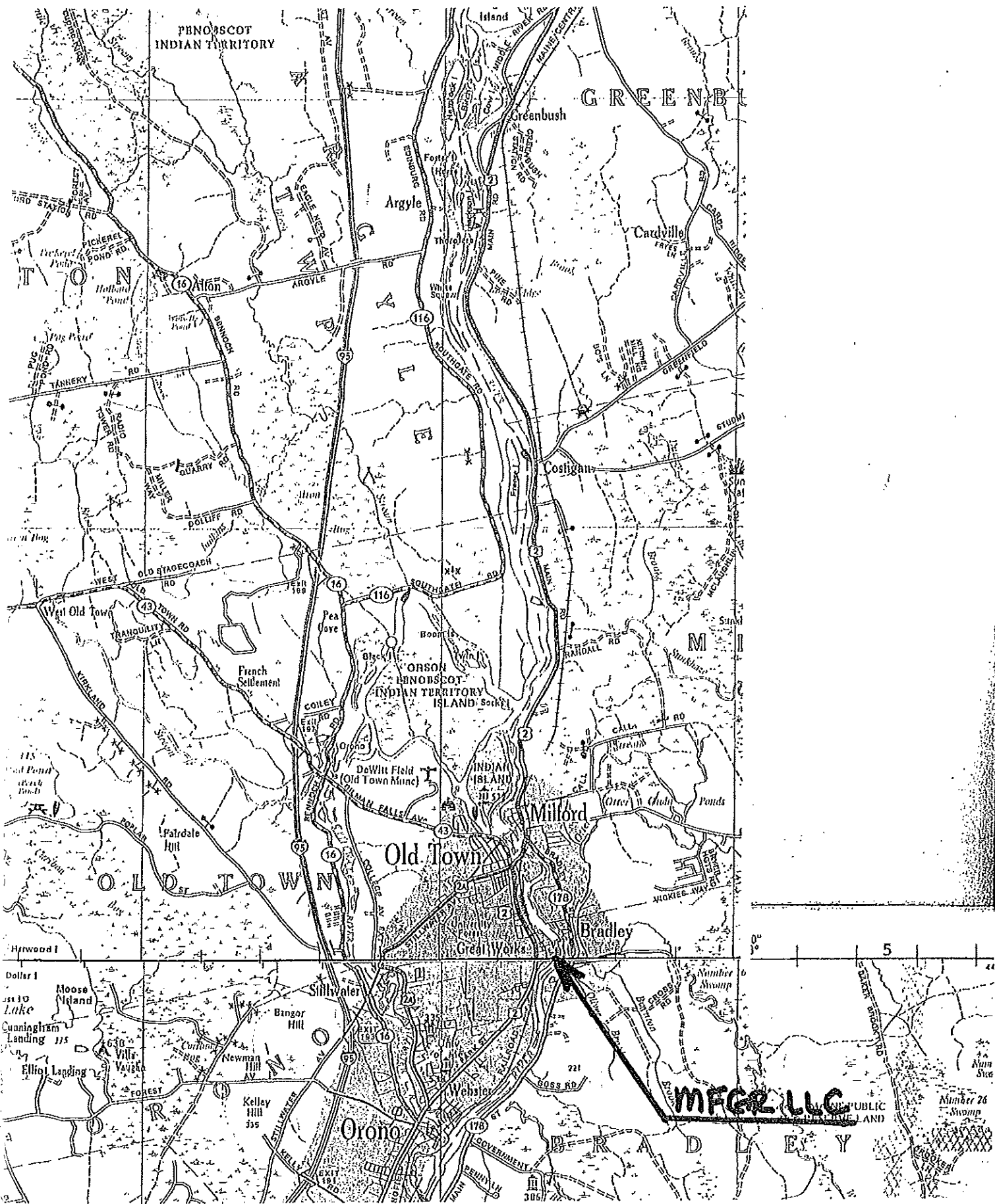
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Gregg Wood
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 287-7693 Fax: (207) 287-3435
e-mail: gregg.wood@maine.gov

10. RESPONSE TO COMMENTS

During the period of September 7, 2016, 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



MFG LLC

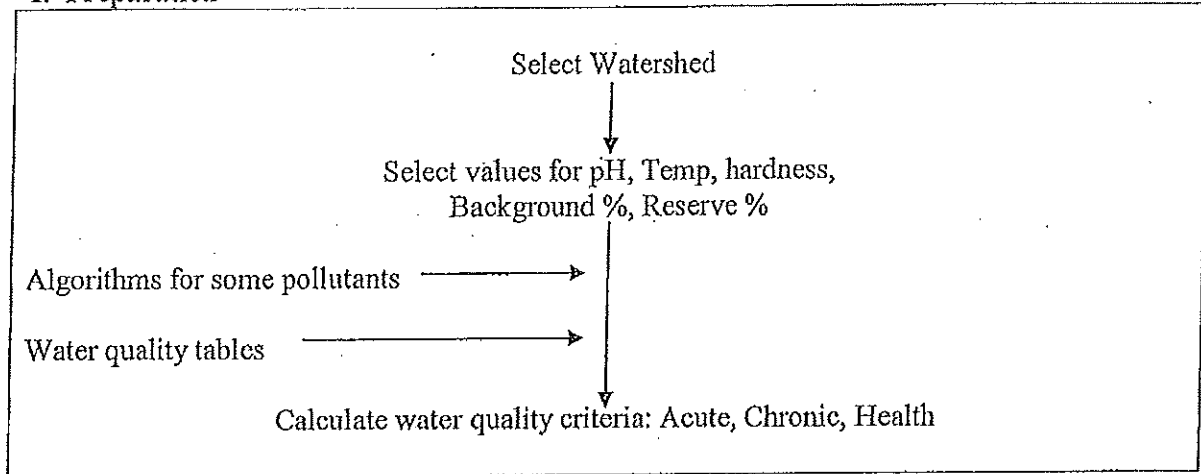
PUBLIC
WATER LAND

Number 26
Swamp

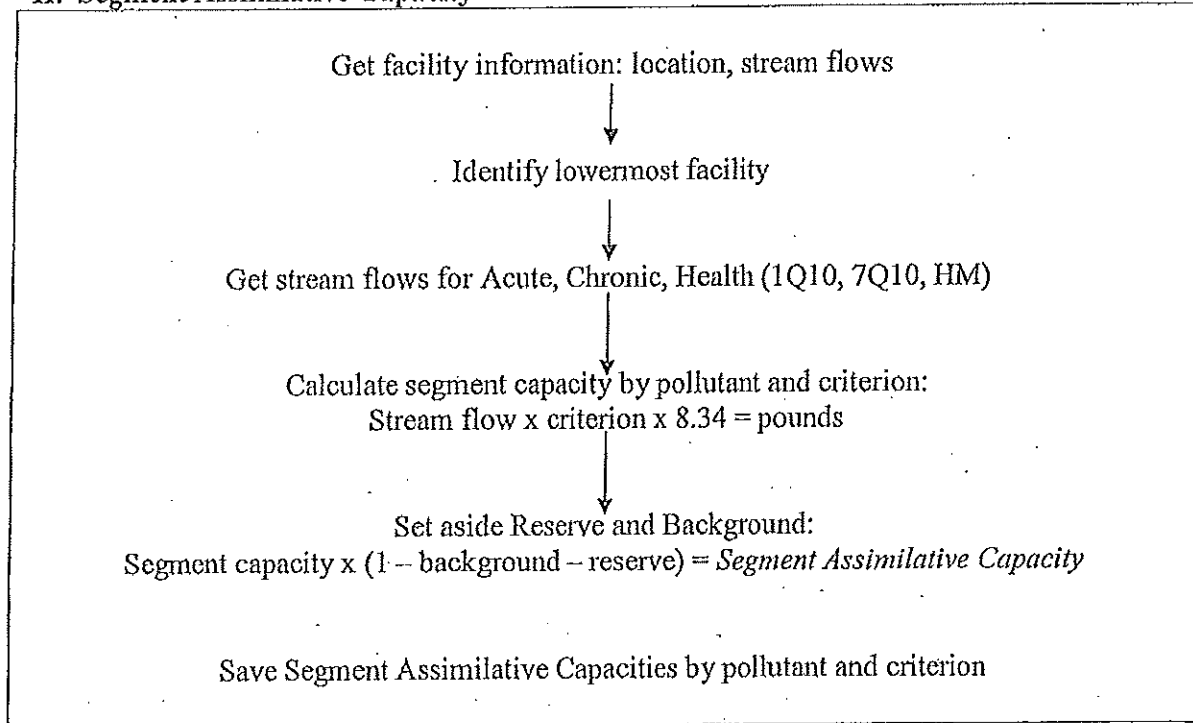
ATTACHMENT B

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

I. Preparation

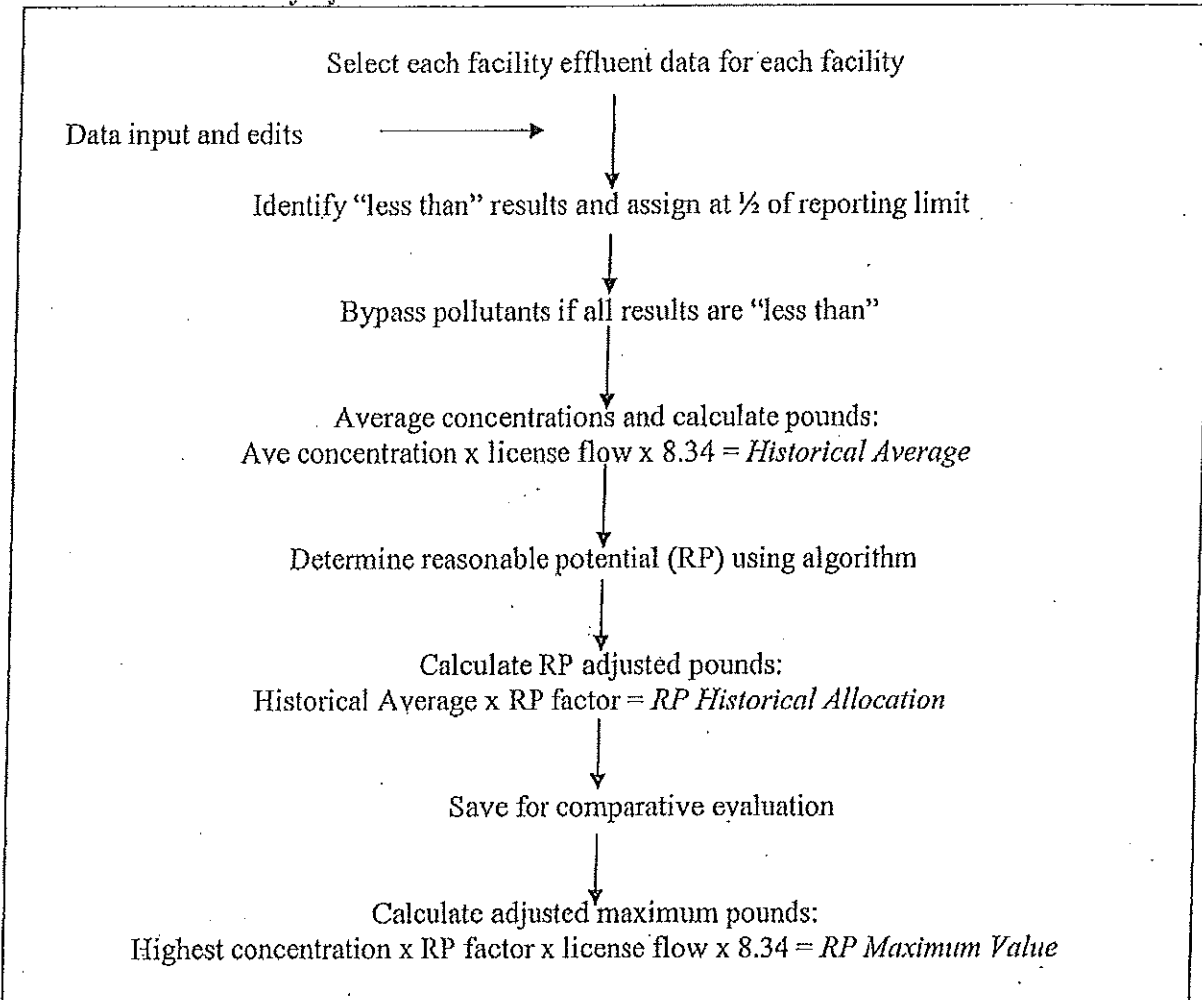


II. Segment Assimilative Capacity

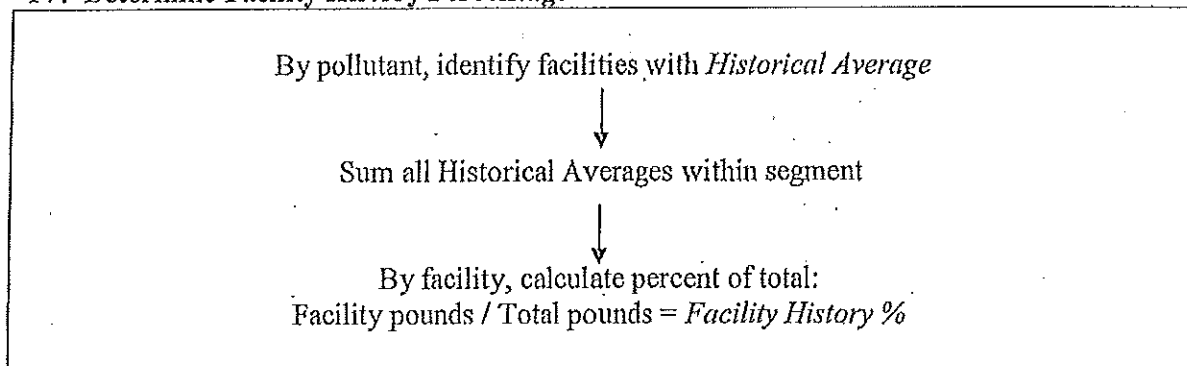


Maine Department of Environmental Protection
General Processing Steps in "DeTox"

III. Evaluate History by Pollutant

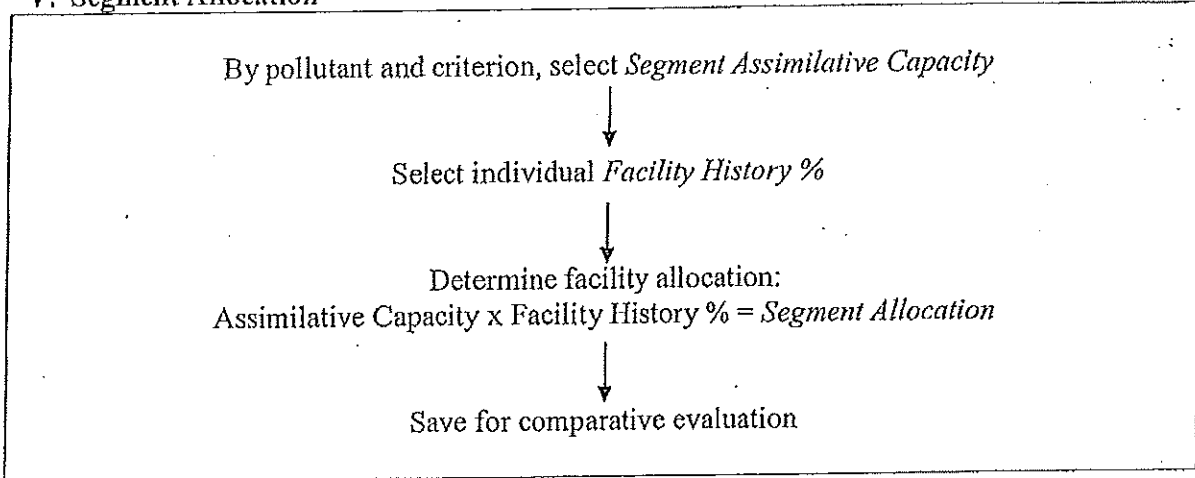


IV. Determine Facility History Percentage

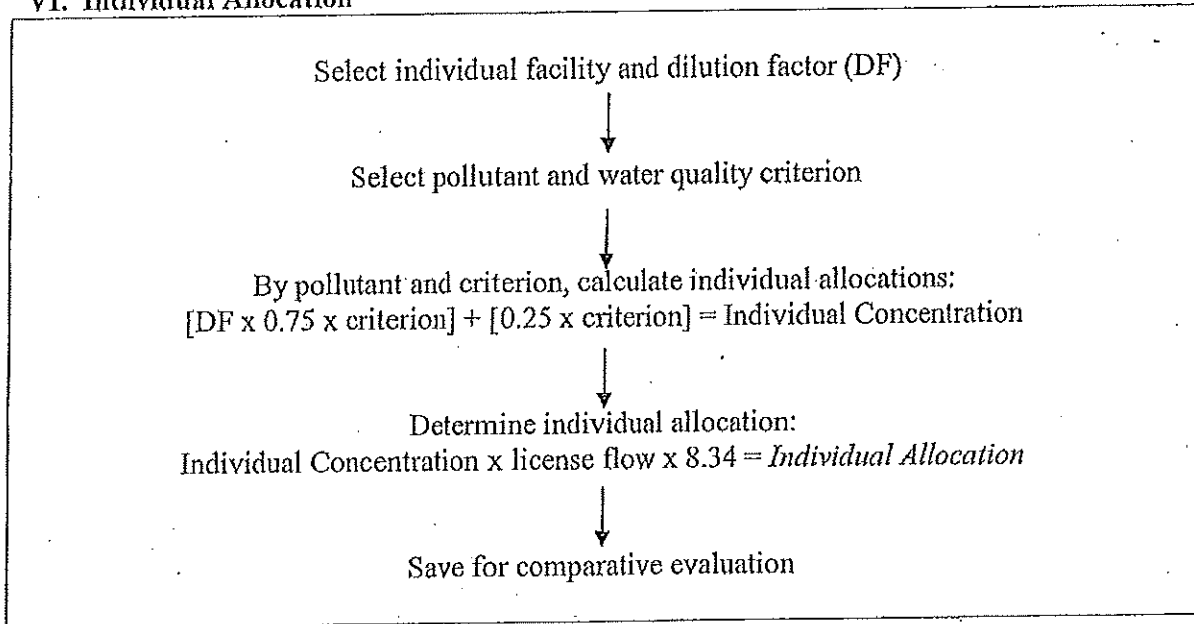


Maine Department of Environmental Protection
General Processing Steps in "DeTox"

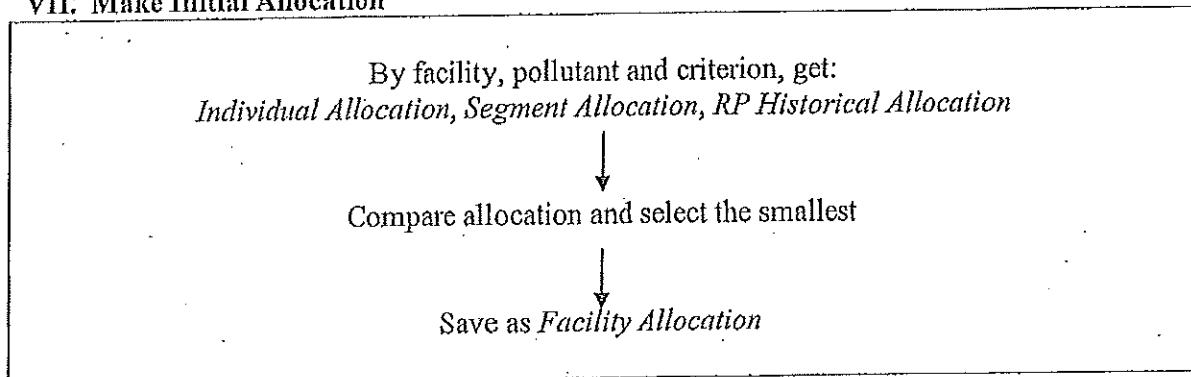
V. Segment Allocation



VI. Individual Allocation

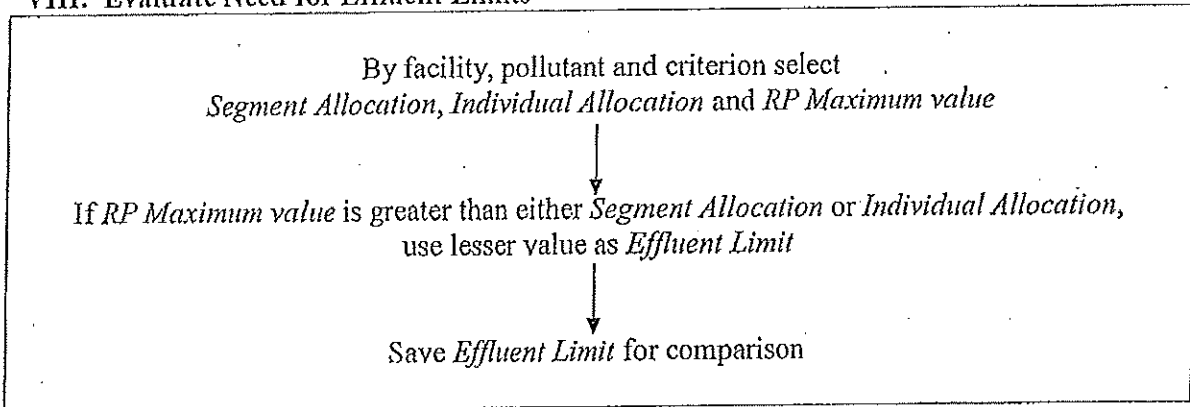


VII. Make Initial Allocation

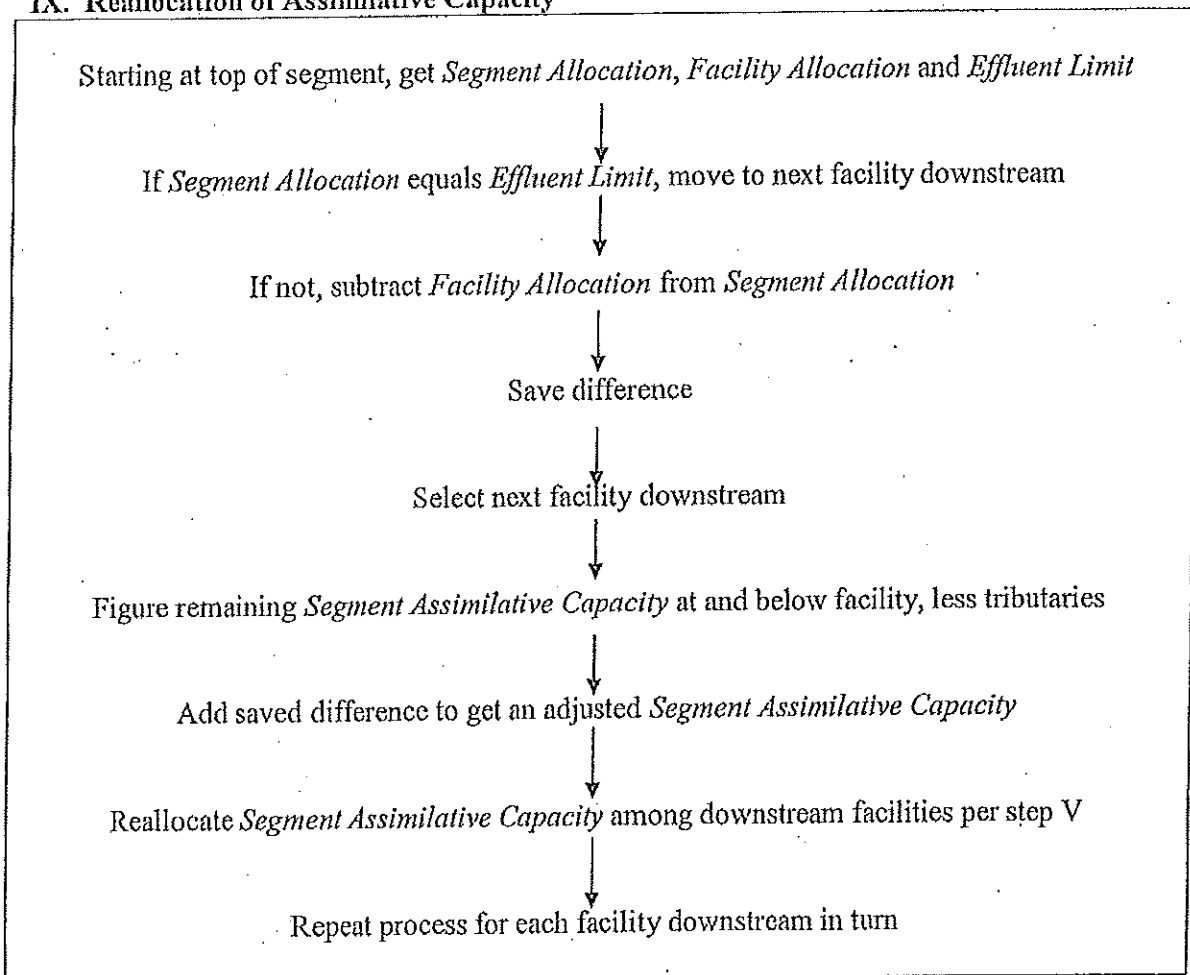


Maine Department of Environmental Protection
General Processing Steps in "DeTox"

VIII. Evaluate Need for Effluent Limits



IX. Reallocation of Assimilative Capacity



MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

DATE: October 2008

TO: Interested Parties

FROM: Dennis Merrill, DEP

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

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

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

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

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

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

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

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

Maine Department of Environmental Protection

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maine Department of Environmental Protection

Working Definitions of Terms Used in the DeTox System.

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

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

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

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

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

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

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

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

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

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

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

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

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

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES# _____ Facility Name _____

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

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

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

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

Scheduled Toxicity Testing for the next calendar year

Test Conducted	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
WET Testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Priority Pollutant Testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analytical Chemistry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other toxic parameters ¹	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

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



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-2811

SUMMARY

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

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

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

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

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

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

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

HOW TO SUBMIT AN APPEAL TO THE BOARD

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

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

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

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

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

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

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

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

II. JUDICIAL APPEALS

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

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

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

ADDITIONAL INFORMATION

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

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