STATE OF MAINE

Department of Environmental Protection

Paul R. LePage
GOVERNOR

James Brooks
ACTING COMMISSIONER

May 19, 2011

Mr. Alan Boynton
Environmental Manager
Red Shield Acquisition LLC
24 Portland Street
Old Town, ME. 04468

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

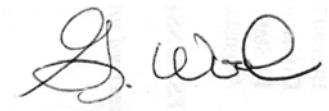
Dear Mr. Boynton:

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

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

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

Sincerely,



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

Enc.
cc: Stakeholder Service List
Sandy Mojica, USEPA

Distribution List Name: Penobscot River Stakeholders

Members:

Adria Elskus	aelskus@usgs.gov
Alan Boynton	sabaocat@adelphia.net
Angie Reed	Angie.Reed@penobscotnation.org
Barbara Arter	bsarter@panax.com
Bernier, Kevin	kevin.bernier@brookfieldpower.com
Bill Taylor	wtaylor@pierceatwood.com
Bradley Moore	brad.moore@bangormaine.gov
Bruce Albert	albertbp@katahdinpaper.com
Cintya Baily	Cintya.Bailey@versopaper.com
Courtemanch, Dave L	Dave.L.Courtemanch@maine.gov
Dan Kusnierz	Dan.Kusnierz@penobscotnation.org
Darold Wooley	Lincolnsanitarydistrict@myfairpoint.net
David Mitchell	dmitchell@ensr.aecom.com.
David Van Slyke	dvanslyke@preti.com
Dennis McComb	dmccomb@lpandt.com
Dick Arnold	dick.arnold@redshieldenv.com
Frank Ruksznis	fprgssd@myfairpoint.net
Gary Brooks	gbrooks@veaziesewerdistrict.com
Gary Stetson	garystetson@myfairpoint.net
George Frantz	frantz.george@epa.gov
Hovell, Tanya	Tanya.Hovell@maine.gov
Jan Paul	Jan.Paul@penobscotnation.org
Jennie Bridge	bridge.jennie@epa.gov
Jim Charett	wastewater@millinocket.org
Joseph Madigan	jmadigan@adelphia.net
Kavanah, Brian W	Brian.W.Kavanah@maine.gov
Ken Gallant	kenneth.gallant@versopaper.com
Kenneth Locke	klocke@brewerme.org
Kristie Rabasca	klr@smemaine
Leo Robichaud	burobichaud@myfairpoint.net
Logue, Edward	Edward.Logue@Maine.gov
Lou Colburn	lcolburn@brewerme.org
Marie Dumonatier	maridumo@th.fraserpapers.com
Mohlar, Robert C	Robert.C.Mohlar@maine.gov
Mower, Barry F	Barry.F.Mower@maine.gov
Murch, Dana P	Dana.P.Murch@maine.gov
Newkirk, Peter	Peter.Newkirk@maine.gov
Nick Bennett	nbennett@nrcm.org
Paul Wintle	pwintle@adelphia.net
Peter Shanahan	pshanahan@hydroanalysisinc.com
Rand, Phyllis A	Phyllis.A.Rand@maine.gov
Rhonda.Daigle	Rhonda.Daigle@penobscotnation.org
Scott Hall	shall@pplweb.com
Tom Bouchard	bouchard@midmaine.com
Trasko, Clarissa	Clarissa.Trasko@maine.gov
Tsomides, Leon	Leon.Tsomides@maine.gov
Wood, Gregg	Gregg.Wood@maine.gov
Young, Matthew R	Matthew.R.Young@maine.gov

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

DEPARTMENT ORDER

IN THE MATTER OF

RED SHIELD ACQUISTION LLC	) MAINE POLLUTANT DISCHARGE
INDUSTRIAL MANUFACTURER	) ELIMINATION SYSTEM PERMIT
OLD TOWN, PENOBSCOT COUNTY, MAINE	) AND
ME0002020	) WASTE DISCHARGE LICENSE
W002226-5N-H-R **APPROVAL**	) **RENEWAL**

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

APPLICATION SUMMARY

Red Shield has filed an application with the Department to renew Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0002020/Maine Waste Discharge License (WDL) #W002766-5N-F-R that was issued by the Department on August 6, 2002, and expired on August 6, 2007.

Red Shield's mill located in Old Town, Maine is currently manufacturing an average of 566 tons/day bleached kraft market pulp. Up until 2006, the mill also produced 257 tons/day bleached kraft tissue products. The 8/6/02 MEPDES permit authorized the discharge up to a monthly average 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. In addition to the routine waste waters discharged, the permit authorized discharges associated with or resulting from essential maintenance, regularly scheduled maintenance during start-up and shutdown.

Red Shield is seeking authorization to discharge waste water associated with both pulping and the manufacturing of tissue products as it's long term business plan is to produce tissue products once market conditions are favorable. In addition, the permittee is seeking authorization to treat up to approximately 1.1 MGD of waste water associated with the production of butanol from an on-site bio-refinery using hemi-cellouse stock from the pulping process at the mill.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the 8/6/02 permitting action except that this permit;

1. Eliminating the weekly average and daily maximum thermal load limitations expressed in BTUs/day as the weekly average and daily maximum temperature difference limitations 0.5ºF are sufficient to determine compliance with Department rule Chapter 582, *Regulations Relating To Temperature*.

2. Eliminating Special Condition N, *Biological Monitoring Program*, as Maine's Department of Inland Fisheries & Wildlife has determined the condition is no longer necessary.

3. Establishing a requirement to submit an annual certification to be consistent with the requirements for reduced whole effluent toxicity (WET) and analytical chemistry in Department rule Chapter 530, *Surface Water Toxics Control Program*.

4. Eliminating the monthly average water quality based mass and concentration limits for arsenic as the most current statistical evaluation of test results on file at the Department indicates the discharge no longer exceeds or has a reasonable potential to exceed applicable ambient water quality criteria (AWQC) found in Department rule Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*.

5. Establishing new or revised water quality based mass and concentration limits for aluminum, copper and lead as the most current statistical evaluation of test results on file at the Department indicates the discharge has a reasonable potential to exceed applicable AWQC found in Department rule Chapter 584.

6. Establishes a monthly average water quality based mass limitation for total phosphorus along with a schedule of compliance to attain said limitation.

7. Reducing the monitoring frequency for the 12 phenolic compounds for Outfall #100 from 1/Month to 2/Year.

8. Reduces the monitoring frequency for dioxin and furan from 2/Quarter to 1/Year.

9. Authorizes the permittee to treat up to approximately 1.1 MGD of waste water associated with the production of butanol from an on-site bio-refinery using hemi-cellulose stock from the pulping process at the mill.

10. Establishes administrative Outfall #004 to report river temperature increases associated with the collective thermal discharge from Outfall #001 and Outfall #002.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated April 13, 2011, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.

2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.

3. The provisions of the State's antidegradation policy, 38 M.R.S.A., Section 464(4)(F), will be met, in that:

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

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

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

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

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

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

ACTION

THEREFORE, the Department APPROVES the above noted application of the RED SHIELD ACQUISITION LLC, to discharge treated process waste waters (including storm water and landfill leachate) 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, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

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

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

3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years thereafter. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of the this permit, the terms and conditions of the this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S.A. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (effective April 1, 2003)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application July 26, 2007.

Date of application acceptance July 26, 2007.

This permit is digitally signed by Teco Brown on behalf of Acting Commmissioner James P. Brooks. It is digitally signed pursuant to 10 M.R.S.A. § 9418. It has been filed with the Board of Environmental Protection as of the signature date. 2011.05.19 14:28:51 -04'00'

This order prepared by GREGG WOOD, BUREAU OF LAND AND WATER QUALITY

SPECIAL CONDITION

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Beginning the effective date of this permit, the permittee is authorized to discharge secondary treated process waste waters from **Outfall #001,** bleach plant effluent (internal waste stream) from **Outfall #100**, non-contact cooling waters from **Outfall #002** and filter backwash from **Outfall #003** 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 as specified	**Daily Maximum** As specified	**Monthly Average** as specified	**Daily Maximum** as specified	**Measurement Frequency** as specified	**Sample Type** as specified
Flow (MGD) *[50050]*	24.4 MGD *[03]*	Report MGD *[03]*	---	---	Continuous *[99/99]*	Recorder*[RC]*
BOD_5 *[00310]*						
June 1 – October 31	7,500 #/day	18,000 #/day	---	---	1/Day	Composite
November 1 – May 31	8,850 #/day *[26]*	18,000 #/day *[26]*	---	---	1/Day *[01/01]*	Composite *[24]*
TSS *[00530]*						
June 1 – October 31	20,000 #/day	35,000 #/day	---	---	1/Day	Composite
November 1 – May 31	22,475 #/day *[26]*	42,000 #/day *[26]*	---	---	1/Day *[01/01]*	Composite *[24]*
Temperature *[00011]*						
June 1 – September 30	---	---	---	105°F *[15]*	1/Day *[01/01]*	Grab *[GR]*
October 1 – May 31	---	---	---	105°F *[15]*	1/Week *[01/07]*	Grab *[GR]*
pH (Std. Unit) *[00400]*	---	---	---	5.0 – 9.0 SU *[12]*	1/Day *[01/01]*	Grab *[GR)*

SPECIAL CONDITIONS

A. OUTFALL #001 – Secondary treated waste waters (cont'd)

Effluent Characteristic **Discharge Limitations** **Monitoring Requirements**

	Monthly Average as specified	**Daily Maximum** as specified	**Monthly Average** as specified	**Daily Maximum** as specified	**Measurement Frequency** as specified	**Sample Type** as specified
Color[(1)] *[00084]*	175 lbs/ton *[42]*	---	---	---	3/Week *[03/07]*	Composite *[24]*
Adsorbable Organic Halogen[(2)](AOX) *[03594]*	989 #/Day *[26]*	1,510 #/Day *[26]*	---	---	1/Quarter *[01/90]*	Composite *[24]*
Total Phosphorus[(3)] *[00665]* *Beginning upon permit issuance (June 1 – September 30)*	Report lbs/day *[26]*	Report lbs/day *[26]*	Report ug/L *[19]*	Report ug/L *[19]*	1/Week *[01/07]*	Composite *[24]*
Total Phosphorus[(3)] *[00665]* ***Beginning June 1, 2015*** *(June 1 – September 30)*	102 lbs/day *[26]*	Report lbs/day *[26]*	Report ug/L *[19]*	Report ug/L *[19]*	1/Week *[01/07]*	Composite *[24]*
Aluminum (Total) *[01105]*	198 lbs/Day *[26]*	---	1,946 ug/L *[28]*	---	1/Year *[01/YR]*	Composite *[24]*
Copper (Total) *[01042]*	9.9 lbs/Day *[26]*	8.0 lbs/Day *[26]*	98 ug/L *[28]*	79 ug/L *[28]*	1/Year *[01/YR]*	Composite *[24]*
Lead (Total) *[01051]*	0.53 lbs/Day *[26]*	---	5 ug/L *[28]*	---	1/Year *[01/YR]*	Composite *[24]*

Footnotes: See pages 10-13 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

SURVEILLANCE LEVEL TESTING – Beginning upon issuance of this permit and lasting through 12 months prior to the expiration date of the permit.

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity (WET) [4]						
A-NOEL						
Ceriodaphnia dubia [TDA3B] (Water Flea)	---	---	---	Report % *[23]*	1/2 Years *[01/2Y]*	Composite *[24]*
Salvelinus fontinalis [TDA6F] (Brook trout)	---	---	---	Report % *[23]*	1/2 Years *[01/2Y]*	Composite *[24]*
C-NOEL						
Ceriodaphnia dubia [TBP3B] (Water Flea)	---	---	---	Report % *[23]*	1/2Years *[01/2Y]*	Composite *[24]*
Salvelinus fontinalis [TBQ6F] (Brook trout)	---	---	---	Report % *[23]*	1/2Years *[01/2Y]*	Composite *[24]*
Analytical Chemistry [5,6] *[51477]*	---	---	---	Report ug/L *[28]*	1/2 Years *[01/2Y]*	Composite/ Grab *[24/GR]*

Footnotes: See pages 10-13 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

SCREENING LEVEL TESTING – Beginning 12 months prior to permit expiration and every five years thereafter.

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity (WET) [4]						
A-NOEL						
Ceriodaphnia dubia [TDA3B] (Water Flea)	---	---	---	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Salvelinus fontinalis [TDA6F] (Brook trout)	---	---	---	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
C-NOEL						
Ceriodaphnia dubia [TBP3B] (Water Flea)	---	---	---	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Salvelinus fontinalis [TBQ6F] (Brook trout)	---	---	---	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Priority Pollutants[6] *[50008]*	---	---	---	Report ug/L *[28]*	1/Year *[01/YR]*	Composite/Grab *[24/GR]*
Analytical Chemistry [5,6] *[51477]*	---	---	---	Report ug/L *[28]*	1/Quarter *[01/90]*	Composite/ Grab *[24/GR]*

Footnotes: See pages 10-13 of this permit for applicable footnotes.

SPECIAL CONDITIONS

OUTFALL #100- (Bleach Plant) – Internal Waste Stream

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	Monthly Average as specified	**Daily Maximum** As specified	**Monthly Average** as specified	**Daily Maximum** as specified	**Measurement Frequency** as specified	**Sample Type** as specified
Flow[7] *[50050]*	Report MGD *[03]*	Report MG *[03]*			1/Week *[01/07]*	Calculate *[CA]*
2,3,7,8 TCDD (Dioxin) [8] *[34675]*	---	---	---	<10 pg/L[9] *[3L]*	1/Year *[01/YR]*	Composite *[CP]*
2,3,7,8 TCDF (Furan) [9] *[38691]*	---	---	---	<10 pg/L[9] *[3L]*	1/Year *[01/YR]*	Composite *[CP]*
Trichlorosyringol[10] *[73054]*	---	---	---	<2.5 ug/L[9] *[28]*	2/Year *[02/YR]*	Composite *[24]*
3,4,5-Trichlorocatechol[10] *[73037]*	---	---	---	<5.0 ug/L[9] *[28]*	2/Year *[02/YR]*	Composite *[24]*
3,4,,6- Trichlorocatechol[10] *[51024]*	---	---	---	<5.0 ug/L[9] *[28]*	2/Year *[02/YR]*	Composite *[24]*
3,4,5-Trichloroguaiacol[10] *[61024]*	---	---	---	<2.5 ug/L[9] *[28]*	2/Year *[02/YR]*	Composite *[24]*
3,4,6-Trichloroguaiacol[10] *[51022]*	---	---	---	<2.5 ug/L[9] *[28]*	2/Year *[02/YR]*	Composite *[24]*
4,5,6-Trichloroguaiacol[10] *[73088]*	---	---	---	<2.5 ug/L[9] *[28]*	2/Year *[02/YR]*	Composite *[24]*
2,4,5-Trichlorophenol[10] *[61023]*	---	---	---	<2.5 ug/L[9] *[28]*	2/Year *[02/YR]*	Composite *[24]*
2,4,6-Trichlorophenol[10] *[34621]*	---	---	---	<2.5 ug/L[9] *[28]*	2/Year *[02/YR]*	Composite *[24]*
Tetrachlorocatechol[10] *[79850]*	---	---	---	<5.0 ug/L[9] *[28]*	2/Year *[02/YR]*	Composite *[24]*
Tetrachloroguaiacol[10] *[73047]*	---	---	---	<5.0 ug/L[9] *[28]*	2/Year *[02/YR]*	Composite *[24]*
2,3,4,6-Tetrachlorophenol[10] *[77770]*	---	---	---	<2.5 ug/L[9] *[28]*	2/Year *[02/YR]*	Composite *[24]*
Pentachlorophenol[10] *[39032]*	---	---	---	<5.0 ug/L[9] *[28]*	2/Year *[02/YR]*	Composite *[24]*
Chloroform[11] *[32106]*	6.56 #/day *[26]*	11.0 #/day *[26]*	---	---	---	---

SPECIAL CONDITIONS

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

Outfall #001 – Secondary treated waste waters
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 sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 or laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000).

All analytical test results shall be reported to the Department including results which are detected below the respective reporting limits (RLs) specified by the Department or as specified by other approved test methods. See **Attachment A** of this permit for a list of the Department's RLs. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the RL achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL or reporting an estimated value ("J" flagged) is not acceptable and will be rejected by the Department. Reporting analytical data and its use in calculations must follow established Department guidelines specified in this permit or in available Department guidance documents.

(1) **Color** – The limitation is a calendar quarterly average limitation. Quarterly results shall be reported in the monthly DMR's for the months of March, June, September and December of each calendar year. The permittee shall monitor the true color (at a pH of 7.6 S.U) in the effluent from Outfall #001 at a minimum of three (3) times per week. See Special Condition G of this permit for reporting requirements. The calculated mass discharged, expressed as lbs/ton of unbleached pulp produced (calculated by multiplying the bleached tonnage by a factor of 1.05% to account for shrinkage), shall be based on air-dried tons of brown stock entering the bleach plant. A color pollution unit is equivalent to a platinum cobalt color unit as described in NCASI Technical Document #803. A pound of color is defined as the number of color pollution units multiplied by the volume of effluent discharged in million gallons per day multiplied by 8.34.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Footnotes:

(2) **AOX** - The analytical method to be used to determine adsorbable organic halogens shall be EPA Method 1650 for which a ML (Minimum Level) of 20 ug/l shall be attained. The ML is defined as the level at which the analytical system gives recognizable signals and an acceptable calibration point.

(3) **Total phosphorus** – See **Attachment B** of this permit for a Department protocol. See Special Condition G of this permit for a schedule of compliance.

(4) **Whole effluent toxicity (WET) testing** – Definitive WET testing is a multi-concentration testing event [a minimum of five dilutions bracketing the critical acute (modified acute) and chronic dilution of 6.0% and 1.3% respectively], which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points.

(a) **Surveillance level testing** - Beginning upon issuance of this permit and lasting through 12 months prior to the expiration date of the permit, the permittee shall conduct surveillance level WET testing at a minimum frequency of once every other year (1/2 Years) on the water flea and the brook trout.

(b) **Screening level testing** - Beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter, the permittee shall conduct screening level WET testing at a minimum frequency of twice per year (2/Year) on the water flea and the brook trout.

Once received by the permittee, WET test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, the permittee may review the toxicity reports for up to 10 business days after receiving the test results from the laboratory conducting the testing before submitting them. The permittee shall evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 6.0% and 1.3%, respectively.

See **Attachment C** of this permit for a copy of the Department's WET report form.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Footnotes:

Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following USEPA methods manuals.

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

b. Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002, EPA-821-R-02-012.

The permittee is also required to analyze the effluent for the parameters specified in the WET chemistry section, and the parameters specified in the analytical chemistry section of the form in **Attachment A** of this permit each time a WET test is performed.

(5) **Analytical Chemistry** Refers to a suite of chemical tests in **Attachment A** of this permit. Reduced surveillance level testing shall be conducted once every other year (1/2 Years). Screening level testing shall be conducted once per quarter(1/Quarter) for four consecutive calendar quarters beginning 12 months prior to permit expiration and every five years thereafter.

Analytical chemistry and priority pollutant testing shall be conducted on samples collected at the same time as those collected for whole effluent toxicity tests, when applicable, and shall be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve the most current minimum reporting levels of detection as specified by the Department.

Once received by the permittee, analytical chemistry and priority pollutant 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 after receiving the test results from the laboratory conducting the testing before submitting them. The permittee shall evaluate test results being submitted and identify to the Department, possible exceedences of the acute, chronic or human health AWQC as established in Chapter 584. For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "NODI-9" monitoring not required this period.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Footnotes:

(6) **Priority Pollutant Testing –** Priority pollutant testing refers to analysis for levels of priority pollutants listed in **Attachment A** of this permit. Screening level testing shall be conducted once per year (1/Year) beginning 12 months prior to permit expiration and every five years thereafter. Surveillance level priority pollutant testing is not required pursuant to Department rule 06-096 CMR Chapter 530 Section 2.D.

(7) **Bleach plant flow**- Shall be calculated on the same day(s) of the month that the bleach plant effluent is sampled for 2,3,7,8 TCDD (Dioxin), 2,3,7,8 TCDF (Furan), twelve (12) chlorinated phenolic compounds or chloroform.

(8) **2,3,7,8 TCDD (Dioxin) & 2,3,7,8 TCDF (Furan)** – The analytical method to be used to determine the concentrations of dioxin and furan shall be EPA Method 1613B. Each composite sample shall consist of a minimum of six (6) grab samples taken every four (4) hours from both the acid and alkaline sewers or one flow proportioned composite sample from a continuous automatic sampling device.

(9) **Minimum Levels (ML's) -** The limitations established in this permitting action for dioxin, furan and the 12 chlorinated phenolic compounds are equivalent to the ML's established for EPA Methods 1613 and 1653 respectively. Compliance will be based on the ML's as listed in Special Condition A of this permit.

(10) **12 Chlorinated phenolic compounds** - The analytical method to be used to determine the concentrations of these compounds shall be EPA Method 1653.

(11) **Chloroform** – The preferred analytical method to be used for chloroform is EPA Method 1624B for which a ML of 10 ug/l shall be attained. Other approved EPA methods are 601 and 624, and Standard Method 6210B and 6230B. If required to do so, the permittee must collect separate grab samples from the acid and alkaline bleach plant filtrates for chloroform analysis. Samples to be analyzed for chloroform may be taken over a 32-hour period where a minimum of six (6) grab samples are collected, each grab sample being at least four (4) hours apart but no more than 16 hours apart.

.

SPECIAL CONDITIONS

OUTFALL #002 – Non-contact cooling waters and steam condensate[(1)]

Effluent Characteristic **Discharge Limitations** **Monitoring Requirements**

	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow (MGD) *[50050]*	Report MGD *[03]*	Report MGD *[03]*			Report MGD *[03]*	1/Day *[01/01]*	Estimate *[ES]*
Temperature *[00011]*							
June 1 – September 30	---	---	---	---	115°F *[15]*	1/Day *[01/01]*	Grab *[GR*
October 1 – May 31	---	---	---	---	115°F *[15]*	1/Week *[01/07]*	Grab *[GR]*
pH (Std. Unit) *[00400]*	---	---	---	---	5.0 – 9.0 SU *[12]*	1/Day *[01/01]*	Grab *[GR)*

Footnotes:

(1) The permittee is authorized to discharge any combination of non-contact cooling water, non-contact condensing water, including discharges from turbine generators, chlorine dioxide plant cooling waters and evaporation cooling waters within the limitations specified above. The permittee must identify the sources of the waters being discharged as an attachment to the monthly Discharge Monitoring Report.

SPECIAL CONDITIONS

OUTFALL #003 – Filter backwash waters(1)

Effluent Characteristic **Discharge Limitations** **Monitoring Requirements**

	Monthly Average as specified	Daily Maximum as specified	Monthly Average As specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow *[50050]*	---	---	Report MGD *[03]*	Report MGD *[03]*	1/Month *[01/30]*	Estimate *[ES]*
Total Suspended Solids *[00530]*	336 lbs/Day *[26]*	1,001 lbs/Day *[26]*	Report mg/L *[19]*	Report mg/L *[19]*	1/Month *[01/30]*	Grab *[GR]*
Total Residual Chlorine *[00560]*	---	---	---	0.5 mg/L *[19]*	1/Month *[01/30]*	Grab *[GR]*
pH (Standard Units) *[00400]*	---	---	---	5.0 – 9.0 SU *[12]*	1/Month *[01/30]*	Grab *[GR]*

Footnotes:

(1) Filter backwash waters include backwashes from media filters and incidental waters from the water treatment plant clearwell and filters.

SPECIAL CONDITIONS

OUTFALL #004 – Administrative outfall

Effluent Characteristic	Discharge Limitations					Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
River Temperature Increase *June 1 – September 30*	---	---	---	0.5 °F[(1a)] *[15]*	---	1/Day *[01/01]*	Calculate *[CA]*
River Temperature Increase *June 1 – September 30*	---	---	---	---	0.5 °F[(1b)] *[15]*	1/Day *[01/01]*	Calculate *[CA]*

Footnotes

(1) **River Temperature Increase** – Beginning June 1, 2011.

(a) **Temperature Increase** (Increase of the ambient receiving water temperature) – This is a weekly rolling average limitation when the receiving water temperature is ≥66°F and <73°F. See Special Condition F, *River Temperature Increase*, of this permit for the equation to calculate the predicted river temperature increase (PRTI).

(b) **Temperature Increase** (Increase of the ambient receiving water temperature) - This is a daily maximum limitation when the receiving water temperature is ≥73°F. See Special Condition F, *River Temperature Increase***,** of this permit for the equation to calculate the RTI.

SPECIAL CONDITIONS

B. NARRATIVE EFFLUENT LIMITATIONS

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

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

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

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

5. The permittee shall not use chlorophenolic-containing biocides.

C. TREATMENT PLANT OPERATOR

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

D. NOTIFICATION REQUIREMENT

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

1. Any substantial change (realized or anticipated) in the volume or character of pollutants being introduced into the waste water collection and treatment system.

2. For the purposes of this section, adequate notice shall include information on:

   a. The quality and quantity of waste water introduced to the waste water collection and treatment system; and

   b. Any anticipated change in the quality and quantity of the waste water to be discharged from the treatment system.

SPECIAL CONDITIONS

E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with; 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on July 26, 2007; 2) the terms and conditions of this permit, and 3) only from Outfall #001, Outfall #002 and Outfall #003 (Outfall #004 is an administrative outfall). Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

F. RIVER TEMPERATURE INCREASE (RTI)

Between June 1st and September 30th of each year when the ambient receiving water temperature is $\geq$66°F and <73°F, the permittee is limited to a thermal discharge that will not increase the ambient receiving water temperature by more than 0.5°F based on a weekly (7 days) rolling average calculation. When the ambient receiving water temperature is $\geq$73°F, the permittee is limited to a thermal discharge that will not increase the ambient receiving water temperature by more than 0.5°F based on a daily calculation. For each operating day during the applicable limitation period, the permittee shall calculate the RTI associated with the collective thermal discharge from Outfall #001 and #002 according to the following equation:

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

where,

Qr = Ambient receiving water flow in gpd or MGD (must be like units as Qe)
Qe = Effluent flow in gpd or MGD (must be like units as Qr)
Te = Effluent temperature in ^{o}F
Tr = Ambient receiving water (mill intake) temperature in ^{o}F

Receiving water flow measurements (Qr) shall be obtained from source/methodology approved by the Department. The permittee shall adhere to mathematical protocols for significant figures and rounding the calculated RTI values. All RTI values reported to the Department on the monthly Discharge Monitoring Reports (DMRs) for compliance with the weekly rolling average and daily maximum ΔT limitations of 0.5°F, shall be rounded to the nearest 0.1°F. As an attachment to the monthly DMRs for June – September of each year, the permittee shall submit the daily values for Qr, Qe, Te and Tr in the equation above.

SPECIAL CONDITIONS

G. SCHEDULE OF COMPLIANCE – TOTAL PHOSPHORUS

1. **Within three months of permit issuance,** ***[PCS Code 95999]*** the permittee shall submit to the Department for review and approval, a report containing a scope of work and schedule to come into compliance with the seasonal monthly average mass limitation of 102 lbs/day for total phosphorus.

   The proposed plan will include, but not be limited to, specific milestones for:

   a. Data collection
   b. Data analysis and recommendations
   c. Implementation of operational and capital improvements
   d. Compliance date

   Within three weeks of plan submittal, the Department shall review and approve said plan, with or without conditions, or request modifications to the plan.

2. **Within nine months of permit issuance,** ***[PCS Code 00199]*** the permittee shall submit to the Department, a progress report describing the data collected to date, current performance of the wastewater treatment system, manufacturing and treatment changes occurring in the previous 6-month period, and a revised work scope and schedule based upon the data collected over the previous six months.

3. **Within fifteen months of permit issuance,** ***[PCS Code 00299]*** the permittee shall submit to the Department, a progress report describing the status of the WWTP evaluation and the current performance of the wastewater treatment system, manufacturing and treatment changes occurring in the previous 6-month period.

4. **Within twenty-one months of permit issuance,** ***[PCS Code 00399]*** the permittee shall submit to the Department, a progress report describing the status of the WWTP evaluation and the current performance of the wastewater treatment system, manufacturing and treatment changes occurring in the previous 6-month period.

5. **Within twenty-seven months of permit issuance,** ***[PCS Code 00199]*** the permittee shall submit to the Department, a final report including the recommended operational and capital improvements required to bring the facility into compliance with the total phosphorus limit. **Within three weeks of plan submittal**, the Department shall review and comment on said plan.

6. **Within thirty-three months of permit issuance,** ***[PCS Code 95999]*** the permittee shall submit to the Department a status report on the implementation of operational and capital improvements required to bring facility into compliance.

7. **On or before June 1, 2015**, ***[PCS Code 05699]*** OTFF shall be in compliance with the seasonal monthly average mass limitation of 102 lbs/day for total phosphorus

SPECIAL CONDITIONS

H. BEST MANAGEMENT PRACTICES PLAN

a. Best Management Practices (BMPs) for spent pulping liquor must be developed by the permittee in accordance with federal regulation 40 CFR, Part 430.03, best engineering practices and must be implemented in a manner that takes into account the specific circumstances at each mill.

b. The permittee must amend its BMP Plan whenever there is a change in mill design, construction, operation, or maintenance that materially affects the potential for leaks or spills of spent pulping liquor, turpentine, or soap from the immediate process areas.

c. The permittee must complete a review and evaluation of the BMP Plan every five years. As a result of this review and evaluation, the permittee must amend the BMP Plan within three months of the review if the mill determines that any new or modified management practices and engineered controls are necessary to reduce significantly the likelihood of spent pulping liquor, soap, and turpentine leaks, spills, or intentional diversions from the immediate process areas, including a schedule for implementation of such practices and controls.

d. The BMP Plan, and any amendments, must be reviewed by the senior technical manager at the mill and approved and signed by the mill manager. Any person signing the BMP Plan or its amendments must certify to the Permitting Authority under penalty of law that the BMP Plan (or its amendments) has been prepared in accordance with good engineering practices and in accordance with this regulation. The mill is not required to obtain approval from the Permitting Authority of the BMP Plan or any amendments.

e. The permittee must maintain on its premises a complete copy of the current BMP Plan and associated records. The BMP Plan and records must be made available to the Permitting Authority or his or her designee for review upon request.

I. MERCURY

All mercury sampling (4/Year) required by this permit or required to determine compliance with interim limitations established pursuant to Department rule Chapter 519, shall be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis shall be conducted in accordance with EPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See **Attachment D,** *Effluent Mercury Test Report*, of this permit for the Department's form for reporting mercury test results.

J. FISH ADVISORY PROGRAM

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

SPECIAL CONDITIONS

K. ANNUAL DIOXIN/FURAN CERTIFICATION

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

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

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

c. Documented and verifiable purchasing procedures are in place for the procurement of defoamers or other additives without elevated levels of known dioxin precursors.

d. Fundamental design changes that affect the ClO2 plant and/or bleach plant operation have been reported to the Department prior to their implementation and said reports explained the reason(s) for the change and any possible adverse consequences if any.

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

By December 31 of each calendar year, the permittee shall provide the Department with a certification describing any of the following that have occurred since the effective date of this permit ***[PCS Code 95799]***: See **Attachment G** 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.

In addition, in the comments section of the certification form, the permittee shall provide the Department with statements describing;

(d) Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge.

SPECIAL CONDITIONS

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

(e) Increases in the type or volume of hauled wastes accepted by the facility.

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

M. AMBIENT WATER QUALITY MONITORING

Between July 1 and September 30 of each year, the permittee is required to participate in the monitoring of ambient water quality on the Penobscot River pursuant to a Department prepared monitoring plan. The total cost to the permittee for the monitoring program shall not exceed a five-year (term of the permit) cap of $5,000.

N. 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 Land & Water Quality
Division of Water Quality Management
106 Hogan Road
Bangor, ME. 04401

Alternatively, if you are submitting an electronic DMR (eDMR), the completed eDMR must be electronically submitted to the Department by a facility authorized DMR Signatory not later than close of business on the 15th day of the month following the completed reporting period. Hard Copy documentation submitted in support of the eDMR must be postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office such that it is received by the Department on or before the fifteenth (15th) day of the month following the completed reporting period. Electronic documentation in support of the eDMR must be submitted not later than close of business on the 15th day of the month following the completed reporting period.

SPECIAL CONDITIONS

O. 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.

P. 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

Printed 1/22/2009

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

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

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

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

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

FRESH WATER VERSION

Please see the footnotes on the last page.

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

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

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

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

Notes:

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

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

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

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

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

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

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

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

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

Comments:

ATTACHMENT B

Protocol for Total Phosphorus Sample Collection and Analysis for Waste Water and Receiving Water Monitoring Required by Permits

Approved Analytical Methods: EPA 365.1 (Rev. 2.0), 365.3, 365.4; SM 4500-P B.5, 4500-P E, 4500-P F; ASTM D515-88(A), D515-88(B); USGS I-4600-85, I-4610-91; OMAAOAC 973.55, 973.56

Sample Collection: The Maine DEP is requesting that total phosphorus analysis be conducted on composite effluent samples, unless a facility's Permit specifically designates grab sampling for this parameter. Facilities can use individual collection bottles or a single jug made out of glass or polyethylene. Bottles and/or jugs should be cleaned prior to each use with dilute HCL. This cleaning should be followed by several rinses with distilled water. Commercially purchased, pre-cleaned sample containers are an acceptable alternative. The sampler hoses should be cleaned, as needed.

Sample Preservation: During compositing the sample must be at 0-6 degrees C (without freezing). If the sample is being sent to a commercial laboratory or analysis cannot be performed the day of collection then the sample must be preserved using H_2SO_4 to obtain a sample pH of <2 su and refrigerated at 0-6 degrees C (without freezing). The holding time for a preserved sample is 28 days.

Note: Ideally, Total P samples are preserved as described above. However, if a facility is using a commercial laboratory then that laboratory may choose to add acid to the sample once it arrives at the laboratory. The Maine DEP will accept results that use either of these preservation methods.

Laboratory QA/QC: Laboratories must follow the appropriate QA/QC procedures that are described in each of the approved methods.

Sampling QA/QC: If a composite sample is being collected using an automated sampler, then once per month run a blank on the composite sampler. Automatically, draw distilled water into the sample jug using the sample collection line. Let this water set in the jug for 24 hours and then analyze for total phosphorus. Preserve this sample as described above.

ATTACHMENT C

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WHOLE EFFLUENT TOXICITY REPORT
FRESH WATERS

Facility Name _____ MEPDES Permit # _____

Facility Representative _____ Signature _____

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

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

Chlorinated? _____ Dechlorinated? _____

Results

	% effluent	
	water flea	**trout**
A-NOEL		
C-NOEL		

Effluent Limitations

A-NOEL	
C-NOEL	

Data summary

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

place * next to values statistically different from controls

for trout show final wt and % incr for both controls

Reference toxicant

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

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

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

ATTACHMENT D

Maine Department of Environmental Protection

Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____

Pipe # _____

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

SAMPLE COLLECTION INFORMATION

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

Sampling Location:

Weather Conditions: _____

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

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

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

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

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

Please Enter Effluent Limits for your facility

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

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

CERTIFICATION

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

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Date**: April 13, 2011**

PERMIT NUMBER: **ME0002020**
LICENSE NUMBER: **W002226-5N-H-R**

NAME AND ADDRESS OF APPLICANT

RED SHIELD ACQUISITION LLC
P.O. Box 564
24 Portland Street
Old Town, ME. 04468

COUNTY: **Penobscot**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

RED SHIELD ACQUISITION LLC
P.O. Box 564
24 Portland Street
Old Town, ME. 04468

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

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Alan Boynton**
Environmental Manager
(207) 827-0678
e-mail alan.boynton@oldtownff.com

1. APPLICATION SUMMARY:

a. Application: Red Shield Acquisition LLC (Red Shield/permittee hereinafter) has filed an application with the Department to renew Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0002020/Maine Waste Discharge License (WDL) #W002766-5N-F-R that was issued by the Department on August 6, 2002, and expired on August 6, 2007.

Red Shield's mill located in Old Town, Maine is currently manufacturing an average of 566 tons/day bleached kraft market pulp. Up until 2006, the mill also produced 257 tons/day bleached kraft tissue products. The 8/6/02 MEPDES permit authorized the

1. APPLICATION SUMMARY (cont'd)

discharge up to a monthly average of 24.4 million gallons per day (MGD) of treated process waters (including storm water and landfill leachate) 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. See **Attachment A** of this Fact Sheet for a location map of the facility. The permit also authorized discharges associated with or resulting from essential maintenance, regularly scheduled maintenance during start-up and shutdown. Red Shield is seeking authorization to discharge waste water associated with both pulping and the manufacturing of tissue products as it's long term business plan is to produce tissue products once market conditions are favorable.

In addition to the routine waste waters associated with the manufacturing of pulp and paper, Red Shield has secured a grant from the U.S. Department of Energy to experiment with the production of butanol via a demonstration scale bio-refinery within the mill complex. Butanol is produced via a fermentation process utilizing hemi-cellulose from the pulping process. The bio-refinery is expected to generate approximately 1.06 MGD of process waste water. The refinery is slated to commence construction in July 2011 and expected to be operational in January 2013.

Red Shield has requested to discharge treated production process waste waters (including treated storm water runoff and treated landfill leachate, non-contact cooling waters and filter backwash waters from three (3) separate outfalls. The permittee has also requested authorization to accept and treat up to 40,000 gallons per month of filter backwash waters from a local public drinking water treatment facility. Sanitary waste water generated at the mill is directed to Old Town's municipal waste water treatment facility which is also permitted by the Department. Red Shield's production process waste waters discharge through Outfall #001 and receive a secondary level of treatment by way of an activated sludge process. The waste waters receive best practicable treatment via a bar screen, two primary clarifiers (each 150 feet in diameter), an aeration basin ($\underset{\sim}{}$ 50 million gallons of capacity) and two secondary clarifiers (each 170 feet in diameter) before being discharged to the receiving waters. In addition to the routine waste waters discharged, this permit authorizes discharges associated with or resulting from essential maintenance, regularly scheduled maintenance during start-up and shutdown, spills and release (whether anticipated or unanticipated) from anywhere in the permitted facility. See **Attachment B** of this Fact Sheet for a schematic of the waste water treatment facility.

Non-contact cooling waters**,** non-contact condensing waters including discharges from turbine cooling waters and cooling waters for oil coolers are discharged from Outfall #002 and do not receive any formal treatment as the only pollutant of concern is heat. Waters discharged from Outfall #003 consist of filter backwash waters from 16 gravity sand filters used to filter raw water extracted from the Penobscot River for process make-up water and boiler feedwater. The discharge from Outfall #003 does not receive any formal treatment prior to discharge to the receiving water.

2. PERMIT SUMMARY

a. Terms and conditions - This permitting action is carrying forward all the terms and conditions of the 8/6/02 permitting action except that this permit;

1. Eliminating the weekly average and daily maximum thermal load limitations expressed in BTUs/day as the weekly average and daily maximum temperature difference limitations 0.5ºF are sufficient to determine compliance with Department rule Chapter 582, *Regulations Relating To Temperature*.

2. Eliminating Special Condition N, *Biological Monitoring Program*, as Maine's Department of Inland Fisheries & Wildlife have determined the condition is no longer necessary.

3. Establishing a requirement to submit an annual certification to be consistent with the requirements for reduced whole effluent toxicity (WET) and analytical chemistry in Department rule Chapter 530, *Surface Water Toxics Control Program.*

4. Eliminating the monthly average water quality based mass and concentration limits for arsenic as the most current statistical evaluation of test results on file at the Department indicates the discharge no longer exceeds or has a reasonable potential to exceed applicable ambient water quality criteria (AWQC) found in Department rule Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*.

5. Establishing new or revised water quality based mass and concentration limits for aluminum, copper and lead as the most current statistical evaluation of test results on file at the Department indicates the discharge has a reasonable potential to exceed applicable AWQC found in Department rule Chapter 584.

6. Reducing the monitoring frequency for the 12 phenolic compounds for Outfall #100 from 1/Month to 2/Year.

7. Establishes a monthly average water quality based mass limitation for total phosphorus along with a schedule of compliance to attain said limitation.

8. Reduces the monitoring frequency the monitoring frequency for dioxin and furan from 2/Quarter to 1/Year.

9. Authorizes the permittee to treat up to approximately 1.1 MGD of waste water associated with the production of butanol from an on-site bio-refinery using hemi-cellulose stock from the pulping process at the mill.

10. Establishes administrative Outfall #004 to report river temperature increases associated with the collective thermal discharge from Outfall #001 and Outfall #002.

2. PERMIT SUMMARY (cont'd)

b. History: The most current and relevant permitting and licensing actions include:

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, 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.

2. PERMIT SUMMARY (cont'd)

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.*

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 Demostration Scale Bio-refinery.

3. RECEIVING WATER STANDARDS

The Penobscot River Basin is located in the northeast part of the State of Maine and is the second largest river basin in New England. The main stem of the Penobscot River forms at the confluence of the East and West Branches in the Town of Medway, approximately 80 miles upriver from the head of tide in Bangor. The discharge points from the Red Shield mill are located just below the Great Works dam in Old Town, approximately 10 miles upriver from the head of tide. Major industrial dischargers upriver from the Red Shield mill include Lincoln Paper & Tissue on the main stem of the river in Lincoln and two Great Northern Paper Company mills in Millinocket and East Millinocket which discharge to the West Branch of the Penobscot River.

Maine law, 38 M.R.S.A. § 465(7)(A)(4) classifies the segment of the main stem of the Penobscot River, from the confluence of the Piscataquis River, including the Stillwater Branch, to the Veazie dam, including all impoundments, as a Class B waterway.

From the Veazie Dam, but not including the Veazie Dam, to the Maine Central Railroad bridge in Bangor-Brewer is classified as a Class B waterway. Further, the Legislature finds that the free-flowing habitat of this river segment provides irreplaceable social and economic benefits and that this use must be maintained.

From the Maine Central Railroad bridge in Bangor to a line extended in an east-west direction from the confluence of Reeds Brook in Hampden is classified as a Class B waterway. Further, the Legislature finds that the free-flowing habitat of this river segment provides irreplaceable social and economic benefits and that this use must be maintained.

Maine law, 38 M.R.S.A. §465(3) contains the classification standards for Class B as follows:

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.

3. RECEIVING WATER STANDARDS (cont'd)

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.

4. RECEIVING WATER QUALITY CONDITIONS

Table Category 5-D entitled, *Rivers and Streams Impaired By Legacy Pollutants* , in a document entitled, 2008 Maine Integrated Water Quality Report, [referred to as the 305(b) report] published by the Department states the designated use of fishing (consumption) is impaired in a ten mile segment of the Penobscot River between the Veazie Dam and Reed Brook due to the presence of PCBs in fish tissue. The Department is not aware of any information that indicates the discharge from Red Shield's waste water treatment facility is causing or contributing to the impairment.

In addition, the Report lists all freshwaters in Maine in "*Category 4-A: Rivers and Streams With Impaired Use, TMDL Completed.* Impairment in this context refers to the designated use of recreational fishing due to elevated levels of mercury in some fish caused by atmospheric deposition. As a result, the State has established a fish consumption advisory for all freshwaters in Maine. The Report states that a regional scale TMDL has been approved. In addition, pursuant to Maine law, 38 M.R.S.A. §420(1-B)(B), *"a facility is not in violation of the ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413 subsection 11."* The Department has established interim monthly average and daily maximum mercury concentration limits for this facility. See the discussion on compliance in section 6(m) of this Fact Sheet.

In the summers of 1997, 2001 and 2007, the Department conducted ambient water quality sampling on a 103-mile segment of the Penobscot River from Millinocket to Bucksport. Reports entitled, *Penobscot River Modeling Report, Final, June 2000*, *Penobscot River Data Report May 2002*, and *Penobscot River Modeling Report Draft, March 2003*, prepared by the Department, indicate there are sections of non-attainment of dissolved oxygen standards as a result of algal blooms in portions of the Class B sections of the rivers. These sections of river have experienced measured DO non-attainment at various locations during periods of low flow and high water temperature. Measured DO non-attainment is predominantly in the early morning hours in sections of river with significant diurnal dissolved oxygen (DO) swings. These significant diurnal DO swings are caused by nutrient enrichment and resulting plant growth. The Department has issued a report entitled, *Penobscot River Phosphorus Waste Load Allocation, May 2011* recommending year-round mass based total phosphorus limits for Katahdin's West operation in Millinocket and seasonal mass based total phosphorus limitations are necessary for the three remaining industrial dischargers (Katahdin East, Lincoln Paper and Tissue and Red Shield) on the river as well as monitoring for total phosphorus for five municipal waste water treatment facilities (Bangor, Brewer, Millinocket, Old Town and Orono).

4. RECEIVING WATER QUALITY CONDITIONS (cont'd)

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

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

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

4. RECEIVING WATER QUALITY CONDITIONS (cont'd)

The Department is pursuing the waste load allocation because it is reasonably expected to address the dissolved oxygen non-attainment presently being experienced on the Penobscot River. The Department has a high level of confidence that implementation of a phosphorus waste load allocation will dramatically curtail phytoplankton growth, to the point where it will be a negligible influence on dissolved oxygen. The specific eutrophication related responses that are targeted by the waste load allocation are not expected to persist into the tidally influenced portion of the Penobscot River. However, water quality improvements associated with the waste load allocation are expected to extend into the tidally influenced section of the river.

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

5. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

OUTFALL #001 (Final Effluent)

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

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

OUTFALL #001 (Final Effluent)

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges require application of best practicable treatment, be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, Maine law, 38 M.R.S.A., Section 420 and Department rules Chapter 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria For Toxic Pollutants*, requires the regulation of toxic substances at the levels set forth in said rules.

b. Production: This permitting action is utilizing production figures of 794 tons/day of unbleached kraft pulp produced (566 air dried tons/day as market pulp) and 257 tons/day of bleached kraft tissue product for calculating technology based mass figures in this permitting action. It is noted the bleached kraft pulp produced is 756 air dried tons/day. The production figures are based on actual production figures provided by the Red Shield for the period January 1, 1999 through December 31, 2001 when the facility was at a steady state rate of production.

c. Dilution Factors: Dilution factors associated with the discharge from the mill's waste water treatment facility were derived in accordance with freshwater protocols established in Department Rule Chapter 530, *Surface Water Toxics Control Program*, October of 2005. With a permitted treatment plant flow of 24.4 MGD, dilution calculations are:

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

Acute: 1Q10 = 2,678 cfs $\Rightarrow \frac{(2{,}678 \text{ cfs})(0.6464)}{24.4 \text{ MGD}} = 71.0{:}1$

Modified Acute(1)
¼1Q10 = 670 cfs $\Rightarrow \frac{(670 \text{ cfs})(0.6464)}{24.4 \text{ MGD}} = 17.7{:}1$

Chronic: 7Q10 = 3,151 cfs $\Rightarrow \frac{(3{,}151 \text{ cfs})(0.6464)}{24.4 \text{ MGD}} = 83.5{:}1$

Harmonic Mean: = 8,404 cfs $\Rightarrow \frac{(8{,}404 \text{ cfs})(0.6464)}{24.4 \text{ MGD}} = 223{:}1$

(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

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

OUTFALL #001 (Final Effluent)

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.

d. Flow: The previous permitting action established a monthly average limit of 24.4 MGD that is being carried forward in this permitting action that represents the design flow of the waste water treatment facility. A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2009 – November 2010 indicates flows have been reported as follows:

Flow

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly average	24.4	9.9 – 14.5	12.1
Daily maximum	Report	11.6 – 18.0	14.3

e. Biochemical oxygen demand (BOD_5) & Total suspended solids (TSS):

The following table contains the monthly average and daily maximum BOD and TSS limitations as calculated utilizing the BPT effluent limitations in 40 CFR Part 430, Sub-part B.

Final Prod. (t/d)	Subpart B	BOD Mon. Avg.		BOD Daily Max.		TSS Mon. Avg.		TSS Daily Max.	
		kg/kkg	lbs/day	kg/kkg	lbs/day	kg/kkg	lbs/day	kg/kkg	lbs/day
257	Kraft Tissue Paper	7.1	3,649	13.65	7,016	12.9	6,631	24	12,336
566	B-Mkt Bl Kft	8.05	9,113	15.45	17,489	16.4	18,565	30.4	34,412
	Totals		12,762		24,505		25,196		46,748

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

OUTFALL #001 (Final Effluent)

Reissued permits/licenses must also conform with EPA's anti-backsliding regulation. Section 402(o) of the CWA and EPA's regulations 40 CFR 122.44(l) prohibits issuance of a new permit/license with limits less stringent than in a previously issued permit/license except in certain circumstances. The 8/6/02 MEPDES permit limited the discharge of BOD and TSS to the following:

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

Derivation of the seasonal BOD and TSS limitations as illustrated above were based on a past demonstrated performance evaluation of the facilities wastewater treatment plant at the mill. The evaluation conducted by the Department used monitoring data for the time period of October 1, 1987 to April 30, 1990 in developing the 95% probable average monthly values of 10,430 lb/day and 24,100 lb/day for BOD and TSS respectively. The Department established the existing more stringent seasonal permit limits based upon best professional judgement (BPJ) of best practicable treatment. This permitting action is carrying forward all seasonal BOD and TSS limits from the previous permitting action.

A review of the DMR data for the period April 2009 – November 2010 indicates the facility has discharged as follows:

	BOD Mass (lbs/day)	
	Month Avg.	Daily Max.
Range		
(summer)	1,341 – 4,100 lbs/day	2,271 – 10,641 lbs/day
(non-summer)	1,744 – 4,100 lbs/day	2,517 – 7,740 lbs/day
Arithmetic mean		
(summer)	2,605 lbs/day	5,514 lbs/day
(non-summer)	2,720 lbs/day	4,870 lbs/day

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

OUTFALL #001 (Final Effluent)

	TSS Mass (lbs/day)	
	Month Avg.	Daily Max.
Range		
(summer)	3,033 – 8,975 lbs/day	5,266 – 15,926 lbs/day
(non-summer)	4,081 – 10,929 lbs/day	5,921 – 17,279 lbs/day
Arithmetic mean		
(summer)	5,785 lbs/day	11,102 lbs/day
(non-summer)	6,612 lbs/day	11,928 lbs/day

f. Temperature: The previous permitting action established a year-round daily maximum effluent temperature limit of 105 ^{o}F that is being carried forward in this permitting action.

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2009 – November 2010 indicates temperatures have been reported as follows

Temperature

Value	Limit (^{o}F)	Range (^{o}F)	Mean (^{o}F)
Daily maximum	105	73 - 99	85

g. River Temperature Increase – Department Rule Chapter 582, *Regulations Relating To Temperature*, limits thermal discharges to an in-stream temperature increase (ΔT) of 0.5° F above the ambient receiving water temperature when the weekly average temperature of the receiving water is greater than or equal to 66° F or when the daily maximum temperature is greater than or equal to 73° F. The temperature thresholds are based on EPA water quality criterion for the protection of brook trout and Atlantic salmon (both species indigenous to the Penobscot River). The weekly average temperature of 66° F was derived to ensure normal growth of the brook trout and the daily maximum threshold temperature of 73° F protects for the survival of juveniles and adult Atlantic salmon during the summer months. As a point of clarification, the Department interprets the term "weekly average temperature" to mean a seven (7) day rolling average. To promote consistency, the Department also interprets the ΔT of 0.5° F as a weekly rolling average criterion when the receiving water temperature is ≥66° F and <73° F. When the receiving water temperature is ≥73°F, compliance with the ΔT of 0.5° F is evaluated on a daily basis. Compliance with the 0.5° F is determined by calculating the river temperature increase (RTI) (expressed in °F) using the actual receiving water flow, actual receiving water temperature, actual discharge flow and actual discharge temperature from the mill. See Special Condition F, *River Temperature Increase* for the formula to conduct said calculation.

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

OUTFALL #001 (Final Effluent)

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

Section 451 also states that, after opportunity for hearing, the Department may establish by order a mixing zone with respect to any discharge for which a license has been issued pursuant to section 414.

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

In 1995, the former owner of the mill conducted a dye study to determine the mixing characteristics of the mill's discharge in the Penobscot River. The dye study determined that the effluent from the mill completely mixed with receiving water approximately three miles downstream of the mill outfall and is considered by the Department to be the zone of initial dilution. No formal mixing zone outside of the zone of initial dilution has been established in this permitting action.

h. pH Range: The previous permitting action established a pH range limit of 5.0 – 9.0 standard units that was based on federal regulation 40 CFR, Part 430. This permitting action is carrying the limit forward and continues to be consistent with the federal effluent guidelines.

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

OUTFALL #001 (Final Effluent)

i. Adsorbable organic halogens (AOX): The previous permitting action established monthly average and daily maximum mass limits for AOX based on federal regulation found at 40 CFR Part 430. The regulation establishes production based BAT monthly average and daily maximum allowances of 0.623 and 0.951 kg/kkg (lbs per 1000 pounds or metric tons) respectively, of unbleached pulp production. With an unbleached kraft production to be 794 tons/day the limits are calculated as follows:

(794 tons/day)(0.623 lbs/1000 lbs)(2000 lbs/ton) = 989 lbs /day
(794 tons/day)(0.951 lbs/1000 lbs)(2000 lbs/ton) = 1,510 lbs /day

The Red Shield mill became elemental chlorine free (ECF) beginning December 1999. A review of the monthly DMR data for the period April 2009 – November 2010 indicates AOX discharge levels have been reported as follows:

AOX

Value	Limit (lbs)	Range (lbs)	Mean (lbs)
Monthly average	989	121 – 236	191
Daily maximum	1,510	174 – 334	248

The federal regulations require 1/Day monitoring for AOX on the final outfall. However, given the fact that permittee has demonstrated that the monthly average and daily maximum AOX discharged has been 79% and 77% respectively, lower than the levels established in the federal regulation, this permitting action is reducing the monitoring frequency from 3/Week 1/Quarter for AOX based on a best professional judgment of the monitoring frequency necessary to determine on-going compliance with the BAT thresholds in the federal regulation.

j. COD: The previous permitting action did not establish final effluent limitations or monitoring requirements for COD. Federal regulation 40 CFR Part 430 has reserved promulgating of specific final effluent limits for COD. The EPA's Permit Guidance Document for implementing 40 CFR Part 430 recommends "… *monitoring of effluent for COD to develop baseline data for developing a COD limit for mills in the future and to provide COD data for helping the mill develop a pollution control strategy*." Former owner Fort James Operating Company has submitted daily COD test results for the period December 1999 (beginning of ECF) through September 2002 which indicates consistent monthly average results. Therefore, this permit does not establish limitations or monitoring requirements until the EPA formally promulgates a performance standard for COD.

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

OUTFALL #001 (Final effluent)

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

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

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

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

2) On and after January 1, 2001, 150 pounds or less of color pollutants per ton of unbleached pulp produced, measured on a quarterly average basis.

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

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

The Red Shield mill is currently in compliance with the best practicable treatment standard of 175 lbs/ton. This permitting action is carrying forward the technology based limit of 175 pounds per ton of unbleached pulp produced.

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

OUTFALL #001 (Final effluent)

l. Whole Effluent Toxicity (WET) & Chemical-Specific Testing – Maine law, 38 M.R.S.A., Sections 414-A and 420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department Rules, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants* set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters. WET, priority pollutant and analytical chemistry testing as required by Chapter 530, is included in this permit in order to fully characterize the effluent. This permit also provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment and receiving water characteristics.

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

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

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

Department rule Chapter 530 (1)(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the Chapter 530 criteria, the permittee's facility falls into the Level II frequency category as the facility has a chronic dilution factor of ≥20:1 but <100:1. Chapter 530(1)(D)(1) specifies that routine screening and surveillance level testing requirements are as follows:

Screening level testing – Beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter.

Level	WET Testing	Priority pollutant testing	Analytical chemistry
II	2 per year	1 per year	4 per year

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

OUTFALL #001 (Final effluent)

Surveillance level testing – Beginning upon issuance of the permit and lasting through 12 months prior to permit expiration.

Level	WET Testing	Priority pollutant testing	Analytical chemistry
II	1 per year	None required	2 per year

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

Department rule Chapter 530(D)(3)(b) states in part, *Dischargers in Level II may reduce surveillance testing to one WET or specific chemical series every other year provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E)."*

Chapter 530(3)(E) states "*For effluent monitoring data and the variability of the pollutant in the effluent, the Department shall apply the statistical approach in Section 3.3.2 and Table 3-2 of USEPA's "Technical Support Document for Water Quality-Based Toxics Control" (USEPA Publication 505/2-90-001, March, 1991, EPA, Office of Water, Washington, D.C.) to data to determine whether water-quality based effluent limits must be included in a waste discharge license. Where it is determined through this approach that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedence of water quality criteria, appropriate water quality-based limits must be established in any licensing action.*"

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

WET evaluation

On 2/9/11, the Department conducted a statistical evaluation on the most recent 60 months of WET data that indicates that the discharge does not exceed or have a reasonable potential (RP) to exceed the acute and chronic critical ambient water quality criteria (AWQC) thresholds (6.0% and 1.3% – mathematical inverse of the modified acute dilution factor 16.7:1 and the chronic dilution factor 74:1).

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

OUTFALL #001 (Final effluent)

Given the absence of exceedences or reasonable potential to exceed critical WET thresholds, the permittee meets the surveillance level monitoring frequency reduction criteria found at Department rule Chapter 530(D)(3)(b). Therefore, this permit is establishing a requirement to conduct surveillance level WET testing at a frequency of once every other year (1/2 Years) and conduct screening level testing of 2/Year beginning in the 12-month period prior to the expiration date of this permit and every five years thereafter.

In accordance with Department rule Chapter 530(2)(D)(4) and Special Condition L, *06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing*, of this permit, the permittee must annually submit to the Department a written statement evaluating its current status for each of the conditions listed.

Chemical evaluation

Chapter 530 (promulgated on October 12, 2005) §4(C), states "*The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions The Department shall use the same general methods as those in section 4(D) to determine background concentrations. For pollutants not listed by the Department, an assumed concentration of 10% of the applicable water quality criteria must be used in calculations."* The Department has limited information on the background levels of metals in the water column in the Penobscot River in the vicinity of the permittee's outfall. Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

Chapter 530 4(E), states "*In allocating assimilative capacity for toxic pollutants, the Department shall hold a portion of the total capacity in an unallocated reserve to allow for new or changed discharges and non-point source contributions. The unallocated reserve must be reviewed and restored as necessary at intervals of not more than five years. The water quality reserve must be not less than 15% of the total assimilative quantity."* Therefore, the Department is reserving 15% of the applicable water quality criteria in the calculations of this permitting action.

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

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

OUTFALL #001 (Final effluent)

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

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

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 E** of this Fact Sheet for Department guidance that establishes protocols for establishing waste load allocations. The guidance states that the most protective of water quality becomes the facility's allocation. According to the 2/9/11 statistical evaluation (Report ID #342), all pollutants of concern (aluminum, copper, and lead) are to be limited based on the segment allocation method.

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

OUTFALL #001 (Final effluent)

Chapter 530 §(3)(D)(1) states "*For specific chemicals, effluent limits must be expressed in total quantity that may be discharged and in effluent concentration. In establishing concentration, the Department may increase allowable values to reflect actual flows that are lower than permitted flows and/or provide opportunities for flow reductions and pollution prevention provided water quality criteria are not exceeded. With regard to concentration limits, the Department may review past and projected flows and set limits to reflect proper operation of the treatment facilities that will keep the discharge of pollutants to the minimum level practicable."*

As not to penalize the permittee for operating at flows less than the permitted flow, the Department is establishing concentration limits based on a back calculation from the mass limit utilizing a multiplier of 2.0.

It is noted the Penobscot Indian Nation (PIN) has informally notified the Department of its intent to formally petition the Department to adopt a site specific fish consumption rate for a segment(s) of the Penobscot River for use in calculating human health based ambient water quality criteria (AWQC) specified by 06-096 CMR Department rule, Chapter 584, *Surface Water Quality Criteria For Toxic Pollutants*. Once petitioned, a formal public process as outlined in **Attachment F** of this Fact Sheet, will be invoked and adhered to. Should an alternate fish consumption rate be adopted, this permit may be reopened pursuant to Special Condition O, *Reopening of Permit For Modifications*, of this permit to establish new or revised water quality based limits for pollutants that exceed or have a reasonable potential to exceed human health AWQC.

Segment allocation methodology

Historical Average:

For the segment allocation methodology, the historical average quantity (mass) for each pollutant of concern for each facility is calculated utilizing the arithmetic mean of the concentrated values reported for each pollutant, a conversion factor of 8.34 lbs/gallon and the monthly average permit limit for flow. The historical mass discharged for each pollutant for each facility is mathematically summed to determine the total mass discharged for each pollutant in the watershed. Based on the individual dischargers historical average each discharger is assigned a percentage of the whole which is then utilized to determine the percent of the segment allocation for each pollutant for each facility. For the permittee's facility, historical averages for aluminum, copper and lead were calculated as follows:

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

OUTFALL #001 (Final effluent)

Aluminum

Mass limits

Mean concentration (n=3) = 227 ug/L or 0.227 mg/L
Permit flow limit = 24.4 MGD
Historical average mass = (0.227 mg/L)(8.34)(24.4 MGD) = 46.3 lbs/day

The 2/9/11 statistical evaluation indicates the historical average mass of aluminum discharged by the permittee's facility is 17.6% of the aluminum discharged by the facilities on the Penobscot River and its tributaries. Therefore, the permittee's segment allocation for aluminum is calculated as 17.6% of the chronic assimilative capacity of the river at Bangor, the most downstream facility minus the assimilative capacity assigned to the tributaries on the Penobscot River that have permitted discharges. The Department has calculated a chronic assimilative capacity of 1,126 lbs/day at Bangor. Therefore, the chronic mass segment allocation for aluminum for the permittee can be calculated as follows:

Monthly average: (Chronic assimilative capacity mass)(% of total aluminum discharged)
(1,126 lbs/day)(0.176) = 198 lbs/day

Since the adoption of Chapter 530, the Department has a developed a policy for establishing equitable concentration limits in permits that are greater than calculated end-of-pipe concentrations. In general, most dischargers subject to the Chapter 530 testing requirements are discharging at or about 50% of the flow limitations established in their permits. This provides the Department with the flexibility to establish higher concentration limits in the permit while still maintaining compliance with the water quality based mass limitations. With an actual discharge flow at ½ (0.5) of permitted flow rate, a concentration limit of two times (mathematical inverse of 0.5) the calculated end-of-pipe concentration, will maintain compliance with water quality based mass limits. Therefore, this permitting action is establishing concentration limitations that are two (2) times higher than the calculated end-of-pipe concentrations. The permittee must keep in mind, if flows greater than 50% of the permitted flow are realized, the concentration in the effluent must be reduced proportionally to maintain compliance with the mass limitations.

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

OUTFALL #001 (Final effluent)

Concentration limits

Monthly average concentration for aluminum;

$$\frac{198 \text{ lbs/day}}{(24.4 \text{ MGD})(8.34 \text{ lbs/gal.})} = 0.973 \text{ mg/L}$$

(0.978 mg/L)(1,000 ug/mg)(2) = 1,946 ug/L

Copper

Mass limits

Mean concentration (n=3) = 23.7 ug/L or 0.0237 mg/L
Permit flow limit = 24.4 MGD
Historical average mass = (0.0237 mg/L)(8.34)(24.4 MGD) = 4.82 lbs/day

The 2/9/11 statistical evaluation indicates the historical average mass of copper discharged by the permittee's facility is 32.41% of the copper discharged by the facilities on the Penobscot River and its tributaries. However, the Red Shield facility is limited by the individual allocation for the acute (daily maximum) limit resulting in a surplus of 4.17 lbs of copper to be allocated to downstream dischargers where copper is being limited as a daily maximum value in a permit. In this case, there are two downstream dischargers (Bangor and Brewer) being limited for acute copper. Therefore, the permittee's chronic segment allocation for copper is calculated as 32.41% of the copper discharged on the Penobscot River and its tributaries and the acute (daily maximum) limit is based on an individual allocation method based on the modified acute dilution factor of 16.74:1. The Department has calculated a chronic assimilative capacity of 30.5 lbs/day at Bangor. Therefore, the mass segment allocations for copper for the permittee can be calculated as follows:

Monthly average: (Chronic assimilative capacity mass)(% of total copper discharged)
(30.5 lbs/day)(0.3241) = 9.9 lbs/day

Monthly average mass limit = 9.9 lbs/day

$$\frac{(9.9 \text{ lbs/day})}{(8.34 \text{ lbs/gal})(24.4 \text{ MGD})} = 0.049 \text{ mg/L}$$

Concentration limit: (0.049 mg/L)(1,000 ug/mg)(2) = 98 ug/L

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

OUTFALL #001 (Final effluent)

Daily maximum mass limit

Acute AWQC = 3.07 ug/L
Acute dilution factor (modified)= 16.74:1

EOP concentration = [Dilution factor x 0.75 x AWQC] + [0.25 x AWQC]

EOP = [16.74 x 0.75 x 3.07 ug/L] + [0.25 x 3.07 ug/L] = 39.3 ug/L

Based on a permitted flow of 24.4 MGD, EOP mass limits are as follows:

$$\frac{(39.3 \text{ ug/L})(8.34)(24.4 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 8.0 \text{ lbs/day}$$

Daily mass limit = 8.0 lbs/day

$$\frac{(8.0 \text{ lbs/day})}{(8.34 \text{ lbs/gal})(24.4 \text{ MGD})} = 0.039 \text{ mg/L}$$

Concentration limit: (0.039 mg/L)(1,000 ug/mg)(2) = 79 ug/L

The calculations above are correct in that the monthly average limitations are greater than the daily maximum limit. This will occur when the ratio between the acute and chronic dilution factors are disproportionate to the acute and chronic AWQC.

Lead

Mass limits

Mean concentration (n=3) = 1.8 ug/L or 0.0018 mg/L
Permit flow limit = 24.4 MGD
Historical average mass = (0.0018 mg/L)(8.34)(24.4 MGD) = 0.373 lbs/day

The 2/9/11 statistical evaluation indicates the historical average mass of lead discharged by the permittee's facility is 9.97% of the lead discharged by the facilities on the Penobscot River and its tributaries. Therefore, permittee's segment allocation for lead is calculated as 9.97% of the chronic assimilative capacity of the river at Bangor, the most downstream facility minus the assimilative capacities assigned to the tributaries on the Penobscot River that have permitted discharges. The Department has calculated a chronic assimilative capacity of 5.33 lbs/day of lead at Bangor. Therefore, the mass segment allocation for lead for the permittee can be calculated as follows:

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

OUTFALL #001 (Final effluent)

Monthly average mass for lead
(Chronic assimilative capacity mass)(% of total lead discharged)
(5.33 lbs/day)(0.0997)= 0.53 lbs/day

Concentration limits

Monthly average concentration for lead;

$$\frac{0.53 \text{ lbs/day}}{(24.4 \text{ MGD})(8.34 \text{ lbs/gal.})} = 0.0026 \text{ mg/L}$$

(0.026 mg/L)(1,000 ug/mg)(2) = 5.2 or 5 ug/L

As for the remaining chemical specific parameters tested to date, none of the test results in the 60-month evaluation period exceed or have a reasonable potential to exceed applicable acute, chronic or human health AWQC. Therefore, this permitting action is carrying forward the waived surveillance level reporting and monitoring frequency for analytical chemistry and priority pollutant testing. As with reduced WET testing, the permittee must file an annual certification with the Department pursuant to Chapter 530 §2(D)(4) and Special Condition L, *06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing*, of this permit, the permittee must annually submit to the Department a written statement evaluating its current status for each of the conditions listed.

Beginning 12 months prior to the expiration date of the permit, the permittee shall conduct default screening level analytical chemistry testing at 1/Quarter and priority pollutant testing of 1/Year.

m. Mercury – Pursuant to *Certain deposits and discharges prohibited,* Maine law, 38 M.R.S.A. § 420 and *Waste discharge licenses,* 38 M.R.S.A. § 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* on May 25, 2000, to the permittee thereby administratively modifying WDL #W002226-44-D-R 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. It is noted the limitations have not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit as limitations and monitoring frequencies are regulated separately through 38 M.R.S.A.§ 413 and 06-096 CMR 519. However, the interim limitations remain in effect and enforceable and any modifications to the limits and or monitoring requirements will be formalized outside of this permitting document.

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

OUTFALL #001 (Final effluent)

Maine law 38 M.R.S.A., §420 1-B,(B)(1) states that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413, subsection 11. A review of the Department's data base for the period April 2004 through the present indicates the permittee has been in compliance with the interim limits for mercury as the results have ranged from <1.0 ppt to 15.7 ppt with an arithmetic mean of 6.0 ppt.

n. Total Phosphorus – Pursuant to the Department's waste load allocation report entitled , *Penobscot River Phosphorus Waste Load Allocation, February 2011,* this permitting action is establishing a seasonal (June 1- September 30) monthly average total phosphorus limit of 102 lbs/day based on the permitted flow of 24.4 MGD and a phosphorus concentration of 0.5 mg/L. The calculation is as follows:

24.4 MGD(8.34 lbs/gal)(0.50 mg/L) = 102 lbs/day

In a letter dated March 21, 2011, the permittee stated it would not be able to meet the total phosphorus limit upon issuance of this permit. Nine sampling events during the summer of 2010 indicate the facility discharged in the range of 86 lbs/day to 203 lbs/day with an arithmetic mean of 161 lbs/day. Maine law, 38 M.R.S.A.§414-A(2) states in part, "*A schedule of compliance may include interim and final dates for attainment of specific standards necessary to carry out the purposes of this subchapter and must be as short as possible, based on consideration of the technological, economic and environmental impact of the steps necessary to attain those standards."*

Department rule Chapter 523, *Waste Discharge License Conditions,* § Section 7, *Schedules of Compliance,* states in part, "*…if a permit establishes a schedule of compliance which exceeds 1 year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.*

(i) The time between interim dates shall not exceed 1 year, except that in the case of a schedule for compliance with standards for sewage sludge use and disposal, the time between interim dates shall not exceed six months.

(ii) If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than 1 year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date."

In correspondence April 12, 2011, the permittee proposed a schedule that is acceptable to the Department and has been established as Special Condition G, *Schedule of Compliance – Total Phosphorus* of this permit.

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

OUTFALL #100 (Internal waste stream)

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

n. Flow: The previous permitting action established a monthly average and daily maximum reporting requirement for flow from the bleach plant that are being carried forward in this permitting action. The permit required estimating the flow when sampling for pollutants was required as the permittee demonstrated at that time that installing continuous flow measurement was disproportionate to EPA's cost estimates proposed in the draft regulation due to the age of mill, and the configuration of the bleach plant sewers. Calculating the flow shall be performed on the same day whenever sampling for the parameters for Outfall #100 of this permit.

A review of the monthly Discharge Monitoring Report (DMR) data for the period April 2009 – November 2010 indicates flows have been reported as follows

Flow

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly average	Report	2.4 – 4.2	3.5
Daily maximum	Report	2.9 – 4.7	3.7

o. 2,3,7,8-TCDD (Dioxin): The previous permitting action established a daily maximum concentration limit of <10 ppq (pg/L) with a monitoring frequency of 2/Quarter for dioxin based on Maine law, 38 M.R.S.A., §420. The limit of 10 pg/L is also the ML (Minimum Level - the level at which the analytical system gives recognizable signals and an acceptable calibration point) for EPA Method 1613B. Federal regulation 40 CFR Part 430 establishes the same limitation and is therefore being carried forward in this permitting action.

Dioxin

Value	Limit (pg/L)	Range (pg/L)	Mean (pg/L)
Daily maximum	Report	<0.2 - <10	0.89

Because of the excellent compliance history and to be consistent with other like permitting action, this permit is reducing the monitoring frequency to 1/Year.

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

OUTFALL #100 (Internal waste stream)

p. 2,3,7,8 TCDF (Furan): The previous permitting action established a limit of <10 ppq (pg/L) based on Maine law, 38 M.R.S.A., §420. The limit of 10 pg/L is also the ML for furan for EPA Method 1613B. Federal regulation 40 CFR Part 430 establishes a daily maximum concentration limit of 31.9 pg/L. Being that Maine law is more stringent, the limit of <10 pg/L is being carried forward in this permitting action.

Furan

Value	Limit (pg/L)	Range (pg/L)	Mean (pg/L)
Daily maximum	Report	<0.3 – 4.4	1.3

As with dioxin, the monitoring frequency for furan is being reduced to 1/Year.

q. Twelve Chlorophenolics: The previous permitting established limitations or monitoring requirements for the chlorophenolic compounds based on federal regulation 40 CFR Part 430. The limitations vary from 2.5 ug/L to 5.0 ug/L and are equivalent to the ML for each parameter using EPA Method 1653. A 1/Month monitoring requirement was also established based on the federal regulation. The permittee has never reported a detectable level concentration for any of the compounds tested to date. Therefore, this permitting action is reducing the monitoring frequency to 2/Year to be consistent with the monitoring frequency for other like facilities.

r. Chloroform: The previous permitting action established monthly average and daily maximum mass limits for chloroform based on federal regulation found at 40 CFR Part 430. The regulation establishes production based BAT monthly average and daily maximum allowances of 4.14 g/kkg and 6.92 g/kkg respectively, of unbleached pulp production. With an unbleached kraft pulp production to be 794 tons/day the limits were calculated as follows:

(794 tons/day)(4.14 g/kkg)(0.907 kkg/ton)(1.0 lbs/ 454g) = 6.56 lbs /day
(794 tons/day)(6.92 g/kkg)(0.907 kkg/ton)(1.0 lbs/ 454g) = 10.9 lbs /day

On July 16, 2004, the Department modified the permitte's MEPDES permit by suspending the monitoring requirement for chloroform in lieu of a certification pursuant to federal regulation 40 CFR Part 430.02(f). The permittee conducted a statistical evaluation of historic values for pH, kappa numbers and chlorine dioxide use to establish a correlation between the said parameters and chloroform levels. Daily monitoring of the surrogate parameters can be used to estimate chloroform values. The permittee has indicated the 2004 statistical evaluation remains representative of the manufacturing

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

process today and therefore the certification remains applicable. Should the monitoring of the surrogate parameters indicate more than a minor statistically difference from the 2004 levels, the permittee will be required to either monitor for chloroform or conduct another statistical evaluation on at least 104 data points collected over a two year period for another certification.

OUTFALL #002 (Non-Contact Cooling, Condensate)

s. Flow: The previous permitting action established a monthly average limit of 3.0 MGD that is being replaced with a reporting requirement in this permitting action. The limit is being removed to provide the permittee with the flexibility to route additional non-contact cooling waters to this outfall if need be. A review of the Discharge Monitoring Report (DMR) data for the period January 1, 1999 to the present indicates actual flows have averaged approximately 3.0 MGD.

t. Temperature: The previous permitting action established a year year-round daily maximum effluent temperature limit of 115 ^{o}F that is being carried forward in this permitting action and remains representative of the discharge.

u. Thermal load – See the discussion under section 5(g) above.

OUTFALL #003 (Filter Backwash)

v. pH Range: The previous licensing action established a pH range limit of 5.0 – 9.0 standard units that was based on federal regulation 40 CFR, Part 430. This permitting action is carrying the limit forward and continues to be consistent with the federal effluent guidelines.

w. Flow: The previous licensing action did not establish any limitations or monitoring requirements for flow. This permitting action is establishing a monthly average and daily maximum reporting requirement in an effort to obtain flow information necessary to calculate mass loadings for total suspended solids (TSS).

x. Total Suspended Solids: The previous permitting action established monthly average and daily maximum concentration limits of 20 mg/L and 60 mg/L respectively, that are being replaced with a reporting requirement in this permitting action. The Department expects that the normal operation of the filter backwash plant will achieve concentration levels within the range of 20 mg/L as a monthly average and 60 mg/L as a daily maximum. If the permittee's testing indicates consistent values outside of this range, appropriate concentration limits may be established in this permit in the future. This permitting action establishing new monthly average and daily maximum mass limitations for mass to be consistent with federal regulation 40 CFR, Part 122.45(f), that states parameters such as TSS must be limited by mass in permits. The monthly average limit of 336 lbs/day was

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

OUTFALL #003 (Filter Backwash)

derived based on a daily maximum flow of 2.0 MGD and 20 mg/L and the daily maximum limit of 1,001 lbs/day was derived based on a monthly average flow of 2.0 MGD and 60 mg/L. Monthly average and daily maximum flow of 2.0 MGD used in the calculations are representative of the flows currently being discharged for the three period 1999 – 2001.

y. pH Range - The previous permitting action established a pH range limit of 5.0 – 9.0 standard units that was based on federal regulation 40 CFR, Part 430. This permitting action is carrying the limit forward and continues to be consistent with the federal effluent guidelines.

6. BEST MANAGEMENT PRACTICES PLAN

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

7. BIOLOGICAL MONITORING PROGRAM

Special Condition N, *Biological Monitoring Program*, of the previous permit required the permittee to monitor bald eagles within 25 miles of the Old Town, Maine mill. Other fish eating birds including, but not limited to, ospreys, great blue herons and common loons were to be sampled as surrogates for dead young, sub-adult or adult eagles or non-viable bald eagle eggs. The bald eagle is no longer listed as threatened or endangered. The Maine Inland Fisheries and Wildlife has made the determination the biological monitoring is outdated (origin 2000) and no longer necessary. As a result, the monitoring requirement is not being carried forward in this permitting action.

8. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

9. PUBLIC COMMENTS

Public notice of this application was made in the Bangor Daily newspaper on or about July 28, 2007**.** The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

10. DEPARTMENT CONTACTS

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

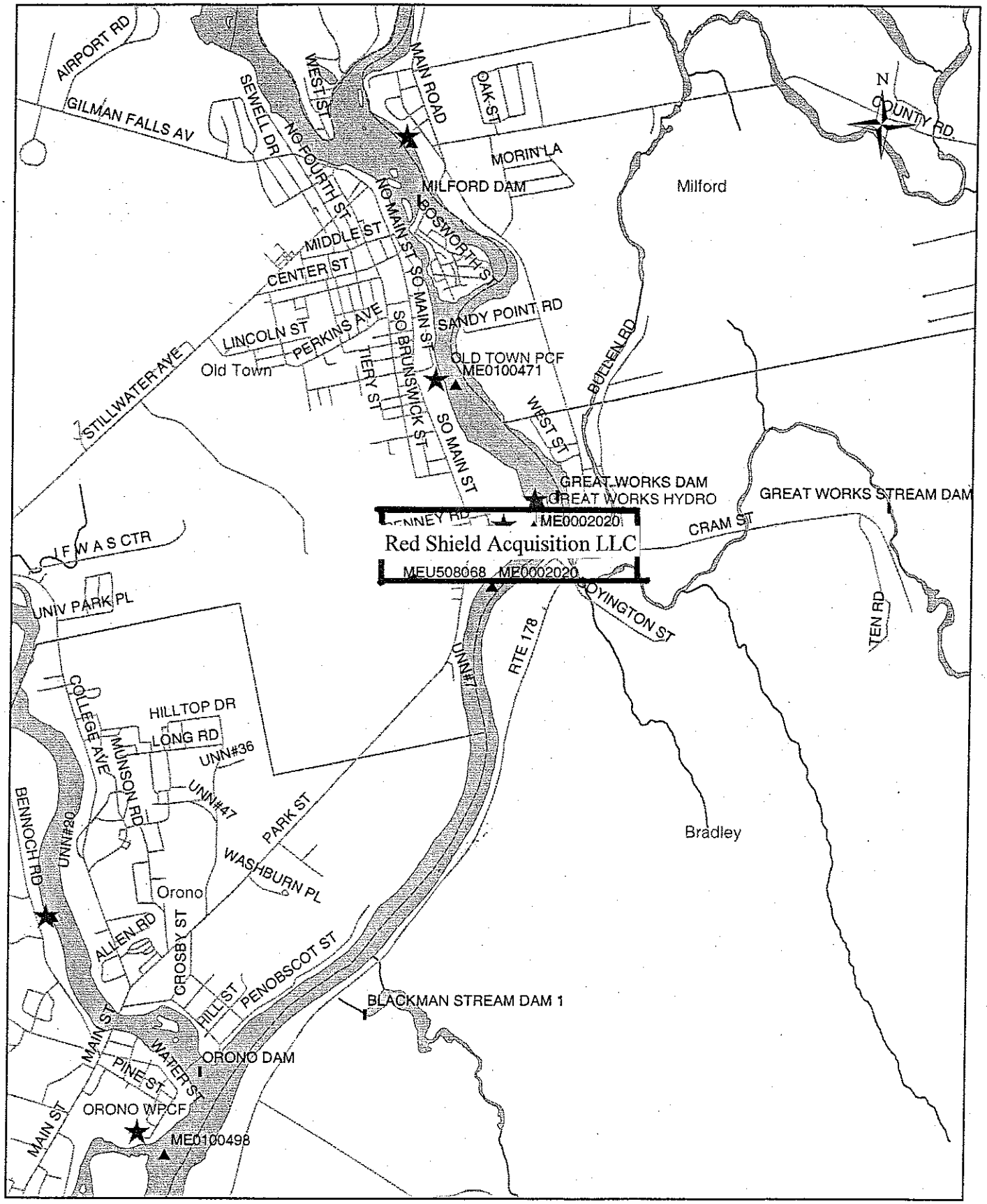
Gregg Wood
Division of Water Quality Management
Bureau of Land and Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017
Telephone: (207) 287-3901
Electronic mail : gregg.wood@maine.gov

11. RESPONSE TO COMMENTS

During the period of April 13, 2011, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department did not receive 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.

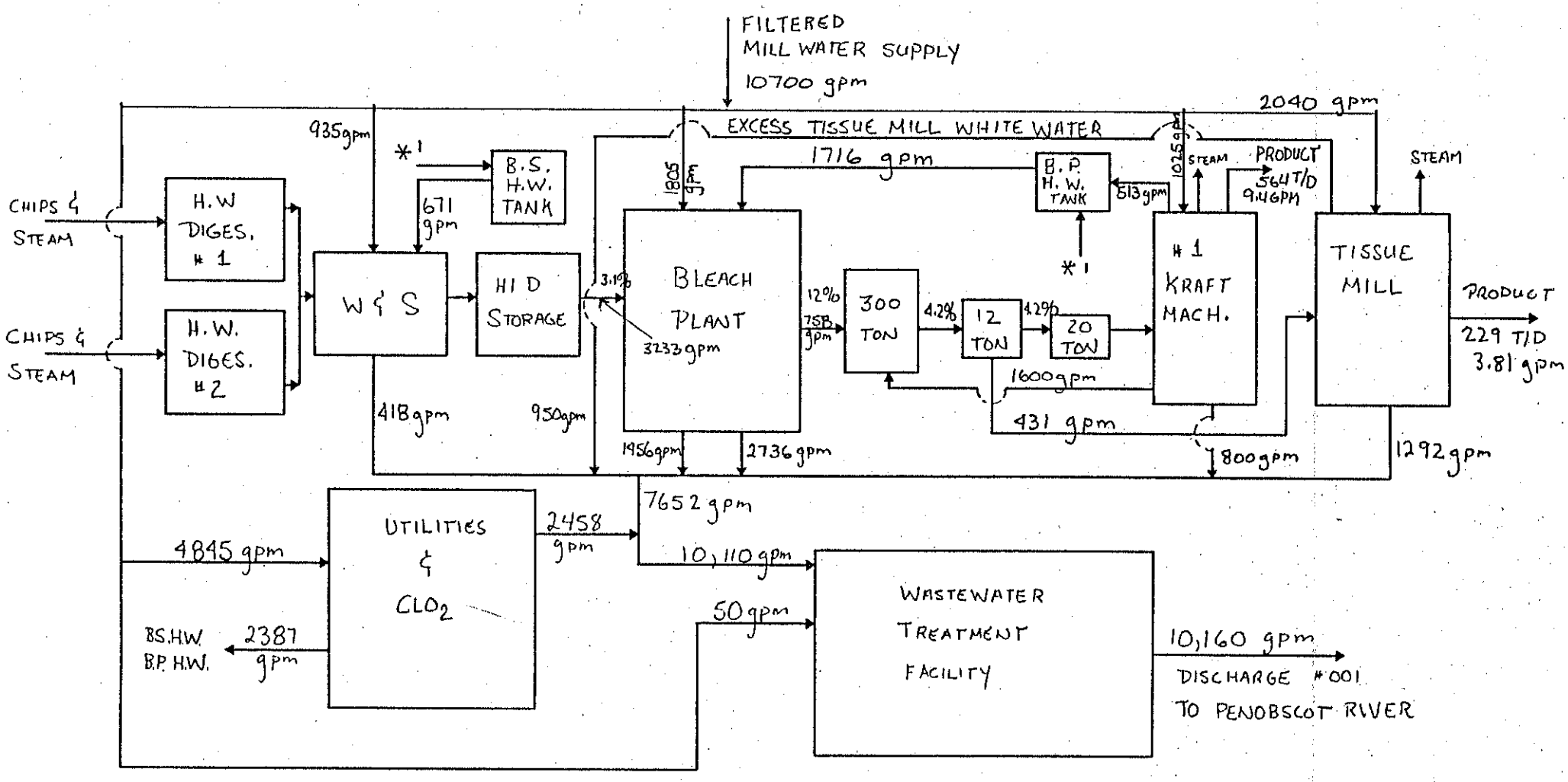
ATTACHMENT A

Wastewater Licensing Information



ATTACHMENT B

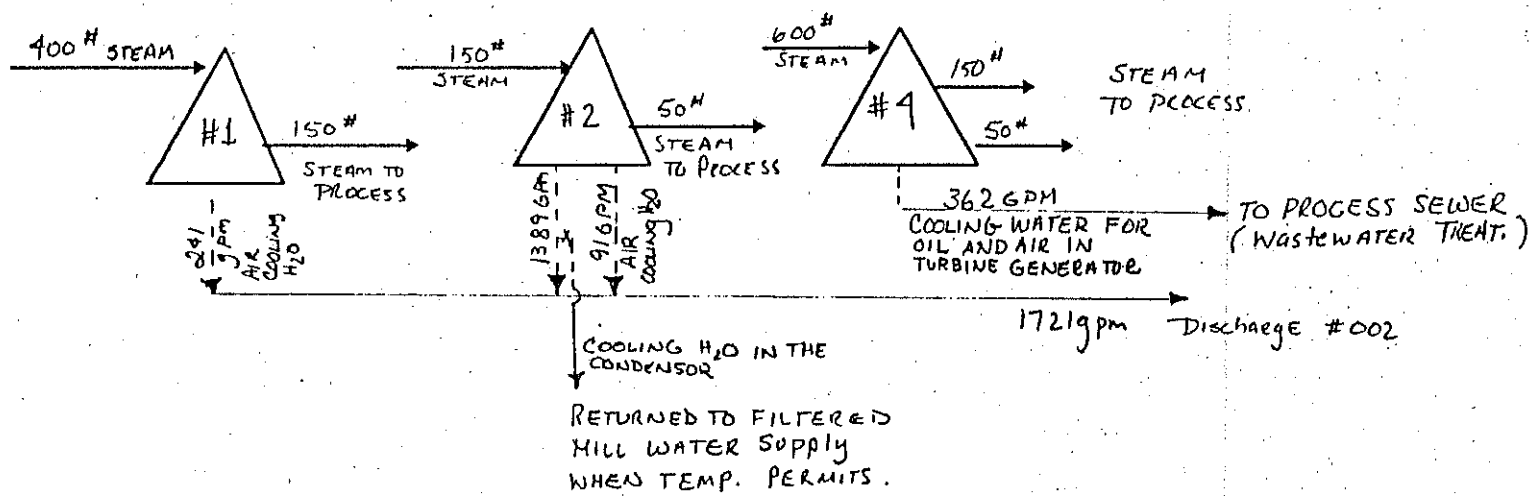
MILL PROCESS WATER TO WTP FLOW DIAGRAM



*' 1) WATER FROM HEAT X
2) WARM H_2O HEADER - CONDENSATE FROM EVAPS,

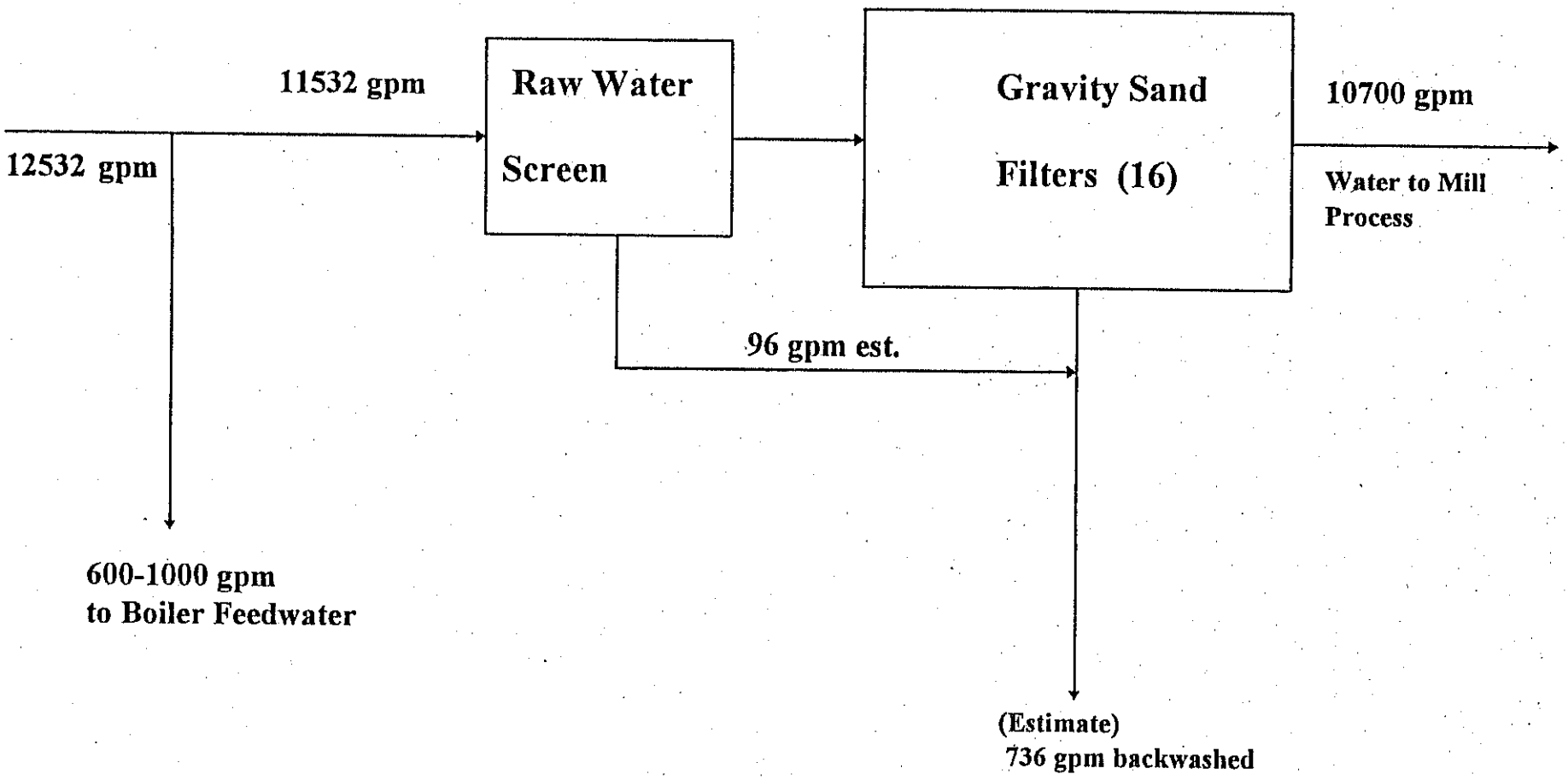
DISCHARGE #002

Turbine Discharge Process Diagram



* NOTE: • ALL FLOWS ESTIMATED
  - OIL COOLING WATER ON #1 TURBINE GOES TO PROCESS SEWER TO WTP.
  - AIR COOLING H_2O + OIL COOLING H_2O GOES TO PROCESS SEWER ON #4 TURBINE

DISCHARGE #003 WATER BALANCE (FILTERED WATER PLANT)



ATTACHMENT C

WET TEST REPORT

Data for tests conducted for the period

04/Feb/2006 - 04/Feb/2011 period.

RED SHIELD ACQUISITION LLC

NPDES= ME000202 Effluent Limit: Acute (%) = 1.494 Chronic (%) = 1.347

Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	65	10/07/2007	1.494		
TROUT	A_NOEL	70	04/20/2008	1.494		
TROUT	C_NOEL	50	10/07/2007	1.347		
TROUT	C_NOEL	50	04/20/2008	1.347		
WATER FLEA	A_NOEL	50	10/07/2007	1.494		
WATER FLEA	A_NOEL	100	04/20/2008	1.494		
WATER FLEA	C_NOEL	6	10/07/2007	1.347		
WATER FLEA	C_NOEL	100	04/20/2008	1.347		

ATTACHMENT D

PRIORITY POLLUTANT DATA SUMMARY

Date Range: **04/Feb/2006 - 04/Feb/2011 period.**

Facility Name: **RED SHIELD ACQUISITION LLC** NPDES: **ME0002020**

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
03/31/2006	NR	NR	1	1	0	0	0	0	0	F	0
08/31/2007	NR	NR	1	1	0	0	0	0	0	F	0
10/07/2007	12.00	11.80	20	9	0	0	0	11	0	F	0
03/27/2008	NR	NR	12	9	0	0	0	3	0	F	0
04/20/2008	12.80	12.50	23	9	0	0	0	14	0	F	0
03/23/2010	NR	NR	1	0	0	0	0	1	0	F	0

y:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

FACILITY CHEMICAL DATA REPORT

Data Date Range: 04/Feb/2006 - 04/Feb/2011

Showing all data

Facility name: **RED SHIELD ACQUISITION LLC** Permit Number: **ME0002020**

Parameter: 1,1,1,2-TETRACHLOROETI	**Test date**	**Result (ug/l)**	**Lsthan**
	03/23/2010	0.001	Y
Parameter: ALUMINUM	**Test date**	**Result (ug/l)**	**Lsthan**
	10/07/2007	275.000	N
	03/27/2008	42.000	N
	04/20/2008	365.000	N
Parameter: AMMONIA	**Test date**	**Result (ug/l)**	**Lsthan**
	10/07/2007	1200.000	N
	03/27/2008	2200.000	N
	04/20/2008	2200.000	N
Parameter: ARSENIC	**Test date**	**Result (ug/l)**	**Lsthan**
	03/31/2006	0.090	N
	08/31/2007	0.004	Y
	10/07/2007	2.000	N
	03/27/2008	20.000	Y
	04/20/2008	1.000	N
Parameter: CADMIUM	**Test date**	**Result (ug/l)**	**Lsthan**
	10/07/2007	0.300	N
	03/27/2008	5.000	Y
	04/20/2008	0.300	N
Parameter: CALCIUM	**Test date**	**Result (ug/l)**	**Lsthan**
	10/07/2007	43000.000	N
	04/20/2008	40000.000	N
Parameter: CHLORINE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/07/2007	20.000	Y
	03/27/2008	20.000	Y
	04/20/2008	20.000	Y
Parameter: CHROMIUM	**Test date**	**Result (ug/l)**	**Lsthan**
	10/07/2007	2.000	Y
	03/27/2008	20.000	Y
	04/20/2008	3.000	N
Parameter: COPPER	**Test date**	**Result (ug/l)**	**Lsthan**
	10/07/2007	3.000	N
	03/27/2008	60.000	N
	04/20/2008	8.000	N
Parameter: CYANIDE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/07/2007	7.000	N
	03/27/2008	40.000	Y
	04/20/2008	4.000	N
Parameter: LEAD	**Test date**	**Result (ug/l)**	**Lsthan**

10/07/2007	1.000	N
03/27/2008	40.000	Y
04/20/2008	3.000	N

Parameter: MAGNESIUM

Test date	Result (ug/l)	Lsthan
10/07/2007	4100.000	N
04/20/2008	3800.000	N

Parameter: MERCURY

Test date	Result (ug/l)	Lsthan
03/01/2006	0.003	N
03/31/2008	0.008	N
07/29/2009	0.005	N
12/30/2009	0.006	N
03/23/2010	0.001	Y
06/16/2010	0.016	N
09/01/2010	0.006	N

Parameter: NICKEL

Test date	Result (ug/l)	Lsthan
10/07/2007	4.000	N
03/27/2008	23.000	N
04/20/2008	2.000	Y

Parameter: SILVER

Test date	Result (ug/l)	Lsthan
10/07/2007	0.300	Y
03/27/2008	20.000	Y
04/20/2008	0.300	N

Parameter: ZINC

Test date	Result (ug/l)	Lsthan
10/07/2007	32.000	N
03/27/2008	110.000	N
04/20/2008	74.000	N

ATTACHMENT E

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

DATE: October 2008

TO: Interested Parties

FROM: Dennis Merrill, DEP

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

****

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

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

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

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

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

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

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

Maine Department of Environmental Protection

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maine Department of Environmental Protection

Working Definitions of Terms Used in the DeTox System.

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

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

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

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

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

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

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

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

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

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

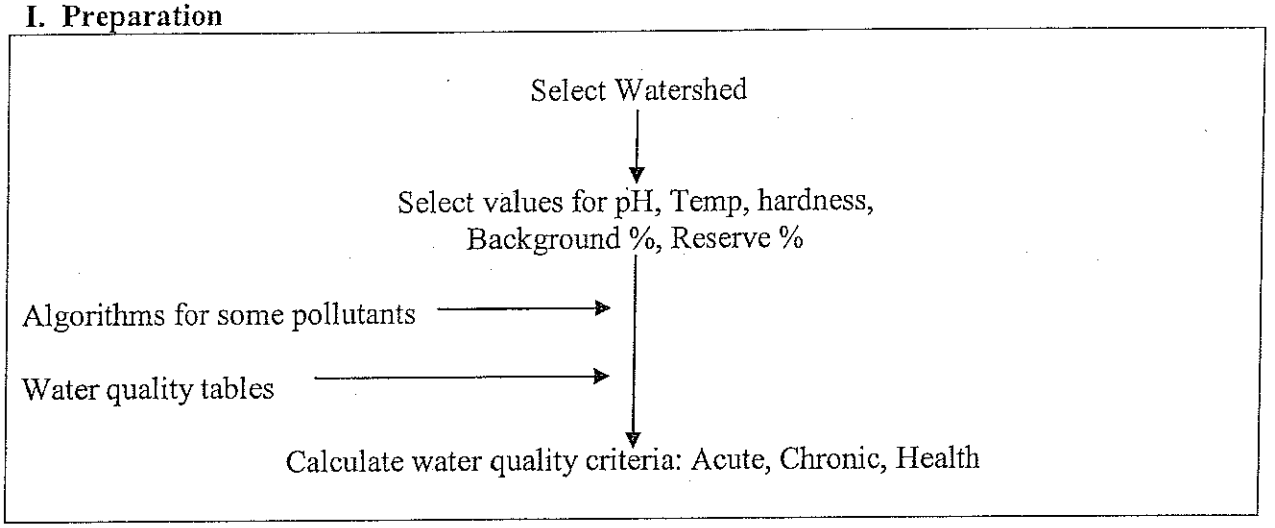
Segment allocation. One of three ways of developing an *allocation.* The amount is set by multiplying a facility's *historical discharge percentage* for a specific pollutant by the *assimilative capacity* for that pollutant and criterion. A facility will have different allocation percentages for each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

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

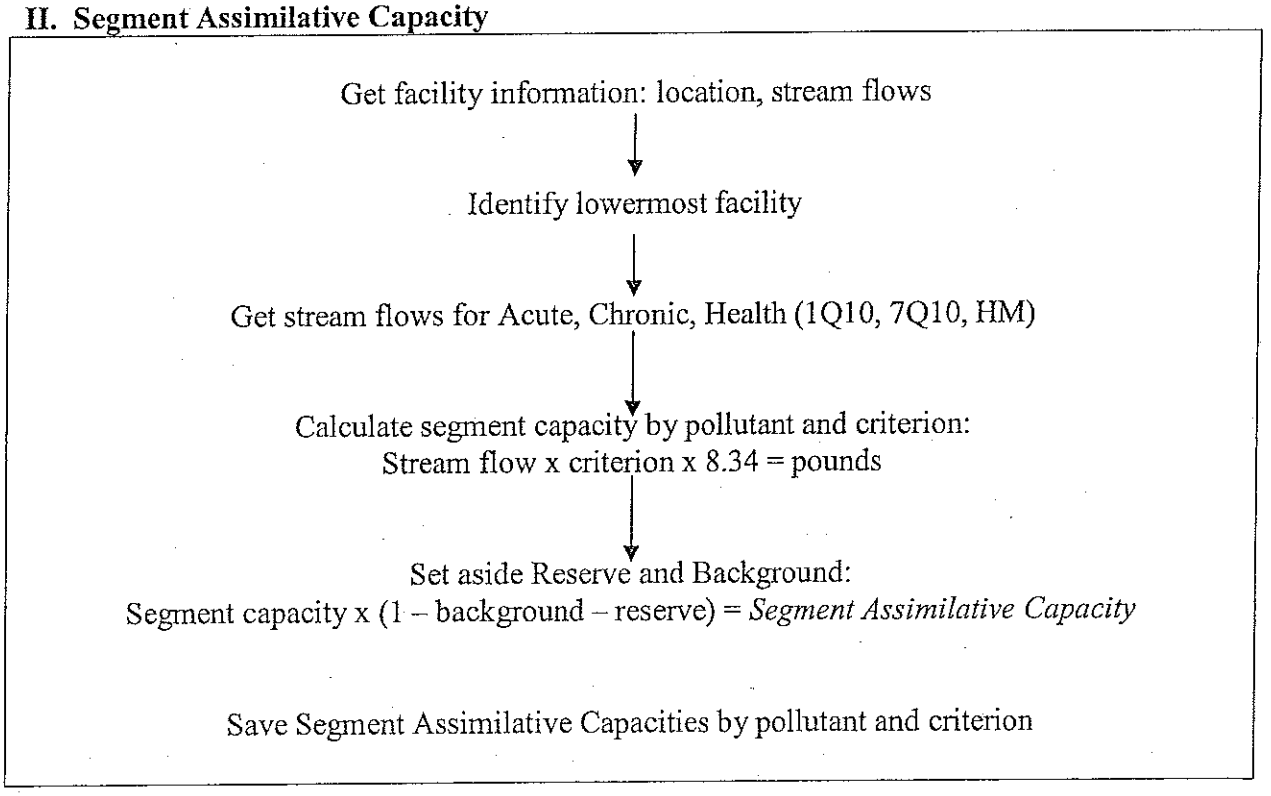
Water quality criteria. Standards for acceptable in-stream or ambient levels of pollutants. These are established in the Department's Chapter 584 and are expressed as concentrations in ug/L. There may be separate standards for acute and chronic protection aquatic life and/or human health. Each criterion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

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

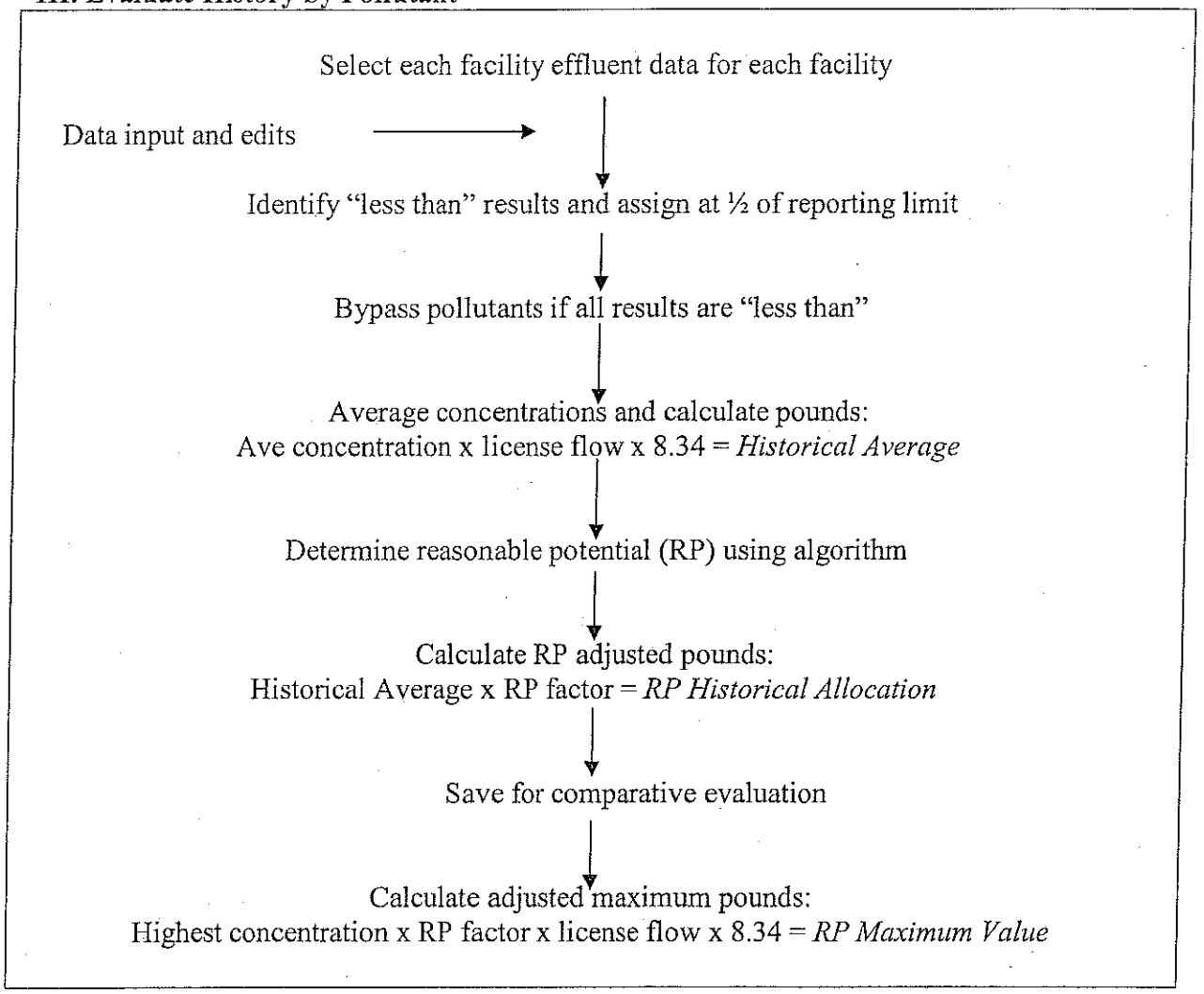
I. Preparation



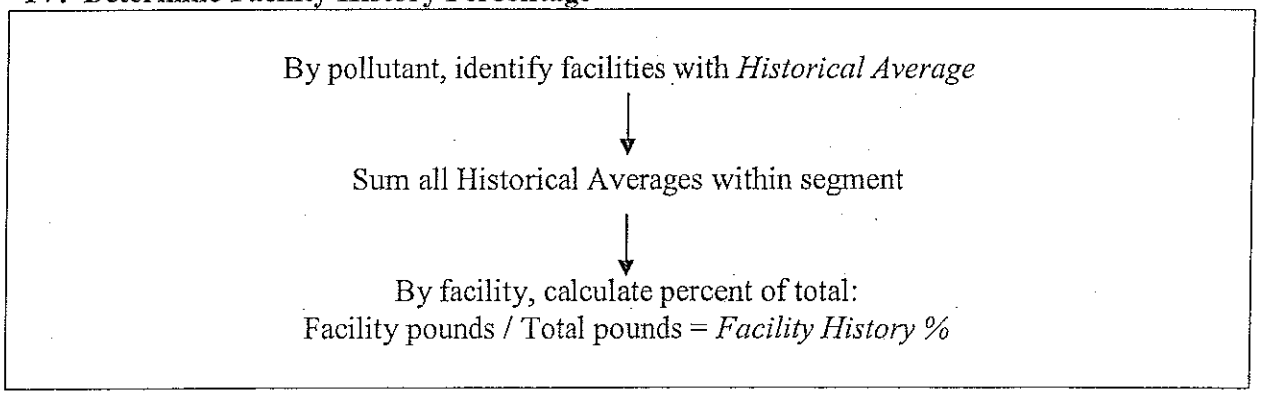
II. Segment Assimilative Capacity



III. Evaluate History by Pollutant



IV. Determine Facility History Percentage



V. Segment Allocation

By pollutant and criterion, select *Segment Assimilative Capacity*

↓

Select individual *Facility History %*

↓

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

↓

Save for comparative evaluation

VI. Individual Allocation

Select individual facility and dilution factor (DF)

↓

Select pollutant and water quality criterion

↓

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

↓

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

↓

Save for comparative evaluation

VII. Make Initial Allocation

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

↓

Compare allocation and select the smallest

↓

Save as *Facility Allocation*

VIII. Evaluate Need for Effluent Limits

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

↓

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

↓

Save *Effluent Limit* for comparison

IX. Reallocation of Assimilative Capacity

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

↓

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

↓

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

↓

Save difference

↓

Select next facility downstream

↓

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

↓

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

↓

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

↓

Repeat process for each facility downstream in turn

ATTACHMENT F

Explanatory Statement of Process DEP Will Follow in the
Development of Site Specific Water Quality Criteria

References: 38 MRSA, section 420(2)(B) and DEP Rules, Chapters 2 and 584(3)(B)

The BEP has initial jurisdiction for issuance of permits that have limits based on site specific criteria ("SSC") developed pursuant to 38 MRSA, Section 420(2)(B). Typically, requests for SSC will come to the Department staff from one of two sources. A discharge source may have information from studies to indicate that statewide criteria are not appropriate for a given pollutant and location. Alternatively, third parties may have information regarding the unique or different uses of a particular water body or may have information about the relative toxicity of certain pollutants. In any event, a request for SSC must be supported by appropriate scientific studies conducted according to a plan of study approved in advance by the Department in consultation with EPA and the Bureau of Health if human health criteria are involved.

Because SSC are implemented through permit limits, they must be considered in the context of permit issuance or modification proceeding. If a permit issuance or renewal is not pending, any person can request that the Department open for modification a current permit for any cause described in 38 MRSA, Section 414-A(5). See also 38 MRSA, Section 341-D(3). Below are the steps that would likely be followed for consideration of SSC, with options for different processes depending on when and how a person intends to develop the technical information in support of the SSC request. This explanation of process is intended solely as advice to assist persons in exercising their options to request site specific criteria as part of a licensing proceeding under Chapter 584, and is not intended to be judicially enforceable.

1. Initial contact is made with DEP staff, indicating a desire to institute a Site Specific Criteria (SSC) proceeding. A petitioner must file with the Department a petition requesting that the BEP assume jurisdiction of the licensing action and making the necessary showing in support of the request for SSC, as described in 06-096 CMR Chapter 584. This will include, but is not limited to, the pollutants and/or issues of concern, and an outline of the proposed studies and process the party intends to use.

2. At the time a petition is filed with the Department, the petitioner must post a public notice in a newspaper having general circulation in the area that would be affected by the SSC. The Department will (by certified mail) notify potentially affected permitted discharge sources and interested parties of record for those permits. Any person may comment on the pending petition. A public hearing may be requested in accordance with the public notice. A service list of potentially interested parties will also be developed.

3. The DEP will prepare recommendations on whether BEP should dismiss or take up the petition. This, together with any comments received on the petition, will be forwarded to the BEP and the matter will be placed on the BEP's agenda. These materials will also be distributed to the service list.

4. The BEP will consider whether a petition includes the necessary information, as provided in Chapter 584. If the BEP grants initial approval of the petition, all permits that may be

affected by a decision to establish a SSC will be reopened for modification consideration in the same proceeding. If the petition is denied, the license that is the subject of the request, if it is being considered for renewal, will be sent back to the DEP for processing.

5. If the Board grants initial approval of the petition for SSC, the petitioner will prepare a plan of study for SSC investigations and submit it to the DEP staff. The topics to be included in the plan are described in Chapter 584(3)(B). The Department may hold pre-submission conferences with the petitioner and other interested parties. At that time, the parties will discuss issues such as the general scope of the study, the participants, existing studies, and any studies that may be proposed by other parties.

6. The DEP, EPA and, if human health criteria are involved, the Bureau of Health will review the Plan(s) of Study. The Department may approve, approve with conditions or not approve a Plan of Study. If a plan is not approved, the deficiencies and criteria for their correction will be clearly identified and opportunity provided for their correction. Department determinations on plans of study are not subject to appeal. All correspondence will be copied to the service list.

7. The approved Plan of Study will then be implemented. In order to capture seasonal variations, studies using sampling programs may continue for a year or more. Those relying on demographic surveys or literature searches may be done in less time.

8. A report of the studies will be provided to the DEP and the service list. Interested parties will be provided a time specified by the Department, but at least 30 days, in which to provide comments. DEP, EPA and, if appropriate, the Bureau of Health will review the report and comments and formulate a technical analysis.

9. The DEP will provide staff recommendations to the BEP as to whether a public hearing should be held. When requested by an affected licensee or when there is creditable conflicting technical information that a hearing will help clarify, a public hearing will be held. Copies of the study reports and all comments received will be provided to the BEP. If no hearing is recommended, the staff will provide a draft order for acceptance or denial of the SCC request.

10. The BEP will either schedule a public hearing or hear argument at a public meeting on staff recommendations.

11. If scheduled, a public hearing will be conducted pursuant to 5 MRSA, Chapter 375, Subchapter IV. Affected licensees have a right to participate in a public hearing and this constitutes their opportunity for hearing on license modifications that may result from SSC determinations. All other parties must petition to intervene in the hearing if they so desire. The Department will then prepare a summary of public comments and staff recommendations and place these on the BEP's agenda.

12. If the BEP decides to set SSC different from the state-wide criteria in Appendix A of Chapter 584, it will direct the staff to prepare permit modifications for affected discharge sources.

13. The staff will prepare draft permit modifications to each discharge source affected, and will notice EPA and other interested parties consistent with Chapter 522.

14. After receiving comments on the draft permits, the staff will prepare proposed permit modifications and place them on the BEP's agenda for consideration.

15. Once approved by the BEP, the modified permits will become valid and subject to the normal appeal provisions of law.

August 2006

ATTACHMENT G

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

MEPDES# _____ Facility Name _____

Since the effective date of your permit have there been:	NO	YES (Describe in Comments)
1. changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may **increase** the toxicity of the discharge?		
2. changes in the operation of the treatment works that may **increase** the toxicity of the discharge?		
3. changes in industrial manufacturing processes contributing wastewater to the treatment works that may **increase** the toxicity of the discharge?		

COMMENTS:

Name(print) _____

Signature _____ Date _____

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

This form may be used to meet the requirements of Chap 530(2)(D)(4). This Chapter requires all dischargers having waived or reduced Toxic testing to file a statement with the Department describing changes to the waste being contributed to their system as outlined above. As an alternative the discharger may submit a signed letter containing the same information.

CONTENTS

A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

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

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

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

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

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

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

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

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

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

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

5. Bypasses.

(a) Definitions.

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

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

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

(c) Notice.

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

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

(d) Prohibition of bypass.

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

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

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

6. Upsets.

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

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

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

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

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

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

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

(c) Records of monitoring information shall include:

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

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

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

D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

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

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

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

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

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

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

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

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

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

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

(f) Twenty-four hour reporting.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

5. Publicly owned treatment works.

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

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

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

E. OTHER REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

DEP INFORMATION SHEET

Appealing a Commissioner's Licensing Decision

Dated: May 2004 **Contact: (207) 287-2811**

SUMMARY

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

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

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

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

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

HOW TO SUBMIT AN APPEAL TO THE BOARD

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

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

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

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

5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.

6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.

7. *New or additional evidence to be offered.* The Board may allow new or additional evidence as part of an appeal only when the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or show that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2, Section 24(B)(5).

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license file is public information made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.

2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.

3. *The filing of an appeal does not operate as a stay to any decision.* An applicant proceeding with a project pending the outcome of an appeal runs the risk of the decision being reversed or modified as a result of the appeal.

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

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

II. APPEALS TO MAINE SUPERIOR COURT

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

ADDITIONAL INFORMATION

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

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