STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

DARRYL N. BROWN
COMMISSIONER

April 4, 2011

Mr. John Clark
Houlton Water Company
P.O. Box 726
Houlton, ME 04730
jlc@hwco.org

RE: Maine Pollution Discharge Elimination System Permit (MEPDES) #ME0101290
Maine Waste Discharge License (WDL) #W002648-6D-D-R
FINAL PERMIT

Dear Mr. Clark:

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

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

Sincerely,

Bill Hinkel

Bill Hinkel
Division of Water Quality Management
Bureau of Land and Water Quality
bill.hinkel@maine.gov
ph: 207-485-2281

Enc.

ec: Tim Peters, HWC Sharri Venno, HBMI Sandy Mojica, USEPA
Sean Bernard; Lori Mitchell, DEP File # W2648

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STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

HOULTON WATER COMPANY	)	MAINE POLUTANT DISCHARGE
PUBLICLY OWNED TREATMENT WORKS	)	ELIMINATION SYSTEM PERMIT
HOULTON, AROOSTOOK COUNTY, MAINE	)	AND
#ME0101290	)	WASTE DISCHARGE LICENSE
#W002648-6D-D-R **APPROVAL**	)	**RENEWAL**

Pursuant to the provisions of the *Federal Water Pollution Control Act*, Title 33 USC, §1251, *Conditions of licenses*, 38 M.R.S.A. § 414-A, and applicable regulations, the Department of Environmental Protection (Department) has considered the application of the HOULTON WATER COMPANY (HWC, permittee, or applicant) with its supportive data, agency review comments, and other related materials on file and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The applicant has applied to the Department for renewal of combination Maine Waste Discharge License (WDL) renewal and modification #W002648-5L-C-M / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0101290, which was issued by the Department on February 16, 2005 and expired on February 16, 2010. The February 16, 2005 MEPDES permit authorized the monthly average discharge of up to 1.5 million gallons per day (MGD) of secondary treated wastewaters from a publicly owned treatment works (POTW) to the Meduxnekeag River, Class B, in Houlton, Maine.

On May 18, 2005, the Department issued an administrative modification letter to HWC to correct typographical errors and to modify Special Condition M, *Inflow/Infiltration*, of the February 16, 2005 MEPDES permit.

On April 10, 2006, the Department amended the February 16, 2005 MEPDES permit by incorporating the whole effluent toxicity (WET), analytical chemistry and priority pollutant testing requirements of *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective October 9, 2005).

PERMIT SUMMARY

This permitting action is <u>significantly different from</u> the February 16, 2005 permitting action in that it is:

1. Eliminating the monthly average water quality-based concentration and mass effluent limitations for total arsenic based on the results of facility testing;

2. Establishing monthly average water quality-based concentration and mass effluent limitations for total aluminum based on the results of facility testing;

3. Establishing monthly average water quality-based concentration and mass effluent limitations for total cadmium based on the results of facility testing;

4. Establishing monthly average water quality-based concentration and mass effluent limitations for total copper based on the results of facility testing;

5. Revising (more stringent) the daily maximum water quality-based concentration and mass effluent limitations for total copper based on the results of facility testing;

6. Establishing monthly average water quality-based concentration and mass effluent limitations for cyanide (available) based on the results of facility testing;

7. Establishing monthly average water quality-based concentration and mass effluent limitations for total lead based on the results of facility testing;

8. Eliminating the A-NOEL limits of 28% for the brook trout and fathead minnow based on the results of facility testing;

9. Eliminating the C-NOEL limit of 25% for the water flea based on the results of facility testing;

10. Establishing a C-NOEL limit of 25% for the brook trout and a surveillance level monitoring frequency of twice per year based on the results of facility testing;

11. Establishing an annual certification statement requirement (Special Condition H, *Statement for Reduced/Waived Toxics Testing* of this permit) for reduced toxics testing; and

12. Eliminating the requirement to conduct ambient water quality for the Meduxnekeag River as this effort will be conducted by the Department.

CONCLUSIONS

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

   (a) Existing 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 as defined in 38 M.R.S.A. § 414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the above noted application of the HOULTON WATER COMPANY to discharge a monthly average of up to 1.5 million gallons per day of secondary treated wastewaters from a publicly owned treatment works to the Meduxnekeag River, Class B, in Houlton, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

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

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

DONE AND DATED AT AUGUSTA, MAINE THIS 4th DAY OF APRIL 2011.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Teco Brown for
DARRYL N. BROWN, Commissioner

Filed
APR - 4 2011
State of Maine
Board of Environmental Protection

Date of initial receipt of application: December 14, 2009
Date of application acceptance: December 14, 2009
This Order prepared by Bill Hinkel, BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **secondary treated sanitary wastewater** from **Outfall #001** to the Meduxnekeag River. Such discharges shall be limited and monitored by the permittee as specified below[(1)]:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
	as specified	as specified	as specified	as specified	as specified	as specified	as specified	as specified
Flow *[50050]*	1.5 MGD *[03]*	---	Report MGD *[03]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
BOD_5 *[00310]*	375 lbs./day *[26]*	563 lbs./day *[26]*	626 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Week *[02/07]*	Composite *[24]*
BOD_5 Percent Removal**(2)** *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
TSS *[00530]*	375 lbs./day *[26]*	563 lbs./day *[26]*	626 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Week *[02/07]*	Composite *[24]*
TSS Percent Removal**(2)** *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	1/Day *[01/01]*	Grab *[GR]*
E. coli Bacteria**(3)** *[31633]*	---	---	---	64 col/100 ml **(4)** *[13]*	---	427 col/100 ml *[13]*	2/Week *[02/07]*	Grab *[GR]*
Total Residual Chlorine**(5)** *[50060]*	---	---	---	0.044 mg/L**(6)** *[19]*	---	0.067 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
pH *[00400]*	---	---	---	---	---	6.0-9.0 SU *[12]*	1/Day *[01/01]*	Grab *[GR]*

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

FOOTNOTES: See Pages 10-13 of this permit for the applicable footnotes.

SPECIAL CONDITIONS

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

2. The permittee is authorized to discharge **secondary treated sanitary wastewater** from **Outfall #001** to the Meduxnekeag River. Such discharges shall be limited and monitored by the permittee as specified below[(1)]:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average as specified	Weekly 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
Total Phosphorus as P(7) "WINTER SEASON" (September 16 – May 31) *[00665]*	Report lbs./day *[26]*	---	Report lbs./day *[26]*	Report µg/L *[28]*	---	Report µg/L *[28]*	1/Month *[01/30]*	Composite *[24]*
Dissolved Orthophosphate as P(8) "WINTER SEASON" (September 16 – May 31) *[00671]*	Report lbs./day *[26]*	Report lbs./day *[26]*	Report lbs./day *[26]*	Report µg/L *[28]*	Report µg/L *[28]*	Report µg/L *[28]*	1/Week *[01/07]*	Composite *[24]*
Dissolved Orthophosphate as P(8) "SUMMER SEASON" (June 1 – September 15) *[00671]*	Report lbs./day *[26]*	Report lbs./day *[26]*	Report lbs./day *[26]*	Report µg/L *[28]*	Report µg/L *[28]*	Report µg/L *[28]*	2/Week *[02/07]*	Composite *[24]*
Total Phosphorus as P(7) "SUMMER SEASON" (June 1 – September 15) *[00665]*	Report lbs./day *[26]*	Report lbs./day *[26]*	Report lbs./day *[26]*	250 µg/L *[28]*	Report µg/L *[28]*	500 µg/L *[28]*	2/Week *[02/07]*	Composite *[24]*
Total Phosphorus as P(7) "SUMMER SEASON" (July 1 – September 15) *[00665]*	1.25 lbs./day(9) *[26]*	---	---	---	---	---	1/Quarter *[01/90]*	Calculate *[CA]*

The italicized numeric values bracketed in the table above and in text on subsequent pages are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports. **FOOTNOTES: See Pages 10-13 of this permit for the applicable footnotes.**

SPECIAL CONDITIONS

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

3. Whole effluent toxicity, analytical chemistry and priority pollutant testing requirements for **Outfall #001A** (1).

SURVEILLANCE LEVEL - Beginning upon issuance and lasting until 12 months prior to permit expiration.

Effluent Characteristic	Effluent Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity (10)						
Acute – NOEL						
Ceriodaphnia dubia (Water flea) *[TDA3B]*	---	---	---	Report % *[23]*	1/Year*[01/YR]*	Composite *[24]*
Salvelinus fontinalis (Brook trout) *[TDA6F]*	---	---	---	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Chronic – NOEL						
Ceriodaphnia dubia (Water flea) *[TBP3B]*	---	---	---	Report % *[23]*	1/Year*[01/YR]*	Composite *[24]*
Salvelinus fontinalis (Brook trout) *[TBQ6F]*	---	---	---	25% *[23]*	2/Year *[02/YR]*	Composite *[24]*
Analytical Chemistry (11) *[51477]*	---	---	---	Report µg/L *[28]*	1/Year *[01/YR]*	Composite/Grab *[24]*
Aluminum (Total) *[01105]*	1.73 lbs./day *[26]*	---	276 µg/L *[28]*	---	2/Year *[02/YR]*	Composite *[24]*
Cadmium (Total) *[01027]*	0.0068 lbs./day *[26]*	---	1.1 µg/L *[28]*	---	2/Year *[02/YR]*	Composite *[24]*
Copper (Total) *[01042]*	0.22 lbs./day *[26]*	0.28 lbs./day *[26]*	35 µg/L *[28]*	45 µg/L *[28]*	2/Year *[02/YR]*	Composite *[24]*
Cyanide (Available) *[01027]*	0.14 lbs./day *[26]*	---	22 µg/L *[28]*	---	2/Year *[02/YR]*	Grab *[GR]*
Lead (Total) *[01051]*	0.074 lbs./day *[26]*	---	---	12 µg/L *[28]*	2/Year *[02/YR]*	Composite *[24]*

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

FOOTNOTES: See Pages 10-13 of this permit for the applicable footnotes.

SPECIAL CONDITIONS

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

4. Whole effluent toxicity, analytical chemistry and priority pollutant testing requirements for **Outfall #001A** (1).

SCREENING LEVEL - Beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter.

Effluent Characteristic	Effluent Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity (10)						
Acute – NOEL						
Ceriodaphnia dubia (Water flea) *[TDA3B]*	---	---	---	Report % *[23]*	1/Quarter*[01/90]*	Composite *[24]*
Salvelinus fontinalis (Brook trout) *[TDA6F]*	---	---	---	Report % *[23]*	1/Quarter*[01/90]*	Composite *[24]*
Chronic – NOEL						
Ceriodaphnia dubia (Water flea) *[TBP3B]*	---	---	---	Report % *[23]*	1/Quarter*[01/90]*	Composite *[24]*
Salvelinus fontinalis (Brook trout) *[TBQ6F]*	---	---	---	25% *[23]*	1/Quarter*[01/90]*	Composite *[24]*
Analytical Chemistry (11) *[51477]*	---	---	---	Report µg/L *[28]*	1/Quarter *[01/90]*	Composite/Grab *[24]*
Priority Pollutants (11) (12) *[50008]*	---	---	---	Report µg/L *[28]*	1/Year *[01/YR]*	Composite/Grab *[24/GR]*
Aluminum (Total) *[01105]*	1.73 lbs./day *[26]*	---	276 µg/L *[28]*	---	2/Year *[02/YR]*	Composite *[24]*
Cadmium (Total) *[01027]*	0.0068 lbs./day *[26]*	---	1.1 µg/L *[28]*	---	2/Year *[02/YR]*	Composite *[24]*
Copper (Total) *[01042]*	0.22 lbs./day *[26]*	0.28 lbs./day *[26]*	35 µg/L *[28]*	45 µg/L *[28]*	2/Year *[02/YR]*	Composite *[24]*
Cyanide (Available) *[01027]*	0.14 lbs./day *[26]*	---	22 µg/L *[28]*	---	2/Year *[02/YR]*	Grab *[GR]*
Lead (Total) *[01051]*	0.074 lbs./day *[26]*	---	---	12 µg/L *[28]*	2/Year *[02/YR]*	Composite *[24]*

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

FOOTNOTES: See Pages 10-13 of this permit for the applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES:

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

   All analytical test results must 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 approve test methods. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the detection limit achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL is not acceptable and will be rejected by the Department. For mass, if the analytical result is reported as <Y or if a detectable result is less than a RL, report a <X lbs/day, where X is the parameter specific limitation established in the permit. See **Attachment A** of this permit, ***WET and Chemical Specific Data Report Form, July 27, 2009***, for a list of the Department's RLs.

   Influent sampling for flow, BOD_5 and TSS must be sampled just upstream of the bar rack at the headworks for the facility.

   Effluent sampling must be sampled for all parameters after the last treatment process such that samples are representative of what is being discharged to the receiving waters. Any change in sampling location(s) must be reviewed and approved by the Department in writing.

2. **Percent Removal** – For secondary treated wastewater, the facility shall maintain a minimum of 85 percent removal of both BOD_5 and TSS. The percent removal shall be based on a monthly average calculation using influent and effluent concentrations. The percent removal shall be waived when the monthly average influent concentration is less than 200 mg/L. For instances when this occurs, the facility shall report "NODI-9" on the monthly Discharge Monitoring Report (DMR).

3. ***E. coli*** **Bacteria** limits are seasonal and apply between May 15 and September 30, inclusive, of each year. The Department reserves the right to require year-round disinfection to protect the health and welfare of the public.

4. ***E. coli*** **Bacteria** – The monthly average limitation is a geometric mean limitation and must be calculated and reported as such.

SPECIAL CONDITIONS

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

FOOTNOTES:

5. **Total Residual Chlorine (TRC)** – Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine-based compounds are being used to disinfect the discharge.

6. **Total Residual Chlorine (TRC)** – For the purposes of this permit, compliance with the **monthly average** limitation in this permit will be based on USEPA's current minimum level (ML) of detection of 50 µg/L (0.05 mg/L). The permittee shall utilize approved test methods that are capable of producing analytical results down to or below 50 µg/L. All analytical test results shall be reported to the Department, including results which are detected below the ML. Results reported at or below the RL will be considered to be in compliance with the permit. The **monthly average** limitation on the Discharge Monitoring Reports will be coded with the RL of 50 µg/L such that detectable results reported at or below 50 µg/L but greater than the **monthly average** water quality-based limit established in this permit will not be recorded as violations of the permit.

7. **Total Phosphorus** – The permittee shall conduct total phosphorous monitoring in accordance with **Attachment B** of this permit, ***Protocol for Total Phosphorus Sample Collection and Analysis for Waste Water and Receiving Water Monitoring Required by Permits, June 2007***, unless otherwise specified by the Department. Analyses and test results must be provided for total phosphorous as P.

8. **Dissolved Orthophosphate** – The permittee shall conduct orthophosphate monitoring in accordance with **Attachment C** of this permit, ***Protocol for Orthophosphate Sample Collection and Analysis for Waste Water and Receiving Water Monitoring Required by Permits, June 2007***, unless otherwise specified by the Department. Analyses and test results must be provided for dissolved orthophosphate as P.

9. **Seasonal Average Phosphorous Limitation** – This limitation is a seasonal average mass limitation applicable during the period of **July 1 through September 15**, inclusive, of each year. The permittee shall calculate the average daily mass discharged during the season by multiplying the total gallons discharged for the season by the arithmetic mean of the 2/Week test results for total phosphorus, multiplied by 8.34 lbs/gal and then divided by the number of days in the season.

SPECIAL CONDITIONS

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

FOOTNOTES:

10. **Whole effluent toxicity (WET) testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 28% and 25% 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. The critical acute and chronic thresholds were derived as the mathematical inverse of the applicable acute and chronic dilution factors of 3.5:1 and 4.0:1, respectively. See **Attachment D** of this permit, ***Whole Effluent Toxicity Report Fresh Waters, July 27, 2009*** for a copy of the Department's WET reporting form.

    Surveillance level testing – Beginning upon issuance of this permit and lasting through 12 months prior to expiration of the permit, the permittee shall conduct surveillance level WET testing at a minimum frequency of once per year (1/Year) on the water flea (*Ceriodaphnia dubia*) and twice per year (2/Year) on the brook trout (*Salvelinus fontinalis*).

    Screening level testing – Beginning 12 months prior to expiration of the permit or in the fifth year since the last screening test, which ever is sooner, the permittee shall conduct screening level WET testing at a minimum frequency of once per calendar quarter (1/Quarter) for the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*).

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

SPECIAL CONDITIONS

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

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 shall analyze the effluent for the parameters specified in the WET chemistry section and the parameters specified in the analytical chemistry section in **Attachment A** of this permit each time a WET test is performed.

11. **Analytical chemistry** – Analytical chemistry refers to a suite of chemical tests listed in **Attachment A** of this permit.

Surveillance level testing – Beginning upon issuance of this permit and lasting through 12 months prior to expiration of the permit, the permittee shall conduct surveillance level analytical chemistry testing at a minimum frequency of once per year (1/Year).

Screening level testing – Beginning 12 months prior to permit expiration and every five years thereafter, the permittee shall conduct screening level analytical chemistry testing at a frequency of once per calendar quarter(1/Quarter) for four consecutive calendar quarters.

12. **Priority pollutant testing** – Priority pollutant testing refers to analysis for levels of priority pollutants listed in **Attachment A** of this permit.

Screening level testing – Beginning 12 months prior to permit expiration and every five years thereafter, the permittee shall conduct screening level priority pollutant testing at a minimum frequency of once per year (1/YR), except for those analytical chemistry parameter(s) otherwise regulated in this permit.

Surveillance level priority pollutant testing is not required by 06-096 CMR 530(2)(D).

SPECIAL CONDITIONS

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

FOOTNOTES:

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

Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department, possible exceedences of the acute, chronic or human health AWQC as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005). For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "NODI-9" monitoring not required this period.

B. NARRATIVE EFFLUENT LIMITATIONS

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

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

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

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

C. TREATMENT PLANT OPERATOR

The person who has the management responsibility over the treatment facility must hold a **Grade III (or higher)** certificate or must be a Maine Registered Professional Engineer pursuant to *Sewerage Treatment Operators*, 32 M.R.S.A., §§ 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 licensee may engage the services of the contract operator.

SPECIAL CONDITIONS

D. DISPOSAL OF TRANSPORTED WASTE INTO THE WASTEWATER TREATMENT FACILITY

The permittee is prohibited from accepting transported wastes for disposal into any part or parts of the wastewater disposal system. "Transported wastes" means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge permit. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.

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 December 14, 2009; 2) the terms and conditions of this permit; and 3) only from Outfall #001. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5)(*Bypass*) of this permit.

F. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the wastewater collection and treatment system by a non-domestic source (user) shall not pass through or interfere with the operation of the treatment system.

G. MERCURY

All mercury sampling (4/Year) required to determine compliance with interim limitations established pursuant to *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001) shall be conducted in accordance with USEPA's "clean sampling techniques" found in USEPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analyses 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 E,** *Effluent Mercury Test Report*, of this permit for the Department's form for reporting mercury test results.

SPECIAL CONDITIONS

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

By December 31st of each calendar year ***[PCS Code 95799]***, the permittee shall provide the Department with statements describing the following:

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

Further, the Department may require that annual testing be re-instituted if it determines that there have been changes in the character of the discharge or if annual certifications described above are not submitted.

I. NOTIFICATION REQUIREMENT

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

1. Any introduction of pollutants into the waste water collection and treatment system from an indirect discharger in a primary industrial category discharging process wastewater; and

2. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system by a source introducing pollutants into the system at the time of permit issuance. For the purposes of this condition, notice regarding substantial change shall include information on:
   (a) the quality and quantity of waste water introduced to the wastewater collection and treatment system; and
   (b) any anticipated impact caused by the change in the quantity or quality of the wastewater to be discharged from the treatment system.

J. WET WEATHER FLOW MANAGEMENT PLAN

The treatment facility staff shall maintain a current written Wet Weather Flow Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall.

Within 90 days of completion of new and or substantial upgrades of the waste water treatment facility, the permittee shall submit to the Department for review and approval, a new or revised Wet Weather Management Plan which conforms to Department guidelines for such plans. The revised plan shall include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events. **The permittee shall review the approved plan annually** and record any necessary changes to keep the plan up to date.

SPECIAL CONDITIONS

K. INFLOW/INFILTRATION (I&I)

On or before December 31st of each year, ***[PCS Code 04399]*** the permitte shall submit to the Department for review a report that summarizes work completed for the previous calendar year and a scope of work and schedule for I&I projects for the upcoming year.

L. OPERATION & MAINTENANCE (O&M) PLAN

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

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

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

M. MONITORING AND REPORTING

Monitoring results obtained during the previous month must 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 DMRs 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 must be submitted to the following address:

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

SPECIAL CONDITIONS

M. MONITORING AND REPORTING (cont'd)

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.

N. REOPENING OF PERMIT FOR MODIFICATIONS

Upon evaluation of the tests results or monitoring requirements specified in the Special Conditions of this permitting action, new site-specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at any time 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 effluent and or ambient water quality monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

O. SEVERABILITY

In the event that any provision(s), 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 7/27/2009

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

Licensed Flow (MGD)	
Acute dilution factor	
Chronic dilution factor	
Human health dilution factor	
Criteria type: M(arine) or F(resh)	

Flow for Day (MGD)[1] _____ **Flow Avg. for Month (MGD)**[2] _____

Date Sample Collected _____ Date Sample Analyzed _____

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									

Maine Department of Environmental Protection
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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									

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

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

Notes:

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

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

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

(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

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

Approved Analytical Methods: EPA 300.0 (Rev. 2.1), 300.1 (Rev. 1.0), 365.1 (Rev. 2.0), 365.3; SM 4110 B, 4110 B-00, 4500-P E, 4500-P F; ASTM D515-88(A), D4327-97, 03; D6508 (Rev. 2); USGS I-4601-85; OMAAOAC 973.55, 973.56, 993.30

Sample Collection: The Maine DEP is requesting that orthophosphate analysis be conducted on composite effluent samples unless a facility's Permit specifically indicates 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. The sampler hoses should be cleaned, as needed. Commercially purchased, pre-cleaned sample containers and or syringe type filtering apparatus are acceptable. If bench top filtering apparatus is being used this should be cleaned, as described above, before each use.

Sample Preservation: During compositing the sample must be at 0-6 degrees C (without freezing). The sample must be filtered immediately (within 15 minutes) after collection using a pre-washed 0.45-um membrane filter. Be sure to follow one of the pre-washing procedures described in the approved methods unless your commercial lab is providing you with pre-washed filters and filtering apparatus. If the sample is being sent to a commercial laboratory or analysis cannot be performed within 2 hours after collection then the sample must be kept at 0-6 degrees C (without freezing). There is a 48-hour holding time for this sample although analysis should be done sooner, if possible.

Laboratory QA/QC: Laboratories must follow the appropriate QA/QC procedures that are described in each of the approved methods. Additionally, laboratories providing filters or filter apparatus for sampling are required to submit blank data for each lot of filters/filtering apparatus to the facility.

Sampling QA/QC:
Filter Blank- if a facility is using a pre-cleaned filter and or filtering apparatus provided by a commercial laboratory then the commercial laboratory must run a filter/filtering apparatus blank on each lot. The results of that analysis must be provided to the facility.

If a facility is using their own filters and filtering apparatus then a filter blank must be included with every sample set that does not include a composite sampler (composite jug and sample line) blank.

Composite Sampler Blank- If a composite sample is being collected using an automatic composite sampler, then once per month run a blank on the composite sampler. A separate filter blank does not have to be done along with the composite sampler blank. When running a composite sampler blank, 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 filter and analyze for orthophosphate. Preserve these samples as described above.

ATTACHMENT D

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WHOLE EFFLUENT TOXICITY REPORT
FRESH WATERS

Facility Name _____ MEPDES Permit # _____

Pipe # _____

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 E

Name of Facility: _____ Federal Permit # ME _____

Pipe # _____

Purpose of this test:

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

SAMPLE COLLECTION INFORMATION

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

Sampling Location:

Weather Conditions: _____

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

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

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

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

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

Please Enter Effluent Limits for your facility

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

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

CERTIFICATION

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

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: **APRIL 4, 2011**

MEPDES PERMIT NUMBER: **#ME0101290**
WASTE DISCHARGE LICENSE NUMBER: **#W002648-6D-D-R**

NAME AND ADDRESS OF APPLICANT:

HOULTON WATER COMPANY
P.O. BOX 726
HOULTON, MAINE 04730

COUNTY: **AROOSTOOK COUNTY**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

TOWN OF HOULTON
135 ACCESS ROAD
HOULTON, MAINE 04730

RECEIVING WATER/CLASSIFICATION: **MEDUXNEKEAG RIVER/CLASS B**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **MR. JOHN CLARK**
(207) 532-2350
jlc@hwc.org.

1. APPLICATION SUMMARY

a. Application: The Houlton Water Company (HWC, applicant or permittee) has applied to the Department of Environmental Protection (Department) for renewal of combination Maine Waste Discharge License (WDL) renewal and modification #W002648-5L-C-M / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0101290, which was issued by the Department on February 16, 2005 and expired on February 16, 2010. The February 16, 2005 MEPDES permit authorized the monthly average discharge of up to 1.5 million gallons per day (MGD) of secondary treated wastewaters from a publicly owned treatment works (POTW) to the Meduxnekeag River, Class B, in Houlton, Maine.

1. APPLICATION SUMMARY (cont'd)

On May 18, 2005, the Department issued an administrative modification letter to HWC to correct typographical errors and to modify Special Condition M, *Inflow/Infiltration*, of the February 16, 2005 MEPDES permit.

On April 10, 2006, the Department amended the February 16, 2005 MEPDES permit by incorporating the whole effluent toxicity (WET), analytical chemistry and priority pollutant testing requirements of *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective October 9, 2005).

2. PERMIT SUMMARY

a. Terms and conditions: **This permitting action is significantly different from the February 16, 2005 permitting action in that it is:**

1. Eliminating the monthly average water quality-based concentration and mass effluent limitations for total arsenic based on the results of facility testing;

2. Establishing monthly average water quality-based concentration and mass effluent limitations for total aluminum based on the results of facility testing;

3. Establishing monthly average water quality-based concentration and mass effluent limitations for total cadmium based on the results of facility testing;

4. Establishing monthly average water quality-based concentration and mass effluent limitations for total copper based on the results of facility testing;

5. Revising (more stringent) the daily maximum water quality-based concentration and mass effluent limitations for total copper based on the results of facility testing;

6. Establishing monthly average water quality-based concentration and mass effluent limitations for cyanide (available) based on the results of facility testing;

7. Establishing monthly average water quality-based concentration and mass effluent limitations for total lead based on the results of facility testing;

8. Eliminating the A-NOEL limits of 28% for the brook trout and fathead minnow based on the results of facility testing;

9. Eliminating the C-NOEL limit of 25% for the water flea based on the results of facility testing;

10. Establishing a C-NOEL limit of 25% for the brook trout and a surveillance level monitoring frequency of twice per year based on the results of facility testing;

2. PERMIT SUMMARY (cont'd)

11. Establishing an annual certification statement requirement (Special Condition H, *Statement for Reduced/Waived Toxics Testing* of this permit) for reduced toxics testing; and

12. Eliminating the requirement to conduct ambient water quality for the Meduxnekeag River as this effort will be conducted by the Department.

b. History: The most current relevant regulatory actions and significant events include the following;

September 29, 1995 – The U.S Environmental Protection Agency (USEPA) issued a renewal of National Pollutant Discharge Elimination System (NPDES) permit #ME0101290 to the HWC for a five-year term.

May 23, 2000 – Pursuant to *Certain deposits and discharges prohibited*, 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* to the permittee thereby administratively modifying WDL #W002648-5L-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 7.4 parts per trillion (ppt) and 5.0 ppt, respectively, and a minimum monitoring frequency requirement of 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.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permit program in Maine, excluding areas of special interest to Maine Indian Tribes. From this point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program, and MEPDES permit #ME0101290 has been utilized for HWC's Houlton facility.

March 8, 2001 – The USEPA approved the Department's total maximum daily load (TMDL) for the Meduxnekeag River.

January 22, 2003 – The Department established site specific hardness values of 74 mg/L (acute) and 87 mg/L (chronic) and recalculated the 7Q10 (6.9 cfs) and 1Q10 (5.9 cfs) based on the information the HWC presented in their report entitled Houlton Water Company, Houlton, Maine, Application to Maine Environmental Protection For Site Specific Limits Hardness Dependent Metals, April 2002, which was submitted to the Department for consideration on April 24, 2002.

February 16, 2005 – The Department issued combination WDL #W002648-6D-D-R / MEPDES permit #ME0101290 to the HWC for a five-year term. The February 16, 2005 MEPDES permit superseded WDL #W002648-5L-B-R issued to HWC on March 30, 2000, and initial WDL #W002648-46-A-N issued to HWC on April 4, 1990.

2. PERMIT SUMMARY (cont'd)

December 14, 2009 – HWC timely submitted a General Application to the Department for a renewal of the February 16, 2005 MEPDES permit. The application was accepted for processing on December 14, 2009 and was assigned WDL #W002648-6D-D-R.

c. Source Description: HWC owns and operates a publicly owned treatment works (POTW) that provides a secondary level of treatment for sanitary wastewaters generated by a population of approximately 6,500 residential and commercial entities in the Town of Houlton. There are no major commercial or industrial users of the system that contribute more than 10% of the flow or pollutant loading to the waste water treatment facility.

HWC's sewer collection system is approximately 37 miles in length, has five pump stations and is completely separated from the storm water collection system and as a result, there are no combined sewer overflow (CSO) points. The wastewater treatment facility is currently not permitted to accept transported wastes.

See Attachment A of this Fact Sheet for a map showing the location of the treatment facility.

d. Wastewater Treatment: HWC's waste water treatment facility provides a secondary level of treatment via an extended air activated sludge process. The major components of the wastewater treatment process include a bar screen, a comminutor, aeration basins with mechanical aerators, two secondary clarifiers, and a chlorine contact chamber. The effluent is disinfected with sodium hypochlorite and dechlorinated with sodium bisulfite prior to being discharged to the Meduxnekeag River via a perforated outfall pipe that has been placed from bank to bank in the river to enhance the mixing characteristics of the discharge with the river. The Department has made a best professional judgment determination that mixing of the effluent with the receiving water is complete and rapid. The facility is equipped with on-site generator for back-up power in the event of power outage. The generator enables the facility to provide a secondary level of treatment and disinfection under all conditions.

The HWC utilizes freeze-drying beds for sludge handling and disposal. The HWC sludge handling facilities consist of aerobic sludge holding lagoons, a one million-gallon holding lagoon and two freeze-drying beds. Dewatering by freezing is accomplished through the separation of solids and liquid fractions during crystal formation. HWC is currently authorized to seasonally spray irrigate supernatant from the sludge storage lagoon through Waste Discharge License #W008129. The purpose of the spray irrigation facility is to reduce the direct discharge of phosphorous-containing wastewater to the Meduxnekeag River.

3. CONDITIONS OF PERMITS

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

4. RECEIVING WATER QUALITY STANDARDS

Classification of major river basins, 38 M.R.S.A. § 467(15)(E)(1)(a) classifies the Meduxnekeag River from the outlet of Meduxnekeag Lake to the international border as a Class B waterway. *Standards for classification of fresh surface waters*, 38 M.R.S.A., § 465(3) describes standards for classification of Class B waters.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2008 Integrated Water Quality Monitoring and Assessment Report, (Report, see: http://www.maine.gov/dep/blwq/docmonitoring/305b/index.htm) prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the segment of the Meduxnekeag River that contains the discharge from HWC as *"Category 4-A: Rivers and Streams with Impaired Use, TMDL Completed."* The TMDL classifies a 6-mile stretch of river below Houlton as not attaining Class B standards for dissolved oxygen. The TMDL states, *"The survey data as well as model runs indicate that the Meduxnekeag River is not attaining standards for dissolved oxygen (DO) concentration below the Houlton outfall. Occasional, marginal non-attainment of DO standards was also measured above the Houlton outfall. The major factor in this non-attainment is the diurnal DO effect from the respiration of attached plant growth as a result of phosphorous enrichment."*

In a report published by the Department entitled, *Meduxnekeag River TMDL, May 1996*, the Department concluded that based on past in-stream sampling of the Meduxnekeag River, non-attainment of dissolved oxygen (DO) standards below the HWC wastewater treatment plant is occurring due to attached plant growth from nutrient enrichment. The 1996 report recommended a phased approach to renewing the WDL for the facility by experimenting with seasonal phosphorus treatment with ferric chloride at the treatment plant along with DO monitoring in the Meduxnekeag River during the summers of calendar years 1996 and 1997. The objective of the experiment was to determine what level the treatment plant could cost effectively treat phosphorus down to and what improvements in DO would be realized in the Meduxnekeag River as a result of the phosphorus treatment.

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

In December of 1997, the Department issued a follow-up report entitled, *Meduxnekeag River 1997 Data Report, December 1997*, stating that based on the data collected in the experiment described above, with a treatment plant effluent concentration of 0.25 mg/L of total phosphorus (demonstrated treatment level) and a flow of 0.60 MGD (mean discharge flow from the treatment plant for July – September, 1993-1997), Class B DO standards would be attained in the river. However, Department modeling predicted with a total phosphorus effluent concentration of 0.25 mg/L and a discharge at the permitted flow of 1.5 MGD, Class B DO standards would not be attained. The report recommended establishing a seasonal (June – September) monthly average concentration limit of 0.25 mg/L and a seasonal (July – September) mass limit of 1.25 lbs./day, respectively. The final TMDL approved by the USEPA on March 8, 2001 contains the same recommendations for monthly average total phosphorus limits. See http://www.maine.gov/dep/blwq/docmonitoring/tmdl2.htm for a link to the 2001 TMDL.

In addition to total phosphorus limitations, the report recommended that summer season (June – September) in-stream sampling for DO and total phosphorus as well as river flow measurements for calendar years 2000 and 2001 should be conducted. The Department, the HWC and third parties conducted the additional in-stream sampling during the summers of 2001 and 2002. Special Condition K, *Ambient Water Quality Monitoring* of the previous permitting action required the HWC to conduct additional in-stream monitoring (upstream and downstream of their outfall) for total phosphorus, ortho-phosphorus and dissolved oxygen in an effort to determine whether the TMDL recommendations are sufficient to maintain water quality standards.

The February 16, 2005 licensing action established a schedule of compliance for unspecified (target levels of 1.25 lbs./day and 0.25 mg/L as monthly averages) future total phosphorus limits. The schedule was established to provide ample time for the HWC to individually or in combination (1) further experiment with ferric chloride (or other chemical) addition to establish a level of treatment that is feasible and cost effective method to come into compliance with the final limits; (2) conduct additional ambient water quality data that may result in modification (more or less stringent) of the Department's recommended mass and concentration limits in the TMDL; (3) conduct an alternatives analysis for the treatment and/or disposal of waste waters on a year-round or seasonal basis.

The Department's Division of Environmental Assessment (DEA) is responsible for water quality evaluations, including the development of TMDLs, recommended requiring the HWC to begin treating for phosphorus beginning May 1st of each year rather than June 1st of each year. By treating for phosphorus 31 days earlier than the TMDL recommends, more phosphorus will be taken out of the riverine system on an annual basis and will be more protective than the TMDL. Calculations by the Department using an assumed effluent concentration value of 3.25 mg/L and flow information for the month of May reported to the Department for the period 1997-2003 inclusive, indicates that up to 42 lbs./day or 1,290 lbs for the month of May of each year will be removed from the river.

On September 27, 2004, the Department issued a revised proposed draft MEPDES permit which proposed monthly average and daily maximum concentration limits of 0.5 mg/L and 1.0 mg/L, respectively, for the month of May beginning May 1, 2006, and 0.25 mg/L and 0.5 mg/L respectively, from June 1 – September 15 of each year (beginning June 1, 2006) and proposed a seasonal (July 1 – September 30) mass limit of 1.25 lbs./day beginning July 1, 2006. In a letter

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

dated October 21, 2004, HWC objected to the imposition of phosphorus treatment in the month of May.

The USEPA made a recommendation to the Department that the final permit should contain a provision requiring HWC to conduct a more broad-scale alternatives analysis to reduce phosphorus levels in the discharge to a range of 0.02 mg/L – 0.1 mg/L as well as evaluate the elimination of the discharge both seasonally and year-round. As a result, the February 16, 2005 permitting action established Special Condition N, *Alternatives Analysis*, intended to develop a scope of work, a schedule and determine costs associated with the various alternatives in the event the TMDL recommendations were not successful in bringing the Meduxnekeag River into attainment with dissolved oxygen standards.

In addition to conducting an alternatives analysis, HWC committed to undertake an intensive inflow/infiltration program to eliminate unwanted waters in the sanitary sewer collection system thereby resulting in more effective phosphorus treatment. Special Condition M of the February 16, 2005 permitting action required the permittee to submit an I&I study plan to the Department for review and approval. HWC submitted an I&I report entitled, Infiltration and Inflow Study, Interim Report, Work Plan & Schedule, March 31, 2005. On May 18, 2005, the Department issued an administrative modification to the February 16, 2005 MEPDES permit to incorporate a schedule of I&I investigation tasks and removal projects.

The Fact Sheet associated with the February 16, 2005 MEPDES permit sated,

> *Following the summer of calendar year 2007, the Department will conduct a comprehensive evaluation of the waste water treatment effluent data and the ambient water quality monitoring data conducted by the permittee, the Department, or others that have a Department approved water quality monitoring program. The purpose of the evaluation is to 1) determine if permit limitations are consistently being achieved; 2) determine if the Meduxnekeag River is attaining dissolved oxygen standards; 3) determine if the TMDL and or the permit need to be revised 4) put the permittee on notice that an alternative phosphorus treatment technology or discharge elimination alternative must be implemented or 5) determine if the HWC is shown to be measurably (0.2 mg/L) causing or contributing to non-attainment if non-attainment continues.*

The Department has not completed "*a comprehensive evaluation of the waste water treatment effluent data and the ambient water quality monitoring data conducted by the permittee, the Department, or others that have a Department approved water quality monitoring program*" at this time. See Section 6.k. of this Fact Sheet for a summary of the Department's Division of Environmental Assessment (DEA)'s preliminary review and conclusions based on the HWC's data.

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

Additionally, all freshwaters formerly listed in Category 5-C are moved to Category 4-A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL. Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, *"Impairment caused by atmospheric deposition of mercury; a regional scale TMDL has been approved. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources."*

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

The 2008 Report also lists the river in *"Category 5-D: Rivers and Streams Impaired by Legacy Pollutants."* Impairment in this context refers to legacy DDT contamination. The Department had previously (see: *The State of Maine 2004 Integrated Water Quality Monitoring and Assessment Report* at: http://www.maine.gov/dep/blwq/docmonitoring/305b/index.htm) identified agricultural non-point source as a potential source that has caused or contributed to the non-attainment status of the receiving water. The Department has no information that the discharge from HWC causes or contributes to this non-attainment status.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limitation of 1.5 million gallons per day (MGD), which is based on the monthly average design criterion for the facility.

b. Dilution Factors: Dilution factors associated with the average design flow of 1.5 MGD were derived in accordance with 06-096 CMR 530(4)(A) and were calculated as follows[1]:

Acute: ¼1Q10 =	1.5 cfs	⇒	$\frac{(1.5\ \text{cfs})(0.6464) + (1.5\ \text{MGD})}{(1.5\ \text{MGD})}$ =	1.7:1
Acute: 1Q10 =	5.9 cfs	⇒	$\frac{(5.9\ \text{cfs})(0.6464) + (1.5\ \text{MGD})}{(1.5\ \text{MGD})}$ =	3.5:1
Chronic: 7Q10 =	6.9 cfs	⇒	$\frac{(6.9\ \text{cfs})(0.6464) + (1.5\ \text{MGD})}{(1.5\ \text{MGD})}$ =	4.0:1
Harmonic Mean =	58 cfs	⇒	$\frac{(58\ \text{cfs})(0.6464) + (1.5\ \text{MGD})}{(1.5\ \text{MGD})}$ =	26:1

06-096 CMR 530(4)(B)(1) states,

> *Analyses using numerical acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone and to ensure a zone of passage of at least 3/4 of the cross-sectional area of any stream as required by Chapter 581. Where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design flow, up to and including all of it, as long as the required zone of passage is maintained.*

The Department has determined that the discharge from HWC via a perforated, bank-to-bank outfall pipe does achieve complete and rapid mixing of the effluent with the receiving waters. Therefore, the Department is utilizing the full 1Q10 stream flow in acute evaluations.

[1] The critical low values (1Q10, 7Q10 and harmonic mean) for the Meduxnekeag River were established by the Department based on a statistical analysis conducted by the by the HWC in calendar year 2002 of the historic flows of the river. The statistical evaluation may be found in a document entitled, Houlton Water Company, Houlton, Maine, Application to Maine Environmental Protection For Site Specific Limits Hardness Dependent Metals, April 2002 prepared by the HWC and submitted to the Department on April 24, 2002.

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

c. Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS): The previous permitting action established, and this permitting action is carrying forward, monthly average and weekly average technology-based concentration limits of 30 mg/L and 45 mg/L, respectively, for BOD_5 and TSS based on the secondary treatment requirements specified at *Effluent Guidelines and Standards*, 06-096 CMR 525(3)(III) (effective January 12, 2001), and a daily maximum concentration limit of 50 mg/L, which is based on a Department best professional judgment of best practicable treatment for secondary treated municipal wastewater. The technology-based monthly average, weekly average and daily maximum mass limits of 375 lbs./day and 563 lbs./day, and 626 lbs./day, respectively, established in the previous permitting action for BOD_5 and TSS and that are based on the monthly average flow limit of 1.5 MGD and the applicable concentration limits, are also being carried forward in this permitting action.

This permitting action is carrying forward a requirement for a minimum of 85% removal of BOD_5 & TSS pursuant to 06-096 CMR 525(3)(III)(a&b)(3) for all flows receiving secondary treatment.

A summary of the effluent BOD_5 and TSS data as reported on the DMRs submitted to the Department for the period January 2007 through August 2010 is as follows:

BOD_5	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average	5 lbs./day	204 lbs./day	46 lbs./day	44
	2.5 mg/L	7.9 mg/L	4.1 mg/L	44
Weekly Average	6.3 lbs./day	371 lbs./day	87 lbs./day	44
	3 mg/L	13.7 mg/L	5.6 mg/L	44
Daily Maximum	7.8 lbs./day	466 lbs./day	97 lbs./day	44
	3 mg/L	19 mg/L	6.6 mg/L	44

TSS	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average	3.8 lbs./day	192 lbs./day	29 lbs./day	44
	1.1 mg/L	6.8 mg/L	2.4 mg/L	44
Weekly Average	5.1 lbs./day	470 lbs./day	58 lbs./day	44
	1.4 mg/L	3.5 mg/L	12 mg/L	44
Daily Maximum	5.1 lbs./day	594 lbs./day	71 lbs./day	44
	1.7 mg/L	14 mg/L	4.4 mg/L	44

This permitting action is carrying forward the minimum monitoring frequency requirement of twice per week for BOD_5 and TSS based on Department best professional judgment.

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

d. Settleable Solids: The previous permitting action established, and this permitting action is carrying forward, a daily maximum best practicable treatment concentration limit of 0.3 ml/L based on a Department best professional judgment of best practicable treatment.

A summary of settleable solids data as reported on the monthly DMRs for the period of January 2007 through August 2010 (# DMRs = 44) indicates the daily maximum settleable solids concentration discharge has been <0.1 ml/L 100% of the time during said reporting period.

This permitting action is carrying forward the minimum monitoring frequency requirement for settleable solids based once per day on best professional judgment.

e. *Escherichia coli (E. coli):* The previous permitting action established, and this permitting action is carrying forward, seasonal (May 15 through September 30 of each year) monthly average (geometric mean) and instantaneous level (daily maximum) *E. coli* bacteria limits of 64 colonies/100 ml and 427 colonies/100 ml, respectively, which are based on the State's Water Classification Program criteria for Class B waters.

A summary of the *E. coli* bacteria data as reported on the DMRs submitted to the Department for Outfall #001A for calendar years 2007 through 2010 (applicable disinfection period only) is as follows:

***E. coli* bacteria**	**Minimum**	**Maximum**	**Arithmetic Mean**	**# DMRs**
Monthly Average	1 col / 100 ml	9.3 col / 100 ml	4 col / 100 ml	18
Daily Maximum	2 col / 100 ml	208 col / 100 ml	68 col / 100 ml	18

This permitting action is carrying forward a minimum monitoring frequency requirement of twice per week for *E. coli* bacteria (during the applicable period) based on best professional judgment.

f. Total Residual Chlorine (TRC): The previous permitting action established monthly average and daily maximum water quality-based TRC limits of 0.044 mg/L and 0.067 mg/L, respectively, for Outfall #001A.

Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department licensing/permitting actions impose the more stringent of either the water quality-based or technology-based based limits.

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

With acute and chronic dilution factors associated with the discharge water quality-based concentration thresholds the discharge may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	A & C Dilution Factors	Calculated Acute Threshold	Calculated Chronic Threshold
0.019 mg/L	0.011 mg/L	3.5:1 (A) 4.0:1 (C)	0.067 mg/L	0.044 mg/L

The Department has established a daily maximum BPT-based limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that need to dechlorinate the discharge to meet water quality based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. The Department has identified that HWC must dechlorinate the effluent prior to discharge in order to consistently achieve compliance with both the bacteria limits and the water quality-based thresholds calculated above. The acute (daily maximum) and chronic (monthly average) water quality-based thresholds calculated above are more stringent than the respective BPT-based limits and are therefore being carried forward in this permitting action.

A summary of TRC data as reported on the monthly DMRs for the period of September 2007 through July 2010 (# DMRs = 14) indicates the monthly average and daily maximum TRC concentration discharge has been <0.05 mg/L 100% of the time during said reporting period.

In April of 1992, the USEPA's Region 1 Quality Assurance Office established a Minimum Level (ML) of detection of 0.05 mg/L (50 µg/L) for TRC. This permitting action is carrying forward a monthly average water-quality based limitation for TRC that is below the ML.

This permitting action is carrying forward a minimum monitoring frequency requirement of once per day for TRC (any time chlorine or chlorine-based compounds are in use for effluent disinfection) based on best professional judgment.

g. pH: The previous permitting action established, and this permitting action is carrying forward, a technology-based pH limit of 6.0 – 9.0 standard units, which is based on 06-096 CMR 525(3)(III), and a minimum monitoring frequency requirement of once per day based on best professional judgment. A summary of pH data as reported on the monthly DMRs for the period of January 2007 through August 2010 (# DMRs = 44) indicates the facility has been in compliance with the pH range limitation 100% of the time during said reporting period.

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

h. Phosphorous: The previous permitting action established monitoring and reporting requirements and numeric limitations for total phosphorous and ortho-phosphorous. The February 16, 2005 MEPDES permit established "winter season" (September 16 through May 31) monitoring and reporting requirements for total phosphorous and ortho-phosphorous at minimum frequencies of once per month and once per week, respectively. The February 16, 2005 MEPDES permit phased total phosphorous limits into effect with a daily maximum concentration limit of 500 µg/L effective beginning June 1, 2005; a monthly average concentration limit of 250 µg/L effective beginning June 1, 2006; and a seasonal (July 1 through September 15) average total phosphorous mass limit of 1.25 lbs./day effective beginning July 2006.

See discussion in Section 5 of this Fact Sheet, *Receiving Water Quality Conditions*, for more information regarding the basis for these phosphorous monitoring requirements and limitations. Also see Section 6.g. of the Fact Sheet associated with the February 16, 2005 MEPDES permit for an extensive discussion concerning phosphorous limitations. In short, in *Meduxnekeag River TMDL, May 1996*, the Department concluded that based on past in-stream sampling of the Meduxnekeag River, non-attainment of dissolved oxygen (DO) standards below the HWC wastewater treatment plant is occurring due to attached plant growth from nutrient enrichment. Phosphorous limits were established based on the recommendations of the Meduxnekeag River TMDL, which was approved by the USEPA on March 8, 2001.

Based on the Department's review of ambient data and the recommendations of the 2001 TMDL, which has not been modified with respect to phosphorous limitations, this permitting action is;

"Summer season"

- Carrying forward the "summer season" (June 1 through September 15, inclusive) monthly average and daily maximum water quality-based effluent total phosphorous (as P) limitations of 250 µg/L and 500 µg/L, respectively, and minimum monitoring frequency requirement of twice per week;
- Carrying forward the "summer season" average (June 1 through September 15, inclusive) mass limitation of 1.25 lbs./day for total phosphorous (as P);
- Carrying forward monthly average, weekly average and daily maximum concentration and mass reporting requirements for dissolved orthophosphate (as P) and a minimum monitoring frequency requirement of twice per week during the "summer season" period of June 1 through September 15;

"Winter season"

- Carrying forward the monthly average and daily maximum concentration and mass monitoring and reporting requirements for total phosphorous (as P) during the "winter season" period of September 16 through May 31, inclusive, and minimum monitoring frequency requirement of once per month; and
- Carrying forward monthly average, weekly average and daily maximum monitoring and reporting requirement for dissolved orthophosphate (as P) during the "winter season" period of September 16 through May 31, inclusive, and minimum monitoring frequency requirement of once per week.

It is noted that this permitting action is clarifying the Department's intent to require dissolved orthophosphate as P and total phosphorous as P limitations and monitoring requirements.

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

A summary of the effluent total phosphorous data as reported on the DMRs submitted to the Department for the period January 2007 through August 2010 is as follows. "Summer" season data are summarized for discharges during the period of June through September of each year; "Winter" season data are for discharges during the period of October through May of each year.

Total Phosphorous	Minimum	Maximum	Arithmetic Mean	# DMRs	Permit Limit as of June 1, 2006
Summer Season MONTHLY Average	0.2 lbs./day	1.56 lbs./day	0.8 lbs./day	15	N/A
	54 µg/L	363 µg/L	161 µg/L	15	**250 µg/L** Maximum result from June 2007 is only value > limit
Summer Season WEEKLY Average	0.4 lbs./day	2.96 lbs./day	1.9 lbs./day	9	N/A
	70 µg/L	547 µg/L	222 µg/L	15	
Summer Season DAILY Maximum	0.3 lbs./day	3.12 lbs./day	1.6 lbs./day	15	N/A
	80 µg/L	562 µg/L	250 µg/L	15	**500 µg/L** Maximum result from June 2007 is only value > limit
Winter Season MONTHLY Average	0.88 lbs./day	19 lbs./day	10 lbs./day	27	N/A
	260 µg/L	2,300 µg/L	1,106 µg/L	27	
Winter Season DAILY Maximum	4.4 lbs./day	19 lbs./day	10 lbs./day	27	
	260 µg/L	2,300 µg/L	1,106 µg/L	27	

The previous permitting action established a seasonal average total phosphorous mass limitation of 1.25 lbs./day that went into effect in 2006. The seasonal average total phosphorous discharge for 2006 through 2009 is as follows:

Year 2006 – 0.77 lbs./day
Year 2007 – 0.59 lbs./day
Year 2008 – 1.06 lbs./day
Year 2009 – 0.68 lbs./day

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

A summary of the effluent ortho-phosphorous data as reported on the DMRs submitted to the Department for the period January 2007 through August 2010 is as follows. "Summer" season data are summarized for discharges during the period of June through September of each year; "Winter" season data are for discharges during the period of October through May of each year.

Ortho-Phosphorous	Minimum	Maximum	Arithmetic Mean	# DMRs
Summer Season MONTHLY Average	0.4 lbs./day	3.6 lbs./day	1.9 lbs./day	15
	74 µg/L	1,847 µg/L	455 µg/L	15
Summer Season WEEKLY Average	0.4 lbs./day	7.13 lbs./day	3.6 lbs./day	15
	86 µg/L	4,215 µg/L	770 µg/L	15
Summer Season DAILY Maximum	0.7 lbs./day	17 lbs./day	5.0 lbs./day	15
	86 µg/L	4,420 µg/L	1,006 µg/L	15
Winter Season MONTHLY Average	8.5 lbs./day	58 lbs./day	29 lbs./day	28
	1,748 µg/L	6,032 µg/L	3,261 µg/L	28
Winter Season WEEKLY Average	14.9 lbs./day	148 lbs./day	41 lbs./day	28
	2,530 µg/L	7,240 µg/L	4,318 µg/L	28
Winter Season DAILY Maximum	14.9 lbs./day	148 lbs./day	41 lbs./day	28
	2,530 µg/L	7,240 µg/L	4,343 µg/L	28

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

i. Stream Flow: The previous permitting action established a seasonal stream flow monitoring requirement and reporting of the monthly average, weekly average and daily maximum results. The February 16, 2005 MEPDES permit required stream flow monitoring as follows:

> *Between May 1st and September 15th of each year beginning calendar year 2005, the permittee shall measure the stream flow of the Meduxnekeag River once per day (Monday – Friday between 8:00 AM and 11:00 AM) via an existing staff gauge located on the west bank of the river just upstream from the HWC's waste water treatment facility. Being that the staff gauge is only calibrated for flows up to 140 cfs, flows greater than 140 cfs shall be reported as >140 cfs on the DMR and daily log reports. The permittee shall maintain a daily log of the stream flow data and submit the log as an attachment to the applicable DMR form for each month during the monitoring period. By October 15th of each year, the permittee shall be submit an electronic copy of the daily logs for the monitoring period for that season.*

Review of data submitted by HWC to the Department on DMRs from calendar years 2007 through 2010 document that flows in the Meduxnekeag River has been significantly greater than the 1Q10 and 7Q10 critical low flow values utilized in this permitting action to establish applicable dilution factors associated with the discharge. The lowest values recorded during said period were from August 2010, a low flow period, with monthly average, weekly average and daily maximum values of 22 cubic feet per second (cfs), 40 cfs and 54 cfs, respectively. The Department's Division of Environmental Assessment (DEA) has recommended that that additional ambient river monitoring should be conducted by the Department and that additional mandated ambient monitoring need not be carried forward in this permitting action.

j. Total Hardness: The previous permitting action established a requirement to sample and report total hardness of the Meduxnekeag River above the point of discharge during the twelve-month period prior to permit expiration (February 2010).

A summary of available total hardness data as reported to the Department (March 2009 through December 2009) for the Meduxnekeag River is as follows:

Total Hardness	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average	53 mg/L	180 mg/L	84 mg/L	10
Daily Maximum	55 mg/L	232 mg/L	95 mg/L	10

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

Water quality-based statistical evaluations utilize an acute hardness of 74 mg/L and a chronic hardness of 87 µg/L, which are site specific values derived by HWC in accordance with the Department's *Total Hardness Protocol* adopted on March 5, 2001. For a more detailed explanation on the derivation of the site specific hardness values see *Houlton Water Company, Houlton, Maine, Application to Maine Environmental Protection For Site Specific Limits Hardness Dependent Metals, April 2002* prepared by the HWC.

The permittee has satisfied the total hardness monitoring and reporting requirement established in the February 16, 2005 MEPDES permit. Additional total hardness monitoring is not being required as a condition of this permit.

k. Ambient Water Quality Monitoring: The previous permitting action established seasonal (May 1 through September 30, inclusive, of each year) weekly ambient water quality monitoring of the Meduxnekeag River for total phosphorus, ortho-phosphorus and dissolved oxygen at two sampling stations upstream of the permittee's wastewater treatment facility and total phosphorus and dissolved oxygen at three sampling locations below the permittee's wastewater treatment plant outfall.

HWC submitted to the Department a report prepared by Acheron Engineering, Environmental & Geological Scientists and entitled, *Review and Analysis of Water Quality Data 2001 thru 2009 Meduxnekeag River Houlton, Maine, December 2009*. On April 29, 2010, the Department's DEA provided the following review comments (excerpts) and recommendations for future permit conditions.

- The Houlton Water Company is to be commended for collecting water quality data above and beyond that required to monitor the effects of their discharge.
- The data show that dissolved oxygen is often lowest above Houlton, due perhaps to non-point sources and/or natural causes.
- The data show that phosphorus concentrations are often elevated below the Houlton Water Company discharge.
- The data also show that dissolved oxygen (DO) is occasionally lowered below the HWC discharge. Although DO was seldom below the 7 ppm criterion for Class B water, river flows were above the critical low 7Q10 flow required by statute for evaluation. Therefore, we are not sure about attainment of the DO criteria.
- Although the DO data were collected within a half hour after sunrise as requested, continuous DO data collected by the Houlton Band of Maliseet Indians (HBMI) show that the minimum DO may occur from midnight to soon after sunrise. HBMI continuous DO data are available for only a limited number of stations, dates, and flows.
- Although water quality below the HWC discharge appears to attain water quality standards most of the time, it is still uncertain if the river is in attainment all of the time.
- Consequently, additional monitoring is needed. The monitoring proposed by Acheron on behalf of HWC in a letter to DEP dated March 25, 2010 is generally sufficient with one modification as follows. Weekly DO monitoring may be discontinued. Continuous monitoring of temperature and DO is needed at station 16.0 and 16.4 immediately above and below the HWC discharge when river flow is less than 80 cfs. Additional continuous DO monitoring, needed at station 18.9 (Lowery Bridge), will be collected by the HBMI as part of a basin wide study addressing DO and other water quality issues.

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

HWC's consultant, Acheron Engineering, Environmental & Geological Scientists, responded to the Department's April 29, 2010 review comments and recommendations in an e-mail dated May 7, 2010 as follows (excerpts provided):

The attached document contain the results of the analyses for Total Phosphorus, Total Ortho-Phosphorus and Dissolved Ortho-Phosphorus for samples collected at six (6) sampling sites on the Meduxnekeag. Three of the sites are upstream of the HWC discharge and three are downstream of the discharge. As I indicated to you verbally, these data shows the effectiveness of the phosphorus treatment technology in uses at the HWC treatment plant. As you review, you should compare the data from the summer season with the data from the last week of September. The HWC operates the phosphorus treatment technology from June through September 16th every year. On September 16th they turn off the system. The samples collected on September 23, 2009 provide an indication of what the Total Phosphorus and Ortho-Phosphorus levels could be without the application of this technology.

For several weeks prior to the 23rd (the only period of the summer when flow[s] were low), Total Phosphorus levels at 3MDX were about 9 ppb. On the 23rd, after treatment was discontinued, the concentration measured at 3MDX was 29 ppb. Ortho-phosphorus levels at 3MDX were all less than 1 ppb for the entire summer, including the low flow period in late August and September. On the 23rd, Ortho-phosphorus levels went up to 22 ppb. As we all know, the dissolved ortho-phosphorus is the bio-available form of phosphorus for plant growth.

In an earlier report, we made the statement that "the TMDL process was a success and the Houlton Water Company is no longer having any measurable negative impact on the water quality of the Meduxnekeag River". These are some of the data we relied on to support that statement. Thanks to the success of the phosphorus treatment technology in use at the Houlton plant, ortho-phosphorus levels in the river at 3MDX (below the outfall) are consistently below 1 ppb

You will surely recall my comment regarding statement number 4 in your email of April 29. "The data show that phosphorus concentrations are often elevated below the Houlton Water Company discharge." *It is true that one can find some weeks when the total phosphorus levels below the outfall are slightly above the concentration upstream. But if you look at the data carefully, you will see there are some weeks when the concentration of TP upstream is higher than downstream. If you*

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

look at the average for the season, the TP levels in the river are consistently 12 to 13 ppb from 1MDX to 5MDX. I should point out that during the low flow period in September, TP levels upstream were higher than downstream (2MDX compared to 3MDX). I reiterate my comment that the choice of the word "elevated" was inappropriate because it implies exceedance of some standard and upon further review of the attached data, I suggest that you might reconsider the entire comment.

As of the date of this permitting action, the Department's DEA has concluded that additional ambient monitoring data is necessary to validate previous data sets and to make a definitive determination of attainment status of the Meduxnekeag River and any impact the discharge from the HWC may have on receiving water quality. The DEA is currently developing a water quality monitoring plan for 2011 in cooperation with the Houlton Band of Maliseet Indians. Additionally, a longer-term river assessment plan is being developed to ensure that all data necessary to assess compliance with receiving water quality standards are available. Significant changes to the results and recommendations provided in the 2001 TMDL may be used to revise the TMDL.

1. Whole Effluent Toxicity (WET) and Chemical Specific Testing: *Conditions of licenses*, 38 M.R.S.A. § 414-A and *Certain deposits and discharges prohibited,* 38 M.R.S.A. § 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. *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective October 9, 2005), and *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005) set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

   WET, priority pollutant and analytical chemistry testing as required by 06-096 CMR 530, 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 06-096 CMR 584.

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

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

1) Level I – chronic dilution factor of <20:1.
2) Level II – chronic dilution factor of ≥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

06-096 CMR 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 06-096 CMR 530 criteria, the permittee's facility falls into the Level I frequency category as the facility has a chronic dilution factor of <20:1. 06-096 CMR 530(1)(D)(1) specifies that default 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
I	4 per year	1 per year	4 per year

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
I	2 per year	None required	4 per year

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

06-096 CMR 530(2)(D)(3) states in part *"Dischargers in Level I may reduce surveillance testing to one WET or specific chemical series per year provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E)."*

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

06-096 CMR 530(3)(E) states:

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

06-096 CMR 530(3) states:

> *The Department shall establish appropriate discharge prohibitions, effluent limits and monitoring requirements in waste discharge licenses if a discharge contains pollutants that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an ambient excursion in excess of a numeric or narrative water quality criteria or that may impair existing or designated uses. The licensee must also control whole effluent toxicity (WET) when discharges cause, have a reasonable potential to cause, or contribute to an ambient excursion above the narrative water quality criteria. "In determining if effluent limits are required, the Department shall consider all information on file and effluent testing conducted during the preceding 60 months. However, testing done in the performance of a Toxicity Reduction Evaluation (TRE) approved by the Department may be excluded from such evaluations.*

WET Evaluation – The previous permitting action establish A-NOEL limits of 28% for the brook trout (*Salvelinus fontinalis*) and the fathead minnow *(Pimephales promelas*) and a C-NOEL limit of 25% for the water flea (*Ceriodaphnia dubia*) as a statistical evaluation at that time indicated the discharge exceeded or had a reasonable potential to exceed critical acute and chronic WET thresholds of 28% and 25% respectively. The critical thresholds were calculated as the mathematical inverse of the acute and chronic dilution factors of 3.5:1 and 4.0:1, respectively. It is noted 06-096 CMR 530 no longer utilizes the fathead minnow (*Pimephales promelas)* as a test species for WET testing.

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

For this permitting action, a statistical evaluation for the most current 60 months of data was conducted on September 15, 2010 that indicates the discharge has one C-NOEL test result for the brook trout (50% on May 27, 2009) that has a reasonable potential to exceed the critical acute water quality threshold of 25%. The evaluation indicates the test results for the water flea during said period do not exceed or have a reasonable potential to exceed critical acute or chronic thresholds.

Therefore, pursuant to 06-096 CMR 530(3), this permitting action is eliminating the A-NOEL limits of 28% for the brook trout and the fathead minnow, eliminating the C-NOEL limit of 25% for the water flea and establishing a C-NOEL limit of 25% for the brook trout. 06-096 CMR 530 does not establish monitoring frequencies for test species that exceeed or have a reasonable potential to exceed critical acute or chronic thresholds. The Department establishes these frequencies based on the timing, severity and frequency of the tests of concern. This permitting action is establishing a default surveillance level monitoring frequency of twice per year (2/Year) for the brook trout.

As for the water flea, the permittee qualifies for the reduced testing frequency provision found at 06-096 CMR 530(2)(D)(3). Therefore, this permitting action establishes a monitoring frequency of once per year (1/Year) for the water flea beginning upon issuance of the permit and lasting through 12 months prior to the expiration date of the permit.

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

All dischargers having waived or reduced testing must file statements with the Department on or before December 31 of each year describing the following.

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

Given the permittee qualifies for the reduced testing frequency provision for the water flea found at 06-096 CMR 530(2)(D)(3), Special Condition H of this permit requires the permittee to file said statement.

Beginning 12 months prior to the expiration date of the permit, the permittee shall revert to a default screening level of 4/Year WET testing in the 06-096 CMR 530 rule for both the water flea and brook trout.

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

Analytical chemistry and priority pollutant testing – 06-096 CMR 530(4)(C), states:

> *The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions The Department shall use the same general methods as those in section 4(D) to determine background concentrations. For pollutants not listed by the Department, an assumed concentration of 10% of the applicable water quality criteria must be used in calculations.*

The Department has limited information on the background levels of metals in the water column in the Meduxnekeag River in the vicinity of the permittee's outfall. Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

06-096 CMR 530(4)(E), states "*In allocating assimilative capacity for toxic pollutants, the Department shall hold a portion of the total capacity in an unallocated reserve to allow for new or changed discharges and non-point source contributions. The unallocated reserve must be reviewed and restored as necessary at intervals of not more than five years. The water quality reserve must be not less than 15% of the total assimilative quantity.*" Therefore, the Department is reserving 15% of the applicable water quality criteria in the calculations of this permitting action.

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

06-096 CMR 530(4)(F) states, in part,

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

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

> *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.*

For the purposes of this permitting action, the Meduxnekeag River is a main stem waterway with its source being the outlet of Drews Lake (Meduxnekeag Lake) in New Limerick and exits the United States into New Brunswick, Canada in the Town of Oakfield. Two wastewater treatment facilities that are subject to the Department's 06-096 CMR 530 testing requirements discharge to the Meduxnekeag River. The wastewater treatment facilities are Tate & Lyle Ingredients Americas Inc. (Tate & Lyle hereinafter, MEPDES permit #ME0002216 / WDL #W000940) and the Houlton Water Company. The Houlton Water Company facility is the most downstream facility. As previously cited, 06-096 CMR 530 requires that AWQC must be met collectively as well as at the individual discharge points on the Meduxnekeag River after taking into consideration historic discharge levels for the two facilities as well as an allocation dedicated to background (10% of AWQC) and a reserve (15% of AWQC).

As with WET test results, the Department conducted a statistical evaluation on September 20, 2010 (Report ID #304) on the most recent 60-months of analytical chemistry and priority pollutant data on file at the Department. The statistical evaluation indicates that both the Houlton Water Company and Tate & Lyle have test results that exceed or have a reasonable potential to exceed AWQC for aluminum and copper and that possibly exceed or has a reasonable potential to exceed the chronic AWQC for cyanide amenable to chlorination. Houlton Water Company also has test results that exceed or have a reasonable potential to exceed the chronic AWQC for cadmium and lead. It is noted test results submitted to the Department to date for cyanide are expressed in total cyanide rather than cyanide amenable to chlorination making it impossible to determine actual exceedences or reasonable potential

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

to exceed AWQC. As a result, the Department is not requiring the permittee to conduct a TRE for cyanide until at least four test results (equivalent to screening level testing) for cyanide amenable to chlorination are submitted to the Department and statistically evaluated.

Based on Department guidance that establishes protocols for establishing waste load allocations (see **Attachment D** of this Fact Sheet) the most protective of water quality becomes the facility's allocation. According to the September 20, 2010 statistical evaluation, aluminum, cadmium, copper, cyanide and lead are to be limited for the Houlton Water Company based on the segment allocation method.

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. For the Houlton Water Company facility, historical averages for aluminum, cadmium, copper, cyanide and lead were calculated as follows:

Aluminum
Mean concentration = 45 µg/L or 0.045 mg/L
Permit flow limit = 1.5 MGD
Historical average mass = (0.045 mg/L)(8.34)(1.5 MGD) = 0.56 lbs./day

The September 20, 2010 statistical evaluation indicates the historical average mass of aluminum discharged by the Houlton water Company facility is 71.4% of the aluminum discharged by the two facilities on the Meduxnekeag River. Therefore, Houlton Water Company's segment allocation for aluminum is calculated as 71.4% of the chronic assimilative capacities of the river at Houlton Water Company. The assimilative capacity at Houlton Water Company is calculated as follows:

7Q10 = 6.9 cfs (0.6464) = 4.46 MGD

Chronic AWQC = 87 µg/L or 0.087 mg/L

Taking into consideration 15% of the AWQC reserve and 10% for background, the assimilative capacities are:

Chronic = (0.087 mg/L)(0.75)(8.34 lbs/gal)(4.46 MGD) = 2.43 lbs./day

Monthly average (chronic) mass limitation for aluminum is calculated as follows:

Monthly average: (Chronic assimilative capacity mass)(% of total aluminum discharged)
(2.43 lbs./day)(0.714) = **1.73 lbs./day**

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

Since the adoption of 06-096 CMR 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 06-096 CMR 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 shall 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.

Monthly average concentration limitation for aluminum;

$$\frac{1.73 \text{ lbs./day}}{(1.5 \text{ MGD})(8.34 \text{ lbs/gal.})} = 0.138 \text{ mg/L}$$

(0.138 mg/L)(1,000 ug/mg)(2) = **276 µg/L**

Cadmium
Mean concentration = 0.6 µg/L or 0.0006 mg/L
Permit flow limit = 1.5 MGD
Historical average mass = (0.0006 mg/L)(8.34)(1.5 MGD) = 0.0075 lbs./day

The September 20, 2010 statistical evaluation indicates the historical average mass of cadmium discharged by the Houlton Water Company facility is 100% of the cadmium discharged by the two facilities on the Meduxnekeag River. Therefore, Houlton Water Company's segment allocation for cadmium is calculated as 100% of the chronic assimilative capacity of the river at Houlton Water Company. The assimilative capacity at Houlton Water Company is calculated as follows:

7Q10 = 6.9 cfs (0.6464) = 4.46 MGD

Chronic AWQC = 0.24409 µg/L[2] or 0.0002449 mg/L

Taking into consideration 15% of the AWQC reserve and 10% for background, the assimilative capacities are:

Chronic = (0.0002449 mg/L)(0.75)(8.34 lbs/gal)(4.46 MGD) = 0.0068 lbs./day

[2] Based on a site specific hardness of 87 mg/L.

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

Monthly average (chronic) mass limitation for cadmium is calculated as follows:

Monthly average: (Chronic assimilative capacity mass)(% of cadmium discharged)
(0.0068 lbs./day)(1.0) = **0.0068 lbs./day**

Monthly average concentration limitation for cadmium;

$$\frac{0.0068 \text{ lbs./day}}{(1.5 \text{ MGD})(8.34 \text{ lbs/gal.})} = 0.00054 \text{ mg/L}$$

(0.00054 mg/L)(1,000 ug/mg)(2) = **1.1 µg/L**

Copper

Mean concentration = 11 µg/L or 0.011 mg/L
Permit flow limit = 1.5 MGD
Historical average mass = (0.011 mg/L)(8.34)(1.5 MGD) = 0.14 lbs./day

The September 20, 2010 statistical evaluation indicates the historical average mass of copper discharged by Houlton Water Company is 96.07% of the copper discharged by the two facilities on the Meduxnekeag River. Therefore, Houlton water Company's segment allocation for copper is calculated as 96.07% of the acute and chronic assimilative capacities of the river at Houlton Water Company. The assimilative capacities at Houlton Water Company are calculated as follows:

1Q10 = 6.9 cfs (0.6464) = 4.46 MGD
7Q10 = 5.9 cfs (0.6464) = 3.81 MGD

Acute AWQC = 12.27763 µg/L[3] or 0.01227763 mg/L
Chronic AWQC = 8.28228 µg/L[4] or 0.00828228 mg/L

Taking into consideration 15% of the AWQC reserve and 10% for background, the assimilative capacities are:

Acute = (0.01227763 mg/L)(0.75)(8.34 lbs/gal)(3.81 MGD) = 0.29259 lbs./day
Chronic = (0.00828228 mg/L)(0.75)(8.34 lbs/gal)(4.46 MGD) = 0.23105 lbs./day

Daily maximum (acute) and monthly average (chronic) mass limitations for copper are calculated as follows:

Daily maximum: (Acute assimilative capacity mass)(% of total copper discharged)
(0.29259 lbs./day)(0.9607) = **0.28 lbs./day**

[3] Based on a site specific hardness of 87 mg/L.
[4] Based on a site specific hardness of 87 mg/L.

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

Monthly average: (Chronic assimilative capacity mass)(% of total copper discharged)
(0.23105 lbs./day)(0.9607) = **0.22 lbs./day**

Daily maximum concentration limitation for copper;

$$\frac{0.28 \text{ lbs./day}}{(1.5 \text{ MGD})(8.34 \text{ lbs/gal.})} = 0.022 \text{ mg/L}$$

(0.022 mg/L)(1,000 ug/mg)(2) = **45 µg/L**

Monthly average concentration limitation for copper;

$$\frac{0.22 \text{ lbs./day}}{(1.5 \text{ MGD})(8.34 \text{ lbs/gal.})} = 0.0176 \text{ mg/L}$$

(0.0176 mg/L)(1,000 ug/mg)(2) = **35 µg/L**

Cyanide, amenable to chlorination

Mean concentration = 3.05 µg/L or 0.00305mg/L
Permit flow limit = 1.5 MGD
Historical average mass = (0.00305 mg/L)(8.34)(1.5 MGD) = 0.0038 lbs./day

The September 20, 2010 statistical evaluation indicates the historical average mass of cyanide discharged by the Houlton Water Company facility is 95.65% of the cyanide discharged by the two facilities on the Meduxnekeag River. Therefore, Houlton Water Company's segment allocation for cyanide is calculated as 95.65% of the chronic assimilative capacities of the river at Houlton Water Company. The assimilative capacity at Houlton Water Company is calculated as follows:

7Q10 = 6.9 cfs (0.6464) = 4.46 MGD

Chronic AWQC = 5.2 µg/L or 0.0052 mg/L

Taking into consideration 15% of the AWQC reserve and 10% for background, the assimilative capacities are:

Chronic = (0.0052 mg/L)(0.75)(8.34 lbs/gal)(4.46 MGD) = 0.145 lbs./day

Monthly average (chronic) mass limitation for cyanide amenable to chlorination is calculated as follows:

Monthly average: (Chronic assimilative capacity mass)(% of cyanide discharged)
(0.145 lbs./day)(0.9565) = **0.14 lbs./day**

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

Monthly average concentration limitation for cyanide, amenable to chlorination;

$$\frac{0.14 \text{ lbs./day}}{(1.5 \text{ MGD})(8.34 \text{ lbs/gal.})} = 0.011 \text{ mg/L}$$

(0.011 mg/L)(1,000 ug/mg)(2) = **22 µg/L**

Lead

Mean concentration = 2.0 µg/L or 0.002 mg/L
Permit flow limit = 1.5 MGD
Historical average mass = (0.002 mg/L)(8.34)(1.5 MGD) = 0.025 lbs./day

The September 20, 2010 statistical evaluation indicates the historical average mass of lead discharged by the Houlton Water Company facility is 100% of the lead discharged by the two facilities on the Meduxnekeag River. Therefore, Houlton Water Company's segment allocation for lead is calculated as 100% of the chronic assimilative capacities of the river at Houlton Water Company. The assimilative capacity at Houlton Water Company is calculated as follows:

7Q10 = 6.9 cfs (0.6464) = 4.46 MGD

Chronic AWQC = 2.66473 µg/L[5] or 0.00266 mg/L

Taking into consideration 15% of the AWQC reserve and 10% for background, the assimilative capacities are:

Chronic = (0.00266 mg/L)(0.75)(8.34 lbs/gal)(4.46 MGD) = 0.074 lbs./day

Monthly average (chronic) mass limitation for lead is calculated as follows:

Monthly average: (Chronic assimilative capacity mass)(% of lead discharged)
(0.074 lbs./day)(1.0) = **0.074 lbs./day**

Monthly average concentration limitation for lead;

$$\frac{0.074 \text{ lbs./day}}{(1.5 \text{ MGD})(8.34 \text{ lbs/gal.})} = 0.0059 \text{ mg/L}$$

(0.0059 mg/L)(1,000 ug/mg)(2) = **12 µg/L**

06-096 CMR 530 does not establish monitoring frequencies for parameters that exceed or have a reasonable potential to exceed AWQC. Monitoring frequencies are established on a case-by-case basis given the timing, severity and frequency of occurrences of the exceedences or reasonable potential to exceed applicable critical water quality thresholds. Therefore, this permitting action is making a best professional judgment to establish the

[5] Based on a site specific hardness of 87 mg/L.

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

monitoring frequencies for the parameters of concern at the default surveillance level frequency of twice per year (2/Year) specified in 06-096 CMR 530.

As for the remaining chemical specific parameters tested to date, none of the test results in the 60-month evaluation period exceed or have a reasonable potential to exceed applicable acute, chronic or human health AWQC. Therefore, this permitting action is establishing a reduced surveillance level reporting and monitoring frequency for analytical chemistry of once per year (1/Year) for the first four years of the term of the permit. As with reduced WET testing, the Houlton Water Company shall file an annual certification with the Department pursuant to 06-096 CMR 530(2)(D)(3) and Special Condition H of this permit. It is noted 06-096 CMR 530 does not require surveillance level priority pollutant testing during the first four years of the term of the permit.

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

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

With continued treatment for total phosphorus at the wastewater treatment facility and the limitations for total phosphorus in this permit, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the water body to meet standards for Class B classifications.

8. PUBLIC COMMENTS

Public notice of this application was made in the *Houlton Times Pioneer* newspaper on or about December 9, 2009. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses,* 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

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

William F. Hinkel
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017
e-mail: bill.hinkel@maine.gov
Telephone: (207) 485-2281

10. RESPONSE TO COMMENTS

During the period of November 23, 2010 through December 23, 2010, the Department solicited comments on the proposed draft MEPDES permit to be issued to Houlton Water Company for the Meduxnekeag River discharge. The Department did not receive significant written comments on the draft permit; however, the Department, the HWC and the Houlton Band of Maliseet Indians verbally discussed certain terms and conditions of the draft permit. The Department's Division of Environmental Assessment recommended that additional ambient water quality monitoring requirements should be conducted by the Department and not imposed on the HWC in this permit renewal. Therefore, the ambient water quality monitoring requirements established in the November 23, 2010 draft permit have been eliminated. Ambient data collected by the Department are will be considered to be The HWC provided information that the C-NOEL WET test result for the brook trout for September 2009 was 100%, not 50% as previously and erroneously reported to the Department. Therefore, the Department revised the WET section of the fact sheet to correctly state that only the May 2009 C-NOEL result of 50% is a reasonable potential to exceed the ambient water quality criterion. No other changes to the November 23, 2010 draft permit were made in this revised draft permit.

A revised draft permit was issued on March 21, 2011 for a 10-day period to provide an opportunity to review the changes to the November 23, 2010 draft permit.

On March 30, 2011, HWC's consultant, Acheron Engineering (Bill Ball), provided written comments on the March 21, 2011 revised draft permit.

Comment #1: "The requirement for the HWC to conduct stream flow monitoring has been carried over from the previous permit. It was needed to supplement the HWC water quality monitoring data, and because the only other gage is some distance upstream of several major tributaries to the Meduxnekeag. The USGS has since established a stream flow gage near Lowery Road, which is a short distance downstream of the HWC discharge. Given the existence of this gage, there is no longer any need for the HWC to collect stream flow measurements. We request that this requirement be deleted from the permit."

Response #1: In the March 21, 2011 revised draft permit, the Department eliminated additional ambient monitoring requirements. The stream flow monitoring requirement in the so-called "effluent limits table" at Special Condition A.2 of the permit was not deleted as intended. This has been corrected in the final order.

Comment #2: "On or about November 29, 2010 following review of the draft permit, ClearWater Laboratory sent an email to the Department.... That email indicates that ClearWater discovered an error in an DMR report for the results of the toxicity test conducted in the third quarter of 2009. The C-NOEL results for that test were incorrectly reported at 50% when the result was actually 100%. The HWC requests that the analysis of the historical WET test data be redone with the corrected results. We believe that this correction will allow for a change in the frequency of the required WET testing in the new permit."

Response #2: The Department updated the WET discussion in the March 21, 2011 revised draft permit to acknowledge the reporting error associated with the September 2009 WET test. The May 2009 WET test result has a reasonable potential to exceed the water quality threshold; therefore, the renewed permit establishes the default surveillance level monitoring frequency for the brook trout.

Comment #3: "The HWC appreciates the Department's decision to remove the ambient water quality monitoring requirement from the license. The HWC agrees with and supports that decision. However, the HWC requests that the Department provide the HWC with a copy of a work plan or study plan for any water quality monitoring studies that will result in data to be used by the Department to assess and evaluate Meduxnekeag River water quality. Also, the HWC offers to assist the Department in the execution of on-going water quality studies within the limits of its capabilities. It is likely that the HWC will want to cooperate with the Department by collecting data during the summer of 2011. The HWC will submit a work plan to the Department for review and comment prior to undertaking any field studies and/or sampling."

Response #3: The MEPDES permitting unit has provided this comment to the Division of Environmental Assessment (DEA) to coordinate river monitoring efforts with the HWC.

Comment #4: "There is a typo on page 10 of permit section of the document, Footnote #7… The reference to orthophosphate in this footnote is incorrect and should be total phosphorus."

Response #4: The Department has corrected this typographical error.

ATTACHMENT A

Houlton Water Company POTW
Houlton, Maine

Map created by Maine DEP
April 2011

ATTACHMENT B

WET TEST REPORT

Data for tests conducted for the period
17/Nov/2005 - 17/Nov/2010 period.

HOULTON NPDES= ME010129 Effluent Limit: Acute (%) = 28.228 Chronic (%) = 25.167

Species	Test	Percent	Sample date	Critical %	Exception	RP
FATHEAD	A_NOEL	100	12/11/2005	28.228		
FATHEAD	C_NOEL	100	12/11/2005	25.167		
TROUT	A_NOEL	100	12/11/2005	28.228		
TROUT	A_NOEL	100	06/20/2006	28.228		
TROUT	A_NOEL	100	11/28/2006	28.228		
TROUT	A_NOEL	100	01/25/2007	28.228		
TROUT	A_NOEL	100	05/06/2008	28.228		
TROUT	A_NOEL	100	11/12/2008	28.228		
TROUT	A_NOEL	100	05/27/2009	28.228		
TROUT	A_NOEL	100	09/26/2009	28.228		
TROUT	A_NOEL	100	12/01/2009	28.228		
TROUT	A_NOEL	100	08/18/2010	28.228		
TROUT	C_NOEL	100	12/11/2005	25.167		
TROUT	C_NOEL	50	05/27/2009	25.167		
TROUT	C_NOEL	50	09/26/2009	25.167		
TROUT	C_NOEL	100	12/01/2009	25.167		
WATER FLEA	A_NOEL	100	12/11/2005	28.228		
WATER FLEA	A_NOEL	100	06/20/2006	28.228		
WATER FLEA	A_NOEL	100	11/28/2006	28.228		
WATER FLEA	A_NOEL	100	01/25/2007	28.228		
WATER FLEA	A_NOEL	100	05/06/2008	28.228		
WATER FLEA	A_NOEL	100	11/12/2008	28.228		
WATER FLEA	A_NOEL	100	05/27/2009	28.228		
WATER FLEA	A_NOEL	100	09/26/2009	28.228		
WATER FLEA	A_NOEL	100	12/01/2009	28.228		
WATER FLEA	A_NOEL	100	08/18/2010	28.228		
WATER FLEA	C_NOEL	100	12/11/2005	25.167		
WATER FLEA	C_NOEL	100	06/20/2006	25.167		
WATER FLEA	C_NOEL	100	11/28/2006	25.167		
WATER FLEA	C_NOEL	100	01/25/2007	25.167		
WATER FLEA	C_NOEL	100	05/06/2008	25.167		
WATER FLEA	C_NOEL	100	11/12/2008	25.167		
WATER FLEA	C_NOEL	100	05/27/2009	25.167		
WATER FLEA	C_NOEL	100	09/26/2009	25.167		
WATER FLEA	C_NOEL	100	12/01/2009	25.167		
WATER FLEA	C_NOEL	50	08/18/2010	25.167		

ATTACHMENT C

PRIORITY POLLUTANT DATA SUMMARY

Date Range: **17/Nov/2005 - 17/Nov/2010 period**

Facility Name: **HOULTON** NPDES: **ME0101290**

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
12/11/2005	1.90	1.90	137	14	28	46	25	13	11	F	0
06/20/2006	1.60	1.30	20	9	0	0	0	11	0	F	0
11/28/2006	1.90	1.30	11	1	0	0	0	10	0	F	0
01/25/2007	1.11	0.80	21	9	0	0	0	12	0	F	0
09/25/2007	0.18	0.09	21	9	0	0	0	12	0	F	0
05/06/2008	1.63	2.56	21	9	0	0	0	12	0	F	0
06/25/2008	0.61	0.28	1	1	0	0	0	0	0	F	0
07/22/2008	1.03	0.80	2	2	0	0	0	0	0	F	0
11/12/2008	1.41	1.11	21	9	0	0	0	12	0	F	0
03/23/2009	1.09	0.97	21	9	0	0	0	12	0	F	0
05/27/2009	1.33	0.63	21	9	0	0	0	12	0	F	0
09/24/2009	0.46	0.44	21	9	0	0	0	12	0	F	0
12/01/2009	1.26	2.09	135	13	28	46	25	12	11	F	0

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
08/18/2010	0.22	0.19	19	9	0	0	0	10	0	F	0

Key-

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

FACILITY CHEMICAL DATA REPORT

Data Date Range: 17/Nov/2005 - 17/Nov/2010

--Showing only those values not reported as a less than result

Facility name: **HOULTON** Permit Number: **ME0101290**

Parameter: ALUMINUM	Test date	Result (ug/l)	Lsthan
	12/11/2005	15.000	N
	06/20/2006	132.000	N
	05/06/2008	230.000	N
	09/24/2009	11.000	N
	12/01/2009	10.000	N
	08/18/2010	17.000	N
Parameter: AMMONIA	**Test date**	**Result (ug/l)**	**Lsthan**
	12/11/2005	160.000	N
	06/20/2006	160.000	N
	01/25/2007	2090.000	N
	09/25/2007	166.000	N
	05/06/2008	955.000	N
	11/12/2008	164.000	N
	03/23/2009	900.000	N
	12/01/2009	330.000	N
	08/18/2010	2970.000	N
Parameter: ARSENIC	**Test date**	**Result (ug/l)**	**Lsthan**
	09/24/2009	1.000	N
Parameter: CADMIUM	**Test date**	**Result (ug/l)**	**Lsthan**
	05/27/2009	1.500	N
Parameter: CALCIUM	**Test date**	**Result (ug/l)**	**Lsthan**
	12/11/2005	93000.000	N
	06/20/2006	80000.000	N
	11/28/2006	98000.000	N
	01/25/2007	95000.000	N
	09/25/2007	85000.000	N
	05/06/2008	90000.000	N
	11/12/2008	105200.00	N
	03/23/2009	100500.00	N
	05/27/2009	89900.000	N
	09/24/2009	74900.000	N
	12/01/2009	95400.000	N
	08/18/2010	78400.000	N
Parameter: CHROMIUM	**Test date**	**Result (ug/l)**	**Lsthan**
	09/24/2009	1.000	N
Parameter: COPPER	**Test date**	**Result (ug/l)**	**Lsthan**
	12/11/2005	14.000	N
	06/20/2006	12.000	N
	11/28/2006	10.000	N
	01/25/2007	11.000	N
	09/25/2007	20.000	N
	05/06/2008	11.000	N

07/22/2008	3.000	N
11/12/2008	5.000	N
03/23/2009	5.000	N
05/27/2009	20.000	N
09/24/2009	20.000	N
12/01/2009	7.000	N
08/18/2010	33.000	N

Parameter: CYANIDE

Test date	Result (ug/l)	Lsthan
06/20/2006	8.000	N

Parameter: LEAD

Test date	Result (ug/l)	Lsthan
05/06/2008	5.000	N
05/27/2009	3.000	N

Parameter: MAGNESIUM

Test date	Result (ug/l)	Lsthan
12/11/2005	9100.000	N
06/20/2006	8200.000	N
11/28/2006	9630.000	N
01/25/2007	9100.000	N
09/25/2007	8440.000	N
05/06/2008	8300.000	N
11/12/2008	10200.000	N
03/23/2009	9800.000	N
05/27/2009	8400.000	N
09/24/2009	7200.000	N
12/01/2009	9800.000	N
08/18/2010	7000.000	N

Parameter: MERCURY

Test date	Result (ug/l)	Lsthan
12/11/2005	0.005	N
02/15/2006	0.004	N
04/17/2006	0.004	N
06/21/2006	0.001	N
08/21/2006	0.001	N
10/26/2006	0.001	N
01/04/2007	0.001	N
03/07/2007	0.002	N
06/27/2007	0.001	N
09/19/2007	0.001	N
02/20/2008	0.002	N
05/07/2008	0.001	N
08/19/2008	0.001	N
11/25/2008	0.001	N
02/11/2009	0.002	N
05/27/2009	0.001	N
09/24/2009	0.001	N
12/01/2009	0.001	N
06/16/2010	0.001	N
08/18/2010	0.001	N

Parameter: NICKEL

Test date	Result (ug/l)	Lsthan
06/20/2006	6.000	N
05/06/2008	5.000	N
09/24/2009	6.000	N
08/18/2010	10.000	N

Parameter: THALLIUM

Test date	Result (ug/l)	Lsthan

	12/11/2005	3.000	N
Parameter: TOLUENE	**Test date**	**Result (ug/l)**	**Lsthan**
	12/01/2009	5.400	N
Parameter: ZINC	**Test date**	**Result (ug/l)**	**Lsthan**
	12/11/2005	19.000	N
	06/20/2006	25.000	N
	01/25/2007	33.000	N
	09/25/2007	32.000	N
	05/06/2008	10.000	N
	11/12/2008	18.000	N
	03/23/2009	26.000	N
	05/27/2009	27.000	N
	09/24/2009	57.000	N
	12/01/2009	13.000	N
	08/18/2010	40.000	N

ATTACHMENT D

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

DATE: October 2008

TO: Interested Parties

FROM: Dennis Merrill, DEP

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

****

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

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

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

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

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

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

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

Maine Department of Environmental Protection

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maine Department of Environmental Protection

Working Definitions of Terms Used in the DeTox System.

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

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

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

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

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

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

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

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

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

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

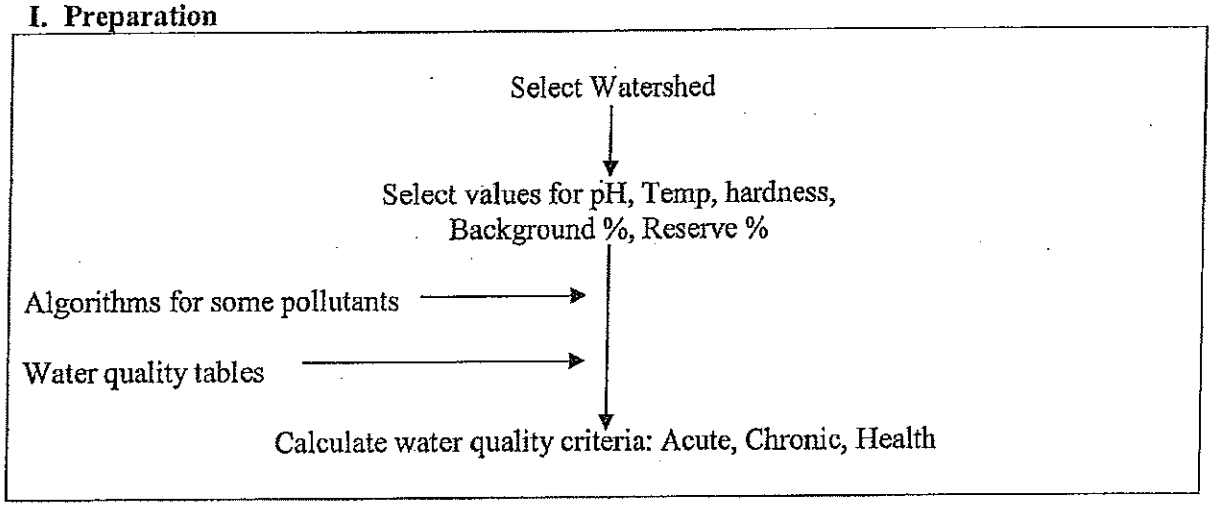
Segment allocation. One of three ways of developing an *allocation.* The amount is set by multiplying a facility's *historical discharge percentage* for a specific pollutant by the *assimilative capacity* for that pollutant and criterion. A facility will have different allocation percentages for each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

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

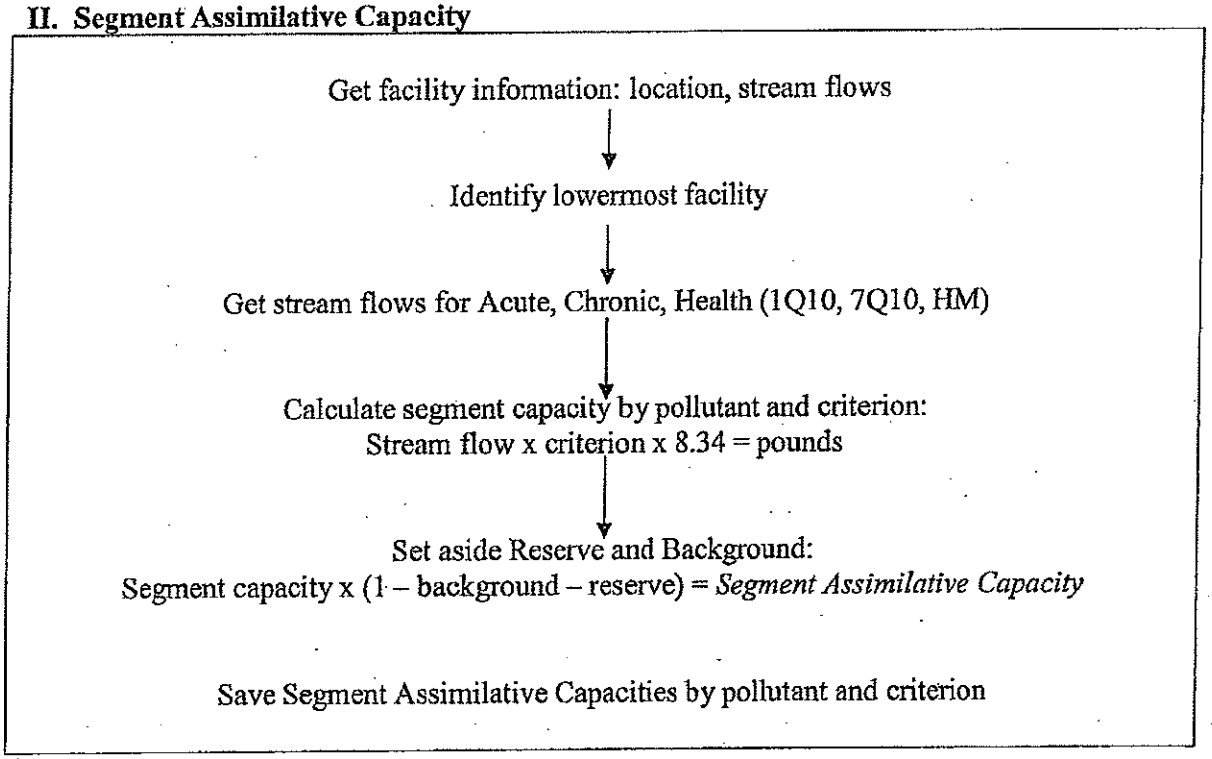
Water quality criteria. Standards for acceptable in-stream or ambient levels of pollutants. These are established in the Department's Chapter 584 and are expressed as concentrations in ug/L. There may be separate standards for acute and chronic protection aquatic life and/or human health. Each criterion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

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

I. Preparation

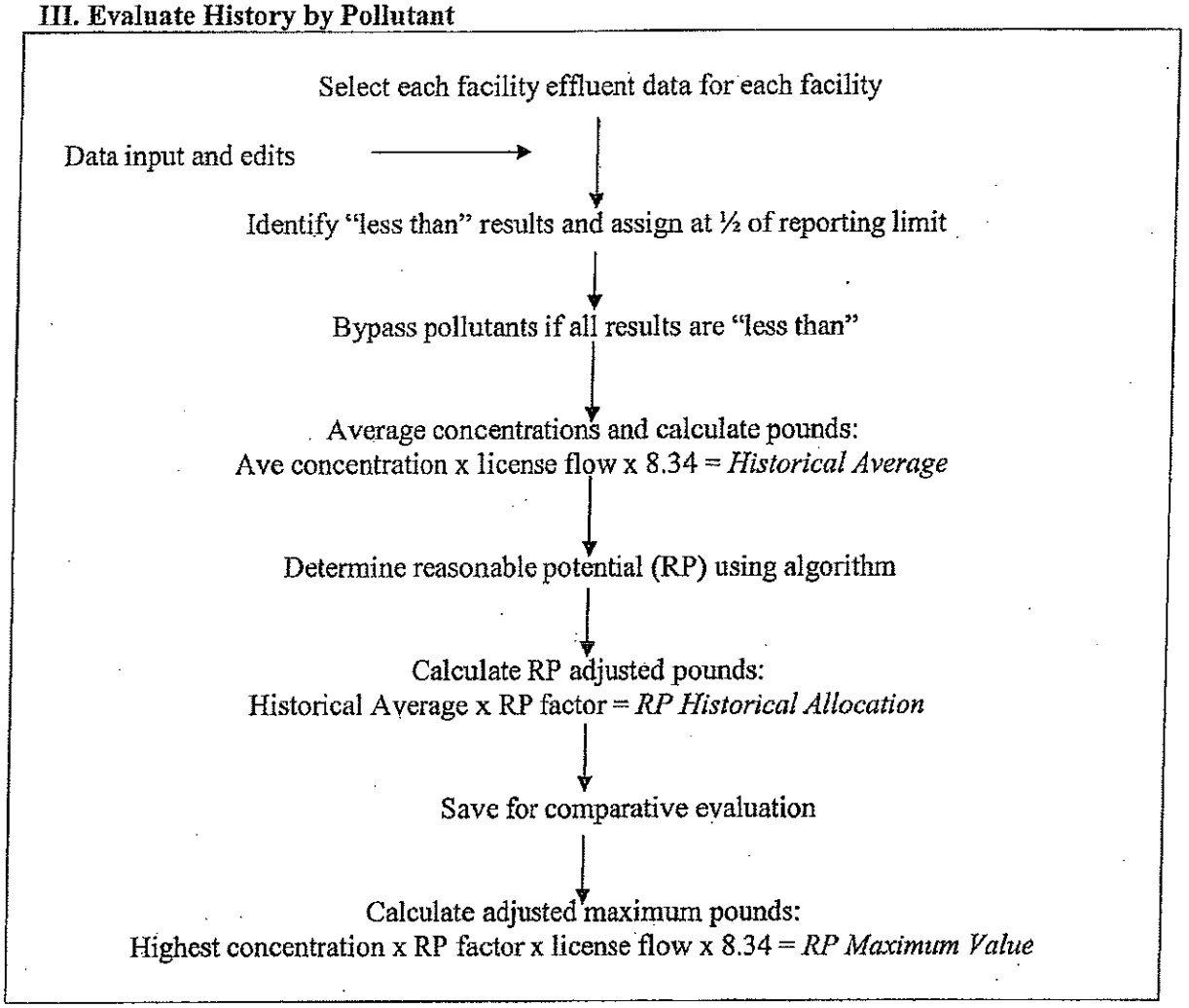


II. Segment Assimilative Capacity

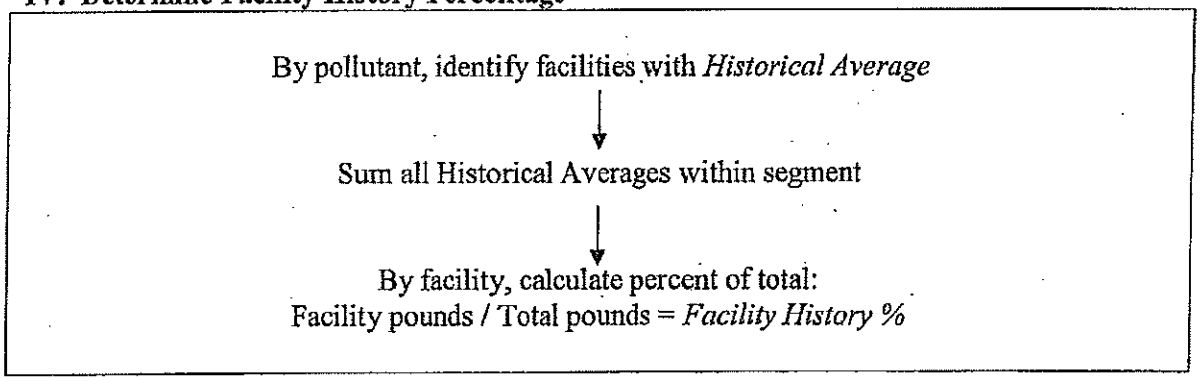


Maine Department of Environmental Protection
General Processing Steps in "DeTox"

III. Evaluate History by Pollutant



IV. Determine Facility History Percentage



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

V. Segment Allocation

By pollutant and criterion, select *Segment Assimilative Capacity*

↓

Select individual *Facility History %*

↓

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

↓

Save for comparative evaluation

VI. Individual Allocation

Select individual facility and dilution factor (DF)

↓

Select pollutant and water quality criterion

↓

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

↓

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

↓

Save for comparative evaluation

VII. Make Initial Allocation

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

↓

Compare allocation and select the smallest

↓

Save as *Facility Allocation*

VIII. Evaluate Need for Effluent Limits

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

↓

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

↓

Save *Effluent Limit* for comparison

IX. Reallocation of Assimilative Capacity

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

↓

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

↓

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

↓

Save difference

↓

Select next facility downstream

↓

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

↓

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

↓

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

↓

Repeat process for each facility downstream in turn

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

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

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

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

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

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.