STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

April 16, 2013

Mr. Andrew Fitzpatrick
Superintendent
Clinton Water District
P.O. Box 358
Clinton, Maine 04927
clintonwaterdistrict@gmail.com

Transmitted via electronic mail
Delivery confirmation requested

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101699
Maine Waste Discharge License (WDL) Application #W002589-6C-G-R
Final Permit

Dear Mr. Fitzpatrick:

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

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

If you have any questions regarding the matter, please feel free to call me at 215-1579.

Sincerely,

Yvette Meunier

Yvette Meunier
Division of Water Quality Management
Bureau of Land and Water Quality
yvette.meunier@maine.gov

Enc.
cc: Beth DeHaas, DEP/CMRO
Sandy Mojica, USEPA

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

DEPARTMENT ORDER

IN THE MATTER OF

CLINTON WATER DISTRICT	)	MAINE POLLUTANT DISCHARGE
CLINTON, KENNEBEC COUNTY	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
#ME0101699	)	WASTE DISCHARGE LICENSE
#W002589-6C-G-R **APPROVAL**	)	**RENEWAL**

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

APPLICATION SUMMARY

The CWD has submitted a timely and complete application to the Department for renewal of Waste Discharge License (WDL) #W002589-5L-E-R / Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101699, which was issued on April 29, 2008, and is scheduled to expire on April 29, 2013. The 4/29/08 MEPDES permit authorized the monthly average discharge of 0.35 million gallons per day (MGD) of secondary treated municipal wastewaters from a publicly owned treatment works (POTW) on a seasonal basis (October 1 – May 31 of each year) to the Sebasticook River, Class C, in Clinton, Maine.

It is noted that the Department issued a minor permit revision February 6, 2012 to revise the mercury monitoring frequency.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions established in the previous permitting action except that this permit is;

1) Incorporating the interim average and maximum numeric limitations for mercury into the permit and reducing the monitoring frequency from 2/Year to 1/Year pursuant to *Certain deposits and discharges prohibited,* 38 M.R.S.A. § 420(1-B)(B)(1);

2) Revising the monitoring and reporting requirements for WET, priority pollutant, and analytical chemistry screening level testing in order to accommodate license renewal schedules;

PERMIT SUMMARY (cont'd)

3) Reducing the monitoring frequencies for biochemical oxygen demand (BOD_5), total suspended solids (TSS) and settleable solids based on a statistical analysis in accordance with the methodology established in the U.S. Environmental Protection Agency's "*Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies*" (USEPA 1996); and

4) Establishing a water quality-based monthly average mass limit and concentration reporting requirement for inorganic arsenic and a monthly average mass and concentration reporting requirements for total arsenic based on the results of facility testing.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated April 16, 2013, 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, *Classification of Maine waters*, 38 M.R.S.A. § 464(4)(F), will be met, in that:

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

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

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

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

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

4. The discharge will be subject to effluent limitations that require application of best practicable treatment as defined in 38 M.R.S.A. § 414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the above noted application of the CLINTON WATER DISTRICT to discharge a monthly average flow of 0.35 million gallons per day of secondary treated municipal wastewater to the Sebasticook River, Class C, in Clinton, Maine, during the period of October 1 through May 31 of each year 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 and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and 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 17th DAY OF April, 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Kuhns
for PATRICIA W. AHO, Commissioner

Filed
APR 17 2013
State of Maine
Board of Environmental Protection

Date filed with Board of Environmental Protection _____

Date of initial receipt of application: February 11, 2013
Date of application acceptance: February 12, 2013
This Order prepared by Yvette M. Meunier, BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **secondary treated municipal wastewater via Outfall #001A** to the Sebasticook River during the period of **October 1 through May 31, inclusive,** of each year. Such discharges shall be limited and monitored by the permittee as specified below[1]. **The discharge from the CWD is not authorized by this permit between June 1 and September 30, inclusive,** of each year.

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	0.35 MGD *[03]*	---	Report MGD *[03]*	---	---	---	Daily When Discharging *[WH/DS]*	Recorder *[RC]*
BOD_5 *[00310]*	88 lbs/day *[26]*	131 lbs/day *[26]*	146 lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Month *[02/30]*	Grab *[GR]*
BOD_5 Percent Removal[2] *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
TSS *[00530]*	88 lbs/day *[26]*	131 lbs/day *[26]*	146 lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Month *[02/30]*	Grab *[GR]*
TSS Percent Removal[2] *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	2/Month *[02/30]*	Grab *[GR]*
E. coli Bacteria[3] (May 15 – Sept. 30) *[31633]*	---	---	---	126/100ml[4] *[13]*	---	949/100 ml *[13]*	1/Week *[01/07]*	Grab *[GR]*
Total Residual Chlorine[5] *[50060]*	---	---	---	0.1 mg/L *[19]*	---	0.3 mg/L *[19]*	5/Week *[05/07]*	Grab *[GR]*
pH Standard Units (SU) *[00400]*	---	---	---	---	---	6.0 – 9.0 SU [6] *[12]*	2/Week *[02/07]*	Grab *[GR]*
Mercury [7] *[71900]*	---	---	---	4.5 ng/L *[3M]*	---	6.8 ng/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*
Arsenic (Total) [8] *[01002] (Upon permit issuance)*	Report lbs/day *[26]*	---	---	Report µg/L *[28]*	---	---	1/ Year *[01/YR]*	Grab *[GR]*
Arsenic (Inorganic)[9] *[01252] (Upon test method approval)*	0.0008 lbs/day *[26]*	---	---	Report µg/L *[28]*	---	---	1/ Year *[01/YR]*	Grab *[GR]*

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

FOOTNOTES: See Pages 6 through 9 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

2. Whole effluent toxicity, analytical chemistry and priority pollutant testing requirements [1].

SCREENING LEVEL - Beginning 24 months prior to the expiration date of the permit and lasting through 12 months prior to permit expiration and every five years thereafter if a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit [1].

Effluent Characteristic	Discharge 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]*	Grab *[GR]*
Salvelinus fontinalis (Brook trout) *[TDA6F]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Grab *[GR]*
Chronic – NOEL						
Ceriodaphnia dubia (Water flea) *[TBP3B]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Grab *[GR]*
Salvelinus fontinalis (Brook trout) *[TBQ6F]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Grab *[GR]*
Analytical Chemistry **(11)** *[51477]*	---	---	---	Report ug/L *[28]*	3/Year *[03/YR]*	Grab *[GR]*
Priority Pollutant **(12)** *[50008]*	---	---	---	Report ug/L *[28]*	1/Year *[01/YR]*	Grab *[GR]*

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

FOOTNOTES: See Pages 6 through 9 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES:

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

   Waste Discharge License Conditions, 06-096 CMR 523(2)(l)(4)(ii), states in part:

   > ...if the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

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

2. **Percent Removal** – The treatment facility shall maintain a minimum of 85 percent removal of both biochemical oxygen demand (BOD_5) and total suspended solids (TSS) for all flows receiving secondary treatment during all months that the facility discharges. Compliance with the limitation shall be based on a twelve-month rolling average. Calendar monthly average percent removal values shall be calculated based on influent and effluent concentrations. For the purposes of this permitting action, the twelve-month rolling average calculation is based on the most recent twelve-month period when the facility has discharged and the average influent concentration is greater than 200 mg/L. The permittee shall enter "NODI-9" on the monthly Discharge Monitoring Report (DMR) and on the "49" form when the twelve-month rolling average calculation for BOD_5 and TSS for the month is less than 200 mg/L.

SPECIAL CONDITIONS

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

FOOTNOTES:

3. **Bacteria Limits** – *E. coli* bacteria limits and monitoring requirements are seasonal and apply between May 15 and September 30 of each year. Whereas this permitting action does not authorize the discharge of wastewater during the period of June 1 – September 30 of each year, bacteria limits are only applicable for this facility from May 15 – May 31 of each year. For instances when the permittee discharges wastewater during the month of May but only prior to May 15th, the permittee shall report "NODI-9" on the monthly DMR. The Department reserves the right to reopen this permit in accordance with Special Condition L, *Reopening of Permit for Modifications*, to impose year-round bacteria limitations to protect the health, safety and welfare of the public.

4. **Bacteria Reporting** – The monthly average *E. coli* bacteria limitation is a geometric mean limitation and sample results shall be reported as such.

5. **TRC Monitoring** – Monitoring for total residual chlorine (TRC) is only required when elemental chlorine or chlorine-based compounds are in use for effluent disinfection. For instances when the chlorine or chlorine-based compounds have not been used for effluent disinfection for an entire reporting period, the permittee shall report "NODI-9" on the monthly DMR. The permittee shall utilize approved test methods that are capable of bracketing the TRC limitation in this permit.

6. **pH Range Limitation** – Effluent pH results outside the range of 6.0 – 9.0 Standard Units (SU) are not to be reported as exceptions provided the cause(s) for the exceedence(s) are naturally occurring. The permittee must provide the Department with written documentation as to the cause(s) of the pH results if found outside the 6.0 – 9.0 range.

7. **Mercury** – The permittee shall conduct all mercury sampling required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the USEPA's "clean sampling techniques" found in USEPA Method 1669, *Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels*. All mercury analysis shall be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry*. Compliance with the monthly average limitation established in Special Condition A.1 of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility. See **Attachment B** for a Department report form for mercury test results.

SPECIAL CONDITIONS

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

FOOTNOTES:

8. **Arsenic (Total) – Beginning upon issuance of this permit and lasting through a date on which the USEPA approves a test method for inorganic arsenic**, the permittee shall sample and analyze the discharge from the facility for total arsenic. The Department's most current reporting limit (RL) for total arsenic is 5 ug/L but may be subject to revision during the term of this permit. All detectable analytical test results shall be reported to the Department including results which are detected below the Department's most current RL at the time of sampling and reporting. Only the detectable results greater than the total arsenic threshold of 0.56 ug/L (See page 19 of the Fact Sheet) or the Department's RL at the time (whichever is higher) will be considered as a possible exceedence of the inorganic limit. If a test result is determined to be a possible exceedence, the permittee shall submit a toxicity reduction evaluation (TRE) to the Department for review and approval within 45 days of receiving the test result of concern from the laboratory.

9. **Arsenic (Inorganic)** – The limitations and monitoring requirements for inorganic arsenic are not in effect until the USEPA approves of a test method for inorganic arsenic. See Special Condition I, *Schedule of Compliance – Inorganic Arsenic*, of this permit modification. Once effective, compliance will be based on a 12-month rolling average basis beginning 12 months after the effective date of the limits. Following USEPA approval of a test method for inorganic arsenic and based on recent available data, the permittee may request that the Department reopen this permit in accordance with Special Condition L, *Reopening of Permit For Modifications*, of this permit to establish a schedule of compliance for imposition of the numeric inorganic arsenic limitations.

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 3.2% and 0.83%, respectively), which provides an 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 (modified) acute and chronic dilution factors of 31:1 and 121:1, respectively.

    Screening level testing – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee shall conduct screening level WET testing at a frequency of once per year (1/Year) for the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*).

SPECIAL CONDITIONS

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

FOOTNOTES:

Pursuant to 06-096 CMR 530, surveillance level testing is waived for this facility.

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 of 3.2% and 0.83%, respectively.

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.

Results of WET tests shall be reported on the "Whole Effluent Toxicity Report Fresh Waters" form included as **Attachment C** of this permit each time a WET test is performed. The permittee is also required to analyze the effluent for the parameters specified in the WET chemistry section, and the parameters specified in the analytical chemistry section of the form in **Attachment A** of this permit each time a WET test is performed.

11. **Analytical chemistry** – Refers to a suite of tests for the chemical parameters listed in **Attachment A** of the permit.

Screening level testing – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee shall conduct analytical chemistry testing at a minimum frequency of once per calendar quarter (1/Quarter). Whereas this permitting action prohibits discharges during the period of June 1 – September 30 of each year, the permittee shall conduct a total of three (3) analytical chemistry testing events, with one test conducted in each of the following calendar periods: January – March, April – May, and October – December.

Pursuant to 06-096 CMR 530, surveillance level testing is waived for this facility.

SPECIAL CONDITIONS

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

FOOTNOTES:

12. **Priority pollutant testing** – Priority pollutants are those parameters specified at *Effluent Guidelines and Standards*, 06-096 CMR 525(4)(IV) (effective January 12, 2001).

    a. **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee shall conduct screening level priority pollutant testing at a minimum frequency of once per year during a month when the facility discharges to the river.

    Surveillance level testing is not required pursuant to 06-096 CMR 530.

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

    Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee 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 permittee shall not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the usages designated for the classification of the receiving waters.

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

3. The permittee shall not discharge effluent that causes visible discoloration or turbidity in the receiving waters or that impairs the usages designated for the classification of the receiving waters.

SPECIAL CONDITIONS

B. NARRATIVE EFFLUENT LIMITATIONS (cont'd)

4. Notwithstanding specific conditions of this permit, the permittee shall not discharge effluent that lowers the quality of any classified body of water below such classification, or lowers the existing quality of any body of water if the existing quality is higher than the classification.

C. TREATMENT PLANT OPERATOR

The treatment facility must be operated by a person holding a minimum of a **Grade II** certificate (or Registered Maine Professional Engineer) pursuant to *Sewage 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 permittee may engage the services of the contract operator.

D. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on February 12, 2013; 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of wastewater from any other point source are not authorized under this permit, and must be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

E. 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. The permittee shall conduct an Industrial Waste Survey (IWS) any time a new industrial user proposes to discharge within its jurisdiction; an existing user proposes to make a significant change in its discharge; or at an alternative minimum, once every permit cycle. The IWS shall identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of the federal Clean Water Act, 40 CFR Part 403 (general pretreatment regulations) or *Pretreatment Program*, 06-096 CMR 528 (last amended March 17, 2008).

F. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and **postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office such that the 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 shall be submitted to the Department-assigned inspector (unless otherwise specified by the Department) at the following address:

SPECIAL CONDITIONS

F. MONITORING AND REPORTING (cont'd)

Department of Environmental Protection
Bureau of Land and Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333-0017

Alternatively, if the permittee submits 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.

G. NOTIFICATION REQUIREMENTS

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

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

2. Any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants to the system at the time of permit issuance; and

3. For the purposes of this section, adequate notice 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 of the change in the quantity or quality of the wastewater to be discharged from the treatment system.

H. STATEMENT FOR REDUCED/WAIVED TOXICS TESTING

By December 31 of each calendar year, the permittee shall provide the Department with a certification describing any of the following that have occurred since the effective date of this permit ***[PCS Code 95799]***. See **Attachment D** of the permit for an acceptable certification form to satisfy this Special Condition.

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

SPECIAL CONDITIONS

H. STATEMENT FOR REDUCED/WAIVED TOXICS TESTING (cont'd)

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

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

(d) Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge; and
(e) Increases in the type or volume of transported (hauled) wastes accepted by the facility.

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. SCHEDULE OF COMPLIANCE – INORGANIC ARSENIC

Beginning upon issuance of this permit modification and lasting through a date on which the USEPA approves a test method for inorganic arsenic, the limitations and monitoring requirements for inorganic arsenic are not in effect. During this time frame, the permittee is required by Special Condition A, *Effluent Limitations and Monitoring Requirements*, of this permit to conduct 1/Year sampling and analysis for total arsenic.

Upon receiving written notification by the Department that a test method for inorganic arsenic has been approved by the USEPA, the limitations and monitoring requirements for inorganic arsenic become effective and enforceable and the permittee is relieved of their obligation to sample and analyze for total arsenic.

J. OPERATIONS AND MAINTENANCE (O&M) PLAN

This permittee shall have a current written comprehensive Operation & Maintenance (O&M) Plan for the facility. The plan must provide a systematic approach by which the permittee shall at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. The O&M Plan shall be kept on-site at all times and made available to Department and USEPA personnel upon request.

SPECIAL CONDITIONS

J. OPERATIONS AND MAINTENANCE (O&M) PLAN (cont'd)

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 wastewater treatment facility to ensure that it is up-to-date.

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.

K. WET WEATHER MANAGEMENT PLAN

The treatment facility staff shall maintain a current, written Wet Weather 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. A specific objective of the plan shall be to maximize the volume of wastewater receiving secondary treatment under all operating conditions. The revised plan must 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.

Once the Wet Weather Management Plan has been approved, the permittee shall review their plan at least annually and record any necessary changes to keep the plan up to date. The Department may require review and update of the plan as it is determined to be necessary.

L. REOPENING OF PERMIT FOR MODIFICATION

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

M. 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 6/1/2012

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

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

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

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

Last Revision - April 25, 2012

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	5								
A	2,4-DICHLOROPHENOL	5								
A	2,4-DIMETHYLPHENOL	5								
A	2,4-DINITROPHENOL	45								
A	2-CHLOROPHENOL	5								
A	2-NITROPHENOL	5								
A	4,6 DINITRO-O-CRESOL (2-Methyl-4,6-dinitrophenol)	25								
A	4-NITROPHENOL	20								
A	P-CHLORO-M-CRESOL (3-methyl-4-chlorophenol)+B80	5								
A	PENTACHLOROPHENOL	20								
A	PHENOL	5								
BN	1,2,4-TRICHLOROBENZENE	5								
BN	1,2-(O)DICHLOROBENZENE	5								
BN	1,2-DIPHENYLHYDRAZINE	20								
BN	1,3-(M)DICHLOROBENZENE	5								
BN	1,4-(P)DICHLOROBENZENE	5								
BN	2,4-DINITROTOLUENE	6								
BN	2,6-DINITROTOLUENE	5								
BN	2-CHLORONAPHTHALENE	5								
BN	3,3'-DICHLOROBENZIDINE	16.5								
BN	3,4-BENZO(B)FLUORANTHENE	5								
BN	4-BROMOPHENYLPHENYL ETHER	5								
BN	4-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	5								
BN	BENZO(G,H,I)PERYLENE	5								
BN	BENZO(K)FLUORANTHENE	5								
BN	BIS(2-CHLOROETHOXY)METHANE	5								
BN	BIS(2-CHLOROETHYL)ETHER	6								
BN	BIS(2-CHLOROISOPROPYL)ETHER	6								
BN	BIS(2-ETHYLHEXYL)PHTHALATE	10								
BN	BUTYLBENZYL PHTHALATE	5								
BN	CHRYSENE	5								
BN	DI-N-BUTYL PHTHALATE	5								
BN	DI-N-OCTYL PHTHALATE	5								
BN	DIBENZO(A,H)ANTHRACENE	5								
BN	DIETHYL PHTHALATE	5								
BN	DIMETHYL PHTHALATE	5								
BN	FLUORANTHENE	5								

Maine Department of Environmental Protection
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BN	FLUORENE	5									
BN	HEXACHLOROBENZENE	5									
BN	HEXACHLOROBUTADIENE	5									
BN	HEXACHLOROCYCLOPENTADIENE	10									
BN	HEXACHLOROETHANE	5									
BN	INDENO(1,2,3-CD)PYRENE	5									
BN	ISOPHORONE	5									
BN	N-NITROSODI-N-PROPYLAMINE	10									
BN	N-NITROSODIMETHYLAMINE	5									
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									
V	ACROLEIN	NA									
V	ACRYLONITRILE	NA									
V	BENZENE	5									

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

Maine Department of Environmental Protection

Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____

Pipe # _____

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

SAMPLE COLLECTION INFORMATION

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

Sampling Location:

Weather Conditions: _____

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

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

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

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

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

Please Enter Effluent Limits for your facility

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

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

CERTIFICATION

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

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT C

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WHOLE EFFLUENT TOXICITY REPORT
FRESH WATERS

Facility Name _____ MEPDES Permit # _____

Facility Representative _____ Signature _____

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

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

Chlorinated? _____ Dechlorinated? _____

Results **% effluent**

	water flea	trout
A-NOEL		
C-NOEL		

Effluent Limitations

A-NOEL	
C-NOEL	

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

place * next to values statistically different from controls

for trout show final wt and % incr for both controls

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

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

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

ATTACHMENT D

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
Commissioner

MEPDES#_____Facility Name_____

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

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

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

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

Scheduled Toxicity Testing for the next calendar year

Test Conducted	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
WET Testing	☐	☐	☐	☐
Priority Pollutant Testing	☐	☐	☐	☐
Analytical Chemistry	☐	☐	☐	☐
Other toxic parameters [1]	☐	☐	☐	☐

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

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

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

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

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

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207)760-3143

web site: www.maine.gov/dep

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: **APRIL 16, 2013**

PERMIT NUMBER: **#ME0101699**
WASTE DISCHARGE LICENSE: **#W002589-6C-G-R**

NAME AND ADDRESS OF APPLICANT:

CLINTON WATER DISTRICT
P.O. BOX 358
CLINTON, MAINE 04927

COUNTY: **KENNEBEC**

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

CLINTON WATER DISTRICT
P.O. BOX 358
CLINTON, MAINE 04927

RECEIVING WATER/CLASSIFICATION: **SEBASTICOOK RIVER/CLASS C**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

MR. ANDREW FITZPATRICK
PLANT MANAGER
(207) 426-8039
E-MAIL: CLINTONWATERDISTRICT@GMAIL.COM

1. APPLICATION SUMMARY

Application: The Clinton Water District (CWD) has applied to the Maine Department of Environmental Protection (Department) for renewal of Waste Discharge License (WDL) #W002589-5L-E-R / Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101699, which was issued on April 29, 2008, and is due to expire on April 29, 2013. The 4/29/08 MEPDES permit authorized the monthly average discharge of 0.35 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) on a seasonal basis (October 1 – May 31 of each year) to the Sebasticook River, Class C, in Clinton, Maine.

2. PERMIT SUMMARY

a. Terms and conditions: This permitting action is carrying forward all the terms and conditions of the previous permitting actions except that this permit is;

1) Incorporating the interim average and maximum numeric limitations for mercury into the permit and reducing the monitoring frequency from 2/Year to 1/Year pursuant to *Certain deposits and discharges prohibited,* 38 M.R.S.A. § 420(1-B)(B)(1);

2) Revising the monitoring and reporting requirements for WET, priority pollutant, and analytical chemistry screening level testing in order to accommodate license renewal schedules as revised in *Surface Water Toxics Control Program*, 06-096 CMR 530;

3) Reducing the monitoring frequencies for biochemical oxygen demand (BOD_5), total suspended solids (TSS) and settleable solids based on a statistical analysis in accordance with the methodology established in the U.S. Environmental Protection Agency's *"Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies"* (USEPA 1996); and

4) Establishing a water quality-based monthly average mass limit and concentration reporting requirement for inorganic arsenic and a monthly average mass and concentration reporting requirements for total arsenic based on the results of facility testing.

b. History: This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the CWD.

February 4, 1986 – The U.S. Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0101699 to the CWD for a five-year term.

May 25, 2000 – Pursuant to 38 M.R.S.A. § 420, *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 #W002589-59-C-R by establishing interim monthly average and daily maximum effluent concentration limits of 4.5 parts per trillion (ppt) and 6.8 ppt, respectively, and a minimum monitoring frequency requirement of 2 tests per year for mercury.

2. PERMIT SUMMARY (cont'd)

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permitting 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 #ME0101443 has been utilized for this facility. On March 26, 2011, the USEPA authorized the Department to administer the MEPDES program in Indian territories of the Penobscot Nation and Passamaquoddy Tribe.

February 14, 2003 – The Department issued WDL #W002589-5L-D-R / MEPDES permit #ME0101699 to the CWD for a five-year term. The 2/14/03 permit superseded WDL #W002589-59-C-R issued on May 18, 1989, WDL #W002589-45-A-R issued on September 11, 1987, and WDL #2589 issued on July 28, 1982 (earliest Order on file with the Department).

June 14, 2004 – The Department issued a letter to the CWD thereby administratively modifying the 2/14/03 MEPDES permit to clarify the discharge prohibition during low river flow conditions applied during the critical warm season of June 1 through September 30 of each year.

April 10, 2006 – The Department amended the 2/25/03 permit to waive toxics testing pursuant to 06-096 CMR 530.

April 29, 2008 – The Department issued WDL #W002589-5L-E-R / MEPDES #ME0101699 for a five-year term. The April 29, 2008 permit superseded previous WDL #W002589-5L-D-R issued on February 14, 2003.

February 6, 2012 – The Department issued a modification of MEPDES permit #ME0101699/WDL #W002589-5L-E-R for a reduction in the mercury testing frequency for total mercury from 2/Year to 1/Year based on *Certain deposits and discharges prohibited*, 38 M.R.S.A., § 420(1-B) (F).

February 11, 2013 – The CWD submitted a timely and complete General Application to the Department for renewal of the 4/29/08 MEPDES permit. The application was accepted for processing on February 12, 2013, and was assigned WDL # W002589-6C-G-R / MEPDES #ME0101699.

c. Source Description: The CWD was formed in 1987 and encompasses approximately 3 square miles. The wastewater treatment facility receives sanitary wastewater flows generated by residential and commercial users within the CWD's boundaries. The facility serves a population of approximately 1,400 people. The permittee has indicated there are no significant industrial contributors to the system and is not required to adopt a formal pretreatment program pursuant to USEPA regulations. The CWD has not requested nor is authorized to accept septage wastes for treatment at the facility.

2. PERMIT SUMMARY (cont'd)

The CWD owns and maintains the collection system that conveys the sanitary wastewaters to the treatment facility. The collection system is approximately 18 miles in length, has five pump stations (all with back-up power) and no combined sewer overflow (CSO) points. A map showing the location of the treatment facility and receiving water is included as **Attachment A** of this fact sheet.

d. Wastewater Treatment: The facility provides a secondary level of treatment via two stabilization ponds operated in series which became operational in January of 1988. The first treatment lagoon has a surface area of approximately 12 acres and the second lagoon has a surface area of approximately 14 acres for a total area of 26 acres. The ponds provide for a detention time of approximately 180 days. Flows from the second lagoon are conveyed to a chlorine contact chamber where the treated wastewater is seasonally disinfected with sodium hypochlorite prior to discharge to the Sebasticook River. The outfall pipe for the discharge extends out into the Sebasticook River approximately 40 feet and is approximately 9 feet below the normal low water level for the river.

3. CONDITIONS OF PERMIT

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(4)(H)(1)(a) classifies the Sebasticook River at the point of discharge as Class C waters. *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465(4) describes the standards for Class C waters.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2010 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists a 30.83-mile reach of the Sebasticook River below the confluent of the East and West Branches (ADB Assessment Unit ID #ME0103000309_332R) in the following categories.

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

"Category 4-A: Rivers and Streams with Impaired Use Other Than Mercury, TMDL Completed." Impairment in this context refers to *E. coli* bacteria and combined sewer overflow (CSO) affected reaches of the river. On September 28, 2009, the USEPA approved the Department's Maine Statewide Bacteria TMDL (Total Maximum Daily Loads), dated August 2009, for fresh, marine and estuarine waters impaired by bacteria. This permitting action establishes bacterial limits and a requirement to disinfect the effluent on a seasonal basis to ensure the discharge does not cause or contribute to non-attainment of in-stream bacteria standards.

The Report lists all of Maine's fresh waters as, "Category 4-A: Waters Impaired by Atmospheric Deposition of Mercury." Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, "All freshwaters are listed in Category 4A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many 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 previous permitting action prohibited discharges from the CWD during the critical warm season of June 1 through September 30 when the flow at USGS gauge #01049000 located in the in the Sebasticook River at Burnham was below 65 cubic feet per second. This prohibition was established based on a determination that the Department did not have sufficient ambient water quality information to conclude that discharges when river flow was below 65 cfs would not cause or contribute to the lowering of the existing water quality. The permittee has agreed to accept a prohibition on the discharge of wastewater during the period of June 1 through September 30 of each year regardless of river flow rates. The CWD accepted this restriction in an effort to protect receiving water quality during critical warm weather and low river flow conditions.

This negotiated agreement reflects the CWD's current operating practice as a "hold-and-release" facility. During the 2008-2013 permit cycle, due to unusual weather patterns the CWD requested and was granted permission from the Department to discharge during the prohibited critical warm season on two separate occasions to avoid damage to their system. During these discharge events, which occurred from July 13-26, 2009 and from June 10-21, 2012, the CWD monitored their effluent as required and incurred no violations of the limits of their license parameters. River flow rates during each of these time periods were well in excess of the critical 65 cfs.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Flow: The previous permitting action established, and this permitting action is carrying forward a monthly average flow limitation of 0.35 MGD based on the design capacity of the facility, and a daily maximum discharge flow reporting requirement. The previous permitting action prohibited discharges from the CWD during the critical warm season of June 1 through September 30 when the flow at USGS gauge #01049000 located in the in the Sebasticook River at Burnham was below 65 cubic feet per second.

A summary of discharge flow data as reported on the monthly Discharge Monitoring Reports (DMRs) for the period of April 2008 through April 2012 for discharges occurring during the period of June – September each year) is as follows. (Note: Data from the two summer discharges discussed above is not included in these summaries).

Discharge Flow	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average	0.066 MGD	0.284 MGD	0.151 MGD	23
Daily Maximum	0.066 MGD	0.343 MGD	0.212 MGD	23

The permittee has agreed to continue to accept a prohibition on the discharge of wastewater during the period of June 1 through September 30 of each year regardless of river flow rates. This negotiated agreement reflects the CWD's current operating practice as a "hold-and-release" facility. Due to unusual weather conditions during the period of the 2008 license, the Department twice granted the CWD permission to discharge during the period between June 1 and Sept 1 when discharges are normally prohibited. Previously the Clinton WD had not had to discharge during the summer since at least 2002. The discharge prohibition contained in this permitting action is only partially water quality driven in that the Department has determined that the CWD can discharge without adverse water quality impacts at ambient river flows above 65 cfs. Therefore, the CWD may, at any time, submit an application for permit modification to revise this discharge prohibition established herein. With the current discharge prohibition in effect, this facility is considered a "hold-and-release" facility with a non-continuous discharge.

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

b. Dilution Factors: For more detailed information regarding dilution factors, please refer to the Fact Sheet associated to the previous 2008 permit #W002589-5L-E-R.

Dilution factors associated with the permitted discharge flow of 0.35 MGD from the facility were derived in accordance with 06-096 CMR 530(4)(A) and were calculated as follows:

Modified Acute: ¼ 1Q10 = 16 cfs $\Rightarrow \frac{(16 \text{ cfs})(0.6464) + (0.35 \text{ MGD})}{(0.35 \text{ MGD})} = 31:1$

Acute: 1Q10 = 65 cfs $\Rightarrow \frac{(65 \text{ cfs})(0.6464) + (0.35 \text{ MGD})}{(0.35 \text{ MGD})} = 121:1$

Chronic: 7Q10 = 65 cfs $\Rightarrow \frac{(65 \text{ cfs})(0.6464) + (0.35 \text{ MGD})}{(0.35 \text{ MGD})} = 121:1$

Harmonic Mean[1]: = 268 cfs $\Rightarrow \frac{(268 \text{ cfs})(0.6464) + (0.35 \text{ MGD})}{(0.35 \text{ MGD})} = 496:1$

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's Division of Environmental Assessment has determined that the discharge from CWD does not achieve complete and rapid mixing with the receiving waters; therefore, the Department is utilizing the default ¼ 1Q10 stream design flow in acute evaluations.

[1] The 7Q10 flow is prorated from the Pittsfield flow monitoring gauge.

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, a 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 best professional jusdgment (BPJ) of best practicable treatment (BPT) for secondary treated municipal wastewater. The technology-based monthly average, weekly average and daily maximum mass limits of 88 lbs/day, 131 lbs/day, and 146 lbs/day established in the previous permitting action for BOD_5 and TSS are also being carried forward in this permitting action.

This permitting action is carrying forward a 30-day average percent removal requirement of 85 percent for BOD_5 and TSS as required pursuant to 06-096 CMR 525(3)(III)(a&b)(3). Compliance with the limitation shall be based on a twelve-month rolling average.

A summary of BOD_5 data as reported on the monthly DMRs for the period of April 2008 through April 2012 is as follows:

BOD_5	**Minimum**	**Maximum**	**Arithmetic Mean**	**# DMRs**
Monthly Average	2 lbs/day	56 lbs/day	17.7 lbs/day	23
	4 mg/L	33 mg/L	15.5 mg/L	23
Weekly Average	3 lbs/day	56 lbs/day	21.8 lbs/day	23
	4 mg/L	34 mg/L	16.8 mg/L	23
Daily Maximum	3 lbs/day	93 lbs/day	23.5 lbs/day	23
	4 mg/L	41mg/L	18.3 mg/L	23

A summary of TSS data as reported on the monthly DMRs for the period of April 2008 through April 2012 is as follows:

TSS	**Minimum**	**Maximum**	**Arithmetic Mean**	**# DMRs**
Monthly Average	1 lbs/day	52 lbs/day	13 lbs/day	23
	1 mg/L	30 mg/L	10.2 mg/L	23
Weekly Average	1 lbs/day	58 lbs/day	16.2 lbs/day	23
	1 mg/L	42 mg/L	12.3 mg/L	23
Daily Maximum	1 lbs/day	71 lbs/day	17.8 lbs/day	23
	1 mg/L	42 mg/L	12.8 mg/L	23

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

On April 19, 1996, the USEPA issued a draft guidance document entitled, "*Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies*" (USEPA 1996) as the basis for determining reduced monitoring frequencies. The guidance document was issued to reduce unnecessary reporting while at the same time maintaining a high level of environmental protection for facilities that have a good compliance record and pollutant discharges at levels below permit requirements. Monitoring requirements are not considered effluent limitations under section 402(o) of the Clean Water Act and therefore, anti-backsliding prohibitions would not be triggered by reductions in monitoring frequencies

The USEPA guidance states "*...the basic premise underlying a performance-based reduction approach is that maintaining a low average discharge relative to the permit limits results in a low probability of the occurrence of a violation for a wide range of sampling frequencies.*" The monitoring frequency reductions in USEPA's guidance were designed to maintain approximately the same level of reported violations as that experienced with the existing baseline sampling frequency in the permit. To establish baseline performance the long term average (LTA) discharge rate for each parameter is calculated using the most recent two-year data set of monthly average effluent data representative of current operating conditions. The LTA/permit limit ratio is calculated and then compared to the matrix in Table I of USEPA's guidance to determine the potential monitoring frequency reduction. It is noted Table I of USEPA's guidance was derived from a probability table that used an 80% effluent variability or coefficient of variation (cv). The permitting authority can take into consideration further reductions in the monitoring frequencies if the actual cv for the facility is significantly lower than the default 80% utilized by the USEPA in Table I.

In addition to the parameter-by-parameter performance history via the statistical evaluation cited above, the USEPA recommends the permitting authority take into consideration the facility enforcement history and the parameter-by-parameter compliance history and factors specific to the State or facility. If the facility has already been given monitoring reductions due to superior performance, the baseline may be a previous permit.

Although USEPA's 1996 guidance recommends evaluation of the most current two-years of effluent data for a parameter , the Department is considering 48 months of data (April 2008 through April 2012).

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

A review of the monitoring data for BOD_5 and TSS indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

BOD_5

Long term average = 17.7 lbs/day
Monthly average limit = 88 lbs/day
Current monitoring frequency = 1/Week

$$\text{Ratio} = \frac{17.7 \text{ lbs/day}}{88 \text{ lbs/day}} = 22\%$$

According to Table I of the USEPA guidance, a 1/Week monitoring requirement can be reduced to 2/Month. Therefore, the monitoring frequency for BOD_5 has been reduced to 2/Month in this permitting action.

TSS

Long term average = 13 lbs/day
Monthly average limit = 88 lbs/day
Current monitoring frequency = 1/Week

$$\text{Ratio} = \frac{13 \text{ lbs/day}}{88 \text{ lbs/day}} = 15\%$$

According to Table I of the USEPA guidance, a 1/Week monitoring requirement can be reduced to 2/Month. Therefore, the monitoring frequency for TSS has been reduced to 2/Month in this permitting action.

This permitting action is carrying forward a grab sample type for all monitored parameters, except discharge flow for which this sample type is not applicable.

d. Settleable Solids – The previous permitting established, and this permitting action carrying forward, a daily maximum concentration limit of 0.3 ml/L, which is considered a best practicable treatment limitation (BPT) for secondary treated wastewater.

A summary of settleable solids data as reported on the monthly DMRs for the period of April 2008 through April 2012 (# DMRs = 23) indicates the daily maximum settleable solids concentration discharge has been at or below 0.1 ml/L 100% of the time.

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

A review of the monitoring data for settleable solids indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 0.1 ml/L
Daily maximum limit = 0.3 ml/L
Current monitoring frequency = 1/Week

$$\text{Ratio} = \frac{0.1 \text{ ml/L}}{0.3 \text{ ml/L}} = 33\%$$

According to Table I of the USEPA guidance, a 1/Week monitoring requirement can be reduced to 2/Month. Therefore, the monitoring frequency for settleable solids has been reduced to 2/Month in this permitting action.

e. *Escherichia coli* Bacteria: The previous permitting action established, and this permitting action is carrying forward, seasonal (May 15-September 30 of each year) monthly average (geometric mean) and daily maximum (instantaneous) *E. coli* bacteria concentration limits of 126 colonies/100 ml and 949 colonies/100 ml, respectively, based on the State's Water Classification Program criteria for Class C waters. It is noted that this permitting action is carrying forward a discharge prohibition during the period of June 1 – September 30 of each year. Bacteria limits are seasonal and apply between May 15 and September 30 of each year, however, the Department reserves the right to require year-round disinfection to protect the health, safety and welfare of the public.

A summary of *E. coli* bacteria data as reported on the monthly DMRs for the period of April 2008 through April 2012 indicates the facility did discharge wastewater during the period when seasonal bacteria limits are in effect. Discharges at the facility occurred from July 13-26, 2009 and from June 10-21, 2012.

This permitting action is carrying forward a minimum monitoring frequency requirement of once 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 technology-based monthly average and daily maximum concentration limits of 0.1 mg/L and 0.3 mg/L respectively for TRC. 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 a water quality-based or BPT based limit.

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

With modified acute (¼ 1Q10) 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	Mod. A & C Dilution Factors	Calculated Acute Threshold	Calculated Chronic Threshold
0.019 mg/L	0.011 mg/L	31:1 (A) 121:1 (C)	0.6 mg/L	1.3 mg/L

The Department has established a daily maximum BPT 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 daily maximum and monthly average BPT-based limits of 0.3 mg/L and 0.1 mg/L, respectively, are more stringent than the calculated daily maximum (acute) water quality-based threshold of 0.6 mg/L and are therefore being carried forward in this permitting action.

During the 2008-2013 permit cycle, due to unusual weather patterns the CWD requested and was granted permission from the Department to discharge during the prohibited critical warm season on two separate occasions to avoid damage to their system. During these discharge events, which occurred from July 13-26, 2009 and from June 10-21, 2012, the CWD monitored their effluent as required and incurred no violations of the limits of their license parameters.

This permitting action is carrying forward a minimum monitoring frequency requirement of five times per week for TRC based on BPJ.

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). The pH value of the effluent shall not be lower than 6.0 SU nor higher than 9.0 SU at any time unless these limitations are exceeded due to natural causes.

A summary of pH data as reported on the monthly DMRs for the period of April 2008 through April 2012 (# DMRs = 23) indicates the facility has been in compliance with the pH range limitation 100% of the time during said reporting period.

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

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

h. Mercury: 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 # W002589-5L-E-R by establishing a cumulative average and daily maximum effluent concentration limits of 4.5 parts per trillion (ppt) and 6.8 ppt, respectively, and a minimum monitoring frequency requirement of two (2) tests per year for mercury. It is noted the concentration limitations have been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit.

38 M.R.S.A. § 420(1-B)(B)(1) provides that a facility is not in violation of the ambient water quality criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department. A review of the Department's data base for the period April 2004 through January 2013 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows.

Mercury (n=20)

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average	4.5	0.55 – 2.6	1.6
Daily Maximum	6.8		

On February 6, 2012, the Department issued a minor revision to the March 10, 2008 permit thereby revising the minimum monitoring frequency requirement from twice per year to once per year pursuant to 38 M.R.S.A. § 420(1-B)(F).

Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing

38 M.R.S.A. § 414-A and 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. 06-096 CMR 530 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

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

WET, priority pollutant and analytical chemistry testing, as required by 06-096 CMR 530, is included in this permit in order to characterize the effluent. 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 water flea (*Ceriodaphnia dubia*) and vertebrate brook trout (*Salvelinus fontinalis*). Chemical-specific monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria. Priority pollutant testing refers to the analysis for levels of priority pollutants listed in 06-096 CMR 525(4)(VI). Analytical chemistry refers to a suite of thirteen (13) chemical tests consisting of: ammonia-nitrogen, total aluminum, total cadmium, total chromium, total copper, total hardness (fresh water only), total lead, total nickel, total silver, total zinc, total arsenic, total cyanide and total residual chlorine.

06-096 CMR 530(2)(A) specifies the dischargers subject to the rule as, *"all licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedences of narrative or numerical water quality criteria."* The CWD discharges domestic (sanitary) wastewaters to surface waters and is therefore subject to the testing requirements of the toxics rule.

This permit 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.

06-096 CMR 530(2)(B) categorizes dischargers subject to the toxics rule into one of four levels (Levels I through IV). Level III dischargers are those dischargers having a chronic dilution factor of at least 100 but less than 500 to 1. The chronic dilution factor associated with the discharge from the CWD is 121:1; therefore, this facility is considered a Level III facility for purposes of toxics testing.

06-096 CMR 530(2)(D) specifies default WET, priority pollutant, and analytical chemistry test schedules for Level III dischargers as follows:

Surveillance level testing – Beginning upon issuance of a permit modification and lasting through 24 months prior to permit expiration (years 1-3 of the permit) and commencing again 12 months prior to permit expiration (year 5 of the permit) the permittee shall conduct 1 WET and 1 Analytical chemistry test per year.

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

Screening level testing – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement the permittee shall conduct 1 WET, 3 Analytical chemistry and 1 Priority pollutant test per year.

i. Whole Effluent Toxicity (WET) Evaluation: 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, USEPA, 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)(C) states in part; *"If these data indicate that the discharge is causing an exceedence of applicable water quality criteria, then: (1) the licensee must, within 45 days of becoming aware of an exceedence, submit a TRE plan for review and approval and implement the TRE after Department approval; and (2) the Department must, within 180 days of the Department's written approval of the TRE plan, modify the waste discharge license to specify effluent limits and monitoring requirements necessary to control the level of pollutants and meet receiving water classification standards."*

On January 31, 2013, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department for the City in accordance with the statistical approach outlined above. **The 1/31/13 statistical evaluation indicates the discharge from the CWD has not exceeded or demonstrated a reasonable potential to exceed the critical acute or chronic ambient water quality thresholds for the water flea or brook trout.** See **Attachment B** of this Fact Sheet for a summary of the WET test results.

Based on the Department's findings this permitting action maintains the established screening level testing for the water flea and brook trout of (1/Year) 06-096 CMR 530 (2)(D)(1). Screening level testing begins 24 months prior to and lasting through 12 months prior to permit expiration (year 4 of the permit) and every five years thereafter.

In addition, 06-096 CMR 530(2)(D)(3)(b) states in part, *Dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E).*

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

Based on the results of the 1/31/13 statistical evaluation, the permittee qualifies for the 06-096 CMR 530(2)(D)(3)(d) surveillance testing waiver for WET test species. Therefore, this permitting action is waiving surveillance level testing for WET test species.

Please note that 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."

Special Condition H of the previous permit established, 06-096 CMR 530(2)(D)(4) Statement For Reduced Toxics Testing, pursuant to 06-096 CMR 530(2)(D)(4). This permitting action is revising previous Special Condition H to include certification requirements for inflow/infiltration and transported wastes that may increase the toxicity of the discharge. This permit provides for reconsideration of testing requirements, including the imposition of certain testing, in consideration of the nature of the wastewater discharged, existing wastewater treatment, receiving water characteristics, and results of testing.

Analytical Chemistry & Priority Pollutant Testing Evaluation

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

The Department has no information on the background levels of metals in the water column in the Sebasticook River. Therefore, a default background concentration of 10% of applicable water quality criteria is being used in the calculations of this permitting action.

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

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 applicable water quality criteria used in the calculations of this permitting action.

06-096 CMR 530(3)(E) states, "*Where it is determined through [the statistical approach referred to in USEPA's Technical Support Document for Water Quality-Based Toxics Control] 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)(D) states, "*Where the need for effluent limits has been determined, limits derived from acute water quality criteria must be expressed as daily maximum values. Limits derived from chronic or human health criteria must be expressed as monthly average values.*"

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

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

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

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

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."

On January 31, 2013, the Department conducted a statistical evaluation on the most recent 60 months of chemical-specific tests results on file with the Department for the CWD in accordance with the statistical approach outlined above. **The evaluation indicates that the discharge potentially: exceeds the human health-based (water and organism) AWQC threshold for inorganic arsenic.** The discharge does not exceed or demonstrate a reasonable potential to exceed the critical AWQC for any other parameters tested. See **Attachment D** of this Fact Sheet for a summary of detectable test results.

The Department has prepared guidance that establishes protocols for establishing waste load allocations. See **Attachment E** of this Fact Sheet. The guidance states that the most protective of water quality becomes the facility's allocation. According to the 1/31/13 statistical evaluation, arsenic is to be limited based on the individual allocation method due the low dilution factors associated with the facility.

Individual allocation methodology

In the individual allocation, the Department continues to utilize the formula it has used in permitting actions since October 2005 taking into consideration background (10% of AWQC) and a reserve (15% of AWQC). The formula is as follows:

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

Mass limit = (EOP concentration in mg/L[2])(8.34 lbs/gal)(permit flow limit in MGD)

Arsenic (Inorganic): The previous permitting action did not establish effluent limitations for arsenic.

Monthly Average Conc. $= (31.0)[(0.75)(0.012\ \mu g/L)] + (0.25)(0.012\ \mu g/L)$
$= 0.28 + 0.003$
$= 0.28\ \mu g/L$

Monthly Average Mass $= \frac{(0.28\ \mu g/L)(8.34\ lbs/gallon)(0.35\ MGD)}{1000\ \mu g/mg} = 0.0008$ lbs/day

[2] Note: 1 mg/L = 1,000 µg/L

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

06-096 CMR 530(C)(6) states:

> All chemical testing must be carried out by approved methods that permit detection of a pollutant at existing levels in the discharge or that achieve detection levels as specified by the Department. When chemical testing results are reported as less then, or detected below the Department's specified detection limits, those results will be considered as not being present for the purposes of determining exceedences of water quality criteria.

The USEPA has not approved a test method for inorganic arsenic as of the date of issuance of this permit. As such, there is no way for the permittee to formally demonstrate compliance with the monthly average water quality-based mass and concentration limits for inorganic arsenic established in this permitting action. Therefore, beginning upon issuance of this permit and lasting through the date in which the USEPA approves a test method for inorganic arsenic the permittee is being required to monitor for total arsenic. Once a test method has been approved, the Department will notify the permittee in writing and the limitations and monitoring requirements for inorganic arsenic become effective thereafter.

As of the date of this permitting action, the Department has limited data on the percentage of inorganic arsenic (approximately 50%) in total arsenic test results. Based on a literature search conducted by the Department, the inorganic fraction can range from 1% - 99% depending on the source of the arsenic. Generally speaking, ground water supplies derived from bedrock wells will likely tend to have higher fractions of inorganic arsenic (As^{+3}-arsenite and/or As^{+5}- arsenate) than one may find in a food processing facility where the inorganic fraction is low and the organic fraction (arsenobetaine, arsenoribosides) is high.

Until the Department and the regulated community in Maine develop a larger database to establish statistically defensible ratios of inorganic and organic fractions in total arsenic test results, the Department is making a rebuttable presumption that the effluent contains a ratio of 50% inorganic arsenic and 50% organic arsenic in total arsenic results.

Being that the only approved test methods for compliance with arsenic limits established in permits is for total arsenic, the Department converted the water quality based end-of pipe monthly average concentration value of 0.28 µg/L for inorganic arsenic calculated on the previous page of this Fact Sheet into an equivalent total arsenic threshold (assuming 50% of the total arsenic is inorganic arsenic). This results in a total arsenic end-of-pipe monthly average concentration threshold of 0.56 µg/L. The calculation is as follows:

$$\frac{\text{0.28 µg/L inorganic arsenic}}{\text{0.5 µg/L inorganic arsenic/ 1.0 µg/L total arsenic}} = \text{0.56 µg/L total arsenic}$$

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

Therefore, a total arsenic value greater than 0.56 µg/L is potentially exceeding the water quality based end-of pipe monthly average concentration value of 0.28 µg/L for inorganic arsenic. Only the results greater than the 12-month rolling average total arsenic threshold of 0.56 µg/L will be considered a potential exceedence of the inorganic limit of 0.28 µg/L. It is noted the Department's current RL for total arsenic is 5.0 µg/L.

If a test result is determined to be a potential exceedence, the permittee shall submit a toxicity reduction evaluation (TRE) to the Department for review and approval within 45 days of receiving the test result of concern from the laboratory. Contact the Department's compliance inspector for a copy of the Department's December 2007 guidance on conducting a TRE for arsenic.

Conditions of licenses, 38 M.R.S.A. § 414-A(2), Schedules of Compliance, states,

> Within the terms and conditions of a license, the department may establish a schedule of compliance for a final effluent limitation based on a water quality standard adopted after July 1, 1977. When a final effluent limitation is based on new or more stringent technology-based treatment requirements, the department may establish a schedule of compliance consistent with the time limitations permitted for compliance under the Federal Water Pollution Control Act, Public Law 92-500, as amended. A schedule of compliance may include interim and final dates for attainment of specific standards necessary to carry out the purposes of this subchapter and must be as short as possible, based on consideration of the technological, economic and environmental impact of the steps necessary to attain those standards.

Special Condition I, *Schedule of Compliance – Inorganic Arsenic*, of this permit establishes a schedule as follows:

> Beginning upon issuance of this permit modification and lasting through a date on which the USEPA approves a test method for inorganic arsenic, the limitations and monitoring requirements for inorganic are not in effect. During this time frame, the permittee is required by Special Condition A, *Effluent Limitations and Monitoring Requirements*, of this permit to conduct 1/Quarter sampling and analysis for total arsenic.

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

> Upon receiving written notification by the Department that a test method for inorganic arsenic has been approved by the USEPA, the limitations and monitoring requirements for inorganic arsenic become effective and enforceable and the permittee is relieved of their obligation to sample and analyze for total arsenic.

The schedule of compliance reserves the final date for compliance with the limit for inorganic arsenic. This reservation stems from the fact the USEPA has no schedule for approving a test method for inorganic arsenic nor does the Department have any authority to require the USEPA to do so. Therefore, the Department considers the aforementioned schedule for inorganic arsenic to be as short as possible given the technological (or lack thereof) issue of not being able to sample and analyze for inorganic arsenic with an approved method.

Waste Discharge License Conditions, 06-096 CMR 523(7)(a)(3), states in part:

> …if a permit establishes a schedule of compliance which exceeds 1 year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.
>
> (i) The time between interim dates shall not exceed 1 year, except that in the case of a schedule for compliance with standards for sewage sludge use and disposal, the time between interim dates shall not exceed six months.
>
> (ii) If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than 1 year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

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

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 case-by-case basis using best professional judgment given the timing, severity and frequency of occurrences of the exceedences or reasonable potential to exceed applicable critical water quality thresholds. Special Condition A, *Effluent Limitations and Monitoring Requirements*, of this permit requires that beginning upon issuance of this permit and lasting through USEPA approval of a test method for inorganic arsenic, the permittee shall conduct 1/Year monitoring for total arsenic. Should the test method approval for inorganic arsenic extend more than one year from the date of the issuance of this permit the sampling and analysis for total arsenic will serve to satisfy the interim requirements specified by 06-096 CMR 523(7)(a)(3). The Department is establishing a minimum monitoring frequency requirement for inorganic arsenic at the routine surveillance level frequency of 1/Year specified in 06-096 CMR 530.

Priority Pollutants

Based on the results of the 1/31/13 statistical evaluation, this permitting action maintains the established screening level testing for priority pollutants of (1/Year). Screening level testing begins 24 months prior to and lasting through 12 months prior to permit expiration (year 4 of the permit) and every five years thereafter.

In addition, surveillance level priority pollutant monitoring is not required for Level III facilities per 06-096 CMR 530(2)(D)(3)(b).

Analytical Chemistry

Based on the provisions of 06-096 CMR 530(2)(D)(3)(c), this permitting action is waiving surveillance level analytical chemistry testing for this facility. 06-096 CMR 530 establishes default screening level analytical chemistry testing at a frequency of once per calendar quarter. Whereas this permitting action prohibits discharges during the period of June 1 – September 30 of each year, the permittee shall conduct a total of three (3) analytical chemistry testing events, with one test conducted in each of the following calendar periods: January – March, April – May, and October – December.

See **Attachment C** of this Fact Sheet for a priority pollutant data summary.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the water body to meet standards for Class C classification.

8. PUBLIC COMMENTS

Public notice of this application was made in the *Morning Sentinel* newspaper on or about February 11, 2013. 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:

Yvette M. Meunier
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 215-1579 Fax: (207) 287-3435
e-mail: yvette.meunier@maine.gov

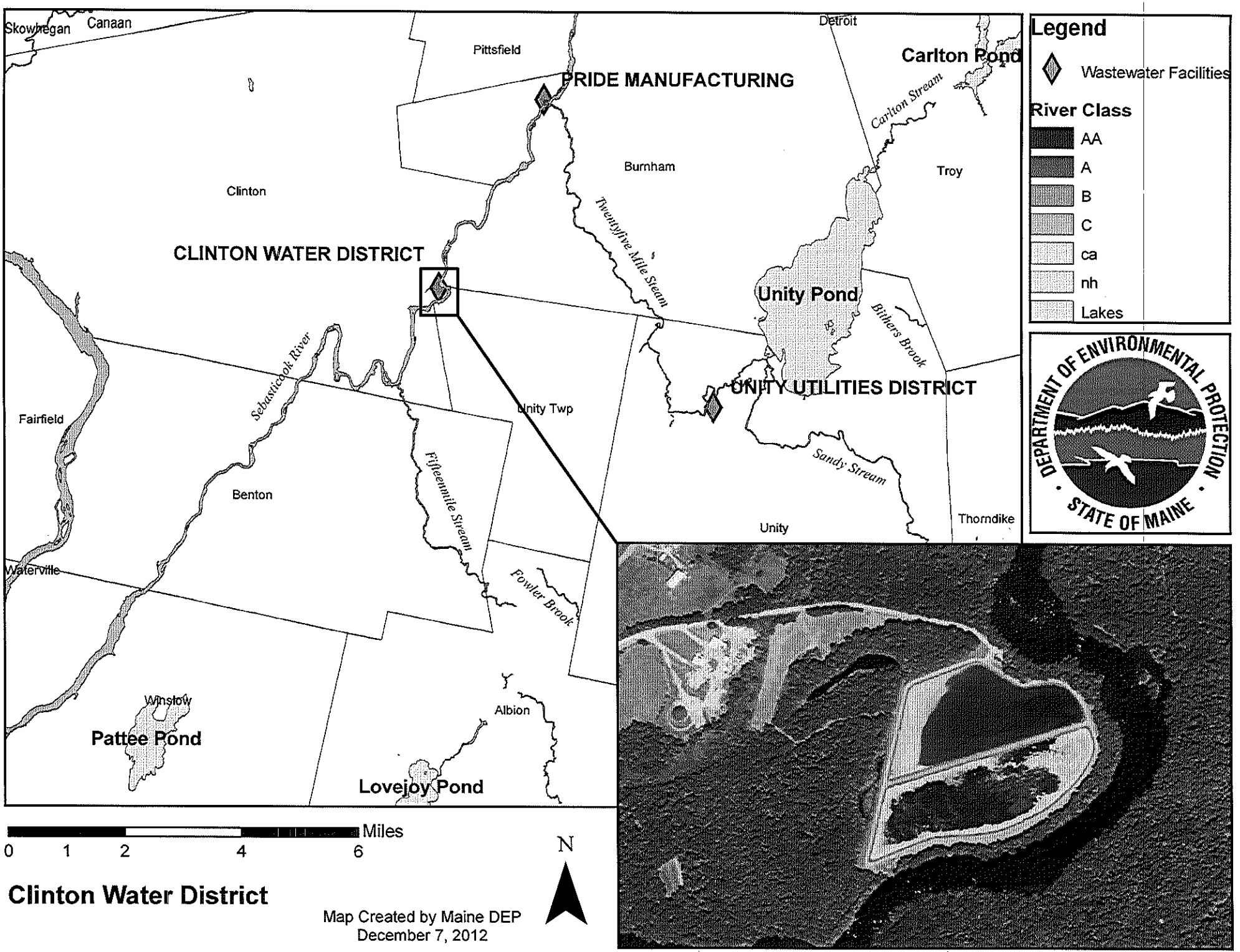
10. RESPONSE TO COMMENTS

During the period of March 8, 2013 through the issuance date of this permit, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit to be issued to the Clinton Water District for the proposed discharge. The Department received a written comment from the Clinton Water District in an electronic e-mail message dated March 25, 2013. A response to Clinton Water District's comment is as follows:

Comment #1: "After review of the Clinton Water District's Wastewater Treatment Facility draft permit we are requesting that the annual sampling for Arsenic be omitted pending results of April 2013 sample results. After speaking with Mark Hein of Clearwater Laboratory, the District proposes taking another grab sample in April 2013 for total arsenic as a follow-up to the April 2012 sample. The April 2012 sample result, as you know, was determined by method 200.7 by Maine Environmental Laboratory. This method is, at times, known to be controversial. The sample using method 200.8 in October 2012 had a result of 1.2 ug/l and January 2013 a result of 1.5 ug/l, both considerably less than April's result. Examining Arsenic results from the year 2000 to April 2012, the level has never been at or near to the 5.0 ug/l ."

Response #1: The Clinton Water District has not demonstrated to the Department that the April 2012 arsenic test result was invalid, either as a result of laboratory error or improper analytical methodology. The Department considers the April 2012 result to be a valid test result which was included in calculating limitations and monitoring requirements for arsenic in this permit. Therefore, the final permit remains unchanged.

ATTACHMENT A



Clinton Water District

Map Created by Maine DEP
December 7, 2012

ATTACHMENT B

FACILITY WET EVALUATION REPORT

Facility: CLINTON **Permit Number:** ME0101699 **Report Date:** 1/31/2013

Receiving Water: SEBASTICOOK RIVER **Rapidmix:** N

Dilution Factors: 1/4 Acute: 31.0120 Acute: 121.048 Chronic: 121.0480

Effluent Limits: Acute (%): 3.304 Chronic (%): 0.826 **Date range for Evaluation: From:** 31/Jan/2008 **To:** 31/Jan/2013

Test Type: A_NOEL

Test Species: TROUT

Test Date	Result (%)	Status
10/10/2012	100.000	OK

Species Summary:

Test Number: 1 **RP:** 6.200 **Min Result (%):** 100.000 **RP factor (%):** 16.129 **Status:** OK

Test Type: C_NOEL

Test Species: TROUT

Test Date	Result (%)	Status
10/10/2012	100.000	OK

Species Summary:

Test Number: 1 **RP:** 6.200 **Min Result (%):** 100.000 **RP factor (%):** 16.129 **Status:** OK

Test Type: A_NOEL

Test Species: WATER FLEA

Test Date	Result (%)	Status
10/10/2012	100.000	OK

Species Summary:

Test Number: 1 **RP:** 6.200 **Min Result (%):** 100.000 **RP factor (%):** 16.129 **Status:** OK

Test Type: C_NOEL

Test Species: WATER FLEA

Test Date	Result (%)	Status
10/10/2012	50.000	OK

Species Summary:

Test Number: 1 **RP:** 6.200 **Min Result (%):** 50.000 **RP factor (%):** 8.065 **Status:** OK

ATTACHMENT C

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 25/Feb/2008 - 25/Feb/2013

Facility Name: **CLINTON** NPDES: **ME0101699**

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
04/11/2012	0.12	0.10	11	10	0	0	0	1	0	F	0
10/10/2012	0.25	0.30	134	14	28	46	24	11	11	F	0
01/16/2013	0.23	0.27	11	10	0	0	0	1	0	F	0

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

ATTACHMENT D

FACILITY CHEMICAL DATA REPORT

Data Date Range: 31/Jan/2008-31/Jan/2013

Facility name: **CLINTON** Permit Number: **ME0101699**

Parameter: ALUMINUM	Test date	Result (ug/l)	Lsthan
	04/11/2012	68.000	N

Parameter: AMMONIA	Test date	Result (ug/l)	Lsthan
	04/11/2012	9200.000	N
	10/10/2012	458.000	N

Parameter: ARSENIC	Test date	Result (ug/l)	Lsthan
	04/11/2012	5.000	N

Parameter: CALCIUM	Test date	Result (ug/l)	Lsthan
	10/10/2012	34500.000	N

Parameter: MAGNESIUM	Test date	Result (ug/l)	Lsthan
	10/10/2012	5340.000	N

Parameter: MERCURY	Test date	Result (ug/l)	Lsthan
	04/23/2008	0.002	N
	12/18/2008	0.002	N
	04/15/2009	0.002	N
	12/16/2009	0.001	N
	04/29/2010	0.001	N
	12/15/2010	0.001	N
	04/27/2011	0.001	N
	10/10/2012	0.001	N

Parameter: TOC	Test date	Result (ug/l)	Lsthan
	10/10/2012	15000.000	N

Parameter: TSS	Test date	Result (ug/l)	Lsthan
	10/10/2012	8800.000	N

ATTACHMENT E

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

DATE: October 2008

TO: Interested Parties

FROM: Dennis Merrill, DEP

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

****

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

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

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

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

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

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

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

Maine Department of Environmental Protection

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maine Department of Environmental Protection

Working Definitions of Terms Used in the DeTox System.

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

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

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

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

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

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

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

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

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

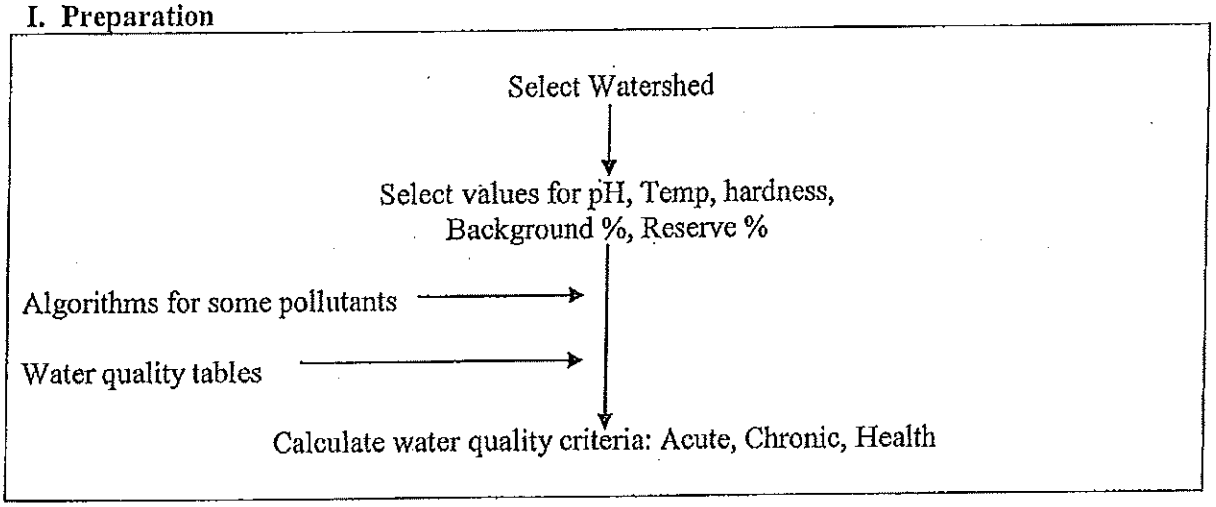
Reserve. An assumed concentration of a pollutant that set aside to account for non-point source of a pollutant and to allow new discharges of a pollutant. By rule this is set at 15% of the applicable *water quality criterion.*

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

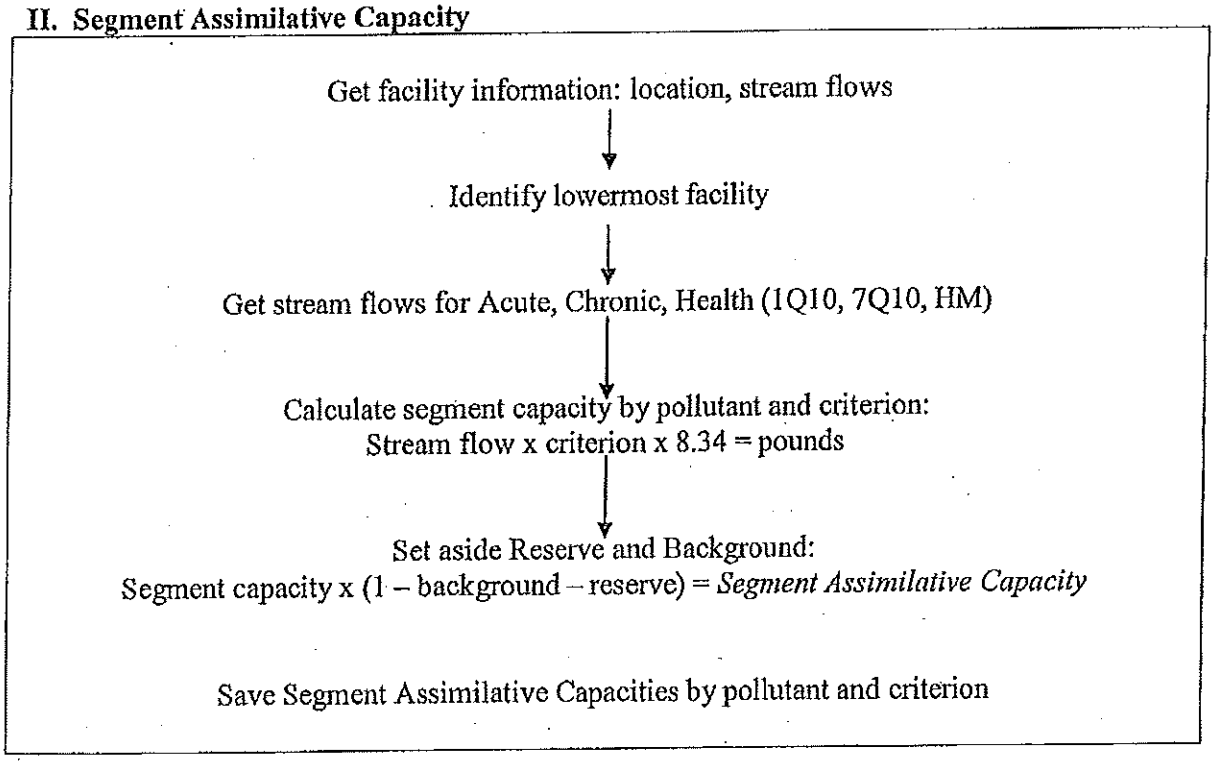
Tributary. A stream flowing into a larger one. A total pollutant load is set by adding the all facilities *allocations* on the tributary and treating this totaled amount as a "point source" to the next larger segment.

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

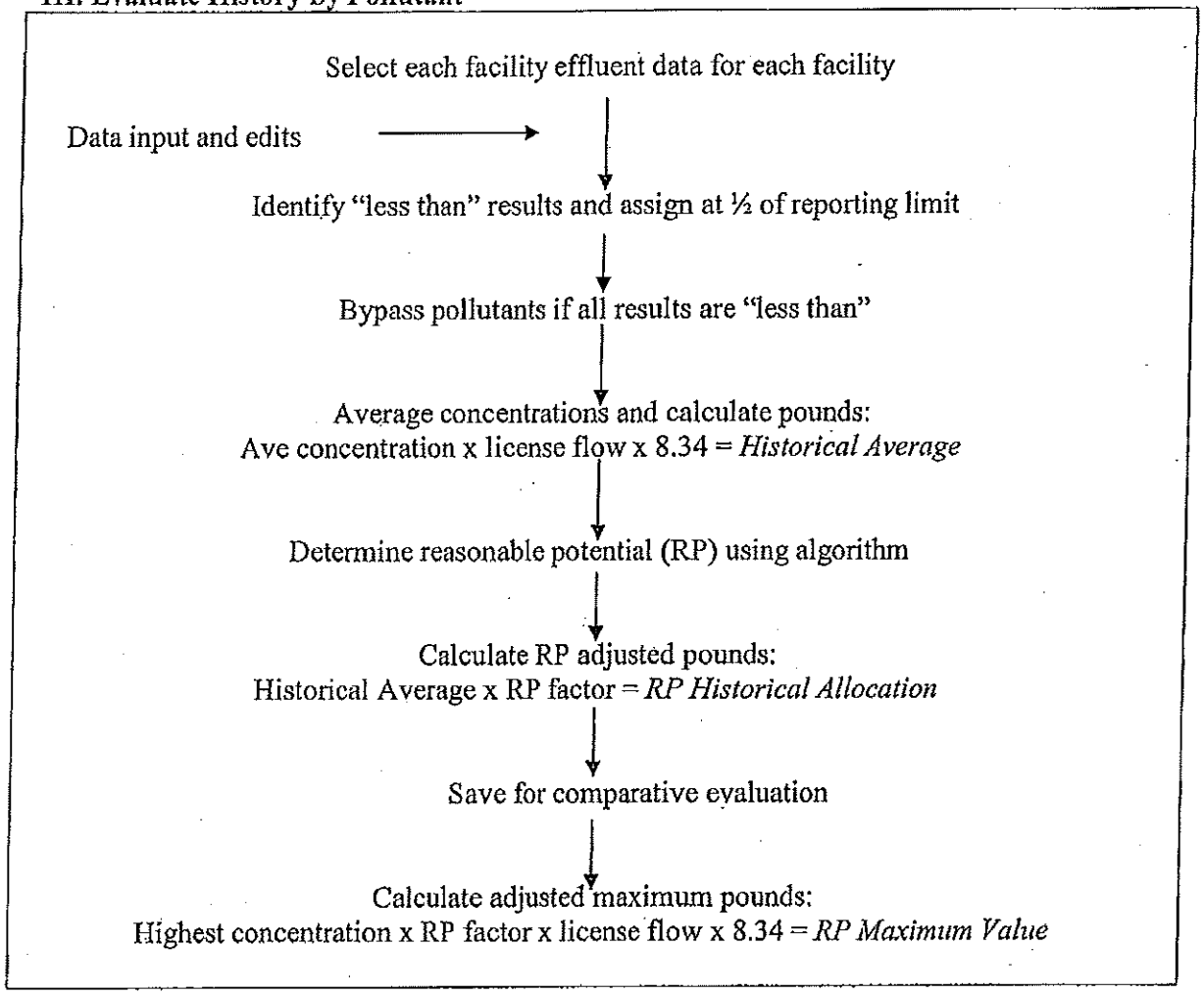
I. Preparation



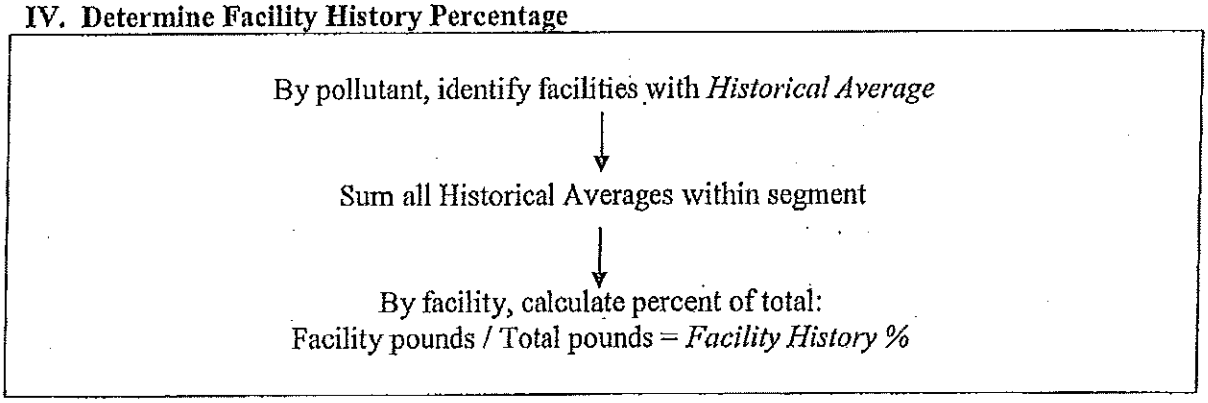
II. Segment Assimilative Capacity



III. Evaluate History by Pollutant



IV. Determine Facility History Percentage



V. Segment Allocation

By pollutant and criterion, select *Segment Assimilative Capacity*

↓

Select individual *Facility History %*

↓

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

↓

Save for comparative evaluation

VI. Individual Allocation

Select individual facility and dilution factor (DF)

↓

Select pollutant and water quality criterion

↓

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

↓

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

↓

Save for comparative evaluation

VII. Make Initial Allocation

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

↓

Compare allocation and select the smallest

↓

Save as *Facility Allocation*

VIII. Evaluate Need for Effluent Limits

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

↓

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

↓

Save *Effluent Limit* for comparison

IX. Reallocation of Assimilative Capacity

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

↓

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

↓

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

↓

Save difference

↓

Select next facility downstream

↓

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

↓

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

↓

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

↓

Repeat process for each facility downstream in turn

CONTENTS

A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

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

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

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

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

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

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

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

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

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

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

5. Bypasses.

(a) Definitions.

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

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

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

(c) Notice.

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

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

(d) Prohibition of bypass.

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

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

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

6. Upsets.

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

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

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

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

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

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

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

(c) Records of monitoring information shall include:

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

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

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

D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

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

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

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

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

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

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

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

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

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

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

(f) Twenty-four hour reporting.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

5. Publicly owned treatment works.

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

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

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

E. OTHER REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012 **Contact: (207) 287-2811**

SUMMARY

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

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

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

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

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

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

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

HOW TO SUBMIT AN APPEAL TO THE BOARD

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

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

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

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

Other Considerations in Appealing a Decision to the Board

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

What to Expect Once You File a Timely Appeal with the Board

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

II. JUDICIAL APPEALS

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

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

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

ADDITIONAL INFORMATION

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

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