STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

August 22, 2016

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

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101290
Maine Waste Discharge License (WDL) Application #W002648-6D-F-R
Final Permit

Dear Mr. Clark:

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

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

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

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

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

Sincerely,

Gregg Wood
Division of Water Quality Management
Bureau of Water Quality

Enc.

cc: William Sheehan, DEP/NMRO Lori Mitchell, DEP/CMRO
Sandy Mojica, USEPA Olga Vergara, USEPA Marelyn Vega, USEPA

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

DEPARTMENT ORDER

IN THE MATTER OF

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

In compliance with the applicable provisions of *Pollution Control*, 38 M.R.S. §§ 411 – 424-B, *Water Classification Program*, 38 M.R.S. §§ 464 – 470 and *Federal Water Pollution Control Act*, Title 33 U.S.C. § 1251, *et seq.*, and applicable rules of the Department of Environmental Protection (Department hereinafter), the Department has considered the application of the HOULTON WATER COMPANY (HWC/permittee hereinafter) with its supportive data, agency review comments, and other related materials on file and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On January 28, 2016, the HWC submitted a timely and complete application to the Department for the renewal of combination Maine Waste Discharge License (WDL) # W002648-6D-D-R / Maine Pollutant Discharge Elimination System (MEPDES) permit # ME0101290 (permit hereinafter), which was issued on April 4, 2011, and expired on April 4, 2016. The April 4, 2011, MEPDES permit authorized the monthly average discharge of 1.5 million gallons per day (MGD) of secondary treated wastewaters from a publicly owned treatment works (POTW) to the Meduxnekeag River, Class B, in Houlton, Maine.

PERMIT SUMMARY

This permitting action is different from the April 4, 2011 permitting action in that it is:

1. Revising the dilution factors associated with the discharge based on new critical low flow data for the Meduxnekeag River;

2. Revising the monitoring frequency for biochemical oxygen demand (BOD_5) and total suspended solids (TSS) from twice per week to once per week based on a statistical evaluation of effluent monitoring results;

3. Eliminating the waiver from the 85% removal requirement for BOD_5 and TSS when influent concentration is less than 200 mg/L as there is no legal justification for the waiver;

4. Revising the minimum monitoring frequency requirement for settleable solids from once per day to three times per week based on a statistical evaluation of effluent monitoring results;

PERMIT SUMMARY (cont'd)

5. Revising the minimum monitoring frequency requirement for *E. coli* bacteria from twice per week to once per week based on a statistical evaluation of effluent monitoring results;

6. Revising the monthly average water quality-based total residual chlorine (TRC) limitation from 0.044 mg/L to a technology-based limit of 0.1 mg/L based on revised dilution factors;

7. Revising the daily maximum water quality-based TRC limitation from 0.067 mg/L to a water quality-based limit of 0.12 mg/L based on revised dilution factors;

8. Revising the minimum monitoring frequency requirement for TRC from once per day to three times per week based on a statistical evaluation of effluent monitoring results;

9. Revising the minimum monitoring frequency requirement for total phosphorus from twice per week to once per week and is eliminating the requirement to monitor and report dissolved orthophosphate;

10. Eliminating the chronic whole effluent toxicity (WET) limit for the brook trout and establishing reduced surveillance level testing indicating the discharge no longer exceeds or has reasonable potential to exceed the applicable ambient water quality criteria;

11. Eliminating the water quality-based concentration and mass effluent limitations for total aluminum, total cadmium, total copper, cyanide (available), and total lead based on the results of facility testing indicating the discharge no longer exceeds or has reasonable potential to exceed the applicable ambient water quality criteria;

12. Revising Special Condition E, *Limitations for Industrial Users*, to ensure compliance with rules governing contributions from industrial users to the POTW; and

13. Incorporating monitoring and reporting requirements for the interim mercury limitations established by the Department for this facility pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and *Waste discharge licenses*, 38 M.R.S. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 C.M.R. 519 (last amended October 6, 2001).

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated July 19, 2016, and subject to the Conditions listed below, the Department makes the following conclusions:

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

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

3. The provisions of the State's antidegradation policy, *Classification of Maine waters*, 38 M.R.S. § 464(4)(F), will be met, in that:

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

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

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

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

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

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

ACTION

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

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

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

3. This permit 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) (last amended October 19, 2015)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

DONE AND DATED AT AUGUSTA, MAINE THIS 22nd DAY OF August 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
PAUL MERCER, Commissioner

Date of initial receipt of application: January 28, 2016

Date of application acceptance: February 1, 2016

Filed
AUG 23 2016
State of Maine
Board of Environmental Protection

Date filed with Board of Environmental Protection _____

This Order prepared by Gregg Wood, BUREAU OF WATER QUALITY

ME0101290 2016 8/22/16

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	1.5 MGD *[03]*	---	Report MGD *[03]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
BOD_5 *[00310]*	375 lbs./day *[26]*	563 lbs./day *[26]*	626 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
BOD_5 Percent Removal[2] *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
TSS *[00530]*	375 lbs./day *[26]*	563 lbs./day *[26]*	626 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
TSS Percent Removal[2] *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	3/Week *[03/07]*	Grab *[GR]*
E. coli Bacteria[3] *[31633]*	---	---	---	64 col/100 ml [4] *[13]*	---	427 col/100 ml *[13]*	1/Week *[01/07]*	Grab *[GR]*
Total Residual Chlorine[5] *[50060]*	---	---	---	0.1 mg/L *[19]*	---	0.12 mg/L *[19]*	3/Week *[03/07]*	Grab *[GR]*
pH *[00400]*	---	---	---	---	---	6.0-9.0 SU *[12]*	1/Day *[01/01]*	Grab *[GR]*
Mercury (Total) [6] *[71900]*	---	---	---	5.0 ng/L *[3M]*	---	7.4 ng/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*

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

FOOTNOTES: See Pages 9-13 of this permit for the applicable footnotes.

SPECIAL CONDITIONS

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

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

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Total Phosphorus [7] (June 1 – September 15) *[00665]*	Report lbs./day *[26]*	Report lbs./day *[26]*	Report lbs./day *[26]*	250 µg/L *[28]*	Report µg/L *[28]*	500 µg/L *[28]*	1/Week *[01/07]*	Composite *[24]*
Total Phosphorus (July 1 – September 15) *[00665]*	1.25 lbs./day[8] *[26]*	---	---	---	---	---	1/Quarter *[01/90]*	Calculate *[CA]*

FOOTNOTES: See Pages 9-13 of this permit for the applicable footnotes.

SPECIAL CONDITIONS

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

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

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

Effluent Characteristic	Effluent Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity [(9)]						
Acute – NOEL						
Ceriodaphnia dubia (Water flea) *[TDA3B]*	---	---	---	Report % *[23]*	1/Year*[01/YR]*	Composite *[24]*
Salvelinus fontinalis (Brook trout) *[TDA6F]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Composite *[24]*
Chronic – NOEL						
Ceriodaphnia dubia (Water flea) *[TBP3B]*	---	---	---	Report % *[23]*	1/Year*[01/YR]*	Composite *[24]*
Salvelinus fontinalis (Brook trout) *[TBQ6F]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Composite *[24]*
Analytical Chemistry [(10)] *[51477]*	---	---	---	Report µg/L *[28]*	1/Year *[01/YR]*	Composite/Grab *[24]*

FOOTNOTES: See Pages 9-13 of this permit for the applicable footnotes.

SPECIAL CONDITIONS

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

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

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

Effluent Characteristic	Effluent Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity [(9)]						
Acute – NOEL						
Ceriodaphnia dubia (Water flea) *[TDA3B]*	---	---	---	Report % *[23]*	1/Quarter*[01/90]*	Composite *[24]*
Salvelinus fontinalis (Brook trout) *[TDA6F]*	---	---	---	Report % *[23]*	1/Quarter*[01/90]*	Composite *[24]*
Chronic – NOEL						
Ceriodaphnia dubia (Water flea) *[TBP3B]*	---	---	---	Report % *[23]*	1/Quarter*[01/90]*	Composite *[24]*
Salvelinus fontinalis (Brook trout) *[TBQ6F]*	---	---	---	Report % *[23]*	1/Quarter*[01/90]*	Composite *[24]*
Analytical Chemistry [(10)] *[51477]*	---	---	---	Report µg/L *[28]*	1/Quarter *[01/90]*	Composite/Grab *[24]*
Priority Pollutants [(10,11)] *[50008]*	---	---	---	Report µg/L *[28]*	1/Year *[01/YR]*	Composite/Grab *[24/GR]*

FOOTNOTES: See Pages 9-13 of this permit for the applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES:

1. **Sampling** – The permittee must conduct all effluent 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 must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. Samples that are analyzed by laboratories at waste water treatment facilities licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 C.M.R. 263 (last amended April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

2. **Percent Removal** – The permittee must achieve a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand for all flows receiving secondary treatment.

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

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

5. **Total Residual Chlorine (TRC)** – TRC limits and monitoring requirements are applicable whenever elemental chlorine or chlorine based compounds are being used to disinfect the discharge. The permittee must utilize approved test methods that are capable of bracketing the limitations in this permit.

SPECIAL CONDITIONS

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

FOOTNOTES:

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

7. **Total Phosphorus** – Total phosphorus monitoring must be performed in accordance with **Attachment B** of this permit entitled, *Protocol For Total P Sample Collection and Analysis for Waste Water – June 1, 2014*, unless otherwise specified by the Department.

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

9. **Whole effluent toxicity (WET) testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions set at levels to bracket the modified acute and chronic critical water quality thresholds of 16% and 14%, respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction or growth as the end points.

    a. **Surveillance level testing.** Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee must initiate surveillance level acute and chronic WET testing at a minimum frequency of once per year for both the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*). Testing must be conducted in a different calendar quarter each sampling event.

SPECIAL CONDITIONS

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

FOOTNOTES:

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

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 as modified by Department protocol for salmonids. See **Attachment C** of this permit for the Department protocol.

a. U.S. Environmental Protection Agency. 2002. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, 5th ed. USEPA 821-R-02-012. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the acute method manual).

b. U.S. Environmental Protection Agency. 2002. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, 4th ed. USEPA 821-R-02-013. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the freshwater chronic method manual).

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 must evaluate test results being submitted and identify to the Department possible exceedances of the critical acute and chronic water quality thresholds of 16% and 14%, respectively.

Results of WET tests must be reported on the "*Whole Effluent Toxicity Report Fresh Waters*" form included as **Attachment D** of this permit each time a WET test is performed. Each time a WET test is performed, the permittee must sample and analyze for the parameters in the WET Chemistry and the Analytical Chemistry sections of the Department form entitled, *Maine Department of Environmental Protection, WET and Chemical Specific Data Report Form*. See **Attachment E** of this permit.

SPECIAL CONDITIONS

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

FOOTNOTES:

10. **Analytical chemistry** – Refers to those pollutants listed under "Analytical Chemistry" on the form included as **Attachment E** of this permit.

    a. **Surveillance level testing** - Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee must conduct analytical chemistry testing at a minimum frequency of once every per year. As with WET testing, testing must be conducted in a different calendar quarter of each year.

    b. **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level analytical chemistry testing at a minimum frequency of four times per year in successive calendar quarters.

11. **Priority pollutant testing.** Refers to those pollutants listed under "Priority Pollutants" on the form included as **Attachment E** of this permit.

    a. **Surveillance level testing** is not required pursuant to 06-096 C.M.R. 530.

    b. **Screening level testing** – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level priority pollutant testing at a minimum frequency of once per year in any calendar quarter provided the sample is representative of the discharge and any seasonal or other variations in effluent quality.

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

    Analytical chemistry and priority pollutant test results must be submitted to the Department not later than the next DMR required by the permit, provided, however, that the permittee may review the laboratory reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department, possible exceedences of the acute, chronic or

SPECIAL CONDITIONS

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

FOOTNOTES:

human health AWQC as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 C.M.R. 584 (effective July 29, 2012). 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 must not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the uses designated for the classification of the receiving waters.

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

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

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

D. AUTHORIZED DISCHARGES

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

SPECIAL CONDITIONS

E. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the wastewater collection and treatment system by a non-domestic source (user) must not pass through or interfere with the operation of the treatment system. The permittee must 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 must 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 C.M.R. 528 (last amended March 17, 2008).

F. MONITORING AND REPORTING

Monitoring results obtained during the previous month must be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and postmarked on or before the thirteenth (13^{th}) 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 (15^{th}) day of the month following the completed reporting period. A signed copy of the DMR and all other reports required herein must be submitted to the Department-assigned inspector (unless otherwise specified by the Department) at the following address:

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

Alternatively, if the permittee submits an electronic DMR (DMR), the completed DMR must be electronically submitted to the Department by a facility authorized DMR Signatory not later than close of business on the 15^{th} day of the month following the completed reporting period. Hard copy documentation submitted in support of the DMR must be postmarked on or before the thirteenth (13^{th}) 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 (15^{th}) day of the month following the completed reporting period. Electronic documentation in support of the DMR must be submitted not later than close of business on the 15^{th} day of the month following the completed reporting period.

SPECIAL CONDITIONS

G. NOTIFICATION REQUIREMENTS

In accordance with Standard Condition D, the permittee must 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; and
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.
3. For the purposes of this section, adequate notice must include information on:

    a. The quality and quantity of wastewater 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. 06-096 C.M.R. 530(2)(D)(4) STATEMENT FOR REDUCED/WAIVED TOXICS TESTING

By December 31 of each calendar year, the permittee must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit ***[ICIS Code 96299]***. See **Attachment E** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

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

2. Changes in the operation of the treatment works that may increase the toxicity of the discharge;

3. Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge;

4. Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge; and

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

The Department may require routine surveillance level 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.

SPECIAL CONDITIONS

I. OPERATIONS AND MAINTENANCE (O&M) PLAN

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

By December 31 of each year, or within 90 days of any process changes or minor equipment upgrades, the permittee must 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. The O&M Plan must be kept on-site at all times and made available to Department and USEPA personnel upon request.

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

J. WET WEATHER MANAGEMENT PLAN

The permittee must maintain a 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 Wet Weather Management Plan must be to maximize the volume of wastewater receiving secondary treatment under all operating conditions. The Wet Weather Management 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. The Department may require the submission of the Wet Weather Management Plan for review and approval.

The permittee must review the Wet Weather Management 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.

SPECIAL CONDITIONS

K. REOPENING OF PERMIT FOR MODIFICATIONS

In accordance with 38 M.R.S. § 414-A(5) and 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 limitations 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.

L. 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

Name of Facility: _____ Federal Permit # ME _____

Pipe # _____

Purpose of this test:

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

SAMPLE COLLECTION INFORMATION

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

Sampling Location:

Weather Conditions: _____

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

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

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

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

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

Please Enter Effluent Limits for your facility

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

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

CERTIFICATION

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

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT B

Protocol for Total Phosphorus Sample Collection and Analysis for Waste Water Effluent

Approved Analytical Methods: EPA 200.7 (Rev. 44), 365.1 (Rev. 2.0), (Lachat), 365.3, 365.4; SM 3120 B, 4500-P B.5, 4500-P E, 4500-P F, 4500-P G, 4500-P H; ASTM D515-88(A), D515-88(B); USGS I-4471-97, I-4600-85, I-4610-91; OMAAOAC 973.55, 973.56 (laboratory must be certified for any method performed)

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

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

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

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

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

ATTACHMENT C

Salmonid Survival and Growth Test

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

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

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

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

Loading Rate - < 0.5 g/l/day

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

Temperature - 12° ± 1°C

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

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

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

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

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

ATTACHMENT D

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 E

Maine Department of Environmental Protection

WET and Chem

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

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

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

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

Date Sample Collected _____ Date Sample Analyzed _____

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

Last Revision July 1, 2015

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.

	WHOLE EFFLUENT TOXICITY		Effluent Limits, % Acute	Effluent Limits, % Chronic		Receiving Water or Ambient	Effluent Concentration (ug/L or as noted) WET Result, % Do not enter % sign	Reporting Limit Check	Possible Exceedence [7] Acute	Possible Exceedence [7] Chronic	
	Trout - Acute										
	Trout - Chronic										
	Water Flea - Acute										
	Water Flea - Chronic										
	WET CHEMISTRY										
	pH (S.U.) (9)										
	Total Organic Carbon (mg/L)					(8)					
	Total Solids (mg/L)										
	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, TOTAL	5				(8)					
	CYANIDE, AVAILABLE [3a]	5				(8)					
M	LEAD	3				(8)					
M	NICKEL	5				(8)					
M	SILVER	1				(8)					
M	ZINC	5				(8)					

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

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

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									

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

Notes:

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

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

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

(3a) Cyanide, Available (Cyanide Amenable to Chlorination) is not an analytical chemistry parameter, but may be required by certain discharge permits .

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

(5) 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:

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: **June 19, 2016**

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

NAME AND ADDRESS OF APPLICANT:

HOULTON WATER COMPANY
P.O. Box 726
Houlton, Maine 04730

COUNTY: **AROOSTOOK COUNTY**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

135 Access Road
Houlton, Maine 04730

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

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. John Clark, General Mgr.**
(207) 532-2350
e-mail: jlc@hwco.org.

1. APPLICATION SUMMARY

a. Application: On January 28, 2016, the HWC submitted a timely and complete application to the Department for the renewal of combination Maine Waste Discharge License (WDL) # W002648-6D-D-R / Maine Pollutant Discharge Elimination System (MEPDES) permit # ME0101290 (permit hereinafter), which was issued on April 4, 2011, and expired on April 4, 2016. The April 4, 2011, MEPDES permit authorized the monthly average discharge of 1.5 million gallons per day (MGD) of secondary treated wastewaters from a publicly owned treatment works (POTW) to the Meduxnekeag River, Class B, in Houlton, Maine.

1. APPLICATION SUMMARY (cont'd)

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

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

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

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

The HWC utilizes freeze-drying beds for sludge handling and disposal. The HWC sludge handling facilities consist of aerobic sludge holding lagoons, a one million-gallon holding lagoon and two freeze-drying beds. Dewatering by freezing is accomplished through the separation of solids and liquid fractions during crystal formation. HWC is currently authorized to seasonally spray irrigate supernatant from the sludge storage lagoon through Waste Discharge License #W8129. The purpose of the spray irrigation facility is to reduce the direct discharge of phosphorous-containing wastewater to the Meduxnekeag River.

2. PERMIT SUMMARY

a. Terms and conditions: This permitting action is different from the April 4, 2011 permitting action in that it is:

1. Revising the dilution factors associated with the discharge based on new critical low flow data for the Meduxnekeag River;

2. Revising the monitoring frequency for biochemical oxygen demand (BOD_5) and total suspended solids (TSS) from twice per week to once per week based on a statistical evaluation of effluent monitoring results;

2. PERMIT SUMMARY (cont'd)

3. Eliminating the waiver from the 85% removal requirement for BOD_5 and TSS when influent concentration is less than 200 mg/L;

4. Revising the minimum monitoring frequency requirement for settleable solids from once per day to three times per week;

5. Revising the minimum monitoring frequency requirement for *E. coli* bacteria from twice per week to once per week;

6. Revising the monthly average water quality-based total residual chlorine (TRC) limitation from 0.044 mg/L to a technology-based limit of 0.1 mg/L based on revised dilution factors;

7. Revising the daily maximum water quality-based TRC limitation from 0.067 mg/L to a water quality-based limit of 0.12 mg/L based on revised dilution factors;

8. Revising the minimum monitoring frequency requirement for TRC from once per day to three times per week;

9. Revising the minimum monitoring frequency requirement for total phosphorus from twice per week to once per week and is eliminating the requirement to monitor and report dissolved orthophosphate;

10. Eliminating the chronic whole effluent toxicity (WET) limit for the brook trout and establishing reduced surveillance level testing indicating the discharge no longer exceeds or has reasonable potential to exceed the applicable ambient water quality criteria;

11. Eliminating the water quality-based concentration and mass effluent limitations for total aluminum, total cadmium, total copper, cyanide (available), and total lead based on the results of facility testing indicating the discharge no longer exceeds or has reasonable potential to exceed the applicable ambient water quality criteria;

12. Revising Special Condition E, *Limitations for Industrial Users*, to ensure compliance with rules governing contributions from industrial users to the POTW; and

13. Incorporating monitoring and reporting requirements for the interim mercury limitations established by the Department for this facility pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and *Waste discharge licenses*, 38 M.R.S. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 C.M.R. 519 (last amended October 6, 2001).

2. PERMIT SUMMARY (cont'd)

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

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

May 23, 2000 – Pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and *Waste discharge licenses*, 38 M.R.S. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 C.M.R. 519 (last amended October 6, 2001), the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL #W002648-5L-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 7.4 parts per trillion (ppt) and 5.0 ppt, respectively, and a minimum monitoring frequency requirement of 4 tests per year for mercury.

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

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

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

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

April 4, 2011 – The Department issued WDL #W002648-6D-D-R to the HWC for a five-year term.

January 28, 2016 – The HWC submitted a timely and complete General Application to the Department for renewal of the April 4, 2011 permit. The application was accepted for processing on February 1, 2016 and was assigned WDL #W002648-6D-F-R / MEPDES #ME0101290.

3. CONDITIONS OF PERMITS

Conditions of licenses, 38 M.R.S. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S. § 420 and 06-096 C.M.R. 530 (effective March 21, 2012) require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 C.M.R. 584 (effective July 29, 2012), 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. § 467(15)(E)(1)(a) classifies the Meduxnekeag River from the outlet of Meduxnekeag Lake to the international border as a Class B waterway. *Standards for classification of fresh surface waters*, 38 M.R.S. § 465(3) describes standards for classification of Class B waters as follows:

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

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

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

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report, (Report) prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the segment of the Meduxnekeag River that contains the discharge from HWC as "*Category 3: Rivers and Streams with Insufficient Data or Information to Determine if Designated Uses are Attainted (One or More Uses may be Impaired);*' "*Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL Completed;*" and "*Category 5-D: Rivers and Streams Impaired by Legacy Pollutants.*"

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

The Report specifies that 2009 and 2010 data indicate little change in dissolved oxygen and total phosphorus values. The Report further states that 2007 and 2008 data submitted by the Houlton Band of Maliseet Indians documents environmental indicators of nutrient problems including diurnal dissolved oxygen swings, increased algal coverage and dissolved oxygen.

On March 8, 2001, the USEPA approved a total maximum daily load (TMDL) for the Meduxnekeag River. The TMDL classifies a 6-mile stretch of river below Houlton as not attaining Class B standards for dissolved oxygen. The TMDL states, *"The survey data as well as model runs indicate that the Meduxnekeag River is not attaining standards for dissolved oxygen (DO) concentration below the Houlton outfall. Occasional, marginal non-attainment of DO standards was also measured above the Houlton outfall. The major factor in this non-attainment is the diurnal DO effect from the respiration of attached plant growth as a result of phosphorous enrichment."* The 2012 Report specifies that the segment length was corrected to 9.5 miles on June 21, 2012, as a result of improved mapping.

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

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

In addition to total phosphorus limitations, the report recommended that summer season (June – September) in-stream sampling for DO and total phosphorus as well as river flow measurements for calendar years 2000 and 2001 should be conducted. The Department, the HWC and third parties conducted the additional in-stream sampling during the summers of 2001 and 2002.

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

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

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

On September 27, 2004, the Department issued a revised proposed draft MEPDES permit which proposed monthly average and daily maximum concentration limits of 0.5 mg/L and 1.0 mg/L, respectively, for the month of May beginning May 1, 2006, and 0.25 mg/L and 0.5 mg/L respectively, from June 1 – September 15 of each year (beginning June 1, 2006) and proposed a seasonal (July 1 – September 30) mass limit of 1.25 lbs./day beginning July 1, 2006. In a letter dated October 21, 2004, HWC objected to the imposition of phosphorus treatment in the month of May.

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

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

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

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

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

The Department has not completed "*a comprehensive evaluation of the waste water treatment effluent data and the ambient water quality monitoring data conducted by the permittee, the Department, or others that have a Department approved water quality monitoring program*" at this time.

Additionally, all freshwaters are listed in *"Category 5-C: Waters Impaired by Atmospheric Deposition of Mercury."* In December 2007, the USEPA approved a Regional Mercury TMDL. Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, *"Impairment caused by atmospheric deposition of mercury; a regional scale TMDL has been approved. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources."*

Pursuant to 38 M.R.S. § 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 C.M.R. 519.

With regard to *"Category 5-D: Rivers and Streams Impaired by Legacy Pollutants,"* impairment in this context refers to legacy DDT contamination. The Department had previously (see: *The State of Maine 2004 Integrated Water Quality Monitoring and Assessment Report*) identified agricultural non-point source as a potential source that has caused or contributed to the non-attainment status of the receiving water. The Department has no information that the discharge from HWC causes or contributes to this non-attainment status.

Additional discussion and summary of phosphorus loading associated with the HWC is provided in this section 6(h) of this Fact Sheet.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

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

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

The HWC submitted, as an addendum to their February 1, 2016, application for waste discharge permit, "River Design Flow Evaluation," prepared with assistance by Acheron Engineering Services. In preparation for permit renewal, the HWC determined that the Mednuxnekeag River flow values should be re-evaluated due to the availability of a new river data from the Lowery Road Bridge gauge (USGS 01018035) located below (north of) the HWC discharge. The gauge has been operated continuously since July 2005 and now provides 10.5 years of historical river flow data. Based on gauge data and an adjustment for drainage area, the HWC proposed revised 1Q10 and 7Q10 river flows of 11.9 cfs and 14.4 cfs, respectively, for the Meduxnekeag at the point of discharge from the HWC. The 1Q10 and 7Q10 values used in the previous permit were 5.9 cfs and 6.9 cfs, respectively. The Department's Division of Environmental Assessment reviewed the values proposed by HWC and concurred that these values are accurate and should be used for calculating permit limitations (see electronic mail from R. Mohlar to G. Wood, dated February 3, 2016). Revised dilution factors associated with the discharge are as follows.

Acute: ¼1Q10 =	3.0 cfs	⇒	$\frac{(3.0\ \text{cfs})(0.6464) + (1.5\ \text{MGD})}{(1.5\ \text{MGD})}$ =	2.3:1
Acute: 1Q10 =	11.9 cfs	⇒	$\frac{(11.9\ \text{cfs})(0.6464) + (1.5\ \text{MGD})}{(1.5\ \text{MGD})}$ =	6.1:1
Chronic: 7Q10 =	14.4 cfs	⇒	$\frac{(14.4\ \text{cfs})(0.6464) + (1.5\ \text{MGD})}{(1.5\ \text{MGD})}$ =	7.2:1
Harmonic Mean[1] =	43.2 cfs	⇒	$\frac{(43.2\ \text{cfs})(0.6464) + (1.5\ \text{MGD})}{(1.5\ \text{MGD})}$ =	19.6:1

[1] The harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3). This multiplying factor is based on guidelines for estimation of human health dilution presented in the U.S. EPA publication, *"Technical Support Document for Water Quality-Based Toxics Control"* (Office of Water; EPA/505/2-90-001, page 88), and represents an estimation of harmonic mean flow on which human health dilutions are based in a riverine 7Q10 flow situation.

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

06-096 C.M.R. 530(4)(B)(1) states,

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

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

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

This permitting action is also carrying forward the requirement for a minimum of 85% removal of BOD_5 & TSS pursuant to 06-096 C.M.R. 525(3)(III)(a)(3) and (b)(3). The HWC has not demonstrated that it qualifies for special considerations pursuant to 06-096 C.M.R. 525(3)(IV) to maintain a waiver from the 85% removal requirement when influent concentration is less than 200 mg/L, which was established in the previous permit. Therefore, this permitting action is eliminating the waiver from the 85% removal requirement provided in the previous permitting action when influent concentration is less than 200 mg/L.

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

A summary of the effluent BOD_5 and TSS data as reported on the DMRs submitted to the Department for the period May 2011 through February 2016 is as follows.

BOD_5	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average	0 lbs./day	240 lbs./day	33 lbs./day	58
	2.3 mg/L	7.6 mg/L	3.8 mg/L	58
Weekly Average	0 lbs./day	390 lbs./day	87 lbs./day	58
	2.5 mg/L	14.0 mg/L	5.1 mg/L	58
Daily Maximum	8.6 lbs./day	490 lbs./day	86 lbs./day	58
	2.9 mg/L	20.0 mg/L	6.3 mg/L	58

TSS	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average	0 lbs./day	114 lbs./day	12.1 lbs./day	58
	1.0 mg/L	4.1 mg/L	2.0 mg/L	58
Weekly Average	0 lbs./day	265 lbs./day	39 lbs./day	58
	1.0 mg/L	6.1 mg/L	2.7 mg/L	58
Daily Maximum	3.5 lbs./day	420.0 lbs./day	53 lbs./day	58
	1.0 mg/L	9.6 mg/L	3.4 mg/L	58

Minimum monitoring frequency requirements in MEPDES permits are prescribed by 06-096 C.M.R. 523(5)(i). The USEPA has published guidance entitled, *Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies* (USEPA Guidance April 1996). In addition, the Department has supplemented the USEPA guidance with its own guidance entitled, *Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996* (Maine DEP May 22, 2014). Both documents are being utilized to evaluate the compliance history for each parameter regulated by the previous permit to determine if a reduction in the monitoring frequencies are justified.

BOD_5

Long term average = 33 lbs./day
Monthly average limit = 375 lbs./day
Current monitoring frequency = 2/week

$$\text{Ratio} = \frac{33 \text{ lbs./day}}{375 \text{ lbs./day}} = 8.8\%$$

According to Table I of the USEPA guidance, a 2/week monitoring requirement can be reduced to 1/month. However, the guidance states that, although the facility may receive a reduction in testing, in no circumstance shall this reduction in testing exceed 50% of the initial testing frequency. Therefore, the monitoring frequency for BOD_5 is being reduced from twice per week to once per week in this permitting action based on *Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996* (Maine DEP May 22, 2014).

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

TSS

Long term average = 33 lbs./day
Monthly average limit = 375 lbs./day
Current monitoring frequency = 2/week

Ratio = 12.1 lbs./day = 3.2%
375 lbs./day

Following the same basis for BOD_5 monitoring reduction, the monitoring frequency for TSS is being reduced from twice per week to once per week in this permitting action based on *Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996* (Maine DEP May 22, 2014).

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

A summary of settleable solids data as reported on the monthly DMRs for the period of May 2011 through February 2016 (# DMRs = 58) indicates the daily maximum settleable solids concentration discharge has been <0.1 ml/L 100% of the time during said reporting period.

This permitting action is revising the minimum monitoring frequency requirement for settleable solids from once per day to three times per week based on *Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996* (Maine DEP May 22, 2014).

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

A summary of the *E. coli* bacteria data as reported on the DMRs submitted to the Department for Outfall #001A for calendar years 2011 through 2016 (applicable disinfection period only) is as follows:

***E. coli* bacteria**	**Minimum**	**Maximum**	**Arithmetic Mean**	**# DMRs**
Monthly Average	2 col / 100 ml	64 col / 100 ml	8 col / 100 ml	25
Daily Maximum	3 col / 100 ml	172 col / 100 ml	32 col / 100 ml	25

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

The previous permitting action established a minimum monitoring frequency requirement of twice per week for *E. coli* bacteria (during the applicable period) based on best professional judgment. This permitting action is revising the minimum monitoring frequency requirement for *E. coli* bacteria from twice per week to once per week based on Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996 (Maine DEP May 22, 2014).

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

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

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

			Calculated	
Acute (A) Criterion	Chronic (C) Criterion	A & C Dilution Factors	Acute Threshold	Chronic Threshold
0.019 mg/L	0.011 mg/L	6.1:1 (A) 14.4:1 (C)	0.12 mg/L	0.16 mg/L

The Department has established a daily maximum BPT-based limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that need to dechlorinate the discharge to meet water quality based thresholds, the Department has established daily maximum and monthly average

BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. The Department has identified that HWC must dechlorinate the effluent prior to discharge in order to consistently achieve compliance with both the bacteria limits and the water quality-based thresholds calculated above.

06-096 C.M.R. 523(5)(l) contains prohibitions for anti-backsliding. Generally, anti-backsliding prohibits the issuance of a renewed permit with less stringent limitations than were established in the previous permit. 06-096 C.M.R. 523(l)(2)(i) contains certain exceptions to anti-backsliding. In the case of the HWC and the limitations for TRC, the Department has determined that the monthly average limitation of 0.067 mg/L and the daily maximum limitation of 0.044 mg/L established in the previous permit would not have been established at the time the previous permit was issued based on the new information[2] that has been obtained since issuance of the 2011 permit. Since issuance of the 2011 permit, the Department has obtained new and more accurate receiving water flow data that affects calculation of water quality-based effluent concentration.

[2] Information concerning more accurate river flow data has been obtained since 2011, as discussed in Section 6.b of this fact sheet.

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

The monthly average BPT-based threshold of 0.1 mg/L is more stringent than the revised water quality-based threshold of 0.16 mg/L and is therefore being established in this permitting action. The revised daily maximum water quality-based threshold of 0.12 mg/L is more stringent than the daily maximum BPT-based threshold of 0.3 mg/L and is therefore being established in this permitting action. The Department concludes that the anti-backsliding provisions have been satisfied and adjustment of the monthly average and daily maximum water quality-based effluent limitations for TRC to be less stringent than that established in the previous permit is permissible.

A summary of TRC data as reported on the monthly DMRs for the period of May 2011 through February 2016 (# DMRs = 25) indicates the monthly average and daily maximum TRC concentration discharge has been <0.05 mg/L 100% of the time during said reporting period.

The previous permitting action established a minimum monitoring frequency requirement of once per day for TRC (any time chlorine or chlorine-based compounds are used at the facility) based on best professional judgment. This permitting action is revising the minimum monitoring frequency requirement for TRC from once per day to three times per week based on Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996 (Maine DEP May 22, 2014).

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 C.M.R. 525(3)(III), and a minimum monitoring frequency requirement of once per day based on best professional judgment. A summary of pH data as reported on the monthly DMRs for the period of May 2011 through February 2016 (# DMRs = 58) indicates the facility has been in compliance with the pH range limitation 100% of the time during the specified reporting period.

h. Total Phosphorus: The previous permitting action established monitoring and reporting requirements and numeric limitations for total phosphorus and ortho-phosphorus. The April 4, 2011 MEPDES permit established "winter season" (September 16 through May 31) monitoring and reporting requirements for total phosphorus and ortho-phosphorus at minimum frequencies of once per month and once per week, respectively.

The April 4, 2011 MEPDES permit established seasonal (June 1 – September 15) monthly average and daily maximum total phosphorus limits of 250 µg/L and 500 µg/L, respectively; and a seasonal (July 1 through September 15) average total phosphorus mass limit of 1.25 lbs./day.

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

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

Waste Discharge License Conditions, 06-096 C.M.R. 523 (effective January 12, 2001) specifies that water quality based limits are necessary when it has been determined that a discharge has a reasonable potential to cause or contribute to an excursion above any State water quality standard including State narrative criteria. In addition, 06-096 C.M.R. 523 specifies that water quality-based limits may be based upon criterion derived from a proposed State criterion, or an explicit State policy or regulation interpreting its narrative water quality criterion, supplemented with other relevant information which may include: EPA's Water Quality Standards Handbook, October 1983, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration, and current USEPA criteria documents.

USEPA's Quality Criteria for Water 1986 (Gold Book) puts forth an in-stream phosphorus concentration goal of less than 0.100 mg/L in streams or other flowing waters not discharging directly to lakes or impoundments, to prevent nuisance algal growth. The use of the 0.100 mg/L Gold Book value is consistent with the requirements of 06-096 C.M.R. 523 noted above for use in a reasonable potential (RP) calculation.

Based on the above rationale, the Department has chosen to utilize the Gold Book value of 0.100 mg/L. It is the Department's intent to continue to make determinations of actual attainment or impairment based upon environmental response indicators from specific water bodies. The use of the Gold Book value of 0.100 mg/L for use in the RP calculation will enable the Department to establish water quality based limits in a manner that is reasonable and that appropriately establishes the potential for impairment, while providing an opportunity to acquire environmental response indicator data, numeric nutrient indicator data, and facility data as needed to refine the establishment of site specific water quality based limits for phosphorus. This permit may be reopened during the term of the permit to modify any reasonable potential calculations, phosphorus limits, or monitoring requirements based on new site-specific data.

The HWC has been conducting total phosphorus monitoring since no later than 2005 for permit compliance. A summary of the effluent total phosphorus data as reported on the DMRs submitted to the Department for the seasonal monitoring period from 2011 through 2016 follows.

Effluent Total-P	Limit	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average	250 µg/L	75 µg/L	2,320 µg/L	805 µg/L	57
Daily Maximum	500 µg/L	90 µg/L	2,320 µg/L	833 µg/L	57

For the background concentration in the Meduxnekeag River, the Department is using an ambient concentration of 0.016 mg/L based on available ambient water quality monitoring data upstream from the point of discharge. The Department's draft ambient water quality criterion for Class B waters is 0.030 mg/L for phosphorus.

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

Using the following calculation and criteria, the HWC does not have a reasonable potential to exceed either the USEPA's Total P Ambient Water Quality Goal of 0.100 mg/L (100 ug/L) for phosphorus for rivers and streams not feeding lakes, or the Department's draft ambient water quality criteria of 0.030 mg/L for phosphorus:

Reasonable Potential Analysis

$$Cr = \frac{QeCe + QsCs}{Qr}$$

Qe = effluent flow	=	1.5 MGD
Ce = effluent pollutant concentration	=	0.805 mg/L
Qs = 7Q10 flow of receiving water	=	9.3 MGD
Cs = upstream concentration	=	0.016 mg/L
Qr = receiving water flow (1.5 MGD + 9.3 MGD)	=	10.8 MGD
Cr = receiving water concentration		

$$Cr = \frac{(1.5\ MGD \times 0.805\ mg/L) + (9.3\ MGD \times 0.016\ mg/L)}{10.8\ MGD} = 0.013\ mg/L$$

Cr = 0.013 mg/L < 0.100 mg/L **No Reasonable Potential**
Cr = 0.013 mg/L < 0.030 mg/L **No Reasonable Potential**

Although the calculation above suggests that the discharge from the HWC does not have a reasonable potential to exceed the either the USEPA's Total P Ambient Water Quality Goal of 0.100 mg/L (100 µg/L) for phosphorus for rivers and streams not feeding lakes, or the Department's draft ambient water quality criteria of 0.030 mg/L for phosphorus, the Meduxnekeag River remains listed as impaired due to problem algal growth and dissolved oxygen attainment. Based on the recommendations of the 2001 TMDL, the Department is carrying forward the seasonal (June 1 through September 15, inclusive) monthly average and daily maximum limits of 250 µg/L and 500 µg/L, respectively; and a seasonal (July 1 through September 15) average total phosphorus mass limit of 1.25 lbs./day.

Based on best professional judgment, this permitting action is revising the minimum monitoring frequency requirement for total phosphorus from twice per week to once per week and is eliminating the requirement to monitor and report dissolved orthophosphate as adequate data for ortho-P was obtained during the term of the previous permit.

i. Whole Effluent Toxicity (WET) and Chemical Specific Testing: *Conditions of licenses*, 38 M.R.S. § 414-A and *Certain deposits and discharges prohibited,* 38 M.R.S. § 420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. *Surface Water Toxics Control Program*, 06-096 C.M.R. 530 (effective March 21, 2012), and *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 C.M.R. 584 (effective July 12, 2012) set 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 C.M.R. 530, is included in this permit in order to fully characterize the effluent. This permit also provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment and receiving water characteristics.

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

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

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

06-096 C.M.R. 530(1)(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the 06-096 C.M.R. 530 criteria, the permittee's facility falls into the Level I frequency category as the facility has a chronic dilution factor of <20:1. 06-096 C.M.R. 530(1)(D)(1) specifies that routine screening and surveillance level testing requirements are as follows.

Surveillance level testing

Level	WET Testing	Priority pollutant testing	Analytical chemistry
I	2 per year	None required	4 per year

Screening level testing

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

A review of the data on file with the Department indicates that to date, the permittee has fulfilled the WET and chemical-specific testing requirements of the 06-096 C.M.R. 530.

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

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

06-096 C.M.R. 530(3)(E) states:

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

06-096 C.M.R. 530(3) states:

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

WET Evaluation – The previous permitting action established a C-NOEL limit of 25% for the brook trout (*Salvelinus fontinalis*) as a statistical evaluation at that time indicated the discharge exceeded or had a reasonable potential to exceed critical chronic WET threshold of 25%.

For this permitting action, a statistical evaluation for the most current 60 months of data was conducted on April 25, 2016, indicates the discharge does not exceed or have a reasonable potential to exceed the critical acute (16%) or chronic (14%) WET thresholds. Therefore, numeric limitations for WET species are not being established in this permitting action, and the previous chronic limit for the brook trout is being eliminated. It is noted, the critical water quality thresholds expressed in percent (%) were derived as the mathematical inverse of the acute (6.1:1) and chronic (7.2:1) dilution factors.

This permitting action is establishing a reduced surveillance level monitoring frequency of once per year (1/Year) for the brook trout and carrying forward reduced testing for the water flea.

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

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

Toxic chemical evaluation – 06-096 C.M.R. 530(3) states, "*In determining if effluent limits are required, the Department shall consider all information on file and effluent testing conducted during the preceding 60 months. However, testing done in the performance of a Toxicity Reduction Evaluation (TRE) approved by the Department may be excluded from such evaluations.*" 06-096 C.M.R. 530(4)(C), states:

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

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

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

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

06-096 C.M.R. 530(4)(F) states, in part,

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

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

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

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

On April 20, 2016, the Department conducted a statistical evaluation based on 15% of the ambient water quality criteria reserve being withheld and 10% of the AWQC being withheld for background (Report ID 828) and determined that the discharge from HWC does not exceed or have a reasonable potential to exceed applicable ambient water quality criteria for toxic pollutants. Therefore, this permitting action is eliminating the concentration and mass limits for aluminum, cadmium, copper, cyanide, and lead that were established in the April 4, 2011 MEPDES permit.

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

Section 402(o) of the Clean Water Act contains prohibitions for anti-backsliding. Generally, anti-backsliding prohibits the issuance of a renewed permit with less stringent limitations than were established in the previous permit. The Clean Water Act contains certain exceptions to anti-backsliding at Section 402(o)(2). In the case of the HWC and the water quality-based effluent limitations established in the previous permitting action for aluminum, cadmium, copper, cyanide, and lead, the Department has determined that these limitations would not have been established at the time the previous permit was issued based on the new information[3] that has been obtained since issuance of the previous permit. Section 402(o)(2)(B)(i) of the Clean Water Act contains an exception to anti-backsliding for information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.

It is noted that anti-backsliding prohibitions and exceptions are mirrored in 06-096 C.M.R. 523 of the Department's rules and at 40 CFR 122.44(l)(2)(i)(B)(1).

In accordance with 06-096 C.M.R. 530(2)(D)(3)(d), this permitting action is establishing a reduced surveillance level monitoring frequency of once per year (1/Year) for analytical chemistry.

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 B classification.

8. PUBLIC COMMENTS

Public notice of this application was made in the *Houlton Times Pioneer* newspaper on January 6, 2016. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses,* 06-096 C.M.R. 522 (effective January 12, 2001).

[3] New information regarding effluent characterization for the specified pollutants has been obtained since issuance of the previous permit.

9. DEPARTMENT CONTACTS

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

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

10. RESPONSE TO COMMENTS

During the period of July 19, 2016, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department did not receive comments from the permittee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the permit. Therefore, the Department has not prepared a Response to Comments.

ATTACHMENT A

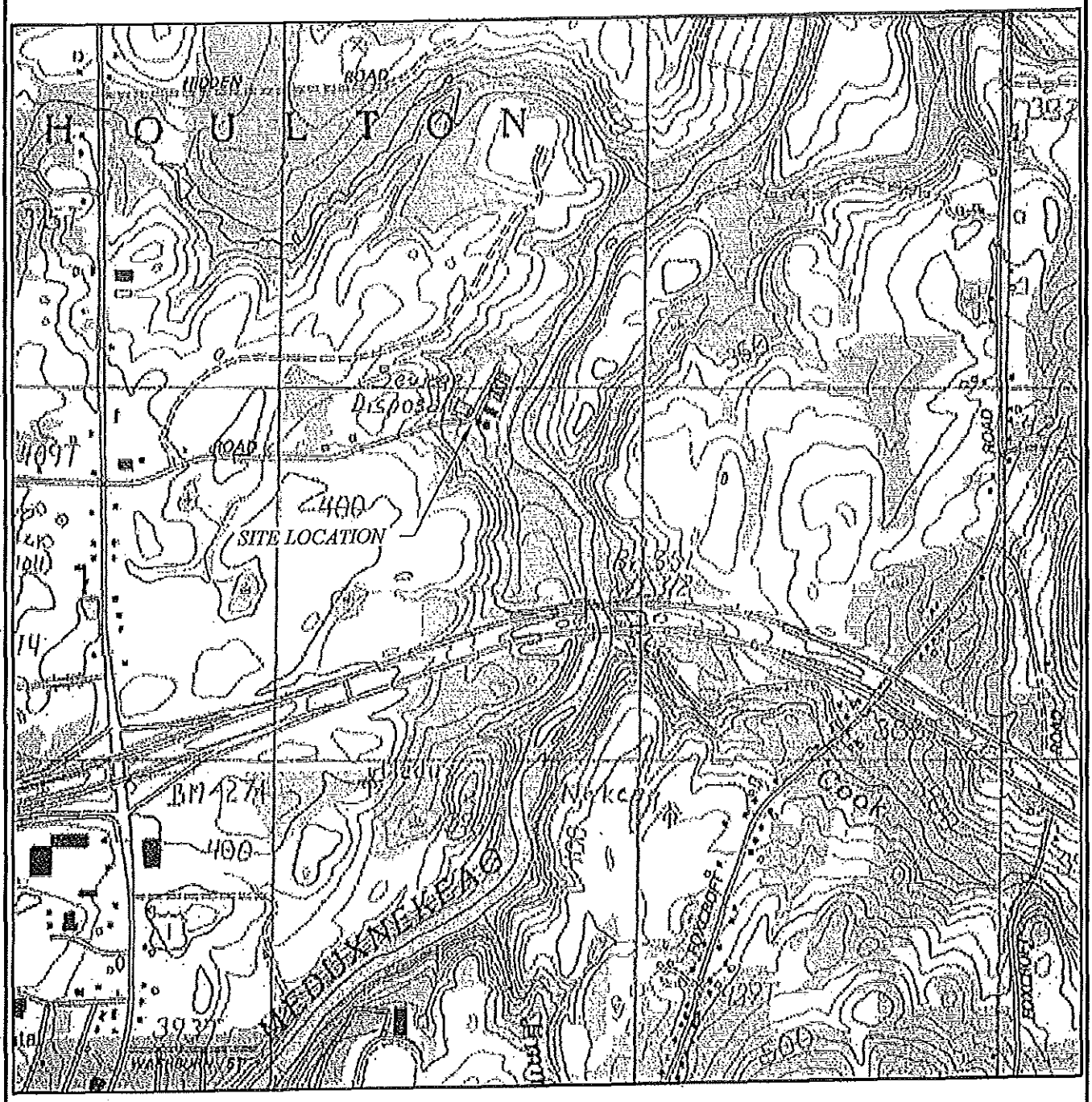

FIGURE 1

HOULTON WATER COMPANY
WASTEWATER TREATMENT FACILITY
SITE LOCATION MAP

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants

www.AcheronEngineering.com

147 Main St.
Newport, ME. 04953
(207)-365-5100

24466 Powell Rd.
Brooksville, FL. 34602
(352)-796-6236

Acheron Engineering, Inc.

JOB NO:	22844	DWG NO:	A-1719
SCALE:	NTS	DATE:	11-4-09

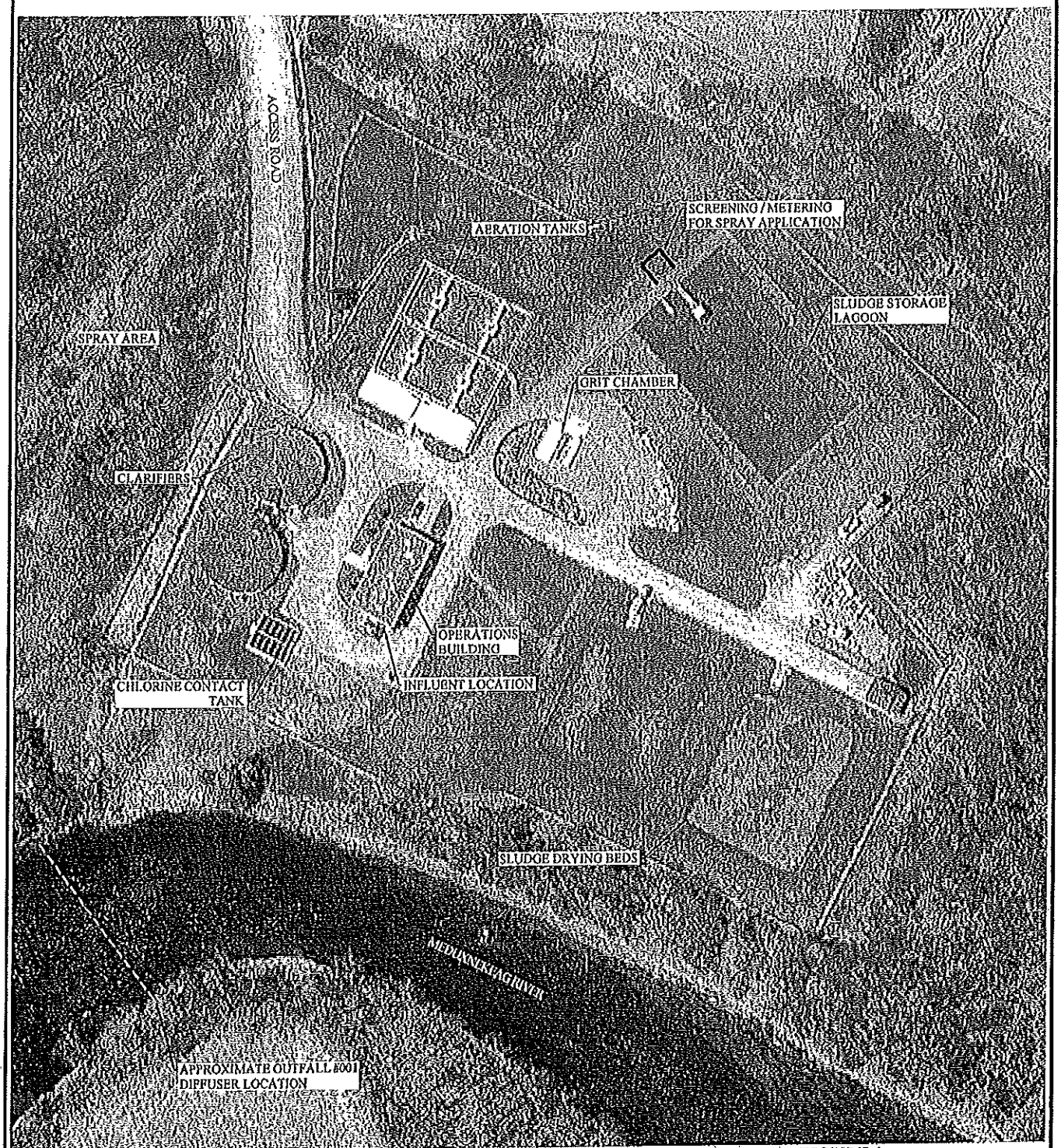

FIGURE 2

HOULTON WATER COMPANY
WASTEWATER TREATMENT FACILITY
FACILITY STRUCTURES MAP

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants
www.AcheronEngineering.com
147 Main St.
Newport, ME. 04953
(207)-368-5700
24466 Powell Rd.
Brooksville, Fl. 34602
(352)-796-6236
Acheron Engineering, Inc.

JOB NO:	12844	DWG NO:	A-1780
SCALE:	NTS	DATE:	11-4-09

ATTACHMENT B

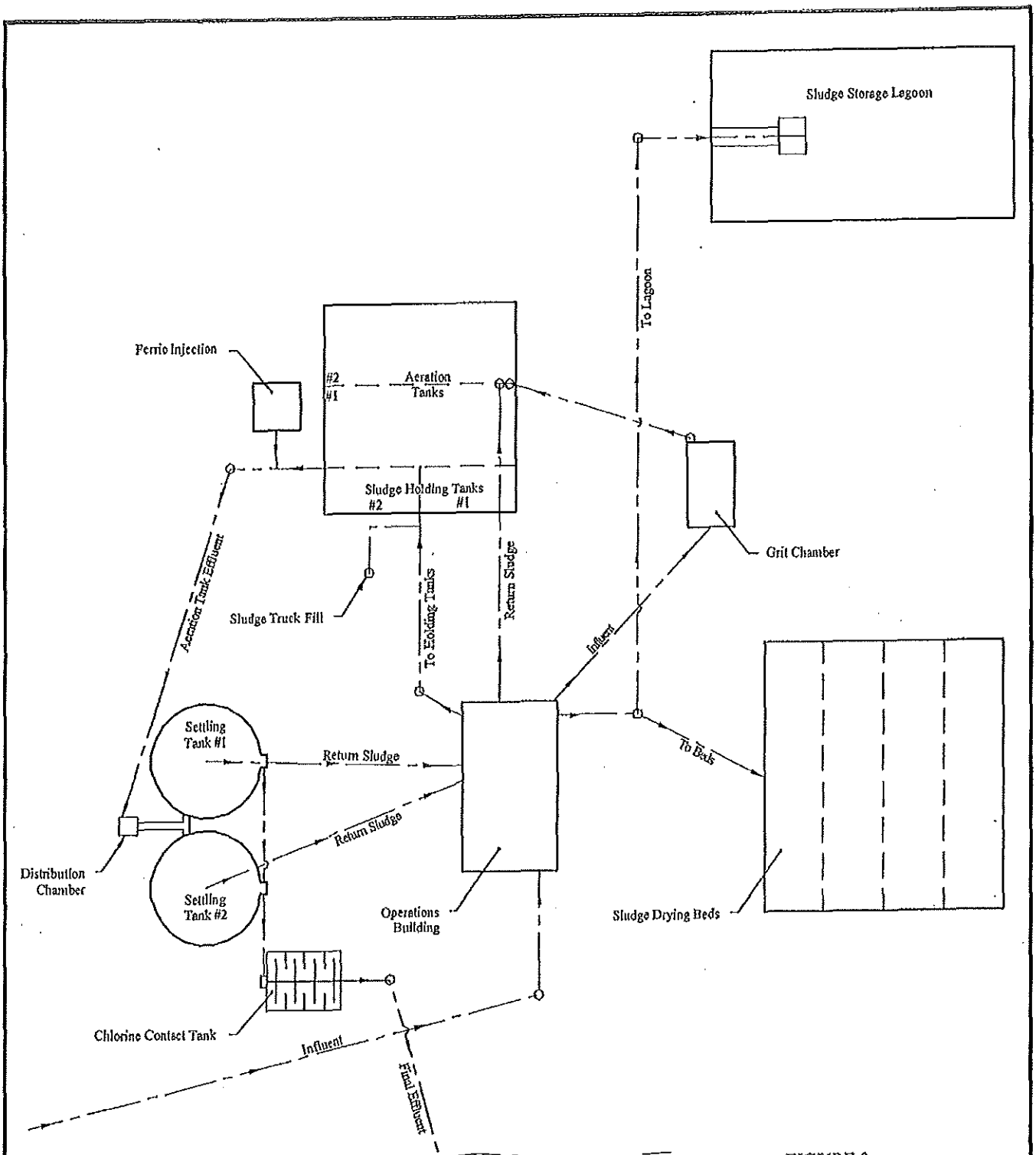

FIGURE 3

HOULTON WATER COMPANY
WASTEWATER TREATMENT FACILITY
TREATMENT FACILITY SCHEMATIC

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants
www.AcheronEngineering.com
147 Main St.
Newport, ME 04953
(207)-368-5100
24166 Powell Rd.
Brooksville, Fl. 34602
(352)-796-6236
Acheron International, Inc.

JOB NO:	22844	DWG NO:	A-1781
SCALE:	NTS	DATE:	11-4-09

ATTACHMENT C

WET TEST REPORT

Data for tests conducted for the period

19/Jul/2011 - 19/Jul/2016

HOULTON NPDES= ME010129 Effluent Limit: Acute (%) = 16.393 Chronic (%) = 13.889

Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	100	07/25/2011	16.393		
TROUT	A_NOEL	100	02/07/2012	16.393		
TROUT	A_NOEL	100	04/11/2012	16.393		
TROUT	A_NOEL	100	11/14/2012	16.393		
TROUT	A_NOEL	100	10/09/2013	16.393		
TROUT	A_NOEL	100	08/25/2014	16.393		
TROUT	A_NOEL	100	03/12/2015	16.393		
TROUT	A_NOEL	100	11/23/2015	16.393		
TROUT	A_NOEL	100	02/09/2016	16.393		
TROUT	C_NOEL	100	07/25/2011	13.889		
TROUT	C_NOEL	100	02/07/2012	13.889		
TROUT	C_NOEL	100	04/11/2012	13.889		
TROUT	C_NOEL	100	11/14/2012	13.889		
TROUT	C_NOEL	100	10/09/2013	13.889		
TROUT	C_NOEL	100	08/25/2014	13.889		
TROUT	C_NOEL	100	03/12/2015	13.889		
TROUT	C_NOEL	100	11/23/2015	13.889		
TROUT	C_NOEL	100	02/09/2016	13.889		
WATER FLEA	A_NOEL	100	02/07/2012	16.393		
WATER FLEA	A_NOEL	100	04/11/2012	16.393		
WATER FLEA	A_NOEL	100	03/12/2015	16.393		
WATER FLEA	A_NOEL	100	11/23/2015	16.393		
WATER FLEA	A_NOEL	100	02/09/2016	16.393		
WATER FLEA	C_NOEL	100	02/07/2012	13.889		
WATER FLEA	C_NOEL	100	04/11/2012	13.889		
WATER FLEA	C_NOEL	100	03/12/2015	13.889		
WATER FLEA	C_NOEL	100	11/23/2015	13.889		
WATER FLEA	C_NOEL	100	02/09/2016	13.889		

HOULTON WATER COMPANY NPDES= ME010129 Effluent Limit: Acute (%) = 16.393 Chronic (%) = 13.889

Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	1	06/28/2015	16.393	Y	
TROUT	A_NOEL	1	09/22/2015	16.393	Y	
TROUT	C_NOEL	1	06/28/2015	13.889	Y	

TROUT	C_NOEL	1	09/22/2015	13.889	Y
WATER FLEA	A_NOEL	1	06/28/2015	16.393	Y
WATER FLEA	A_NOEL	1	09/22/2015	16.393	Y
WATER FLEA	C_NOEL	1	06/28/2015	13.889	Y
WATER FLEA	C_NOEL	1	09/22/2015	13.889	Y

ATTACHMENT D

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 19/Jul/2011 - 19/Jul/2016

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

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
07/25/2011	0.58	0.34	19	10	0	0	0	9	0	F	0
08/22/2011	0.46	0.14	1	1	0	0	0	0	0	F	0
02/07/2012	0.44	0.73	19	10	0	0	0	9	0	F	0
04/11/2012	1.29	1.05	21	10	0	0	0	11	0	F	0
05/15/2012	1.41	1.81	1	1	0	0	0	0	0	F	0
11/14/2012	1.65	2.73	21	10	0	0	0	11	0	F	0
10/09/2013	0.47	0.58	21	10	0	0	0	11	0	F	0
01/21/2014	1.64	1.86	21	10	0	0	0	11	0	F	0
08/25/2014	0.23	0.11	21	10	0	0	0	11	0	F	0
03/12/2015	0.18	0.20	21	10	0	0	0	11	0	F	0
11/23/2015	1.03	1.19	18	9	0	0	0	9	0	F	0
11/24/2015	1.03	1.32	1	1	0	0	0	0	0	F	0
02/09/2016	NR	NR	21	10	0	0	0	11	0	F	0

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

Date Range: 19/Jul/2011 - 19/Jul/2016

Facility Name: **HOULTON WATER COMPANY** NPDES: **ME0101290**

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
06/28/2015	0.82	0.36	105	13	0	46	25	10	11	F	0
06/29/2015	0.82	0.46	28	0	28	0	0	0	0	F	0
09/22/2015	0.41	0.52	19	9	0	0	0	10	0	F	0

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

ATTACHMENT E

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES#_____Facility Name_____

Since the effective date of your permit, have there been;		NO	YES Describe in comments section
1	Increases in the number, types, and flows of industrial, commercial, or domestic discharges to the facility that in the judgment of the Department may cause the receiving water to become toxic?	☐	☐
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.

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.