STATE OF MAINE **DEPARTMENT OF ENVIRONMENTAL PROTECTION**



PAUL R. LEPAGE

GOVERNOR



PAUL MERCER COMMISSIONER

April 20, 2016

Mr. James R. Charette Town of Millinocket 197 Penobscot Ave. Millinocket, ME. 04462 wastewater@millinocket.org

Sent via electronic mail **Delivery confirmation requested**

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100803 Maine Waste Discharge License (WDL) Application #W002680-6D-I-R **Proposed Draft MEPDES Permit - Renewal**

Dear Mr. Charette:

Attached is a proposed draft MEPDES permit and Maine WDL which the Department proposes to issue for your facility as a final document after opportunity for your review and comment. By transmittal of this letter, you are provided with an opportunity to comment on the proposed draft permit and its special and standard conditions. If it contains errors or does not accurately reflect present or proposed conditions, please respond to this Department so that changes can be considered.

By copy of this letter, the Department is requesting comments on the proposed draft permit from various state and federal agencies and from any other parties who have notified the Department of their interest in this matter.

The comment period begins on April 20, 2016 and ends on May 20, 2016. All comments on the proposed draft permit must be received in the Department of Environmental Protection office on or before the close of business Friday, May 20, 2016. Failure to submit comments in a timely fashion will result in the proposed draft/license permit document being issued as drafted.

AUGUSTA 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017 (207) 287-7688 FAX: (207) 287-7826 (207) 941-4570 FAX: (207) 941-4584

BANGOR 106 HOGAN ROAD, SUITE 6 BANGOR, MAINE 04401

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

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

Town of Millinocket April 20, 2016 Page 2 of 2

Comments in writing should be submitted to my attention at the following address:

Maine Department of Environmental Protection Bureau of Water Quality Division of Water Quality Management 17 State House Station Augusta, ME 04333-0017 <u>Cindy.L.Dionne@maine.gov</u>

If you have any questions regarding the matter, please feel free to contact me.

Sincerely,

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Cindy L. Dionne Division of Water Quality Management Bureau of Water Quality ph: 207-557-5950

Enc.

ec: Barry Mower, DEP Pamela Parker, DEP Matthew Young, DEP Lori Mitchell, DEP Sean Mahoney, CLF Environmental Review, DMR David Webster, USEPA David Pincumbe, USEPA Alex Rosenberg, USEPA Alex Rosenberg, USEPA Olga Vergara, USEPA Marelyn Vega, USEPA Richard Carvalho, USEPA Environmental Review, IFW Dan Kusnierz, Penobscot Indian Nation



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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF MILLINOCKET PUBLICLY OWNED TREATMENT WORKS MILLINOCKET, PENOBSCOT COUNTY, MAINE ME0100803 W002680-6D-I-R **APPROVAL** MAINE POLLUTANT DISCHARGE
 ELIMINATION SYSTEM PERMIT
 AND
 WASTE DISCHARGE LICENSE
 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, and applicable rules of the Department of Environmental Protection (Department), the Department has considered the application of the Town of Millinocket (Millinocket), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On February 4, 2016, the Department accepted as complete for processing an application from Millinocket for renewal of combination Waste Discharge License (WDL) # W002680-6D-G-R / Maine Pollutant Discharge Elimination System (MEPDES) permit # ME0100803, which was issued by the Department on May 25, 2011 for a five-year term. The May 25, 2011 permit authorized the monthly average discharge of 2.33 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to the West Branch of the Penobscot River, Class C, in Millinocket, Maine.

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PERMIT SUMMARY

a. Terms and conditions

This permitting action is <u>different from</u> the May 25, 2011 permit in that it:

- 1. Eliminates Special Condition *J. Disposal of Transported Wastes* as requested by Millinocket;
- 2. Eliminates Special Condition C. Disinfection;
- 3. Eliminates Special Condition L. Ambient Water Quality Monitoring;
- 4. Eliminates the waiver for percent removal requirements for biochemical oxygen demand (BOD₅) and total suspended solids (TSS) when influent strength is less than 200 milligrams per liter (mg/L);
- 5. Incorporates 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 CMR 519 (last amended October 6, 2001);
- 6. Amends the whole effluent toxicity (WET) screening monitoring period from 12 months prior to permit expiration to 24 months prior to permit expiration;
- 7. Eliminates surveillance level WET and chemical testing based on facility results;
- 8. Increases the TRC monitoring frequency from 5/Week to 1/Day whenever elemental chlorine or chlorine based compounds are being used to disinfect the discharge per a request from the facility;
- 9. Reducing the monitoring frequency from 2/Week to 1/Week for pH;
- 10. Eliminates the seasonal, weekly effluent total phosphorus reporting condition; and
- 11. Eliminates numeric limits for total copper in response to facility testing results.

CONCLUSIONS

BASED on the findings in the attached and incorporated Fact Sheet dated April 20, 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.

ME0100803 W002680-6D-I-R

CONCLUSIONS (cont'd)

- 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 in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
 - (c) Where the standards of classification of the receiving waterbody are not met, the discharge will not cause or contribute to the failure of the waterbody to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving waterbody exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing water quality of any waterbody, 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 discharges 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).

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ACTION

THEREFORE, the Department APPROVES the application of the TOWN OF MILLINOCKET to discharge a monthly average of 2.33 million gallons per day of secondary treated sanitary wastewater from the permittee's facility to the West Branch of the Penobscot River, Class C, in Millinocket, Maine, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

- 1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable to All Permits," revised July 1, 2002, copy attached.
- 2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
- 3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. *Maine Administrative Procedure Act*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (amended October 19, 2015).

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS _____ DAY OF ____2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:___

PAUL MERCER, Commissioner

Date of initial receipt of application	February 3, 2016
Date of application acceptance	February 4, 2016

Date filed with Board of Environmental Protection

This Order prepared by Cindy L. Dionne, Bureau of Water Quality

SPECIAL CONDITIONS A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge secondary treated sanitary wastewater from <u>Outfall #001A</u> to the West Branch of the Penobscot River in Millinocket. Such discharges are limited and must be monitored by the permittee as specified below⁽¹⁾:

							Minimum		
Effluent Characteristic			Discharge Li	mitations		Monitoring Requirements			
	<u>Monthly</u>	<u>Weekly</u>	<u>Daily</u>	Monthly Weekly		Daily	<u>Measurement</u>	<u>Sample</u>	
	<u>Average</u>	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Average</u>	<u>Maximum</u>	Frequency	<u>Type</u>	
Flow [50050]	2.33 MGD [03]		Report MGD [03]				Continuous [99/99]	Recorder [RC]	
BOD ₅ [00310]	583 lbs./day [26]	874 lbs./day [26]	972 lbs./day [26]	30 mg/L [19]	45 mg/L <i>[19]</i>	50 mg/L [19]	1/Week [01/07]	24-Hour Composite [24]	
BOD ₅ Percent Removal ⁽²⁾ [81010]				85% [23]			1/Month [01/30]	Calculate [CA]	
TSS [00530]	583 lbs./day [26]	874 lbs./day [26]	972 lbs./day [26]	30 mg/L [19]	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	1/Week [01/07]	24-Hour Composite [24]	
TSS Percent Removal ⁽²⁾ [81011]				85% [23]			1/Month [01/30]	Calculate [CA]	
Escherichia coli (E. coli) Bacteria ^(3,4) [31633] (May 15^{th} – September 30^{th})				126/100 ml ⁽⁴⁾ [13]		949/100 ml [13]	2/Week ⁽⁵⁾ [02/07]	Grab [GR]	
Total Residual Chlorine ⁽⁶⁾ [50060]						1.0 mg/L <i>[19]</i>	1/Day [01/01]	Grab [GR]	
pH ⁽⁷⁾ [00400]						6.0 – 9.0 SU [12]	1/Week [01/07]	Grab [GR]	
Mercury (Total) ⁽⁸⁾ [71900]				12.4 ng/L [<i>3M</i>]		18.6 ng/L [3M]	1/Year [01/YR]	Grab [GR]	

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

Footnotes: See Pages 7-9 of this permit for applicable footnotes.

Page 6 of 14

SPECIAL CONDITIONS

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

2. The permittee is authorized to discharge **secondary treated municipal wastewaters from** <u>Outfall #001A</u> to the Penobscot River in Millinocket. Such discharges must be limited and monitored by the permittee as specified below ⁽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.

Effluent Characteristic		Discharge	Minimum Monitoring Requirements			
	Monthly <u>Average</u>	Daily <u>Maximum</u>	Monthly <u>Average</u>	Daily <u>Maximum</u>	Measurement <u>Frequency</u>	Sample Type
WETAcute - No Observed Effect Level(NOEL)Ceriodaphnia dubia (Water flea)[TDA3B]Salvelinus fontinalis (Brook trout)[TDA6F]				Report % [23] Report % [23]	1/Year [01/YR] 1/Year [01/YR]	Composite [24] Composite [24]
<u>Chronic – NOEL</u> Ceriodaphnia dubia (Water flea) [TBP3B] Salvelinus fontinalis (Brook trout) [TBQ6F]				Report % [23] Report % [23]	1/Year [01/YR] 1/Year [01/YR]	Composite [24] Composite [24]
Analytical chemistry ⁽¹⁰⁾ [51477]				Report µg/L [28]	1/Quarter [01/90]	Composite/Grab [24]
Priority Pollutant ⁽¹⁰⁾ [50008]				Report µg/L [28]	1/Year [01/YR]	Composite/Grab [24]

Footnotes: See Pages 7-9 of this permit for applicable footnotes.

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 sent to another POTW 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 CMR 263 (last amended April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

Influent samples for BOD₅ and TSS must be collected in the wet well of the last pump station prior to being conveyed to the treatment facility.

Effluent samples for all parameters must be collected after the last treatment process prior to discharge to the receiving water. The permittee may move the effluent sampling point to the operations building when the facility is <u>NOT</u> chlorinating or dechlorinating the effluent.

Any change in sampling location(s) must be reviewed and approved by the Department in writing.

- 2. Percent Removal The treatment facility must maintain a minimum of 85 percent removal of both biochemical oxygen demand and total suspended solids for all flows receiving secondary treatment. Compliance with the limitation is based on a twelve-month rolling average. Calendar monthly average percent removal values must be calculated based on influent and effluent concentrations. The twelve-month rolling average calculation is based on the most recent twelve-month period.
- **3.** *E. coli* bacteria *E. coli* bacteria limits and monitoring requirements are seasonal and apply between May 15th and September 30th of each year. In accordance with 38 M.R.S. § 414-A(5), the Department may, at any time and with notice to the permittee, modify this permit to establish bacteria limitations on a year-round basis to protect the health and welfare of the public.
- 4. Bacteria Reporting The monthly average *E. coli* bacteria limitation is a geometric mean limitation and sample results must be reported as such.

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

Footnotes

- **5. Two/week sampling requirement** There must be at least one day between sampling events when required to sample 2/week.
- 6. Total residual chlorine (TRC) Limitations 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.
- **7. pH** The pH value of the effluent must not be lower than 6.0 SU nor higher than 9.0 SU at any time unless due to natural causes.
- 8. Mercury The permittee must conduct all mercury monitoring required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the U.S. Environmental Protection Agency's (USEPA) "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.
- **9.** 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 0.71% and 0.16%, respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction or growth as the end points. The critical acute and chronic thresholds were derived as the mathematical inverse of the applicable acute and chronic dilution factors of 140:1 and 617:1, respectively, for Outfall #001A.

Test results must be submitted to the Department no later than the next 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 exceedences of the critical acute and chronic water quality thresholds of 0.71% and 0.16%, respectively.

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

Footnotes

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

- 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).
- 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).

Results of WET tests must be reported on the "Whole Effluent Toxicity Report Fresh Waters" form included as **Attachment C** of this permit each time a WET test is performed.

The permittee must analyze the effluent for the analytical chemistry and priority pollutant parameters specified on the "WET and Chemical Specific Data Report Form" form included as **Attachment D** of this permit each time a WET test is performed.

10. Analytical chemistry and Priority Pollutant testing – Refers to those pollutants listed in their respective categories on the form included as Attachment D of this permit.

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 human health ambient water quality criteria (AWQC) as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective July 29, 2012). For the purposes of DMR reporting, enter a "1" for <u>yes</u>, testing done this monitoring period or "N-9" monitoring <u>not required</u> this period.

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

Footnotes

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.

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

D. NOTIFICATION REQUIREMENT

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

- 1. Any 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 (increase or decrease) in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants into 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.

E. MONITORING AND REPORTING

Monitoring results obtained during the previous month must be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and **postmarked on or before the thirteenth** (13th) day of the month or handdelivered to the Department's Regional Office such that the DMRs are received by the Department on or before the fifteenth (15th) day of the month following the completed reporting period. A signed copy of the DMR and all other reports required herein must be submitted to the Department-assigned inspector (unless otherwise specified by the Department) at the following address:

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

E. MONITORING AND REPORTING (cont'd)

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

F. 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, and submit the results to the Department. 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 CMR 528 (last amended March 17, 2008).

G. 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 4, 2016, 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of wastewater from any other point source are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit.

H. WET WEATHER FLOW MANAGEMENT PLAN

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

H. WET WEATHER FLOW MANAGEMENT PLAN (cont'd)

The plan must conform to Department guidelines for such plans and 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 permittee must review their plan at least annually and record any necessary changes to keep the plan up to date. The Department may require review and update of the plan as it is determined to be necessary.

I. OPERATION & MAINTENANCE (O&M) PLAN

The permittee must maintain a current written comprehensive Operation & Maintenance (O&M) Plan for the facility. The plan must provide a systematic approach by which the permittee must 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. 06-096 CMR 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 75305]*. See **Attachment C** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

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

J. 06-096 CMR 530(2)(D)(4) STATEMENT FOR REDUCED/WAIVED TOXICS TESTING (cont'd)

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

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

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

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

K. REOPENING OF PERMIT FOR MODIFICATIONS

In accordance with 38 M.R.S. § 414-A(5) and upon evaluation of the test 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 or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit must remain in full force and effect, and must be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

CONTENTS

SECTION		TOPIC						
А		GENERAL PROVISIONS						
	1	General compliance	2					
		Other materials	2					
	3	Duty to Comply	2					
		Duty to provide information	2					
		Permit actions	2					
	6	Reopener clause	2					
	7	Oil and hazardous substances	2					
	8	Property rights	3					
	9	Confidentiality	3					
		Duty to reapply	3					
		Other laws	3					
	12	Inspection and entry	3					
В		OPERATION AND MAINTENANCE OF FACILITIES						
	1	General facility requirements	3					
	2	Proper operation and maintenance	4					
	3	Need to halt reduce not a defense	4					
	4	Duty to mitigate	4					
	5	Bypasses	4					
	6	Upsets	5					
С		MONITORING AND RECORDS						
	1	General requirements	6					
	2	Representative sampling	6					
	3	Monitoring and records	6					
D		REPORTING REQUIREMENTS						
	1	Reporting requirements	7					
	2	Signatory requirement	8					
		Availability of reports	8					
		Existing manufacturing, commercial, mining, and silvicultural dischargers	8					
	5	Publicly owned treatment works	9					
Е		OTHER PROVISIONS						
	1	Emergency action - power failure	9					
	2	Spill prevention	10					
	3	Removed substances	10					
	4	Connection to municipal sewer	10					
F		DEFINTIONS	10					

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).

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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 nonroutine 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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

(a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or

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

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

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

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

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.

ATTACHMENT A

Data Date Range:

09/Feb/2001-09/Feb/2016



Facility: MILLINOCKET

Permit Number: ME0100803

Max (ug/l): 0.0171		Average (ug/l): 0.0054		
:	Sample Date	Result (ng/l)	Lsthan	Clean
	02/03/2009	4.00	Ν	Т
	04/22/2009	3.50	Ν	Т
	08/19/2009	4.50	Ν	т
	12/03/2009	4.10	Ν	Т
	02/24/2010	4.30	Ν	Т
	05/12/2010	5.00	Ν	Т
	08/11/2010	5.21	Ν	т
	11/17/2010	7.07	Ν	Т
	02/09/2011	4.10	Ν	Т
	05/04/2011	1.10	Ν	Т
	08/10/2011	1.30	Ν	Т
	11/16/2011	8.60	Ν	Т
	02/07/2012	6.79	Ν	Т
	06/05/2013	17.10	Ν	Т
	09/10/2014	4.45	Ν	т

ATTACHMENT B

Salmonid Survival and Growth Test

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

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

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

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

Loading Rate - < 0.5 g/l/day

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

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

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

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

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

Duration - Acute = 48 hours

- Chronic = 10 days minimum

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

ATTACHMENT C

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION WHOLE EFFLUENT TOXICITY REPORT FRESH WATERS

Facility Name			MEPDES Permit # Pipe #						
Facility Representative By signing this form, I attest that	to the best of m	y knowledge that the	Signature	is true, accurate,	033000990000000000000000				
Facility Telephone #			Date Collected		Date Tested				
Chlorinated?		Dechlorinated?		mm/dd/yy		mm/dd/yy			
Results A-NOEL C-NOEL	% ef water flea	fluent trout]		A-NOEL C-NOEL	Effluent Limitations			
Data summary	%	water flea survival	no. young	% 5	trout survival	final weight (mg)			
QC standard lab control receiving water control conc. 1 (%) conc. 2 (%) conc. 3 (%) conc. 5 (%) conc. 6 (%) stat test used place * next Reference toxicant toxicant / date limits (mg/L) results (mg/L)	A>90 to values stati	C>80	>15/female	A>90	C>80	> 2% increase > 2% increase cr for both controls			
Comments Laboratory conducting test									
Company Name			Company Rep. Nan Company Rep. Sigr						
			• • • • •						
City, State, ZIP			Company Telephon	ie #					

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

ATTACHMENT D

Maine Department of Environmental Protection

WET and Chem

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

Facility Name				MEPDES # Pipe #		Facility R	Representative Signature To the best of my kn		ormation is true	e, accurate ai	nd complete.
Licensed Flow (MGD) Acute dilution factor		Flow for Day (MGD) ⁽¹⁾			Flow Avg. for Month (MGD) ⁽²				I		
	Chronic dilution factor			Date Samp	le Collected		Date Sam	ple Analyzed		ī	
	Human health dilution factor			• • • • •			_	, , , , , , , , , , , , , , , , , , , ,		1	
	Criteria type: M(arine) or F(resh)	f			Laboratory				Telephone		
	Last Revision - July 1, 2015				_				- 		
	ERROR WARNING ! Essential facility	FRESH W	ATER VEF		Lab Contact				Lad ID #		
	information is missing. Please check required entries in bold above.	Please see the fo	ootnotes on	the last page.		Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)				
	WHOLE EFFLUENT TOXICITY										
			Effluen Acute	t Limits, % Chronic			WET Result, % Do not enter % sign	Reporting Limit Check	Possibl Acute	e Exceed	ence ⁽⁷⁾
	Trout - Acute										
	Trout - Chronic										
	Water Flea - Acute										
	Water Flea - Chronic										
	WET CHEMISTRY										
	pH (S.U.) (9)								1		
	Total Organic Carbon (mg/L)					(8)					
	Total Solids (mg/L)					X-7					
	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⁾				I. I.	(3)			1		
	Also do these tests on the effluent with								1		(7)
	WET. Testing on the receiving water is			luent Limits,				Reporting	Possibl	e Exceed	ence (/)
	optional	Reporting Limit	Acute ⁽⁶⁾	Chronic ⁽⁶⁾	Health ⁽⁶⁾			Limit Check	Acute	Chronic	Health
	TOTAL RESIDUAL CHLORINE (mg/L) (9)	0.05				NA					
	AMMONIA	NA				(8)					
М	ALUMINUM	NA				(8)					
M	ARSENIC	5				(8)					
M	CADMIUM	1		İ		(8)			1		
M	CHROMIUM	10				(8)					
M	COPPER	3				(8)				1	
M	CYANIDE, TOTAL	5				(8)					
	CYANIDE, AVAILABLE ^(3a)	5				(8)					
М	LEAD	3				(8)				L	
М	NICKEL	5				(8)				L	
Μ	SILVER	1				(8)				<u> </u>	
Μ	ZINC	5				(8)					
Maine Department of Environmental Protection

WET and Chem

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	PRIORITY POLLUTANTS (4)										
				Effluent Limits				Possible Exceedence ⁽⁷⁾			
		Reporting Limit	Acute ⁽⁶⁾	Chronic ⁽⁶⁾	Health ⁽⁶⁾			Reporting Limit Check	Acute	Chronic	Health
Μ	ANTIMONY	5									
Μ	BERYLLIUM	2									
Μ	MERCURY (5)	0.2									
М	SELENIUM	5									ſ
Μ	THALLIUM	4									
А	2,4,6-TRICHLOROPHENOL	5									ſ
А	2,4-DICHLOROPHENOL 2,4-DIMETHYLPHENOL	5									
А	2,4-DIMETHYLPHENOL	5									
А	2,4-DINITROPHENOL	45									
А	2-CHLOROPHENOL	5									
A	2-NITROPHENOL	5									
	4,6 DINITRO-O-CRESOL (2-Methyl-4,6-										
А	dinitrophenol)	25									
A	4-NITROPHENOL	20									
	P-CHLORO-M-CRESOL (3-methyl-4-	20									
Δ	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		5									
BN	1,4-(P)DICHLOROBENZENE 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									
											<u> </u>
BN BN	BENZIDINE BENZO(A)ANTHRACENE	45 8									
	BENZO(A)ANTHRACENE BENZO(A)PYRENE										
BN	BENZO(A)PYRENE BENZO(G,H,I)PERYLENE	5									
BN		5									
BN	BENZO(K)FLUORANTHENE	5									
BN	BIS(2-CHLOROETHOXY)METHANE BIS(2-CHLOROETHYL)ETHER	5									
BN		6		+	+		}	1			
BN	BIS(2-CHLOROISOPROPYL)ETHER	6		+	+		}	1			
BN	BIS(2-ETHYLHEXYL)PHTHALATE	10		+	+		}	1			
BN	BUTYLBENZYL PHTHALATE	5					l	I			
BN	CHRYSENE	5									
BN	DI-N-BUTYL PHTHALATE	5	ļ					I			ļ
BN	DI-N-OCTYL PHTHALATE	5						Į			ļ
ΒN	DIBENZO(A,H)ANTHRACENE	5						Į			ļ
ΒN	DIETHYL PHTHALATE	5									ļ
ΒN	DIMETHYL PHTHALATE	5					ļ	I			ļ
ΒN	FLUORANTHENE	5									

Maine Department of Environmental Protection WET and Chem

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DN								
BN BN	FLUORENE HEXACHLOROBENZENE	5						
BN	HEXACHLOROBUTADIENE HEXACHLOROCYCLOPENTADIENE	5						
		10 5						
BN	HEXACHLOROETHANE INDENO(1,2,3-CD)PYRENE							
BN BN	INDENO(1,2,3-CD)PYRENE	5						
	N-NITROSODI-N-PROPYLAMINE	10						
BN	N-NITROSODI-N-PROPYLAMINE							
BN BN	N-NITROSODINE I HYLAMINE	5						
BN	NAPHTHALENE							
BIN	NITROBENZENE	5						
		5						
BN	PHENANTHRENE PYRENE	5						
BN		0.05						
P	4,4'-DDD							
P	4,4'-DDE	0.05						
	4,4'-DDT	0.05	├────					⊢−−−− −
P		0.2	├────					⊢−−−− −ੀ
Р	A-ENDOSULFAN	0.05	├ ──── │	ł – – – – – – – – – – – – – – – – – – –		8		 ↓
P	ALDRIN	0.15	├ ──── │	ł – – – – – – – – – – – – – – – – – – –		8		 ↓
P	B-BHC	0.05	├────	<u> </u>				 ┢────┤
P	B-ENDOSULFAN	0.05	-	-				l
1	CHLORDANE	0.1						
Ρ	D-BHC	0.05						
Р		0.05						
Ρ	ENDOSULFAN SULFATE	0.1						
Ρ	ENDRIN	0.05						
Ρ	ENDRIN ALDEHYDE	0.05						
Ρ	G-BHC	0.15						
Ρ	HEPTACHLOR	0.15						
Ρ	HEPTACHLOR EPOXIDE	0.1						
Ρ	PCB-1016	0.3						ļ
Ρ	PCB-1221	0.3						 ļ
Ρ	PCB-1232	0.3						
Ρ	PCB-1242	0.3						ļ
Ρ	PCB-1248	0.3						
Ρ	PCB-1254	0.3		ļ				ļ]
Ρ	PCB-1260	0.2						ļ]
Ρ	TOXAPHENE	1						 ļ]
V	1,1,1-TRICHLOROETHANE	5						ļ]
V	1,1,2,2-TETRACHLOROETHANE	7						 ļ]
V	1,1,2-TRICHLOROETHANE	5						 ļ]
V	1,1-DICHLOROETHANE	5		ļ				L
	1,1-DICHLOROETHYLENE (1,1-							1 1
V	dichloroethene)	3		ļ		l		
V	1,2-DICHLORÓETHANE	3		ļ				
V	1,2-DICHLOROPROPANE	6						
	1,2-TRANS-DICHLOROETHYLENE (1,2-							7
V	trans-dichloroethene)	5						
	1,3-DICHLOROPROPYLENE (1,3-							
V	dichloropropene)	5		 				<u> </u>
V	2-CHLOROETHYLVINYL ETHER	20						
V	ACROLEIN	NA						
V	ACRYLONITRILE	NA						
V	BENZENE	5						
	•		• • • •			8		,

Revised July 1, 2015

Maine Department of Environmental Protection WET and Chem

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V	BROMOFORM	5					
\vee	CARBON TETRACHLORIDE	5					
\vee	CHLOROBENZENE	6					
V	CHLORODIBROMOMETHANE	3					
\vee	CHLOROETHANE	5					
\vee	CHLOROFORM	5					
\vee	DICHLOROBROMOMETHANE	3					
\vee	ETHYLBENZENE	10					
\vee	METHYL BROMIDE (Bromomethane)	5					
\vee	METHYL CHLORIDE (Chloromethane)	5					
\vee	METHYLENE CHLORIDE	5					
	TETRACHLOROETHYLENE						
V	(Perchloroethylene or Tetrachloroethene)	5					
\vee	TOLUENE	5					
	TRICHLOROETHYLENE						
V	(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 AND WASTE DISCHARGE LICENSE

FACT SHEET

Date: April 20, 2016

MEPDES PERMIT:ME0100803WASTE DISCHARGE LICENSE:W002680-6D-I-R

NAME AND ADDRESS OF APPLICANT:

TOWN OF MILLINOCKET 197 PENOBSCOT AVENUE MILLINOCKET, ME 04462

COUNTY:

PENOBSCOT

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

MILLINOCKET WASTEWATER TREATMENT FACILITY 36 LAGOON ROAD MILLINOCKET, MAINE 04462

RECEIVING WATER / CLASSIFICATION:

WEST BRANCH OF THE PENOBSCOT RIVER/CLASS C

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

MR. JAMES CHARETTE (207) 723-7040 wastewater@millinocket.org

1. APPLICATION SUMMARY

a. <u>Application:</u> On February 4, 2016, the Department of Environmental Protection (Department) accepted as complete for processing an application from the Town of Millinocket (Millinocket) for renewal of combination Waste Discharge License (WDL) # W002680-6D-G-R / Maine Pollutant Discharge Elimination System (MEPDES) permit # ME0100803, which was issued by the Department on May 25, 2011 for a five-year term. The May 25, 2011 permit authorized the monthly average discharge of 2.33 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to the West Branch of the Penobscot River, Class C, in Millinocket, Maine.

2. PERMIT SUMMARY

a. <u>Terms and conditions</u>

This permitting action is <u>different from</u> the May 25, 2011 permit in that it:

- 1. Eliminates Special Condition J. Disposal of Transported Wastes as requested by Millinocket;
- 2. Eliminates Special Condition *C. Disinfection*;
- 3. Eliminates Special Condition L. Ambient Water Quality Monitoring;
- 4. Eliminates the waiver for percent removal requirements for biochemical oxygen demand (BOD₅) and total suspended solids (TSS) when influent strength is less than 200 milligrams per liter (mg/L);
- Incorporates 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 CMR 519 (last amended October 6, 2001);
- 6. Amends the whole effluent toxicity (WET) screening monitoring period from 12 months prior to permit expiration to 24 months prior to permit expiration;
- 7. Eliminates surveillance level WET and chemical testing based on facility results;
- 8. Increases the TRC monitoring frequency from 5/Week to 1/Day whenever elemental chlorine or chlorine based compounds are being used to disinfect the discharge per a request from the facility;
- 9. Reducing the monitoring frequency from 2/Week to 1/Week for pH;
- 10. Eliminates the seasonal, weekly effluent total phosphorus reporting condition; and

2. PERMIT SUMMARY (cont'd)

- 11. Eliminates numeric limits for total copper in response to facility testing results.
- b. <u>History:</u> This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the permittee's facility.

June 26, 1992 - The U.S. Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0100803 to the Town of Millinocket for a five-year term. This constituted the last USEPA permitting action for the facility.

April 30, 1997 - The Department issued WDL #W-002680-46-D-R for a five-year term.

May 23, 2000 – Pursuant to Maine law, 38 M.R.S. §420 and §413 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL #W002680-46-D-R by establishing interim monthly average and daily maximum effluent concentration limits of 12.4 parts per trillion (ppt) and 18.6 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. From that date forward, the permit program has been referred to as the MEPDES permit program and ME0100803 (same as the NPDES permit) will be the primary reference number for the facility.

May 6, 2003 – The Department issued WDL #W-002680-5L-E-R for a five-year term.

February 11, 2004 – The Department issued WDL #W-002680-5L-F-M / MEPDES Permit #ME0100803 to the Town of Millinocket for the discharge of up to a monthly average of 2.33 MGD of secondary treated sanitary wastewater to the West Branch of the Penobscot River. The Permit/WDL incorporated the terms and conditions of the MEPDES permit program and was issued for a five-year term.

January 9, 2009 – The Town of Millinocket submitted a timely application for renewal of its WDL / MEPDES Permit. The application was assigned WDL #W-002680-5L-G-R / MEPDES Permit #ME0100803.

May 25, 2011 – The Department issued MEPDES permit #ME0100803 / WDL #W002680-6D-G-R for a five-year term.

January 8, 2013 – The Department initiated a modification of the 5/25/11 permit to reduce the monitoring frequency for mercury to once per year.

2. PERMIT SUMMARY (cont'd)

February 3, 2016 – The permittee submitted a timely and complete General Application to the Department for renewal of the May 25, 2011 permit (including subsequent minor permit revisions and permit modifications). The application was accepted for processing on February 4, 2016 and was assigned WDL #W002680-6D-I-R / MEPDES #ME0100803.

c. <u>Source Description</u>: The wastewater treatment facility receives sanitary wastewater flows from a population of approximately 5,200 residential and commercial users within the Town of Millinocket.

The Town owns and maintains a sewer collection system that is approximately 36 miles in length and is 100% separated. The collection system has five (5) pump stations (one dedicated to a public school), all with emergency power provisions and audio/visual alarm systems.

A map showing the location of the facility and the receiving water is included as Fact Sheet **Attachment A.**

d. <u>Wastewater Treatment:</u> The wastewater treatment facility provides for a secondary level of treatment via three aerated facultative lagoons each with fine bubble diffused aeration (Pond #2 upgraded in 1999 and Pond #1 upgraded in 2001) that can be operated in series or parallel. The three lagoons have a total surface area of 13.1 acres, a total volume of 33.2 million gallons and provides for a detention time of up to 28 days. The effluent from the final lagoon is disinfected by sodium hypochlorite and discharged to the West Branch of the Penobscot River via a reinforced concrete pipe measuring 36-inches in diameter that outlets on the north bank of the river, five feet from shore in a depth of one foot at summer river stage level. During the next scheduled sludge removal, Millinocket plans to replace the existing aeration lines in Pond #3 to provide better mixing and oxygen transfer.

A process flow schematic for the facility is included as Fact Sheet Attachment B.

3. CONDITIONS OF PERMIT

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 the application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, *Certain deposits and discharges prohibited,* 38 M.R.S. § 420 and Department rule *Surface Water Toxics Control Program,* 06-096 CMR 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 CMR 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(7)(C)(1)(f) classifies the West Branch of the Penobscot River, main stem at the point of discharge (from the outlet of Ferguson and Quakish Lakes to its confluence with the East Branch of the Penobscot River, including all impoundments) as Class C water. *Standards for classification of fresh surface waters*, 38 M.R.S. § 465(4) describes the standards for Class C waters.

5. RECEIVING WATER QUALITY CONDITIONS

The following is an excerpt from the <u>State of Maine 2012 Integrated Water Quality Monitoring</u> <u>and Assessment Report</u>, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act.

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

The Department therefore delisted five Penobscot River segments, including the segment that contains the Millinocket discharge, Assessment Unit ME0102000109_205R01 (West Branch of the Penobscot River, including Dolby Pond) as "Category 4-B: Rivers and Streams Impaired by Pollutants – Pollution Control Requirements Reasonably Expected to Result in Attainment" for dissolved oxygen and nutrient/eutrophication biological indicators. A comment in the report states that "2011 permits (Millinocket) providing nutrient limits are expected to correct existing aquatic life use impairments. Expected to attain in 2016."

The Report lists all of Maine's fresh waters as, "Category 4-A: Waters Impaired by Atmospheric Deposition of Mercury." Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, "All freshwaters are listed in Category 4A (Total Maximum Daily Load (TMDL) Completed) due to USEPA approval of a Regional Mercury TMDL." Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many fish from any given waters do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

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 CMR 519.

The Department has no information that the discharge from the permittee, as conditioned, causes or contributes to non-attainment of applicable Class C water quality standards.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. <u>Flow:</u> Previous permitting action established a monthly average discharge flow limitation of 2.33 MGD, which this permitting action is carrying forward.

This permitting action is also carrying forward all mass-based effluent limits based on the previously established flow limit of 2.33 MGD.

The Department reviewed 55 Discharge Monitoring Reports (DMRs) that were submitted for the period of June 2011 through December 2015. A review of data indicates the following:

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	2.33	0.32 - 2.06	0.8
Daily Maximum	Report	0.65 - 5.44	1.6

Flow

b. <u>Dilution Factors</u>: The Department established applicable dilution factors for the discharge in accordance with freshwater protocols established in *Surface Water Toxics Control Program*, 06-096 CMR 530 (last amended March 21, 2012). The previous permitting action established dilution factors based on the 2.33 MGD flow limit to ensure that water quality-based limits are protective of receiving water quality on a year-round basis.

With a monthly average flow limit of 2.33 MGD, dilution factors for the facility are as follows:

Modified Acute = 500 cfs
$$\Rightarrow$$
 (500 cfs)(0.6464) + (2.33 MGD) = 140:1
(2.33 MGD)

Acute: 1Q10 = 2,000 cfs $\Rightarrow (2,000 \text{ cfs})(0.6464) + (2.33 \text{ MGD}) = 556:1$ (2.33 MGD) Chronic: 7Q10 = 2,219 cfs $\Rightarrow (2,219 \text{ cfs})(0.6464) + (2.33 \text{ MGD}) = 617:1$ (2.33 MGD) Harmonic Mean: = 2,364 cfs $\Rightarrow (2,364 \text{ cfs})(0.6464) + (2.33 \text{ MGD}) = 657:1$ (2.33 MGD)

06-096 CMR 530(4)(B)(1) states that analyses using numeric acute criteria for aquatic life must be based on $\frac{1}{4}$ of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone. The regulation goes on to say that where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design, up to including all of it.

The Department has made the determination the discharge does not receive rapid and complete mixing with the receiving water, therefore the default stream flow of ¹/₄ of the 1Q10 is applicable in acute statistical evaluations.

c. <u>Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS)</u>: Previous permitting action established , and this permitting action is carrying forward, monthly average and weekly average BOD₅ and TSS concentration limits of 30 milligrams per liter (mg/L) and 45 mg/L, respectively, which were based on secondary treatment requirements pursuant to 40 CFR 133.102 and 06-096 CMR 525(3)(III). Previous permitting action also established, and this permitting action is carrying forward, daily maximum BOD₅ and TSS concentration limits of 50 mg/L based on a Department best professional judgement (BPJ) of BPT for secondary treated wastewater. All three concentration limitations are being carried forward in this permitting action.

The mass limitations were derived as follows:

1	viass Lining Calculation		
	Monthly Average	(30 mg/L)(8.34 lbs./gallon)(2.33 MGD) =	583 lbs./day
	Weekly Average	(45 mg/L)(8.34 lbs./gallon)(2.33 MGD) =	874 lbs./day
	Daily Maximum	(50 mg/L)(8.34 lbs./gallon)(2.33 MGD) =	972 lbs./day

Mass Limit Calculations

This permitting action is also carrying forward the requirement for a minimum of 85% removal of BOD₅ & TSS pursuant to 06-096 CMR 525(3)(III)(a)(3) and (b)(3). The permittee has not demonstrated that it qualifies for special considerations pursuant to 06-096 CMR 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.

A summary of BOD_5 data as reported on the DMRs submitted to the Department for the period of June 2011 – December 2015 is as follows:

BOD₅ Mass

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	583	17 - 171	57
Weekly Average	874	21 - 335	83
Daily Maximum	972	24 - 457	105

BOD₅ Concentration

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	4 - 14	9
Weekly Average	45	5-17	11
Daily Maximum	50	5-19	12

A summary of TSS data as reported on the DMRs submitted to the Department for the period of June 2011 – December 2015 is as follows:

TSS Mass

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	583	6-170	31
Weekly Average	874	7-378	51
Daily Maximum	972	8-571	66

TSS Concentration

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	1 - 14	5
Weekly Average	45	2-20	6
Daily Maximum	50	2-25	7

Minimum monitoring frequency requirements in MEPDES permits are prescribed by 06-096 CMR Chapter 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 is justified.

Although USEPA's 1996 Guidance recommends evaluation of the most current two years of effluent data for a parameter, the Department is considering 55 months of data (June 2011 – December 2015). A review of the mass monitoring data for BOD₅ & TSS indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as 10% for BOD₅ and 5% for TSS. According to Table I of the USEPA Guidance and Department Guidance, the monitoring requirement can be reduced to 1/Month for both BOD₅ and TSS, however, taking into consideration both the USEPA and Department Guidance, this permitting action is reducing the current monitoring frequency of 2/Week to 1/Week for BOD₅ and TSS.

d. <u>Escherichia coli bacteria</u>: The previous permitting action established, and this permitting action is carrying forward, seasonal monthly average and daily maximum *Escherichia coli* bacteria limitations of 126 colonies/100 ml (geometric mean) and 949 colonies/100 ml (instantaneous), respectively, that are in effect between May 15 and September 30, inclusive, of each year.

During calendar year 2005, Maine's Legislature approved a new daily maximum water quality standard of 236 colonies/100 ml for Class B and Class C waters. The Department has determined that end-of-pipe limitations for the instantaneous concentration standard of 236 colonies/100 mL will be achieved through available dilution of the effluent with the receiving waters and need not be revised in MEPDES permits for facilities with adequate dilution (at least 1.1:1 for facilities in Class B waters).

A review of the data as reported on the monthly DMRs for the period of June 2011 – September 2015 indicates the following:

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	126	1 - 50	11
Daily Maximum	949	1 - 816	125

E. coli Bacteria (n=24)

e. <u>Total Residual Chlorine (TRC)</u>: The previous permitting action established a daily maximum BPT-based concentration limit of 1.0 mg/L as well as a minimum monitoring frequency requirement of five times a week at all times during the year. The Department specifies TRC limitations in order to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. The Department imposes the more stringent of either water quality-based or BPT-based limits. End-of-pipe acute and chronic water quality-based concentration thresholds may be calculated as follows:

Criterion		Dilution Factors	Calculated Threshold
Acute	0.019 mg/L	140:1	2.66 mg/L
Chronic	0.011 mg/L	617:1	6.79 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that must dechlorinate the effluent in order to consistently achieve compliance with 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 permittee's wastewater treatment process does not include effluent dechlorination following disinfection. This permitting action is carrying forward the daily maximum BPT-based concentration limit of 1.0 mg/L as it is more stringent than the water quality-based thresholds of 2.66 mg/L (acute) and 6.79 mg/L (chronic) as calculated above. The permitting action is amending the monitoring frequency be amended to 1/Day. Therefore this permitting action is amending the monitoring requirement for TRC from 5/Week to 1/Day. Although bacteria limitations are seasonal and apply between May 15 and September 30 of each year, the facility must monitor and report TRC during any period that chlorine-based compounds are in use at the facility because chlorine compounds are toxic at all times of the year.

A summary of TRC data as reported on the monthly DMRs for the period of June 2011 – December 2015 is as follows:

Total residual chlorine (DMRs=2)

rour residuar emorme (Diving-2)								
Value Limit (mg/L)		Range (mg/L)	Mean (mg/L)					
Daily Maximum	1.0	0.35 - 0.47	0.4					

- f. <u>pH:</u> The previous permitting action established a technology based pH range limitation of 6.0 9.0 standard units pursuant to 06-096 CMR 525(3)(III)(c) along with a monitoring frequency of 2/Week. A review of the pH values from June 2011 to December 2015 (n=55) indicates that the results ranged from 6.8 to 9 standard units. Based on the consistent nature of the wastewater as well as facility compliance, this permitting action is reducing the monitoring frequency to 1/Week.
- g. Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing: 38 M.R.S. § 414-A and 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. 06-096 CMR 530 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. 06-096 CMR 584 sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

WET, priority pollutant and analytical chemistry testing, as required by 06-096 CMR 530, is included in this permit in order to characterize the effluent. WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*). Chemical-specific monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria. Priority pollutants effects to the analysis for levels of priority pollutants listed under "Priority Pollutants" on the form included as Attachment D of the permit. Analytical chemistry refers to those pollutants listed under "Analytical Chemistry" on the form included as Attachment D of the permit.

06-096 CMR 530(2)(A) specifies the dischargers subject to the rule as:

All licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedences of narrative or numerical water quality criteria.

Millinocket discharges domestic (sanitary) wastewater to surface waters and are therefore subject to the testing requirements of the toxics rule.

06-096 CMR 530(2)(B) categorizes dischargers subject to the toxics rule into one of four levels (Levels I through IV). The four categories for dischargers are as follows:

Level I	Chronic dilution factor of <20:1
Level II	Chronic dilution factor of \geq 20:1 but <100:1.
Level III	Chronic dilution factor \geq 100:1 but <500:1 or >500:1 and Q \geq 1.0 MGD
Level IV	Chronic dilution >500:1 and Q \leq 1.0 MGD

Based on the criteria, the permittee's facility is considered a Level III discharger as the chronic dilution of the receiving water is 617:1 and the permitted flow is greater than or equal to 1.0 MGD. 06-096 CMR 530(2)(D) specifies <u>default</u> WET, priority pollutant, and analytical chemistry test schedules for Level III dischargers as follows.

Surveillance level testing

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

Screening level testing

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

This permit provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment, and receiving water characteristics.

h. <u>Whole Effluent Toxicity (WET)</u>: 06-096 CMR 530(3)(E) states:

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

On February 12, 2016, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department for the Millinocket POTW in accordance with the statistical approach outlined above. The 2/12/16 statistical evaluation indicates the discharge from the Millinocket POTW has not exceeded or demonstrated a reasonable potential to exceed the critical acute or chronic ambient water quality thresholds for the water flea (*Ceriodaphnia dubia*) or brook trout (*Salvelinus fontinalis*). See **Attachment D** of this Fact Sheet for a summary of the WET test results.

06-096 CMR 530(2)(D)(3)(b) states, "Dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedences....." Based on the provisions of 06-096 CMR 530 and Department best professional judgment, this permitting action is waiving surveillance level WET testing requirements for this facility. Special Condition L. 06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing of this Permit explains the statement required by the discharger to waive WET testing.

i. Analytical Chemistry & Priority Pollutant Testing Evaluation:

06-096 CMR 530(4)(C) states:

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

06-096 CMR 530(3)(E) states, "Where it is determined through [the statistical approach referred to in USEPA's Technical Support Document for Water Quality-Based Toxics Control] that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedence of water quality criteria, appropriate water quality-based limits must be established in any licensing action."

06-096 CMR 530(3)(D) states, "Where the need for effluent limits has been determined, limits derived from acute water quality criteria must be expressed as daily maximum values. Limits derived from chronic or human health criteria must be expressed as monthly average values."

On February 9, 2016, the Department conducted a statistical evaluation of the most recent 60 months of chemical-specific test results on file with the Department. The evaluation indicates that the discharge does not exceed or demonstrate a reasonable potential to exceed the critical AWQC for any pollutants. Therefore, this permitting action is eliminating the effluent limitations and monitoring requirements for copper established in the previous permitting action. See **Attachment E** of this Fact Sheet for test dates and results for the pollutants of concern.

Based on the provisions of 06-096 CMR 530 and Department best professional judgment, this permitting action is waiving surveillance level analytical chemistry testing requirements for this facility.

j. <u>Mercury</u>: Pursuant to 38 M.R.S. § 420 and 38 M.R.S. § 413 and 06-096 CMR 519, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # WDL #W002680-46-D-R by establishing interim monthly average and daily maximum effluent concentration limits of 12.4 parts per trillion (ppt) and 18.6 ppt, respectively, and a minimum monitoring frequency requirement of 4 tests per year for mercury.

38 M.R.S. § 420(1-B)(B)(1) provides that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department. A review of the Department's database for the period February 2009 through September 2014 is as follows:

Mercury (II – 15)					
Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)		
Monthly Average	12.4	1 10 17 10	5 /		
Daily Maximum	18.6	1.10 – 17.10	3.4		

Mercury (**n** = **15**)

On February 6, 2012, the Department issued a minor revision to the May 25, 2011 permit thereby revising the minimum monitoring frequency requirement from four times per year to once per year pursuant to 38 M.R.S. § 420(1-B)(F). This minimum monitoring frequency is being carried forward in this permitting action.

k. <u>Total Phosphorus</u>: *Waste Discharge License Conditions*, 06-096 CMR 523 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.¹ In addition, 06-096 CMR 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: USEPA'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.²

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 CMR 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 permittee conducted year round effluent total phosphorus testing as a condition of the May 25, 2011 permit. Based upon the most recent laboratory test results, the arithmetic mean effluent concentration is 2.2 mg/L (2,200 micrograms per liter (µg/L)) and is considered representative of the discharge from the facility. In 2007 a Waste Load Allocation (WLA) study was conducted on the Penobscot River in the vicinity of the discharge. Ambient phosphorus levels ranged from 15.7 ppb to 19.3 ppb. Therefore, for this calculation, we will be using the mean of the ambient data, 16.6 ppb (rounded to 17.0 ppb).

¹ Waste Discharge License Conditions, 06-096 CMR 523(5)(d)(1)(i) (effective date January 12, 2001)

² 06-096 CMR 523(5)(d)(1)(vi)(A)

Using the following calculation and criteria, Millinocket does not have a reasonable potential to exceed the EPA's Total P Ambient Water Quality Gold Book goal of 0.100 mg/L (100 μ g/L) or the Department's draft ambient water quality criterion of 0.030 mg/L for phosphorus in rivers and streams not feeding lakes.

Reasonable Potential Analysis

$$Cr = QeCe + QsCs$$

 Qr

Qe = effluent flow	=	2.33 MGD
Ce = effluent pollutant concentration	=	2.2 mg/L
Qs = 7Q10 flow of receiving water	=	1,434 MGD
Cs = upstream concentration	=	0.017 mg/L
Qr = receiving water flow (1,434 MGD + 2.33)	3 MGD)	= 1,436.33 MGD
Cr = receiving water concentration		

$$Cr = (2.33 \text{ MGD x } 2.2 \text{ mg/L}) + (1,434 \text{ MGD x } 0.017 \text{ mg/L}) = 0.021 \text{ mg/L}$$

1,436.33 MGD

 $\label{eq:cr} \begin{array}{l} Cr = 0.021 \ mg/L < 0.100 \ (EPA \ Gold \ Book) \ mg/L \Rightarrow \textbf{No Reasonable Potential} \\ Cr = 0.021 \ mg/L < 0.030 \ (Maine \ Draft \ Criterion) \ mg/L \Rightarrow \textbf{No Reasonable Potential} \end{array}$

Therefore, no end-of-pipe limitations or monitoring requirements for total phosphorous are being established in this permit. The seasonal, weekly effluent reporting condition is being eliminated in this permit as the effluent phosphorus load has been characterized.

A review of the DMR data for the Millinocket facility for the period of June 2011 through December 2015 indicates the following:

Value	Limit (lbs./day)	Minimum (lbs./day)	Maximum (lbs./day)	Average (lbs./day)
Monthly Average	Report	5	50	13
Daily Maximum	Report	5	53	14

Phosphorus Mass

Value	Limit (mg/L)	Minimum (mg/L)	Maximum (mg/L)	Average (mg/L)
Monthly Average	Report	0.5	3.2	2.2
Daily Maximum	Report	0.5	4.0	2.2

Phosphorus Concentration

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 waterbody to meet standards for Class C classification.

8. PUBLIC COMMENTS

Public notice of this application was made in the *Bangor Daily News* newspapers on or about <u>January 1, 2016</u>. 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 must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

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

Cindy L. Dionne Division of Water Quality Management Bureau of Water Quality Department of Environmental Protection 17 State House Station Augusta, Maine 04333-0017 Telephone: (207) 557-5950 e-mail: <u>Cindy.L.Dionne@maine.gov</u>

10. RESPONSE TO COMMENTS

Reserved until the end of the formal 30-day public comment period.

ATTACHMENT A



ATTACHMENT B

Millinocket Wastewater Treatment

Process Schematic

:



Attatchment "A"

ATTACHMENT C

STATE OF MAINE **DEPARTMENT OF ENVIRONMENTAL PROTECTION**

CHAPTER 530.2(D)(4) CERTIFICATION

_Facility Name_____ MEPDES#

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	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th 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.

ATTACHMENT D

FACILITY WET EVALUATION REPORT



Facility: MILLINOCKET	Permit Num	ber: ME0100803 Rep	ort Date: 2/16/2016
Receiving Water: PENOBSCOT W. BF	RANCH RIVER	R	apidmix: N
Diluition Factors: 1/4 Acute: 141.1	023 Acute: 561.409	Chronic: 616.6177	
Effluent Limits: Acute (%): 0.71	2 Chronic (%): 0.162 Date rang	ge for Evaluation: From 16/Feb/2011	To: 16/Feb/2016
Test Type: A_NOEL			
Test Species: WATER FLEA	Test Date	Result (%)	Status
	10/19/2011	100.000	OK
	01/25/2012	100.000	OK
	07/23/2013	100.000	OK
	05/14/2014	100.000	OK
Species Summary:			
Test Number: 4	RP: 2.600 Min Result (%): 10	0.000 RP factor (%): 38.462	2 Status: OK
Test Type: C_NOEL			
Test Species: WATER FLEA	Test Date	Result (%)	Status
	10/19/2011	100.000	ОК
	01/25/2012	100.000	ОК
	07/23/2013	25.000	ОК
	05/14/2014	100.000	OK
Species Summary:			
Test Number: 4	RP: 2.600 Min Result (%): 25	.000 RP factor (%): 9.615	Status: OK

ATTACHMENT E

FACILITY PRIORITY POLLUTANT DATA REPORT

Data Date Range:

16/Feb/2011 - 16/Feb/2016



Showing only those values not reported as a less than result

	ILLINOCKET	Permit	Number: ME0100803	
Parameter:	ALUMINUM	Test date	Result (ug/l)	Lstha
		10/19/2011	76.000	N
		01/25/2012	71.000	Ν
		07/23/2013	78.200	Ν
Parameter:	AMMONIA	Test date	Result (ug/l)	Lstha
		10/19/2011	14400.000	N
		01/25/2012	17500.000	Ν
		07/23/2013	11500.000	Ν
		05/14/2014	3870.000	Ν
		04/08/2015	16000.000	Ν
		07/07/2015	9100.000	Ν
		01/14/2016	8600.000	Ν
Parameter:	CALCIUM	Test date	Result (ug/l)	Lstha
		10/19/2011	12600.000	N
		01/25/2012	12200.000	N
		07/23/2013	15300.000	Ν
		05/14/2014	15700.000	Ν
Parameter:	COPPER	Test date	Result (ug/l)	Lstha
		10/19/2011	10.000	N
		01/25/2012	20.000	Ν
		07/23/2013	5.530	Ν
		05/14/2014	3.580	Ν
		04/08/2015	13.200	Ν
		07/07/2015	4.290	N
		01/14/2016	9.880	Ν
Parameter:	LEAD	Test date	Result (ug/l)	Lstha
		01/14/2016	0.406	N
Parameter:	MAGNESIUM	Test date	Result (ug/l)	Lstha
		10/19/2011	1800.000	N
		01/25/2012	2200.000	Ν
		07/23/2013	2520.000	Ν
		05/14/2014	2270.000	Ν
Parameter:	MERCURY	Test date	Result (ug/l)	Lstha
		05/04/2011	0.001	N
		08/10/2011	0.001	Ν
		11/16/2011	0.009	Ν
		02/07/2012	0.007	Ν
		06/05/2013	0.017	Ν
		09/10/2014	0.004	Ν
Parameter:	NICKEL	Test date	Result (ug/l)	Lstha
		01/14/2016	0.990	N
Parameter:	тос	Test date	Result (ug/l)	Lstha

FACILITY PRIORITY POLLUTANT DATA REPORT

Data Date Range:

16/Feb/2011 - 16/Feb/2016



Showing only those values not reported as a less than result

Facility name: MILLINOCKET	Permit	Number: ME0100803	
	01/25/2012	14800.000	Ν
	05/14/2014	7400.000	Ν
Parameter: TSS	Test date	Result (ug/l)	Lsthan
	10/19/2011	3800.000	N
	01/25/2012	4900.000	N
	05/14/2014	4700.000	Ν
Parameter: ZINC	Test date	Result (ug/l)	Lsthan
	10/19/2011	12.000	N
	01/25/2012	36.000	Ν
	07/23/2013	10.900	Ν
	05/14/2014	13.700	Ν
	04/08/2015	48.300	Ν
	07/07/2015	10.600	Ν
	01/14/2016	36.200	Ν