STATE OF MAINE **DEPARTMENT OF ENVIRONMENTAL PROTECTION**



PAUL R. LEPAGE GOVERNOR

June 1, 2017

Mr. Frank Kearney Superintendent Presque Isle Utilities District P.O. Box 470 Presque Isle, Maine 04769 e-mail: frank@piutilities.com

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100561 Maine Waste Discharge License (WDL) Application #W002713-6D-F-R **Final Permit**

Dear Mr. Kearney:

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

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

If you have any questions regarding the matter, please feel free to call me at 287-7693. Your Department compliance inspector copied below is also a resource that can assist you with compliance. Please do not hesitate to contact them with any questions.

Sandy Mojica, USEPA

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

Sincerely,

Gregg Wood Division of Water Quality Management Bureau of Water Quality

Enc.

William Sheehan, DEP/NMRO Lori Mitchell, DEP/CMRO cc: Pamela Parker, DEP/CMRO Olga Vergara, USEPA

BANGOR 106 HOGAN ROAD, SUITE 6 BANGOR, MAINE 04401 (207) 287-7688 FAX: (207) 287-7826 (207) 941-4570 FAX: (207) 941-4584 PORTLAND 312 CANCO ROAD PORTLAND, MAINE 04103 (207) 822-6300 FAX: (207) 822-6303

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

Michael Riley, DEP/CMRO

Marelyn Vega, USEPA

'ebsite: www.maine.gov/dep

AUGUSTA

17 STATE HOUSE STATION

AUGUSTA, MAINE 04333-0017

PAUL MERCER COMMISSIONER



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

DEPARTMENT ORDER

IN THE MATTER OF

PRESQUE ISLE UTILITIES DISTRICT)PUBLICLY OWNED TREATMENT WORKS)PRESQUE ISLE, AROOSTOOK COUNTY, MAINE)ME0100561)W002713-6D-F-RAPPROVALAPPROVAL)

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT AND WASTE DISCHARGE LICENSE RENEWAL

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

APPLICATION SUMMARY

The PIUD has submitted a timely and complete application to the Department for the renewal of combination Waste Discharge License (WDL) #W002713-5L-D-R/ Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100561 (permit hereinafter), which was issued by the Department on June 18, 2007, and expired on June 18, 2012. The 6/18/07 permit authorized the monthly average discharge of up to 2.31 million gallons per day (MGD) of secondary treated sanitary waste waters (Outfall #001C) and an unspecified quantity of primary and secondary treated sanitary waste waters (Outfall #001B) from a municipal waste water treatment facility to the Aroostook River, Class C, and under certain circumstances, authorized the discharge of an unspecified quantity of primary and secondary treated waste waters (Outfall #002A) to Presque Isle Stream, Class B, in Presque Isle, Maine.

The 6/18/07 permit established a schedule of compliance in which the permittee was to cease discharging secondary and primary treated waste water to Presque Isle Stream beginning November 1, 2009. Thereafter, all treated waste water was to be discharged to the Aroostook River, Class C, unless the hydraulic capacity of the 36-inch outfall structure to the Aroostook River was exceeded. The permittee's consulting engineer determined the hydraulic capacity of the outfall would be exceeded at the 100-year flood elevation of 427.00 feet above mean sea level. When this occurs, the permittee was authorized to discharge primary and secondary treated waste waters to Presque Isle Stream.

PERMIT SUMMARY

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

- 1. Incorporating the interim average and maximum numeric limitations for mercury into the permit and carrying forward a 1/Year monitoring requirement established in a minor revision dated February 2, 2012.
- 2. Eliminating the monthly average and daily maximum water quality based mass and concentration limits for total copper as the most recent 60 months of copper data indicates the discharge no longer exceeds or has a reasonable potential to exceed applicable ambient water quality criteria (AWQC).
- 3. Establishing a new monthly average mass limitation for total aluminum given test results in the most recent 60 months indicate the discharge has a reasonable potential to exceed applicable ambient water quality criteria pursuant to Department rule, 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*. This permit also eliminates the technology based concentration limit for total aluminum based on Maine law 38 M.R.S. §464, ¶¶ K.
- 4. Establishing a more stringent monthly average water quality based limitation for total phosphorus based on new information obtained from a 2012 ambient water quality survey conducted by the Department. The survey indicates the discharge of total phosphorus from the PIUD is contributing to pH violations in the Aroostook River.
- 5. Reducing the monitoring frequencies for biochemical oxygen demand (BOD), total suspended solids (TSS) and *E. coli* bacteria from 3/week to 2/Week, settleable solids (SS) from 5/Week to 2/Week, total residual chlorine (TRC) from 1/Day to 5/Week, total phosphorus from 3/Week to 1/Week an pH from 1/Day to 5/Week based on a statistical evaluation of the previous 45 months of Discharge Monitoring Report (DMR) data.
- 6. Eliminating the allowance to bypass secondary treatment at the treatment facility pursuant to 06-096 CMR Chapter 523(m) and 40 CFR §122.41(m) as the Department has made the determination there is a feasible alternative to bypassing secondary treatment.
- 7. Eliminating the monthly total limit of 60,000 gallons for receiving and treated transported waste as there is no basis to limit the facility in this manner.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated April 28, 2017, and subject to the Conditions listed below, the Department makes the following conclusions:

- 1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
- 2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
- 3. The provisions of the State's antidegradation policy, 38 M.R.S. §464(4)(F), will be met, in that:
 - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - (b) Where high quality waters of the State constitute an outstanding natural resource, that water quality will be maintained and protected;
 - (c) Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
- 4. The discharge will be subject to effluent limitations that require application of best practicable treatment as defined in Maine law, 38 M.R.S., §414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the above noted application of PRESQUE ISLE UTILITIES DISTRICT to discharge a monthly average flow of up to 2.31 million gallons per day (MGD) of secondary treated sanitary waste waters (Outfall #001C) from a municipal waste water treatment facility to the Aroostook River, Class C, and under certain circumstances authorizes the discharge of an unspecified quantity of secondary treated waste waters (Outfall #003A) to Presque Isle Stream Class B, in Presque Isle, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

- 1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits," revised July 1, 2002, copy attached.
- 2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
- 3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years 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.A. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (last amended October 9, 2015)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS 5^{th} DAY	OF <u>June</u> , 2017.
DEPARTMENT OF ENVIRONMENTAL PROTECTION BY: Michael Kulus Paul Mercer, Commissioner	
	Filed
Date of initial receipt of application: <u>March 28, 2012</u>	JUN 0 5 2017
Date of application acceptance: March 28, 2012	State of Maine Board of Environmental Protection
Date filed with Board of Environmental Protection	

This Order prepared by Gregg Wood, BUREAU OF WATER QUALITY

ME0100561 2017 5/29/17

Page 5 of 19

Minimum

ME0100561 W002713-6D-F-R

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge **secondary treated** sanitary waste waters to the Aroostook River. There shall be no discharge of secondary treated waste waters to Presque Isle Stream, except when the hydraulic capacity of the Aroostook River outfall structure is exceeded. Such treated waste water discharges shall be limited and monitored by the permittee as specified below.

OUTFALL #001C – Secondary treated waste water

	• .•		D .					
Effluent Characte	ristic		Disc	harge Limitations			Monitoring R	equirements
	<u>Monthly</u> <u>Average</u>	<u>Weekly</u> <u>Average</u>	<u>Daily</u> <u>Maximum</u>	<u>Monthly</u> <u>Average</u>	<u>Weekly</u> <u>Average</u>	<u>Daily</u> <u>Maximum</u>	<u>Measurement</u> <u>Frequency</u>	<u>Sample</u> <u>Type</u>
Flow [50050]	2.31 MGD <i>[03]</i>		Report MGD [03]			the bound	Continuous [99/99]	Recorder [RC]
BOD ₅ [00310]	578 lbs./day [26]	867 lbs./day [26]	963 lbs./day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	2/Week <i>[02/07]</i>	24-Hour Composite [24]
BOD ₅ Percent Removal ⁽²⁾ [81010]			84.149.84	85% [23]			1/Month [01/30]	Calculate [CA]
TSS [00530]	578 lbs./day [26]	867 lbs./day <i>[26]</i>	963 lbs./day [26]	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	2/Week [02/07]	24-Hour Composite [24]
TSS Percent Removal ⁽²⁾ [81011]				8 5% <i>[23]</i>			1/Month [01/30]	Calculate [CA]
Settleable Solids [00545]						0.3 ml/L [25]	2/Week [02/07]	Grab [GR]
<i>E. coli</i> Bacteria ⁽³⁾ [31633]	an thirty			126/100 ml ⁽⁴⁾ [13]		949/100 ml <i>[13]</i>	2/Week [02/07]	Grab [GR]
Total Residual Chlorine ⁽⁵⁾ [50060]				0.1 mg/L [19]		0.3 mg/L [19]	5/Week [05/07]	Grab [GR]
pH [00400]		-				6.0 – 9.0 SU [12]	5/Week [05/07]	Grab [GR]

The italicized numeric values bracketed in the table above and the tables that follow are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports. Footnotes: See pages 10 through 13 of this permit for applicable footnotes.

ME0100561 W002713-6D-F-R

PERMIT

Page 6 of 19

Minimum

SPECIAL CONDITIONS

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

OUTFALL #001C – Secondary treated waste water

Effluent Characteristic				Monitoring Requirements				
	<u>Monthly</u> <u>Average</u>	<u>Weekly</u> <u>Average</u>	<u>Daily</u> <u>Maximum</u>	Monthly Average	<u>Weekly</u> <u>Average</u>	<u>Daily</u> <u>Maximum</u>	<u>Measurement</u> <u>Frequency</u>	<u>Sample</u> <u>Type</u>
Aluminum (Total) [01105]	1.4 lbs./day [26]					Report ug/L [28]	2/Year [02/YR]	24-Hour Composite [24]
Mercury (Total) ⁽⁶⁾ [71900]				16.6 ng/L [3M]		24.9 ng/L [3M]	1/Year [01/YR]	Grab [GR]
Phosphorus (Total) ⁽⁷⁾ (June 1 – Sept. 30) [00665]	14.0 lbs./day [26]	Report lbs./day [26]	Report lbs./day [26]	Report mg/L [19]	Report mg/L [26]	Report mg/L [19]	1/Week [01/07]	24-Hour Composite [24]

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

Page 7 of 19

ME0100561 W002713-6D-F-R

SPECIAL CONDITIONS

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

SURVEILLANCE LEVEL - Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee shall conduct surveillance level testing as follows:

Effluent Characteristic		Discharge	Limitations	Minimum				
		-			Monitoring Requirements			
	Monthly	Daily	Monthly	Daily	Measurement	<u>Sample</u>		
	Average	<u>Maximum</u>	Average	<u>Maximum</u>	<u>Frequency</u>	Type		
Whole Effluent Toxicity ⁽⁸⁾								
Acute – NOEL					1			
Ceriodaphnia dubia (Water flea) [ТДАЗВ]				Report % (23)	1/2 Years (01/2Y)	Composite (24)		
Salvelinus fontinalis (Brook trout) [TDA6F]f				Report % [23]	1/2 Years [01/2Y]	Composite [24]		
<u>Chronic – NOEL</u>								
Ceriodaphnia dubia (Water flea) [TBP3B]				Report % [23]	1/2 Years [01/2Y]	Composite [24]		
Salvelinus fontinalis (Brook trout) [TBQ6F]				Report % [23]	1/2 Years 101/217	Composite [24]		
Analytical Chemistry (9,11) [54177]				Report ug/L /287	1/2/Years 101/2Y7	Composite/Grab (24)		

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

Page 8 of 19

ME0100561 W002713-6D-F-R

SPECIAL CONDITIONS

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

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

	Monthly	Daily	Monthly	Daily	Measurement	Sample
	Average	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>	<u>Frequency</u>	Type
Whole Effluent Toxicity ⁽⁸⁾						
Acute – NOEL						
Ceriodaphnia dubia (Water flea) [ТДАЗВ]				Report % [23]	2/Year _[02/YR]	Composite [24]
Salvelinus fontinalis (Brook trout) [TDA6F]				Report % [23]	2/Year _[02/YR]	Composite [24]
<u>Chronic – NOEL</u>						
Ceriodaphnia dubia (Water flea) [TBP3B]				Report % [23]	2/Year _[02/YR]	Composite [24]
Salvelinus fontinalis (Brook trout) [TBQ6F]				Report % [23]	2/Year _[02/YR]	Composite (24)
Analytical Chemistry (9,11) [54177]				Report ug/L [28]	1/Quarter [01/90]	Composite/Grab [24]
Priority Pollutant (10,11) 1500087				Report ug/L /287	1/Year [01/YR]	Composite/Grab [24]

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

Page 9 of 19

SPECIAL CONDITIONS

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

OUTFALL #003A – The permittee is prohibited to discharge secondary treated waste waters to Presque Isle Stream, except when the hydraulic capacity of the Aroostook River outfall structure is exceeded. Such treated waste water discharges shall be limited and monitored by the permittee as specified below.

						Minimum	
Effluent Characteristic		Disc	harge Limitations	Monitoring Requirements			
	<u>Monthly</u> <u>Average</u>	<u>Daily</u> <u>Maximum</u>	<u>Monthly</u> <u>Average</u>	<u>Daily</u> <u>Maximum</u>	<u>Measurement</u> <u>Frequency</u>	<u>Sample</u> <u>Type</u>	
Overflow Use, Occurrences			Report (# of days) [93]		1/When discharging _[01/DH]	Record Total _[RT]	

SPECIAL CONDITIONS

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

Footnotes:

Sampling Locations:

Influent: Influent sampling must be conducted in the headworks building after the bar screen structure.

Effluent: Effluent sampling must be conducted at the outlet to the chlorine contact tank prior to the outfall structure entry.

- 1. Sampling Sampling and analysis must be conducted 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 for waste water. Samples that are analyzed by laboratories operated by waste discharge facilities licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 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, all results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.
- 2. **Percent Removal** The treatment facility must maintain a minimum of 85 percent removal of BOD₅ and TSS for all flows receiving secondary treatment. The percent removal must be calculated based on influent and effluent concentration values.
- 3. Bacteria Limits *E. coli* bacteria limits and monitoring requirements are seasonal and apply between May 15 and September 30 of each year. The Department reserves the right to require year-round disinfection to protect the health, safety and welfare of the public.
- 4. Bacteria Reporting The monthly average *E. coli* bacteria limitation is a geometric mean limitation and sample results must be reported as such.
- 5. TRC Monitoring Monitoring for TRC is only required when elemental chlorine or chlorinebased compounds are in use for effluent disinfection. For instances when a facility has not disinfected with chlorine-based compounds for an entire reporting period, the facility shall report "N-9" for this parameter on the monthly DMR. The permittee must utilize approved test methods that are capable of bracketing the TRC limitation in this permit.

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

Footnotes:

6. Mercury – All mercury sampling (1/Year) required to determine compliance with interim limitations established pursuant to *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001) must be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, <u>Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels</u>. All mercury analyses must be conducted in accordance with EPA Method 1631E, <u>Determination of Mercury in Water by Oxidation</u>, <u>Purge and Trap</u>, and Cold Vapor Fluorescence Spectrometry. See Attachment A, *Effluent Mercury Test Report*, of this permit for the Department's form for reporting mercury test results.

Compliance with the monthly average limitation established in Special Condition A.1 of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.

- 7. Total Phosphorus Total phosphorus monitoring must be performed in accordance with Attachment B of this permit entitled, *Protocol For Total P Sample Collection and Analysis for Waste Water – June 1, 2014*, unless otherwise specified by the Department.
- 8. Whole Effluent Toxicity (WET) Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 2.5 % and 2.2 %, 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 and reproduction for the water flea, survival and growth for the trout, and fertilization for the sea urchin 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 40:1 and 46:1, respectively, for the discharge to the Aroostook River.
 - a. Surveillance level testing Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee must conduct surveillance level testing at a minimum frequency of once every two years (reduced testing) for the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*). Tests must be conducted in a different calendar quarter each testing event.

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

Footnotes:

b. Screening level testing – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level testing at a minimum frequency of twice per year for both species. There must be at least six (6) months between testing events. Acute and chronic tests must be conducted on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*).

WET test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 2.5 % and 2.2 % respectively.

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

- a. <u>Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to</u> Freshwater Organisms, Fourth Edition, October 2002, EPA-821-R-02-013.
- b. <u>Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Freshwater</u> and Marine Organisms, Fifth Edition, October 2002, EPA-821-R-02-012.

Results of WET tests must be reported on the "WET Results Report – Fresh Waters" form included as **Attachment D** of this permit each time a WET test is performed. The permittee is required to analyze the effluent for the parameters specified on the "WET and Analytical Chemistry Results – Fresh Waters" form included as **Attachment E** of this permit each time a WET test is performed.

- 9. Analytical chemistry Refers to a suite of chemicals in Attachment E of this permit.
 - a. Surveillance level testing Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee must conduct surveillance level analytical chemistry testing at a minimum frequency of once every two years (reduced testing).

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

Footnotes:

- b. Screening level testing Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level analytical chemistry testing at a minimum frequency of once per calendar quarter for four consecutive calendar quarters.
- 10. Priority pollutant testing Refers to a suite of chemicals in Attachment E of this permit.
 - a. Surveillance level testing Priority pollutant testing is not required for this facility pursuant to Department rule 06-096 CMR Chapter 530, § 2(D)(1).
 - b. Screening level testing Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level priority pollutant testing at a minimum frequency of once per year.
- 11. Analytical chemistry and priority pollutant tests Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department, possible exceedances of the acute, chronic or human health AWQC as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005). For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "N-9" monitoring not required this period.

B. NARRATIVE EFFLUENT LIMITATIONS

- 1. The effluent must not contain 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 effluent must not contain 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 discharge must not cause visible discoloration or turbidity in the receiving waters which would impair the uses designated for the classification of the receiving waters.
- 4. Notwithstanding specific conditions of this permit the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

C. TREATMENT PLANT OPERATOR

The person in responsible charge of the treatment facility must be operated by a person holding a minimum of a Maine **Grade IV** certificate (or Registered Maine Professional Engineer) pursuant to *Sewerage 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. 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 March 28, 2012; 2) the terms and conditions of this permit; and 3) only from Outfall #001C under normal operations and from Outfall #003A under certain hydraulic conditions. Discharges of waste water 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.

E. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the waste water 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) at 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 report the results to the Department. See **Attachment G** of the Fact Sheet for Department Guidance on conducting a IWS. 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).

F. NOTIFICATION REQUIREMENTS

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

- 1. Any introduction of pollutants into the waste water collection and treatment system from an indirect discharger in a primary industrial category discharging process waste water; and
- 2. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system by a source introducing pollutants to the system at the time of permit issuance.
- 3. For the purposes of this section, adequate notice must include information on:
 - a. The quality and quantity of waste water introduced to the waste water collection and treatment system; and
 - b. Any anticipated impact of the change in the quantity or quality of the waste water to be discharged from the treatment system.

ME0100561

W002713-6D-F-R

G. WET WEATHER FLOW MANAGEMENT PLAN

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

Within 90 days of completion of new and or substantial upgrades of the waste water treatment facility, the permittee must submit to the Department for review and approval, a new or revised Wet Weather Management Plan which conforms to Department guidelines for such plans. The revised plan 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 annually and record any necessary changes to keep the plan up to date.

H. PUMP STATION EMERGENCY OVERFLOWS

Discharges from emergency overflow structures in pump stations <u>are not authorized by this permit</u>. The permittee must make provisions to monitor the pump station(s) listed below, in accordance with a monitoring plan reviewed and approved by the Department, to determine the frequency and an estimation of the volume discharged (via measurement or estimation). Discharges from the following pump stations are considered a violation of Special Condition E *Authorized Discharges*, Standard Condition B(1)(a-b) and must be reported in accordance with Standard Condition D(1)(f) *Reporting Requirements: Twenty-four hour reporting* of this permit.

Outfall Number	Outfall Location	Receiving Water and Class			
Chapman Street Pump Station	Chapman Street	Presque Isle Stream, Class B			

I. OPERATIONS AND MAINTENANCE (O&M) PLAN

This facility must have a current written comprehensive Operation & Maintenance (O&M) Plan. 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 waste water 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 EPA personnel upon request.

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

J. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

During the effective period of this permit, the permittee is authorized to receive and introduce into the treatment process or solids handling stream a maximum of 18,000 gallons per day of transported waste, subject to the following terms and conditions:

- "Transported wastes" means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.
- 2. The character and handling of all transported wastes received must be consistent with the information and management plans provided in application materials submitted to the Department.
- 3. At no time shall the addition of transported wastes cause or contribute to effluent quality violations. Transported wastes may not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility.

Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. Odors and traffic from the handling of transported wastes may not result in adverse impacts to the surrounding community. If any adverse effects exist, the receipt or introduction of transported wastes into the treatment process or solids handling stream shall be suspended until there is no further risk of adverse effects.

- 4. The permittee must maintain records for each load of transported wastes in a daily log which must include at a minimum the following.
 - (a) The date;
 - (b) The volume of transported wastes received;
 - (c) The source of the transported wastes;
 - (d) The person transporting the transported wastes;
 - (e) The results of inspections or testing conducted;
 - (f) The volumes of transported wastes added to each treatment stream; and
 - (g) The information in (a) through (d) for any transported wastes refused for acceptance.

These records must be maintained at the treatment facility for a minimum of five years.

5. The addition of transported wastes into the treatment process or solids handling stream must not cause the treatment facility's design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of transported wastes into the treatment process or solids handling stream must be reduced or terminated in order to eliminate the overload condition.

J. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

- 6. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added shall not be recorded as transported wastes but should be reported in the treatment facility's influent flow.
- 7. During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current Wet Weather Flow Management Plan approved by the Department that provides for full treatment of transported wastes without adverse impacts.
- 8. In consultation with the Department, chemical analysis is required prior to receiving transported wastes from new sources that are not of the same nature as wastes previously received. The analysis must be specific to the type of source and designed to identify concentrations of pollutants that may pass through, upset or otherwise interfere with the facility's operation.
- 9. Access to transported waste receiving facilities may be permitted only during the times specified in the application materials and under the control and supervision of the person responsible for the wastewater treatment facility or his/her designated representative.
- 10. The authorization is subject to annual review and, with notice to the permittee and other interested parties of record, may be suspended or reduced by the Department as necessary to ensure full compliance with Chapter 555 of the Department's rules and the terms and conditions of this permit.

K. 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 E of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

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

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

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

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

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

L. MONITORING AND REPORTING

Electronic Reporting

NPDES Electronic Reporting, 40 C.F.R. 127, requires MEPDES permit holders to submit monitoring results obtained during the previous month on an electronic discharge monitoring report to the regulatory agency utilizing the USEPA electronic system.

Electronic Discharge Monitoring Reports (DMRs) submitted using the USEPA NetDMR system, must be:

- 1. Submitted by a facility authorized signatory; and
- 2. Submitted no later than midnight on the 15th day of the month following the completed reporting period.

Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Toxics reporting must be done using the DEP Toxsheet reporting form included as **Attachment E** of this permit. An electronic copy of the Toxsheet reporting document must be submitted to the Department assigned compliance inspector as an attachment to an email. In addition, a hardcopy form of this sheet must be signed and submitted to the Department assigned compliance inspector, or a copy attached to your NetDMR submittal will suffice. Documentation submitted electronically to the Department in support of the electronic DMR must be submitted no later than midnight on the 15th day of the month following the completed reporting period.

Toxsheet reporting forms must be submitted electronically as an attachment to an email sent to your Department compliance inspector. In addition, a signed hardcopy of your Toxsheet must also be submitted.

SPECIAL CONDITIONS

L. MONITORING AND REPORTING (cont'd)

A signed copy of the DMR and all other reports required herein must be submitted to the Department assigned compliance inspector (unless otherwise specified) following address:

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

M. REOPENING OF PERMIT FOR MODIFICATION

Upon evaluation of the tests results in the Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at anytime and with notice to the permittee, modify this permit to: (1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded: (2) require additional monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

N. SEVERABILITY

In the event that any provision, or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit shall remain in full force and effect, and shall be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

ATTACHMENT A

Maine Department of Environmental Protection Effluent Mercury Test Report

Name of Facility:	Federal Permit # ME											
	Pipe #											
Purpose of this test: Initial limit determination Compliance monitoring Supplemental or extra te	on for: year calendar quarter est											
SAMPLE COLLECTION INFORMATION												
Sampling Date:	Sampling time:AM/PM											
Sampling Location:												
Weather Conditions:												
Please describe any unusual conditions with the i time of sample collection:	nfluent or at the facility during or preceding the											
Optional test - not required but recommended wh evaluation of mercury results:	ere possible to allow for the most meaningful											
Suspended Solidsmg/L Samp	le type: Grab (recommended) or Composite											
ANALYTICAL RESULT H	OR EFFLUENT MERCURY											
Name of Laboratory:												
Date of analysis:	Result:ng/L (PPT)											
Effluent Limits: Average = ng/L	$maximum = \ng/L$											
Please attach any remarks or comments from the their interpretation. If duplicate samples were taken the samples were taken at taken at the samples were taken at take	laboratory that may have a bearing on the results or en at the same time please report the average.											
CERTIF	ICATION											
I certifiy that to the best of my knowledge the for conditions at the time of sample collection. The using EPA Methods 1669 (clean sampling) and 1 instructions from the DEP.	egoing information is correct and representative of sample for mercury was collected and analyzed 631 (trace level analysis) in accordance with											
Ву:	Date:											
Title:												

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT B

. . .

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

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

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

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

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

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

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

Maine DEP, July 1, 2014 Page C1

ATTACHMENT C

E

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 D

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION WHOLE EFFLUENT TOXICITY REPORT FRESH WATERS

Facility Name]	MEPDES Permit #					
Facility Representative	t to the best of my	knowledge that the	Signature	is true, accurate, a	and complete.			
Facility Telephone #			Date Collected		Date Tested			
Chloringted2	-	Dechlorinated?	, , , , , , , , , , , , , , , , , , ,	mm/dd/yy	•	mm/dd/yy		
					2001000000			
Results	water flea	uent trout			A-NOEL	astructure restructions		
A-NOEL C-NOEL					C-NOEL			
Data summary	% st	water flea	no. young	% si	urvival	final weight (mg)		
QC standard lab control receiving water control conc. 1 (%) conc. 2 (%) conc. 3 (%) conc. 4 (%) conc. 5 (%) conc. 6 (%) stat test used place * next Reference toxicant toxicant / date limits (mg/L) results (mg/L)	A>90 t to values statist Water A-NOEL	C>80	>15/female	A>90		> 2% increase		
Laboratory conducting tes Company Name	t		Company Rep. Na	me (Printed)				
Mailing Address			Company Rep. Sig	nature				
City, State, ZIP			Company Telepho	ne#				

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

ATTACHMENT E

Printed 9/11/2015

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 # Facility Re Pipe #			presentative Signature To the best of my knowledge this information is true, accurate and complete.					
	Licensed Flow (MGD) Acute dilution factor			Flow for Day (MGD) ⁽¹⁾			Flow Avg. for Month (MGD) ⁶				
	Chronic dilution factor			Date Sampl	e Collected		Date Samj	ple Analyzed			
	Human health dilution factor Criteria type: M(arine) or F(resh)	f			Laboratory				Telephone		
j	Last Rovision-Universions			•	Address	·	·····				
	ERROR WARNING Essential facility	FRESH W	ATER VER	SION	Lab Contact				Lab ID #		
	information is missing. Please check required entries in bold above.	Please see the fo	otnotes on t	he last page.		Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)				
	WHOLE EFFLUENT TOXICITY			的形象建筑							
			Effluent Acute	Limits, % Chronic	,		WET Result, % Do not enter % sign	Reporting Limit Check	Possible	Exceed	ence ⁽⁷⁾
	Trout - Acute								110010		
	Trout - Chronic								İ		
	Water Flea - Acute										
-	Water Flea - Chronic										
	WET CHEMISTRY	用 推開 國際 唐明	國德國權	國國國國國際							
	pH (S.U.) (9)										
	Total Organic Carbon (mg/L)					(8)					
	Total Solids (mg/L)										
	Liotal Suspended Solids (mg/L)					(0)	· · · · · · · · · · · · · · · · · · ·				l
	Alkalitity (mg/L)					(8)			ļ		
	Total Hardness (mg/l)					(9)			<u> </u>		
	Total Magnesium (mg/L)					(8)				<u> </u>	
<u> </u>	Total Calcium (mg/L)					(8)					
期期	ANAL VTICAL CHEMISTRY (3)					THE OWNER OF THE OWNER /b>		ATTERNMENT OF THE OWNER OF THE O	A CONTRACTOR OF A CONTRACT		ALIGUER DALIS
新田田 和	Also do these tests on the effluent with										
	WFT Testing on the receiving water is		Eff	luent Limits,	ug/L			Reporting	Possible	e Exceed	ence ⁽⁷⁾
	optional	Reporting Limit	Acute ⁽⁶⁾	Chronic ⁽⁶⁾	Health ⁽⁶⁾			Limit Check	Acute	Chronic	Health
	TOTAL RESIDUAL CHLORINE (mg/L) (9)	0.05				NA		Line Oneon	1.0000	OUNCINC .	i iceltri
	AMMONIA	NA		•		(8)	····				j
М	ALUMINUM	NA			1	(8)			1		
М	ARSENIC	5				(8)			1	<u> </u>	
M	CADMIUM	1				(8)					
M	CHROMIUM	10		•		(8)					
<u>M</u>	ICOPPER	3				(8)					
(M England	ICYANIDE, TOTAL	5	<u> </u>		<u> </u>	(8)	<u> </u>	<u> </u>	1	ļ	<u> </u>
	CYANIDE, AVAILABLE (3a)	5				(8)		1		1	
М	LEAD	3				(8)				1	1
М	NICKEL	5				(8)					
M	SILVER	1				(8)					
<u>IM</u>	ZINC	5				(8)				1	

Revised July 1, 2015

DEPLW 0740-H2015

Maine Department of Environmental Protection

WET and Chem

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

	PRIORITY POLLUTANTS (4)										
				Effluent Limi	its	*******			Possible	e Exceed	ence ⁽⁷⁾
		Reporting Limit	Acute ⁽⁶⁾	Chronic ⁽⁶⁾	Health ⁽⁶⁾			Reporting Limit Check	Acute	Chronic	Health
М	ANTIMONY	5									
M	BERYLLIUM	2								······	
Mate	MERCURY (5) PAR SEX HERE REPORT	table in 1928 Within		STOC STOCKED		a fail a la fail a la fail a la				MARKING KURK	
M	SELENIUM	5							Contraction (Laboration)	THE REAL PROPERTY OF THE PAIL	ISSN 11010101000000
М	THALLIUM	4							· · · · · ·		
A	2,4,6-TRICHLOROPHENOL	5									
<u>A</u>	2.4-DICHLOROPHENOL	5		-					· · · · · · · · · · · · · · · · · · ·		[
A	2,4-DIMETHYLPHENOL	5]					·		r
A	2,4-DINITROPHENOL	45		-	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·				
A	2-CHLOROPHENOL	5					· · · · · · · · · · · · · · · · · · ·				·
<u>A</u>	2-NITROPHENOL	5							**		·
	4,6 DINITRO-O-CRESOL (2-Methyl-4,6-				-						
A	dinitrophenol)	25									1 1
A	4-NITROPHENOL	20			• • • • • • • • • • • • • • • • • • •						
	P-CHLORO-M-CRESOL (3-methyl-4-							·····			
A	chlorophenol)+B80	5									1
A	PENTACHLOROPHENOL	20									
A	PHENOL	5									
BN	1,2,4-TRICHLOROBENZENE	5				· · · · · · · · · · · · · · · · · · ·					
BN	1,2-(O)DICHLOROBENZENE	5	[<u> </u>		
BN	1,2-DIPHENYLHYDRAZINE	20				•					
BN	1.3-(M)DICHLOROBENZENE	5									
BN	1.4-(P)DICHLOROBENZENE	5					···· · · · · · · · · · · · · · · · · ·				
BN	2.4-DINITROTOLUENE	6	1								ł
BN	2.6-DINITROTOLUENE	5									
BN	2-CHLORONAPHTHALENE	5	1								<u> </u>
BN	3.3'-DICHLOROBENZIDINE	16.5									
BN	3.4-BENZO(B)FLUORANTHENE	5					·····				<u> </u>
BN	4-BROMOPHENYLPHENYL ETHER	5									
BN	4-CHLOROPHENYL PHENYL ETHER	5								·	
BN	ACENAPHTHENE	5			<u> </u>						<u> </u>
BN	ACENAPHTHYLENE	5								[<u></u>
BN	ANTHRACENE	Š									
BN	BENZIDINE	45	·								
BN	BENZO(A)ANTHRACENE	8			1	1					
BN	BENZO(A)PYRENE	5	<u> </u>		1						
BN	BENZO(G.H.I)PERYLENE	5			<u> </u>					<u></u>	
BN	BENZO(K)FLUORANTHENE	5	1								
BN	BIS(2-CHLOROETHOXY)METHANE	<u> </u>									<u> </u>
BN	BIS(2-CHI OROFTHYI)ETHER	ě – –				<u> </u>		·····			
BN	BIS/2-CHI OROISOPROPYL) FTHER	8	<u> </u>						1		<u> </u>
BN	BIS(2-ETHYI HEXYI)PHTHALATE	10		<u> </u>							<u> </u>
BN	BUTYLBENZYL PHTHALATE	5						ł			<u> </u>
BN	CHRYSENE	<u> </u>	<u> </u>	+	·		<u> </u>	{	<u> </u>	 	<u> </u>
BN	DLN-BUTYL PHTHALATE	5						 		<u> </u>	<u></u>
BM		<u> </u>									Ļ
BN									<u> </u>		<u> </u>
BN		<u> </u>				<u> </u>				ļ	1
BAL		2	<u> </u>						<u> </u>	ļ	
				<u> </u>		<u> </u>					
LOIX	ILOOMATTENE	1 5	I		F	1					

Revised July 1, 2015

DEPLW 0740-H2015

Maine Department of Environmental Protection

WET and Chem

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

BN	FLUORENE	5								
BN	HEXACHLOROBENZENE	5		******		 				
BN	HEXACHLOROBUTADIENE	5				 				
BN	HEXACHLOROCYCLOPENTADIENE	10				 				
BN	HEXACHLOROETHANE	5				 				
BN	INDENO(1.2.3-CD)PYRENE	5				 				
BN	ISOPHORONE	5				 				
BN	N-NITROSODI-N-PROPYLAMINE	10				 				
BN	N-NITROSODIMETHYLAMINE	5				 				
BN	N-NITROSODIPHENYI AMINE	<u>z</u>				 				
BN	NAPHTHALENE	5				 				
BN	NITROBENZENE	<u>y</u>			·····	 				
RN	PHENANTHRENE	<u>2</u>				 				
BN	PYRENE	<u>></u>		·						
P	444000	0.06				 				
P	4.4-DDF	0.05				 				
P	4 4-DDT	0.05				 				
P	A-BHC	0.00				 				
i-	A-ENDOSLILEAN	0.2				 				
i	ALDRIN	0.03				 		ļ		
	R_RHC	0.15				 				
Þ	B-ENDOSULEAN	0.05								
ie		0.00			·	 		l	· · · · · · · · · · · · · · · · · · ·	
i-	DEBHC	0.1		1		 				
i-		0.05				 				
i -		0.05		ļ		 				
		0.1				 				
i		0.05				 				
<u> </u>	C-BHC	0.05	_			 				
P		0.15				 				
	HEPTACHI OR EPOXIDE	0.13	·····			 				
·P	PCB-1016	0.3				 		<u> </u>		
P	PCB-1221	0.3				 				
P	PCB-1232	0.3				 		ł <u></u> .		
	PCB-1242	0.3			<u> </u>	 		L		
	PCB-1248	0.0				 				
P	PCB-1254	0.0				 				
ie -	PCB-1260	0.3						L		
Þ		1	1		}	 				
İv	1.1.1-TRICHLOROETHANE	<u> </u>			<u> </u>	 		<u> </u>		
1	1.1.2.2-TETRACHLOROFTHANE	7	<u> </u>		<u> </u>	 				
Ív	1.1.2-TRICHLOROETHANE	5				 	L	<u> </u>		
İ v	1.1-DICHLOROETHANE	5			+	<u> · · · · · · · · · · · · · · · · · · ·</u>	l			
<u>۲</u>	1.1-DICHLOROFTHYLENE (1.1-	<u>ر</u>		[<u> </u>			[
lv –	dichloroethene)	2	1				1			
V.	1 2-DICHLOROFTHANE	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~								
1	1 2-DICHLOROPROPANE	3	1			 				
h	1 2-TRANS-DICHLOROFTHYLENE /1 2-	0		[··· ··· ···		 	 			
lv –	trans-dichloroothene)	£								
 		3	<u> </u>		<u> </u>	 · · · · · · · · · · · · · · · · · · ·	I	1		
b	dichlorononene)	F								
1×	2-CHI OROFTHYI VINYI ETUER	<u> </u>		l				<u> </u>		
1		20		<u> </u>		 	 ~	<u> </u>	<u> </u>	
1		N/A			<u> </u>	 	 	J	ļ	
1 .	IRENZENE					 	l		<u> </u>	
L	المالحا المت	2	L	L	1				I	

Revised July 1, 2015

DEPLW 0740-H2015

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.

117	REDMOCORM	6	· · · · · · · · · · · · · · · · · · ·				 		
V	DICONOFORM	<u>ə</u>							
<u>v</u>	CARBON TETRACHLORIDE	5							
V	CHLOROBENZENE	6					 		
V	CHLORODIBROMOMETHANE	3					 		
V	CHLOROETHANE	5			1				
∇	CHLOROFORM	5	j					1	
V	DICHLOROBROMOMETHANE	3						<u> </u>	
$\overline{\mathbf{v}}$	ETHYLBENZENE	10				· · ··································	 		
V	METHYL BROMIDE (Bromomethane)	5		······					
V	METHYL CHLORIDE (Chloromethane)	5			-		 		
∇	METHYLENE CHLORIDE	5				······································	 		
	TETRACHLOROETHYLENE								
1×	(rechordenyiene or retrachioroethene)	5							
<u> </u>	TOLUENE	5	į						
	TRICHLOROETHYLENE						 		
V	(Trichloroethene)	3						1	
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) Mercus/(Slotten/teported in transmision interformation and the source of the superior source in the source of

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

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

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

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

Comments:

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

CONTENTS

SECTION		TOPIC	PAGE
А		GENERAL PROVISIONS	
	1	General compliance	2
	2	Other materials	2
	3	Duty to Comply	2
	4	Duty to provide information	2
	5	Permit actions	2
	6	Reopener clause	2
	7	Oil and hazardous substances	2
	8	Property rights	3
	9	Confidentiality	3
	10	Duty to reapply	3
	11	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
	3	Availability of reports	8
	4	Existing manufacturing, commercial, mining, and silvicultural dischargers	8
	5	Publicly owned treatment works	9
E		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

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

AND

MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Date: April 28, 2017

PERMIT NUMBER:ME0100561LICENSE NUMBER:W002713-6D-F-R

NAME AND ADDRESS OF APPLICANT:

PRESQUE ISLE UTILITIES DISTRICT P. O. Box 470 Presque Isle, Maine 04769

COUNTY:

Aroostook

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

126 Dyer Street Presque Isle, Maine 04769

RECEIVING WATER/CLASSIFICATION: Aroostook River, Class C Presque Isle Stream, Class B

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: Mr. Frank Kearney, Superintendent (207) 762-5061 e-mail: <u>frank@piutililies.com</u>

1. APPLICATION SUMMARY

a. <u>Application</u> - The Presque Isle Utilities District (PIUD/permittee hereinafter) has submitted a timely and complete application to the Department for the renewal of combination Waste Discharge License (WDL) #W002713-5L-D-R/ Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100561 (permit hereinafter), which was issued by the Department on June 18, 2007, and expired on June 18, 2012. The 6/18/07 permit authorized the monthly average discharge of up to 2.31 million gallons per day (MGD) of secondary treated sanitary waste waters (Outfall #001A) and an unspecified quantity of primary and secondary treated sanitary waste waters (Outfall #001B) from a municipal waste water treatment facility to the Aroostook River, Class C, and under certain circumstances, authorizes the discharge of an unspecified quantity of primary and secondary treated secondary treated secondary treated waste waters (Outfall #002A) to Presque Isle Stream, Class B, in Presque Isle, Maine.

1. APPLICATION SUMMARY (cont'd)

The 6/18/07 permit established a schedule of compliance in which the permittee was to cease discharging secondary and primary treated waste water to Presque Isle Stream beginning November 1, 2009. Thereafter, all treated waste water was to be discharged to the Aroostook River, Class C, unless the hydraulic capacity of the 36-inch outfall structure to the Aroostook River was exceeded. The permittee's consulting engineer determined the hydraulic capacity of the outfall would be exceeded at the 100-year flood elevation of 427.00 feet above mean sea level. When this occurs, the permittee was authorized to discharge primary and secondary treated waste waters to Presque Isle Stream.

b. <u>Source Description</u>: The wastewater treatment facility serves a population of approximately 5,740 people in the City of Presque Isle. The treatment facility receives sanitary waste water generated by residential and commercial entities within the PIUD's boundaries. The facility does not receive more than 10% of its flow or pollutant loading from industrial users of the system.

The sanitary sewer collection system consists of approximately 50 miles of pipe with four pump stations. The collection system is a separated system with no combined sewer overflow (CSO) points. The PIUD has requested authorization to continue to add a daily maximum of up to 18,000 gallons per day of transported waste into the facility's solids handling system. Special Condition J of this permit authorizes PIUD to receive and introduce into its solids handling system the requested volume of transported wastes from local haulers. Transported wastes will be transferred by tank truck to a 8,600-gallon aerated receiving/holding tank and then to a 9,000-gallon lime-stabilization tank. After the transported waste is lime-stabilized, it may be stored temporarily at the treatment facility with the treatment facility sludge, or it may be hauled directly to a sludge storage lagoon or a sludge utilization site. In its 3/28/12 application for permit renewal, the permittee completed the Department form *Application For Addition of Transported Wastes in Wastewater Treatment Facilities*.

See Attachment A of this Fact Sheet for a map showing the location of the treatment facility, Presque Isle Stream outfall location and the Aroostook River outfall location.

c. <u>Waste Water Treatment</u>: The PIUD provides a secondary level of treatment via an activated sludge system. The treatment process includes an aerated grit chamber, two bar screens, an oxidation ditch, two clarifiers with covers, and a chlorine contact chamber. An equipment upgrade project was completed in calendar year 2005. The dissolved air flotation (DAF) sludge thickener was replaced by a rotary drum thickener. The liquid sodium hypochlorite disinfection system was replaced by a bulk NaOCl disinfection system, and the gas sulfur dioxide dechlorination system was replaced by a liquid sodium bisulfite system. Final effluent is conveyed to the Aroostook River via a 36-inch diameter outfall pipe located just east of the U.S. Route 1 bridge crossing of the Aroostook River in Presque Isle. This permit does, however, allow for discharges to Presque Stream when the hydraulic capacity of the Aroostook River outfall is exceeded during 100-year flood conditions.

1. APPLICATION SUMMARY (cont'd)

The PIUD's treatment facility receives excessive inflow and infiltration into the sewer collection system. When flow to the treatment facility exceeds 5.2 MGD, a hydro-brake diverts the excess flow to a swirl separator and then to a point in the plant's outfall pipe after the chlorine contact chamber. The concentrated underflow from the swirl separator (0.2 MGD) is conveyed back to the headworks of the treatment facility for secondary treatment. The primary treated effluent is disinfected by a high rate disinfection system designed to meet Department best practicable treatment (BPT) daily maximum *E. coli* bacteria limits protective of the Aroostook River.

See Attachment B of this Fact Sheet for a wastewater process flow schematic.

2. PERMIT SUMMARY

- a. <u>Terms and Conditions</u>: This permitting action is carrying forward the terms and conditions of the previous permitting actions except that this permit is;
 - 1. Incorporating the interim average and maximum numeric limitations for mercury into the permit and carrying forward a 1/Year monitoring requirement established in a minor revision dated February 2, 2012.
 - 2. Eliminating the monthly average and daily maximum water quality based mass and concentration limits for total copper as the most recent 60 months of copper data indicates the discharge no longer exceeds or has a reasonable potential to exceed applicable ambient water quality criteria (AWQC).
 - 3. Establishing a new monthly average mass limitation for total aluminum given test results in the most recent 60 months indicate the discharge has a reasonable potential to exceed applicable ambient water quality criteria pursuant to Department rule, 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*. Eliminating technology based concentration limit for total aluminum based on Maine law 38 M.R.S. §464, ¶¶ K.
 - 4. Establishing a more stringent monthly average water quality based limitation for total phosphorus based on new information obtained from a 2012 ambient water quality survey conducted by the Department. The survey indicates the discharge of total phosphorus from the PIUD is contributing to pH violations in the Aroostook River.
 - 5. Reducing the monitoring frequencies for biochemical oxygen demand (BOD), total suspended solids (TSS) and *E. coli* bacteria from 3/week to 2/Week, settleable solids (SS) from 5/Week to 2/Week, total residual chlorine (TRC) from 1/Day to 5/Week, total phosphorus from 3/Week to 1/Week and pH from 1/Day to 5/Week based on a statistical evaluation of the previous 45 months of Discharge Monitoring Report (DMR) data.
 - 6. Eliminating the allowance to bypass secondary treatment at the treatment facility pursuant to 06-096 CMR Chapter 523(m) and 40 CFR §122.41(m) as the Department has made the determination there is a feasible alternative to bypassing secondary treatment.

2. PERMIT SUMMARY (cont'd)

- 7. Eliminating the monthly total limit of 60,000 gallons for receiving and treated transported waste as there is no basis to limit the facility in this manner.
- b. <u>History</u>: The most current licensing/permitting actions include the following:

September 21, 1995 – The U.S. Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0100561 for the discharge from the PIUD's waste water treatment facility.

May 23, 2000 – Pursuant to Certain deposits and discharges prohibited, 38 M.R.S. § 420 and Waste discharge licenses, 38 M.R.S. § 413 and Interim Effluent Limitations and Controls for the Discharge of Mercury, 06-096 CMR 519 (last amended October 6, 2001), the Department issued a Notice of Interim Limits for the Discharge of Mercury to the permittee thereby administratively modifying WDL #W002713-46-A-R by establishing interim monthly average and daily maximum effluent concentration limits of 16.6 parts per trillion (ppt) and 24.9 ppt, respectively, and a minimum monitoring frequency requirement of 4 tests per year for mercury.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permit program in Maine, excluding areas of special interest to Maine Indian Tribes. From that point forward, the program has been referred to as the MEPDES program.

September 30, 2002 – The Department issued WDL #W002713-5L-C-M / MEPDES permit #ME0100561 to PIUD for a five-year term. The 9/30/2002 permit superseded WDL #W002713-5L-B-R issued on December 28, 2000, and WDL #W002713-46-A-R issued on April 15, 1988 (earliest Order on file with the Department).

May 14, 2003 – The Department administratively modified the 9/30/2002 MEPDES permit by eliminating the limitations and monitoring requirements for whole effluent toxicity (WET) testing, chemical-specific testing, bis (2-ethylhexyl) phthalate, total silver, and total zinc.

October 29, 2003 – The Department administratively modified the 9/30/2002 MEPDES permit by extending the submission deadline established in Special Condition K from April 17, 2004 to December 31, 2004.

January 20, 2004 – The Department administratively modified the 9/30/2002 MEPDES permit by eliminating the limitations and monitoring requirements for G-BHC.

April 10, 2006 – The Department administratively modified the 9/30/2002 MEPDES permit to incorporate testing requirements of 06-096 CMR 530.

June 18, 2007 – The Department issued combination WDL #W002713-5L-D-R / MEPDES permit #ME0100561 (permit hereinafter) for a five-year term.

2. PERMIT SUMMARY (cont'd)

February 13, 2009 – The Department issued combination WDL #W002713-6D-E-M/ MEPDES #ME0100561 permit modification that eliminated the water quality based limitations for total copper and reduced the monitoring frequency for analytical chemistry.

February 6, 2012 – The Department issued a minor revision to the June 18, 2007 permit by reducing the monitoring frequency for mercury from 4/Year to 1/Year.

March 28, 2012 – The PIUD submitted a timely and complete application to the Department for the renewal of the WDL/MEPDES permit.

August 3, 2012 – The Department issued combination WDL #W002713-6D-G-M/ MEPDES #ME0100561 permit modification that established water quality based limitation for inorganic arsenic and total aluminum and incorporated the technology based limitations for total mercury established on May 23, 2000.

September 6, 2012 - The Department issued combination WDL #W002713-6D-H-M/ MEPDES #ME0100561 permit modification that established a schedule of compliance for the permittee to conduct an energy audit on or before August 22, 2013.

October 4, 2013 - The Department issued combination WDL #W002713-6D-J-M/ MEPDES #ME0100561 permit modification that removed water quality based limitations for inorganic arsenic based on a revision to the ambient water quality criteria for inorganic arsenic.

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

4. RECEIVING WATER STANDARDS

Maine law, 38 M.R.S., § 467(15)(C)(1)(d) classifies the Aroostook River, main stem, from its confluence with Presque Isle Stream to a point located 3.0 miles upstream of the former intake of the Caribou water supply, including all impoundments, which includes the discharge from the PUID outfall, as Class C waters. Maine law, 38 M.R.S. § 465(4) describes the standards for Class C waters as follows;

- A. Class C waters must be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as a habitat for fish and other aquatic life.
- B. The dissolved oxygen content of Class C water may be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained. In order to provide additional protection for the growth of indigenous fish, the following standards apply.
 - (1) The 30-day average dissolved oxygen criterion of a Class C water is 6.5 parts per million using a temperature of 22 degrees centigrade or the ambient temperature of the water body, whichever is less, if:
 - (a) A license or water quality certificate other than a general permit was issued prior to March 16, 2004 for the Class C water and was not based on a 6.5 parts per million 30-day average dissolved oxygen criterion; or
 - (b) A discharge or a hydropower project was in existence on March 16, 2005 and required but did not have a license or water quality certificate other than a general permit for the Class C water. This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004.
 - (2) In Class C waters not governed by subparagraph (1), dissolved oxygen may not be less than 6.5 parts per million as a 30-day average based upon a temperature of 24 degrees centigrade or the ambient temperature of the water body, whichever is less. This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004. The department may negotiate and enter into agreements with licensees and water quality certificate holders in order to provide further protection for the growth of indigenous fish. Agreements entered into under this paragraph are enforceable as department orders according to the provisions of sections 347-A to 349.

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

Between May 15th and September 30th, the number of Escherichia coli bacteria of human and domestic animal origin in Class C waters may not exceed a geometric mean of 126 per 100 milliliters or an instantaneous level of 236 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures. The board shall adopt rules governing the procedure for designation of spawning areas. Those rules must include provision for periodic review of designated spawning areas and consultation with affected persons prior to designation of a stretch of water as a spawning area.

C. Discharges to Class C waters may cause some changes to aquatic life, except that the receiving waters must be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community. This paragraph does not apply to aquatic pesticide or chemical discharges approved by the department and conducted by the department, the Department of Inland Fisheries and Wildlife or an agent of either agency for the purpose of restoring biological communities affected by an invasive species.

Maine law, 38 M.R.S., §467(15)(C)(2)(a) classifies all tributaries of the Aroostook River entering below the confluence of the Machias River that are not otherwise classified as Class B waters. Maine law 38 M.R.S. § 465(3) describes the standards for Class B waters as follows:

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

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

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

5. RECEIVING WATER QUALITY CONDITIONS

<u>The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report</u>, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists a 10.5 miles of the Aroostook River (ADB Assessment Unit ID ME0101000413_148R, between the confluence with Presque Isle Stream and 3 miles upstream of the former Caribou water supply intake) in *Category 3: Rivers and Streams with Insufficient Data or Information to Determine if Designated Uses Are Attained (One or more Uses Impaired).* In addition, all of Maine's fresh waters as, "*Category 4-A: Waters Impaired With Impaired Use, TMDL Completed, Waters Impaired by Atmospheric Deposition of Mercury.* The report states the impairment is caused by atmospheric deposition of mercury; a regional scale TMDL has been approved. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Health and 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 Maine law, 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 average and maximum mercury concentration limits for this facility and the permittee has been in compliance with said limits. See the discussion in section 6(k) of this Fact Sheet.

Historic Water Quality Assessment/Modeling

The Aroostook River Basin is the largest sub-basin of the St. John River lying almost entirely within the State of Maine. The river segment of interest on the Aroostook begins in Ashland and flows to Washburn, Presque Isle, Caribou, Fort Fairfield and eventually the international border. In this segment of interest, there are seven point source discharges licensed to discharge organic waste loads to the Aroostook River: Ashland Water and Sewer District (AWSD), Town of Washburn, Presque Isle Utilities District (PIUD), Caribou Utilities District (CUD), Limestone Water & Sewer District (LWSD), Fort Fairfield Utilities District (FFUD), and McCain Foods, USA, Inc. (McCain). Additionally, two dams significantly impound water in this river segment. The Caribou dam is located approximately 15 river miles upstream of the international border and impounds water 4.5 river miles upstream of the Caribou dam. The Tinker dam is located in Canada, but impounds water 5 river miles upstream of the international border.

A study of the Aroostook River from Ashland to the United States-Canadian border (58 miles) began in the summer of 2001 involving the Department and a number of stakeholders, including McCain. Two data sets were collected in August of 2001 to calibrate and verify a water quality model, and in September 2004, the Department summarized the findings in a report entitled, <u>Aroostook River</u> <u>Modeling Report, Final Sept 2004</u> ("Modeling Report").

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

The Department has not established numeric nutrient criteria at this time, specifically for phosphorus. The Department is in the process of developing nutrient criteria (as required by the USEPA), methodologies for quantitatively evaluating benthic-attached algae, and developing water classification specific (Class A, Class B, and Class C) chlorophyll-a standards for Maine waters. No schedule has been established to finalize the criteria for total phosphorus.

The Department's Division of Environmental Assessment (DEA) evaluated the 2001 Aroostook River data, calibrated and verified the Aroostook River water quality model and published the 2004 Modeling Report, certain assumptions were incorporated into the model to predict water quality conditions, such as utilizing a range of 8 to 12 ug/L for chlorophyll-a as the likely threshold level for algae blooms. Additionally, "there is currently no precedent on threshold levels of benthic algae where designated uses become inhibited, but it is likely that this could also be an issue on the Aroostook River after the nutrient criteria are developed...." (Modeling Report, p.51) In the Executive Summary of the Modeling Report (see #11 and #12), the Department concluded that "An additional data set should be taken at reduced point source phosphorus inputs" and "Total phosphorus license allocations for point sources should be re-evaluated by the model after collection of the additional data set recommended and nutrient criteria development are final." The Department stated in its response to comment #11 (see page 4 of the Modeling Report, *Response to Comments*), that "it [i]s important to make all stakeholders aware of the nutrient issue on the Aroostook River and give some idea for ballpark estimates of phosphorus allocations, given the current science and knowledge of this issue."

The Department concluded in the Modeling Report that both 2001 data sets experienced chlorophyll-a levels exceeding the upper range of the 8 to 12 μ g/L threshold from above the Caribou dam to the international border, and that algae blooms were projected for 13 to 23 miles of the river from Maysville to the international border, with chlorophyll-a levels as high as 17 μ g/L. The model predicted that both minimum dissolved oxygen criteria and monthly average dissolved oxygen criteria (6.5 parts per million) should be met everywhere on the Aroostook River. Additionally, the Modeling Report stated that "Although not quantitatively sampled, large levels of benthic algae were observed in the Aroostook River during the 2001 surveys. The benthic algae were evident from the confluence of the Presque Isle Stream to the head of the Caribou dam impoundment, but most abundant from below the Caribou dam to the head of the Tinker Dam impoundment in Fort Fairfield." The Modeling Report stated that dissolved oxygen data collected in 2001 was characterized by large diurnal fluctuations due to the significant growths of both bottom-attached (benthic) and floating algae (phytoplankton)." There is a trend of less fluctuation (generally around 1-2 ppm) above the major point source discharges as compared to average diurnal fluctuations below the major point source discharges for 9 ppm in shallower flowing sections and 1 to 4 ppm in impoundments).

Phosphorus is ordinarily the limiting nutrient in fresh water systems, which must be reduced in order to alleviate eutrophication. Component analysis was undertaken in the 2004 Modeling Report by comparing input loads of point and non-point sources of ultimate BOD and total phosphorus. The analysis demonstrated that at 7Q10 river conditions, McCain and PISD were the major sources of phosphorus in the river, assuming that both were discharging at permitted flows with contributions of

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

43% and 17% of the total river phosphorus load, respectively. See Figure 16 of the Modeling Report. Assuming that all dischargers were discharging their permitted BOD_5 loads at 7Q10 flow, McCain, LWSD, CUD, and PIUD are all significant inputs with contributions of 29%, 15%, 15%, and 14%, respectively, of the total ultimate BOD load. For both phosphorous and BOD, base flow non-point source and background sources are not significant, accounting collectively for 4% and 13% of the total river load for phosphorus and BOD, respectively. See Figure 17 of the Modeling Report.

Different levels of point source reductions were investigated to estimate the amount needed to alleviate eutrophication on the Aroostook River, given the model assumptions described above. See Table 10 of the Modeling Report. Large reductions of point source phosphorus were recommended to reduce algae to a non-eutrophic state. Model prediction runs undertaken with reduced phosphorus inputs from McCain and PIUD, which collectively have been identified as the two largest sources of phosphorus to the river, provide guidance as to the necessary reductions. The model runs suggested that a total phosphorus effluent mass limit for the McCain and PIUD facilities based upon permitted flow and a total phosphorus concentration of 0.5 ppm would result in a maximum chlorophyll-a concentration of 9 ppb, which approaches the lower end of the 8-12 ppb range at which algae blooms are expected in the river.

Due to uncertainties in final nutrient criteria and how these final criteria will affect the 2004 Modeling Report results, the May 17, 2007 permit carried forward the seasonal (June 1 – September 30) weekly average total phosphorus mass and concentration limits of 91 lbs./day and 6.6 mg/L for both Tier #1 and Tier #2 of the McCain permit with a minimum monitoring frequency requirement of three times per week.

Current Water Quality Assessment/Modeling

The Department conducted two separate studies of the Aroostook River in July-August, 2012 to update its evaluation of nutrient enrichment on the river and published the results in a report entitled, *Aroostook River Data Report, April 2013*. The biological monitoring results show that the river is enriched with nutrients, but is remarkably resilient and supported relatively healthy aquatic life communities (Table 1 of the report). All the biological monitoring samples for macro-invertebrates and algae attained class. The pH was greater than the pH criterion of 6.5-8.5 for four samples collected during the late morning or early afternoon, particularly downstream of Presque Isle. The percent cover of filamentous algae > 2 cm in length was not bad, but looked ready to bloom if water levels dropped further.

Sample results confirm the problems with pH (Figure 4). During a July 24-26 sampling trip, the Department measured early morning and afternoon DO and pH, along with other water quality parameters, for three consecutive days. Upstream of Presque Isle, the data show that the river had small diurnal swings with moderate peaks in DO (\leq 9.63 ppm) and pH (\leq 8.27). Sample locations further downstream from Presque Isle center indicate algae is likely removing phosphorus from the water by the time it reached the downstream sample locations. Downstream of Presque Isle and

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

Caribou, nutrient enrichment increased production of algae and plants, which caused larger swings and higher peaks in DO (10.08-13.63 ppm) and pH (8.59-9.11). pH values exceeded the 8.5 criterion at seven locations on the Aroostook River downstream of Presque Isle and Caribou. The high pH values downstream are not natural based on the evidence that the upstream sample points did not have pH >8.5 and the high pH downstream was caused by algae and aquatic plants. The alkalinity from the region's calcium-rich soils contributed to the high pH values and made the river more susceptible to pH exceedances.

The 2013 data report indicates on 7/30/12, there were a lot of nutrients being discharged into the river in the Presque Isle area. Upstream of Presque Isle, the total phosphorus concentration was 9 μ g/L compared to 93 and 80 μ g/L downstream of Presque Isle. The large ortho-phosphorus concentrations from the same date suggest that the source was a point source discharge. The total phosphorus concentrations were comparable upstream and downstream of Presque Isle on 8/27. The McCain potato processing plant was operating in July but was not discharging into the Aroostook River in late August when the second batch of samples were collected. During the July 24-26 sampling trip, all total phosphorus samples collected in the Aroostook River were <33 μ g/L. During the same trip, samples collected total phosphorus samples from three major tributaries ranging from 14 ug/L to 32 μ g/L. There is great potential for phosphorus enrichment from the agriculturally impacted tributaries during storm events. Major conclusions and recommendations from the report were as follows:

• Dissolved oxygen criterion was met throughout the river with diurnal swings over

5 mg/L.

- Chlorophyll a exceeded 8 μ g/L within the Caribou dam and Tinker dam impoundments.
- Although pH was not measured during the 2001 field survey, readings were taken during a transect survey in 2002 and included in the report. Observed pH levels exceeded criterion of 8.5 on four of eight river sites. The report concluded that the elevated pH was due to the diurnal algal growth kinetics.
- High phosphorus concentrations measured during the field survey and elevated when modeled during critical water quality conditions are attributed to point source discharges.
- Collective point source phosphorus reductions of greater than 50% from current amounts are needed to eliminate algae blooms.

See section 6(h) of this Fact Sheet for additional discussion on total phosphorus.

Outfall #001C - Secondary treated waste water

a. Flow: The previous permitting action established a monthly average flow limitation of 2.31 MGD based on the dry weather design capacity of the facility. The limitation is being carried forward in this permitting action along with a daily maximum discharge flow reporting requirement. A review of the monthly Discharge Monitoring Reports (DMRs) submitted to the Department for the period January 2013 - September 2016 indicates flow values have been reported as follows:

Flow (DMRs = 45)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	2.31	0.73 - 4.03 ⁽¹⁾	1.67
Daily maximum	Report	0.93 – 5.37	3.29

- (1) There were nine excursions of the monthly average flow limitation with most coinciding with a bypass of secondary treatment event requiring an instantaneous flow of 5.4 MGD be conveyed to secondary treatment before bypassing.
- b. Dilution Factors: Dilution factors associated with the permitted discharge flow of 2.31 MGD to the Aroostook River were derived in accordance with 06-096 CMR Chapter 530(4)(A) and were calculated as follows.

Acute: $1Q10^{(1)} = 139 \text{ cfs}^{(1)}$	$\Rightarrow (139 \text{ cfs})(0.6464) + (2.31 \text{ MGD}) = 40:1$ (2.31 MGD)
Chronic: $7Q10^{(1)} = 160 \text{ cfs}^{(1)}$	$\Rightarrow (160 \text{ cfs})(0.6464) + (2.31 \text{ MGD}) = 46:1$ (2.31 MGD)
Harmonic Mean ⁽¹⁾ = 993 cfs ⁽¹⁾	$\Rightarrow (993 \text{ cfs})(0.6464) + (2.31 \text{ MGD}) = 279:1$ (2.31 MGD)
Loofnoto:	

Footnotes:

(1) Flows were determined by a 2016 Department statistical evaluation of the Washburn gauge data through August 2016 along with adjustments for the contributing drainage area between the gauge and the PIUD facility.

Outfall #001C – Secondary treated waste water

c. <u>Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS)</u>: The previous permitting action established monthly average and weekly average BOD₅ and TSS concentration limits of 30 mg/L and 45 mg/L, respectively, based on secondary treatment requirements of Department rule 06-096 CMR Chapter 525(3)(III), and daily maximum BOD₅ & TSS concentration limits of 50 mg/L based on a Department best professional judgment (BPJ) of best practicable treatment (BPT). All three concentration limits are being carried forward in this permitting action based on the secondary treatment requirements and Department BPJ as described above.

The previous permitting action established monthly average, weekly average and daily maximum BOD_5 and TSS mass limits of 578 lbs./day, 867 lbs./day and 963 lbs./day, respectively, based the monthly average discharge flow limit of 2.31 MGD and the applicable concentration limits which are being carried forward in this permitting action and were derived as follows:

Monthly average mass limit: (30 mg/L)(8.34 lbs./gallon)(2.31 MGD) = 578 lbs./dayWeekly average mass limit: (45 mg/L)(8.34 lbs./day)(2.31 MGD) = 867 lbs./dayDaily maximum mass limit: (50 mg/L)(8.34 lbs./day)(2.31 MGD) = 963 lbs./day

This permitting action is also carrying forward a requirement for a minimum of 85% removal of BOD₅ & TSS pursuant to Department rule 06-096 CMR Chapter 525(3)(III)(a)(3) and (b)(3).

A review of the monthly DMRs submitted to the Department for the period January 2013 – September 2016 indicates BOD & TSS values have been reported as follows:

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	578	28-365	129
Weekly Average	863	33 - 605	185
Daily Maximum	963	58 – 1,271 ⁽¹⁾	339

BOD Mass (DMRs=45)

BOD Concentration (DMRs=45)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	4 - 24	9
Weekly Average	45	4 - 29	12
Daily Maximum	50	5-33	16

(1) One excursion coinciding with a bypass of secondary treatment.

Outfall #001C – Secondary treated waste water

TSS mass (DMRs=45)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	578	32 - 298	93
Weekly Average	863	40-452	146
Daily Maximum	963	$55 - 1,371^{(1)}$	298

TSS concentration (DMRs=45)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	4 – 9	6
Weekly Average	45	5-17	8
Daily Maximum	50	$6-55^{(1)}$	13

BOD % Removal (DMRs=45)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	<u>92 - 98</u>	95

TSS % Removal (DMRs=45)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	94 - 97	96

(1) Seven excursions coinciding with a bypass of secondary treatment.

The previous permitting action established a minimum monitoring frequency requirement of three times per week (3/Week) for BOD_5 and TSS, based on Department guidance for POTWs permitted to discharge between 1.0 MGD and 5.0 MGD.

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 EPA guidance with its own guidance entitled, *Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996* (Maine DEP May 22, 2014). Both documents are being utilized to evaluate the compliance history for each parameter regulated by the previous permit to determine if a reduction in the monitoring frequencies are justified.

Although EPA's 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering 45 months of data (January 2013 – September 2016). A review of the monitoring data for BOD & TSS indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as 22% and 16% respectively. According to Table I of the EPA Guidance, a 3/Week monitoring requirement can be reduced to 2/Week. Therefore, this permitting action is reducing the monitoring frequency for BOD and TSS to 2/Week.

Outfall #001C – Secondary treated waste water

d. <u>Settleable Solids (SS)</u> – The previous permitting established a daily maximum BPT concentration limit of 0.3 ml/L along with a monitoring frequency of 5/Week. The limitation is being carried forward in this permitting action. A review of the monthly DMR data for the period January 2013 – September 2016 indicates settleable solids have been reported as follows:

Settleable Sonds concentration (Diffus 45)				
Value	Limit (ml/L)	Average (ml/L)		
Daily Maximum	0.3	0.0 - 0.2	0.006	

Settleable solids concentration (DMRs 45)

A review of the SS monitoring above indicates the ratio (expressed in percent) of the long term effluent average to the daily maximum limit can be calculated as 2%. Using EPA and Department Guidance, a 1/Day monitoring requirement can be reduced to 5/Week. However, given settleable solids has only been reported above 0.0 ml/L on two occasions, this permitting action is reducing the monitoring frequency for SS to 2/Week to be consistent with the monitoring frequency for BOD and TSS.

e. <u>Escherichia coli (E. coli) bacteria</u>: The previous permitting action established a seasonal (May 15–September 30) monthly average concentration limits of 126 colonies/100 ml (geometric mean) for *E. coli* bacteria which is based on the State of Maine Water Classification Program criteria for Class C waters found at 38 M.R.S.A. §465(4)(B). The previous permit established a technology based daily maximum *E. coli* bacteria limitation of 949 colonies/100 ml (instantaneous level), as the Department made a determination that after taking into consider the dilution associated with the discharge, the limit of 949 colonies/100 ml is protective of the water quality standard for bacteria. Therefore, the daily maximum limitation of 949 colonies/100 ml is being carried forward in this permitting action.

A summary of the effluent *E. coli* bacteria data as reported on the DMRs submitted to the Department for the period May 2013 – September 2016 is as follows:

E con bacteria (DNHS 20)					
Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)		
Monthly Average	126	2 - 82	16		
Daily Maximum	949	44 - 613	252		

E coli. bacteria (DMRs = 20)

A review of the *E. coli* bacteria monitoring data above indicates the ratio (expressed in percent) of the long term effluent average to the monthly average limit can be calculated as 13%. According to Table I of the EPA Guidance, a 3/Week monitoring requirement can be reduced to 2/Week. Therefore, this permitting action is reducing the monitoring frequency for *E. coli* bacteria to 2/Week.

Outfall #001C – Secondary treated waste water

f. <u>Total Residual Chlorine (TRC)</u>: The previous permitting action established monthly average and daily maximum technology-based concentration limits of 0.1 mg/L and 0.3 mg/L respectively, for TRC. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department permitting actions impose the more stringent of either a water quality-based or BPT based limit.

With acute and chronic dilution factors associated with the discharge, end-of-pipe acute and chronic water quality-based concentration thresholds for the discharge to the Aroostook River may be calculated as follows:

			Calcula	ted
Acute (A)	Chronic (C)	A & C	Acute	Chronic
Criterion	Criterion	Dilution Factors	Threshold	<u>Threshold</u>
0.019 mg/L	0.011 mg/L	40:1 (A)	0.76 mg/L	0.51 mg/L
		46:1 (C)		

To meet the water quality based thresholds calculated above, the permittee must dechlorinate the effluent prior to discharge. The Department has established a daily maximum BPT limitation of 0.3 mg/L for facilities that need to dechlorinate their effluent unless calculated water quality based thresholds are lower than 0.3 mg/L. In the case of the PIUD, the acute water quality based threshold calculated above is higher than 0.3 mg/l, thus the technology based limitation of 0.3 mg/L is being imposed. As for the monthly average limitation, the Department's BPT limitation is 0.1 mg/L. Being that the calculated water quality based limit is higher than 0.1 mg/L, the technology based limitation of 0.1 mg/L is being imposed.

A review of the DMR data for the period May 2013 – September 2016 indicates TRC concentration values have been reported as follows:

Total residual childrine (TRC) (DAINS 20)					
Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)		
Monthly average	0.1	0.01 - 0.03	0.02		
Daily maximum	0.3	0.03 - 0.06	0.04		

Total residual chlorine (TRC) (DMRs=20)

A review of the TRC monitoring data above indicates the ratio (expressed in percent) of the long term effluent average to the monthly average limit can be calculated as 20%. According to EPA and Department Guidance, a 1/Day monitoring requirement can be reduced to 5/Week. Therefore, this permitting action is reducing the monitoring frequency for TRC to 5/Week.

Outfall #001C – Secondary treated waste water

<u>pH:</u> The previous permitting action is contained a technology-based pH limit of 6.0 – 9.0 standard units that is being carried forward in this permit. The pH limit is based on 06-096 CMR 525(3)(III), and a minimum monitoring frequency requirement of once per day based on Department guidance.

A review of the monthly DMR data for the period January 2013 – September 2016 indicates the following:

pН	(DMRs	= 45)
----	-------	-------

Value	Limit (su)	Minimum (su)	Maximum (su)
Range	6.0 - 9.0	6.4	7.2

Given the pH range limitations have never been violated, this permit is reducing the monitoring frequency for pH from 1/Day to 5/Week.

h. <u>Total Phosphorus (Total-P)</u>: The previous permitting action established a seasonal (June – September) monthly average water quality based mass and concentration limits of 19.2 lbs/day and 1.0 mg/L based on a recommendation in the <u>Aroostook River Modeling Report, Final Sept 2004</u>, prepared by the Department. The monthly average mass limit was derived as follows:

Monthly average mass limit: (1.0 mg/L)(8.34 lbs./gallon)(2.31 MGD) = 19.2 lbs./day

In addition to monthly average limits for total phosphorus, the previous permit established weekly average and daily maximum mass and concentration reporting requirements for total phosphorus. The monitoring frequency was established at 3/week. A review of the monthly DMR data for the period January 2013 – September 2016 indicates the following:

Total phosphorus mass (DMRs = 16)

Value	Limit lbs/day	Range (lbs/day)	Mean (lbs/day)
Monthly average	19.2	2.0 - 8.2	4.2
Weekly average	Report	2.9 - 12	5.9
Daily maximum	Report	3.8 21.3	8.1

Total phosphorus concentration (DMRs = 16)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly average	1.0	0.2 - 0.5	0.3
Weekly average	Report	0.2 - 0.6	0.4
Daily maximum	Report	0.3 - 0.8	0.5

Outfall #001C – Secondary treated waste water

Department guidance on monitoring frequency reductions does not authorize a permit writer to reduce the monitoring frequencies for water quality based limitations. Therefore the 3/Week monitoring requirement for total phosphorus is being carried forward in this permitting action.

A summary of review of the effluent data for ortho-phosphorus as reported on the DMRs submitted to the Department for the period June 2013 – September 2016 is as follows:

Value	Limit lbs/day	Range (lbs/day)	Mean (lbs/day)
Monthly average	Report	0.2 - 3.8	1.9
Weekly average	Report	0.2 - 6.0	3.1
Daily maximum	Report	0.3-12	4.5

Ortho-phosphorus mass (DMRs = 16)

Ortho- phosphorus concentration (DMRs = 16)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly average	Report	0.02 - 0.30	0.2
Weekly average	Report	0.02 - 0.40	0.2
Daily maximum	Report	0.03 - 0.6	0.4

The previous permitting action established monthly average, weekly average and daily maximum mass and concentration reporting requirements in an attempt to develop a correlation between total and ortho-phosphorus discharge levels. The data indicates the ortho-phosphorus is approximately 50% of the total phosphorus. Being that correlation has been established, ortho-phosphorus monitoring requirements are not being carried forward in this permitting action.

Given the close proximity of the discharges from the McCain Foods facility and Presque Isle Utility District (approximately 1.0 miles apart) the Department is evaluating the impact of total phosphorus discharged from the two facilities collectively. The calculations are as follows:

<u>Given</u>

Flow limit = 4.81 MGD (2.5 MGD McCain + 2.31 MGD PIUD) 7Q10 at PIUD = 160 cfs or 103.4 MGD Background concentration of Total P = 0.01 mg/L Critical Total P threshold = 0.10 mg/L Chronic dilution factor = 22.5:1

Outfall #001C – Secondary treated waste water

<u>Find</u>:

- 1. Does the combined discharge have a reasonable potential to exceed the threshold of 0.10 mg/L?
- 2. Allowable discharge of Total P mass from McCain and PIUD combined.
- 3. Total P mass limit for each facility.

Solution:

1. Reasonable potential

What is remaining assimilative capacity: 0.100 mg/L - 0.01 mg/L = 0.090 mg/L

What is the weighted average concentration of Total P being discharged? <u>McCain (2.5 MGD)(4.9 mg/L) + PIUD (2.31 MGD)(0.33 mg/L)</u> = 2.7 mg/L 4.81 MGD What is the resultant instream concentration after rapid and complete mixing? <u>2.7 mg/L</u> = 0.12 mg/L 22.5

Reasonable potential? Yes, as 0.12 mg/L > than assimilative capacity of 0.090 mg/L

2. Allowable discharge of Total P mass from McCain and PIUD combined.

EOP concentration = [Dilution factor x 0.90 x AWQ goal] + [0.10 x AWQC goal]

EOP concentration = $[(22.5 \times 0.90 \times 0.100 \text{ mg/L}) + (0.1 \times 0.100 \text{ mg/L})] = 2.04 \text{ mg/L}$

Monthly average mass limit: (4.81 MGD)(8.34 lbs/gal)(2.04 mg/L) = 82 lbs/day

3. Total P mass limit for each facility

Based on the allocation established in the previous permitting actions for McCain and PIUD, the facilities were limited to a total of 110 lbs/day, 91 lbs/day for McCain and 19 lbs/day for PIUD. That apportions to 83% of the allocation to McCain and 17% of the allocation to PIUD. To be consistent with previous allocations, this permitting action is establishing monthly average water quality based mass limitations for each facility as follows:

McCain: 82 lbs/day(0.83)= 68 lbs/day resulting in a 31% reduction from the previous permit.

PIUD: 82 lbs/day(0.17)= 14 lbs/day resulting in a 32% reduction from the previous permit.

Outfall #001C - Secondary treated waste water

A review of the total phosphorus monitoring data on page 17 of this Fact Sheet indicates the ratio (expressed in percent) of the long term effluent average to the new monthly average mass limit established in this permit (14 lbs./day) can be calculated as 30%. According to EPA and Department Guidance, a 3/Week monitoring requirement can be reduced to 1/Week. Therefore, this permitting action is reducing the monitoring frequency for total phosphorus from 3/Week to 1/Week.

The Maine Potato Board recently announced it will partner with the Central Aroostook Soil & Water Conservation District (SWCD), McCain Foods USA, Maine Department of Transportation, Maine Department of Environmental Protection, Maine Department of Agriculture, Conservation & Forestry, St. John Valley SWCD, Southern Aroostook SWCD, Maine Association of Conservation Districts (MACD), and Maine Rural Water Association to create a public-private partnership between government and the potato industry to address soil erosion, soil health, and water quality within Aroostook County, Maine. The project goals are to reduce soil loss from potato fields, prevent sedimentation of public roads, ditches and rights-of-way, improve ambient water quality in rivers and tributary streams, and protect sources of public drinking supplies.

With the reduction in the water quality based limitations for total phosphorus and a proposed project to reduce non-point source run-off in the Aroostook River watershed during term of this permit, the Department believes there is a reasonable assurance the pH levels in Aroostook River below the McCain facility will achieve the pH range water quality standard of 6.0 - 8.5 standard units pursuant to Maine law. As part of an Adaptive Management Plan, the Department and the permitted facilities will continue to collect effluent and ambient data on environmental indicators to determine if the current limitations are sufficient to attain standards. If it is found standards are not being met, the Department reserves the right to reopen this permit (after proper notice to the permittee) pursuant to Special Condition M, *Reopening of Permit For Modifications*, to establish more stringent limitations and or monitoring requirements.

i. Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing: Maine law, 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. Department rule 06-096 CMR Chapter 530 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

Outfall #001C - Secondary treated waste water

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

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

- 1) Level I chronic dilution factor of <20:1.
- 2) Level II chronic dilution factor of $\geq 20:1$ but < 100:1.
- 3) Level III chronic dilution factor \geq 100:1 but <500:1 or >500:1 and Q \geq 1.0 MGD
- 4) Level IV chronic dilution factor >500:1 and Q \leq 1.0 MGD

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

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

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

Surveillance level testing – Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee shall conduct surveillance level testing as follows:

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

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

Outfall #001C – Secondary treated waste water

Department rule Chapter 530(1)(D)(3)(c) states in part, "Dischargers in Level II may reduce surveillance testing to one WET or specific chemical series every other year provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3(E)."

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

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

WET evaluation

On October 26, 2016, the Department conducted a statistical evaluation on the most recent 60 months of WET data that indicates that the discharge does not exceed or have a reasonable potential (RP) to exceed the acute or chronic critical ambient water quality thresholds (2.5% and 2.2% – mathematical inverse of the acute dilution factor 40:1 and the chronic dilution factor 46:1).

Given the absence of exceedances or reasonable potential to exceed critical WET thresholds, the permittee meets the surveillance level monitoring frequency reduction criteria found at Department rule 6-096 CMR Chapter 530(1)(D)(3)(c). Therefore, this permit is establishing surveillance level WET testing at a frequency of once every other year (1/2 Years) for the first three years of the permit and the fifth year of the permit. Beginning 24 months prior to the expiration date and lasting through 12 months prior to the expiration date of the permit and every five years thereafter, the permittee shall conduct screening level WET testing on the water flea and the brook trout.

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

Outfall #001C – Secondary treated waste water

Chemical evaluation

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

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

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

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

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

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

Outfall #001C - Secondary treated waste water

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

For this permitting action a couple of the variables in the statistical evaluation have changed based on new information. The 1Q10 and 7Q10 of the Aroostook River at the Presque Isle facility have increased from 126 cfs to 139 cfs and 156 cfs to 160 cfs respectively, based on a 2016 statistical evaluation of gauge data at Washburn for the Aroostook River. In addition, withholding 15% of the AWQC for reserve capacity has been reduced to withholding 0%. On January 21, 2015, the Department conducted statistical evaluations based on 15% of the ambient water quality criteria reserve being withheld (Report ID 779) and 0% of the reserve of the criteria being withheld (Report ID 881) to determine if the unallocated assimilative capacity would avoid an exceedance or avoid a reasonable potential to exceed applicable ambient water quality criteria for toxic pollutants. Report ID 881 indicates McCain's would no longer have a reasonable potential to exceed the chronic ambient water quality criteria for copper. Therefore, pursuant to 06-096 CMR Chapter 530(4)(e), the Department is utilizing the full 15% of the unallocated assimilative capacity in the statistical evaluation when establishing limits for toxic pollutants in waste discharge licenses for facilities in the Aroostook River watershed.

In a letter dated September 21, 2000, to the Department, the Presque Isle Sewer District submitted eight and a half years (1990-1999) of quarterly test results (by season) of the background hardness of Presque Isle Stream in an effort to have the Department consider a site specific hardness for hardness dependent metals. The arithmetic mean of the seasonal data points are as follows: Winter (62 mg/L), Spring (34 mg/L), Summer (66 mg/L) and Fall (40 mg/L). The Department took the data submitted by the PIUD into consideration and made the determination that for hardness dependent metals, the applicable acute hardness for Presque Isle Stream at the point of discharge is 33 mg/L and the chronic hardness is 40 mg/L, and applicable limits for hardness dependent metals were established in PIUD's September 30, 2002, MEPDES permit.

The Department has made a rebuttable presumption that the hardness data for the Aroostook River is similar to the background hardness in Presque Isle Stream and is therefore being utilized for establishing limits for hardness dependent metals for dischargers in the Aroostook River watershed. Because only one hardness value can be entered into the Department DETOX program for statistically evaluating chemical specific test results and establishing limitations for pollutant that have a reasonable potential or exceed AWQC, the Department is utilizing a watershed hardness value of 40 mg/L. The value is the arithmetic mean of the acute and chronic hardness values established for PIUD's September 30, 2002, MEPDES permit.

Outfall #001C - Secondary treated waste water

See Attachment F of this Fact Sheet for Department guidance that establishes protocols for establishing waste load allocations. The guidance states that the most protective of water quality becomes the facility's allocation. According to the most current statistical evaluation (Report ID #881 conducted on 9/22/16), the pollutant of concern for the PIUD is aluminum and shall be limited based on the segment allocation method.

Segment allocation methodology

Historical Average:

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

<u>Aluminum</u>

Mass limits

Mean concentration (n=15) = 34 ug/L or 0.034 mg/L Permit flow limit = 2.31 MGD Historical average mass = (0.034 mg/L)(8.34)(2.31 MGD) = 0.66 lbs/day

The 9/22/16 statistical evaluation indicates the historical average mass of aluminum discharged by the permittee's facility is 1.72% of the aluminum discharged by the facilities on the Aroostook River and its tributaries. Therefore, the permittee's segment allocation for aluminum is calculated as 1.72% of the chronic assimilative capacity of the river at Fort Fairfield, the most downstream facility on the Aroostook River. The Department has calculated a chronic assimilative capacity 83.1 lbs/day of aluminum at Fort Fairfield. The chronic assimilative capacity (AC) at Fort Fairfield was calculated based on 90% of the applicable AWQC (taking into consideration the 10% reduction to account for background, 0% reduction for reserve) and the critical low flow (7Q10 = 195 cfs). The calculation for aluminum is as follows:

Chronic:

7Q10 @ Fort Fairfield = 195 cfs or 126 MGD AWQC = 87 ug/L 87 ug/L(0.90) = 78.3 ug/L or 0.0783 mg/L

Chronic AC = (126 MGD)(8.34 lbs/gal)(0.0783 mg/L) = 82.3 lbs/day

Outfall #001C - Secondary treated waste water

Therefore, the mass segment allocation for aluminum for the permittee can be calculated as follows:

Monthly average: (Acute assimilative capacity mass)(% of total aluminum discharged) (82.3 lbs/day)(0.0172) = **1.4 lbs/day**

In May 2012, Maine law 38 M.R.S. §464, ¶¶ K was enacted which reads as follows, "Unless otherwise required by an applicable effluent limitation guideline adopted by the department, any limitations for metals in a waste discharge license may be expressed only as mass-based limits." There are no applicable effluent limitation guidelines adopted by the Department or the USEPA for toxic pollutants discharged from a publicly owned treatment works. Therefore, this permitting action is not establishing a monthly average concentration limit for aluminum in this permit.

Chapter 530 does not establish monitoring frequencies for parameters that exceed or have a reasonable potential to exceed AWQC. Monitoring frequencies are established on case-by-case basis given the timing, severity and frequency of occurrences of the exceedances or reasonable potential to exceed applicable critical water quality thresholds. Therefore, this permitting action is making a best professional judgment to establish the monitoring frequencies for the parameters of concern at the default surveillance level frequency of 2/Year specified in Chapter 530.

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

Beginning 24 months prior to the expiration date of the permit, the permittee shall conduct routine screening level analytical chemistry testing at 1/Quarter and priority pollutant testing of 1/Year.

j. <u>Mercury</u> - Pursuant to Maine law, 38 M.R.S.A. §420 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 on May 23, 2000, thereby administratively modifying WDL#W002713-6D-D-R by establishing interim monthly average and daily maximum effluent concentration limits of 16.6 parts per trillion (ppt) and 24.9 ppt, respectively, and a minimum monitoring frequency requirement of four tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001. However, effective June 15, 2001, the Maine Legislature enacted Maine law, 38 M.R.S. §413, sub-§11 specifying that interim mercury limits and monitoring requirements remain in effect.

Outfall #001C - Secondary treated waste water

Maine law 38 M.R.S.A., §420 1-B,(B)(1) states that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413, subsection 11. A review of the Department's data base for the period 2011 - 2015 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows;

Mercurv	(n	=	6)	
---------	----	---	----	--

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average, Maximum	16.6 / 24.9	1.54 – 19.3	4.65

Pursuant to Maine law 38, M.R.S.A. §420, sub-§1-B, ¶F, on February 6, 2012, the Department issued a minor revision of the permittee's MEPDES permit that reduced the monitoring frequency for mercury from 4/Year to 1/Year given the permittee has maintained at least 5 years of mercury testing data. In fact, the permittee has been monitoring mercury at a frequency of 4/Year since June 2000 or 15 years.

k. <u>Transported waste</u> - The previous permitting action authorized the permittee to receive and introduce up to 18,000 gpd and up to a monthly total of 60,000 gallons of transported wastes into the wastewater treatment process or solids handling stream. Department rule Chapter 555, *Standards For The Addition of Transported Wastes to Wastewater Treatment Facilities*, limits the quantity of transported wastes received at a facility to 1% of the design capacity of the treatment facility utilizes a side stream or storage method of introduction into the influent flow, or 0.5% of the design capacity of the facility if the facility if the facility utilizes a side stream or storage method of introduction into the influent flow. A facility may receive more than 1% of the design capacity on a case-by-case basis. The permittee has requested the Department carry forward the daily quantity of transported wastes that it is authorized to receive and treat (up to 18,000 gpd) as it utilizes the side stream/storage method of metering transported wastes into the facility's influent flow. With a design capacity of 2.31 MGD, 18,000 gpd only represents 0.8% of said capacity. The Department is eliminating the monthly total limit of 60,000 gallons as there is no basis to limit the facility in this manner.

The Department has determined that under normal operating conditions, the receipt and treatment of 18,000 gpd of transported wastes into the wastewater treatment process will not cause or contribute to upset conditions of the treatment process.
7. CSO RELATED BYPASS OF SECONDARY TREATMENT

Section 402(q)(1) of the Clean Water Act requires that "each permit, order or decree issued pursuant to this chapter after December 21, 2000, for a discharge from a municipal combined storm and sanitary sewer shall conform to the Combined Sewer Overflow Control Policy signed by the Administrator on April 11, 1994" 33 U.S.C. § 1342(q)(1). The Combined Sewer Overflow Control Policy (CSO Policy, 59 Fed. Reg. 18688-98), states that under USEPA's regulations the intentional diversion of waste streams from any portion of a treatment facility, including secondary treatment, is a bypass and that 40 CFR 122.41(m), allows for a facility to bypass some or all the flow from its treatment process under specified limited circumstances. Under the regulation, the permittee must show that the bypass was unavoidable to prevent loss of life, personal injury or severe property damage, that there was no feasible alternative to the bypass and that the permittee submitted the required notices. The CSO Policy also provides that, for some CSO-related permits, the study of feasible alternatives in the control plan may provide sufficient support for the permit record and for approval of a CSO-related bypass to be included in an NPDES permit.¹ Such approvals will be re-evaluated upon the reissuance of the permit, or when new information becomes available that would represent cause for modifying the permit.

The CSO Policy indicates that the feasible alternative threshold may be met if, among other things, "... the record shows the secondary treatment system is properly operated and maintained, that the system has been designed to meet secondary limits for flows greater than peak dry weather flow, plus an appropriate quantity of wet weather flow, and that it is either technically or financially infeasible to provide secondary treatment at the existing facilities for greater amounts of wet weather flow."²

USEPA's CSO Control Policy and CWA section 402(q)(1) provide that the CSO-related bypass provision in the permit should make it clear that all wet weather flows passing through the headworks of the POTW will receive at least primary clarification and solids and floatables removal and disposal, and disinfection, where necessary, and any other treatment that can reasonably be provided.³ Under section 402(q)(1) of the CWA and as stated in the CSO Policy, in any case, the discharge must not violate applicable water quality standards.⁴ The Department will evaluate and establish on a case-bycase basis effluent limitations for discharges that receive only a primary level of clarification prior to discharge and those bypasses that are blended with secondary treated effluent prior to discharge to ensure applicable water quality standards will be met.

In July 2015, the permittee's consulting engineer submitted information to the Department and the USEPA on the history of combined sewer overflows and inflow and infiltration into the collection system and what was done to address the two issues. The documentation indicates the excessive I&I was acknowledged as a problem and resulted in a combination of remedies including pipe replacement and the construction of a swirl separator to treat the remaining I&I along with the sanitary waste water.

¹ 59 Fed. Reg. 18,688, at 18,693 and 40 CFR Part 122.41(m)(4) (April 19, 1994).

² 59 Fed. Reg. at 18,694.

³ 59 Fed. Reg. at 18,693.

⁴ 59 Fed. Reg. at 18694, col 1 (April 19, 1994).

7. CSO RELATED BYPASS OF SECONDARY TREATMENT (cont'd)

The USEPA reviewed the documentation and suggested the I&I that remains is feasible to remove by way of an aggressive I&I removal program such that discharges from the swirl will no longer be necessary. The Department concludes the permittee has not provided convincing evidence that the bypass are unavoidable to prevent loss of life, personal injury or severe property damage, or that there are no feasible alternative to the bypasses. Therefore, this permit is eliminating the allowance to bypass secondary treatment.

The Department and the USEPA acknowledge that removal of I&I is a costly long term endeavor. PIUD's I&I removal program will include field investigations such as flow monitoring, television inspections, sewer system mapping and prioritization of areas with high I&I. The program will also require the permittee to obtain funding to perform both the engineering design as well as implementation of construction to perform the improvements identified in the investigations. The permittee anticipates a substantial cost to perform the improvements.

8. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

9. PUBLIC COMMENTS

Public notice of this application was made in the <u>Presque Isle Star Herald</u> newspaper on or about <u>February 22, 2012</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 shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

10. DEPARTMENT CONTACTS

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

Gregg Wood Division of Water Quality Management Bureau of Water Quality Department of Environmental Protection 17 State House Station Augusta, Maine 04333-0017 Telephone: (207) 287-7693 Fax: (207) 287-3435 e-mail: gregg.wood@maine.gov

11. RESPONSE TO COMMENTS

During the period April 28, 2017, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department did not receive comments from the permittee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the permit. Therefore, the Department has not prepared a Response to Comments.

ATTACHMENT A

.

• • Presque Isle Sewer District Outfall Information

Outfall Location Map



ATTACHMENT B

. . .

. .



ATTACHMENT C

10/26/2016

WET TEST REPORT

Data for tests conducted for the period

26/Oct/2011 -26/Oct/2016



PRESQUE ISLE SEWER DIST	NPDES= ME010056	Effluer	nt Limit: Acute (%) =	2.500	Chronic $(\%) = 2.174$	
Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	100	11/01/2011	2.500		
TROUT	A_NOEL	100	02/05/2013	2.500		
TROUT	A_NOEL	100	08/05/2014	2.500		
TROUT	A_NOEL	100	10/27/2015	2.500		
TROUT	A_NOEL	100	06/08/2016	2.500		
TROUT	C_NOEL	100	11/01/2011	2.174		
TROUT	C_NOEL	100	02/05/2013	2.174		
TROUT	C_NOEL	100	08/05/2014	2.174		
TROUT	C_NOEL	100	10/27/2015	2.174		
TROUT	C_NOEL	100	06/08/2016	2.174		
WATER FLEA	A_NOEL	100	11/01/2011	2.500		
WATER FLEA	A_NOEL	100	02/05/2013	2.500		
WATER FLEA	A_NOEL	100	08/05/2014	2.500		
WATER FLEA	A_NOEL	100	10/27/2015	2.500		
WATER FLEA	A_NOEL	100	06/08/2016	2.500		
WATER FLEA	C_NOEL	100	11/01/2011	2.174		
WATER FLEA	C_NOEL	100	02/05/2013	2.174		
WATER FLEA	C_NOEL	100	08/05/2014	2,174		
WATER FLEA	C_NOEL	100	10/27/2015	2.174		
WATER FLEA	C NOEL	100	06/08/2016	2,174		

ATTACHMENT D

CHEMICAL TEST REPORT

Data entered into Toxscan for the period

26/Oct/2011-26/Oct/2016



Facility Name: PRESQUE ISLE SEWER DI!

动情报

Permit Number: ME010056

ALUMINUM	1	·		
	Test Date	Result (ug/l)	Lsthan	Status
	02/13/2012	36,000	N	
	08/12/2012	8.000	Ν	
	11/06/2012	60.000	N	
	02/05/2013	60.000	Y	
•	08/05/2013	34.000	N	
	05/11/2014	. 15.000	Y	
	08/05/2014	60.000	Y	
	11/09/2014	26.000	N	
,	05/13/2015	108.000	N	
	06/15/2015	15.000	Y	
	08/05/2015	50.000	N	
	08/09/2015	60.000	Y	
	06/08/2016	60.000	Y	

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 26/Oct/2011-26/Oct/2016



NPDES: ME0100561 Facility Name: PRESQUE ISLE SEWER DIST Test # By Group Monthly Daily **Total Test** Number Clean Hg **Test Date** (Flow MGD) М V BN Р 0 А 0.92 0.87 10 Û 0 0 1 0 F 0 02/13/2012 11 Test # By Group Monthly Daily Total Test Number р Α Clean Hg М V BN 0 **Test Date** (Flow MGD) 2 0 F 0 0.95 0 0 0 0 08/12/2012 1.20 2 Monthly Daily Total Test Test # By Group **Test Date** Number м v BN Р 0 Α Clean Hg (Flow MGD) 2 0 0 0 F 0 11/06/2012 1.63 1,89 2 0 0 Total Test Monthly Daily Test # By Group Number Clean BN Ρ A Hg **Test Date** (Flow MGD) М v 0 0 0 1.72 21 10 0 0 11 F 0 02/05/2013 1,33 Total Test Test # By Group Monthly Daily Clean Number BN Α Hg (Flow MGD) М V р 0 **Test Date** 0 0 0 2 2 0 0 F 0 08/05/2013 2.48 4.11 Monthly Daily **Total Test** Test # By Group (Flow MGD) Number М V BN Ρ 0 A Clean Hg **Test Date** 0 0 F 0 1.96 0 0 0 05/11/2014 2.33 1 1 Test # By Group Daily Total Test Monthly Number Clean Hg (Flow MGD) М BN Р Ο A **Test Date** ٧ 10 0 11 0 F 0 0.91 1.04 21 0 0 08/05/2014 **Total Test** Test # By Group Monthly Daily Number BN A Clean Hg v P ο (Flow MGD) М **Test Date** 0 2,41 1 0 0 0 0 F 0 11/09/2014 1,88 1 Monthly Daily **Total Test** Test # By Group (Flow MGD) Number М V BN Ρ ο Α Clean Hg **Test Date** 1.59 1 0 0 0 0 F 0 1.67 1 0 05/13/2015 Monthly Daily Total Test Test # By Group Number М v BN Р 0 A Clean Hg **Test Date** (Flow MGD) 0 0 0 0 F 0 06/15/2015 1.69 1.64 1 1 0 Monthly Dally Total Test Test # By Group ⁱHg (Flow MGD) Number М v BN P 0 А Clean **Test Date** 0 Ö 0 0 1 0 0 F 08/05/2015 1.18 1.62 1 Monthly Daily Total Test Test # By Group Number Ήg Test Date (Flow MGD) М V BN Ρ 0 Α Clean 1.05 11 10 0 0 0 1 0 F 0 1.18 08/09/2015 Monthly Daily **Total Test** Test # By Group Number А Clean Hg **Test Date** (Flow MGD) М V BN Ρ 0 133 13 28 46 25 10 11 0 06/08/2016 1.32 1.37

Keyi

A = Acid Q = Others

BN = Base Neutral M = Metals V = Volatiles

P = Pesticides

State of Maine - Department of Environmental Protection

Page No. 1

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 26/Oct/2011-26/Oct/2016



Facility Name:	PRESQUE ISLE SEWER DISTRICT			NPDES: ME0100561							
	Monthly	Daily	Total Test		Те	st # 8	ly Gr	oup			
Test Date	(Flow	MGD)	Number	M	v	BN	P	0	Α	Clean	Hg
10/27/2015	1,20	0.89	19	9	0	0	0	10	0	F	0
	Monthly	Daily	Total Test		Te	st # B	y Gr	oup			
Test Date	(Flow	MGD)	Number	M	V	BN	Ρ	0	Α	Clean	Hg
02/16/2016	1.62	1.84	10	9	0	0	0	1	0	F	0

Кеу

A = Acid O = Others BN = Base Neutral M = Metals

P = Pesticides

V = Volatiles "

State of Maine - Department of Environmental Protection

Page No. 2

ATTACHMENT E

DEPLW1083-2009

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

MEPDES#		
Since the effective date of your permit have there been:	NO	YES (Describe in Comments)
1. changes in the number or types of no domestic wastes contributed directly or i to the wastewater treatment works that r increase the toxicity of the discharge?	n- indirectly may	
2. changes in the operation of the treatm works that may increase the toxicity of t discharge?	nent he	
3. changes in industrial manufacturing p contributing wastewater to the treatment that may increase the toxicity of the disc	rocesses works charge?	

Name(print) _____

COMMENTS:

Signature Date

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

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

ATTACHMENT F

-

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

DATE: October 2008

TO: Interested Parties

FROM: Dennis Merrill, DEP

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

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

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

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

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

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

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

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

Maine Department of Environmental Protection

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maine Department of Environmental Protection

Working Definitions of Terms Used in the DeTox System.

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

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

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

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

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

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

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

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

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

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

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

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

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







IV. Determine Facility History Percentage By pollutant, identify facilities with *Historical Average* Sum all Historical Averages within segment By facility, calculate percent of total: Facility pounds / Total pounds = Facility History %





VII. Make Initial Allocation



VIII. Evaluate Need for Effluent Limits

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

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

Save Effluent Limit for comparison

IX. Reallocation of Assimilative Capacity

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

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

If not, subtract Facility Allocation from Segment Allocation

Save difference

Select next facility downstream

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

Add saved difference to get an adjusted Segment Assimilative Capacity

Reallocate Segment Assimilative Capacity among downstream facilities per step V

Repeat process for each facility downstream in turn

ATTACHMENT G

Limitations for Industrial Users – How to conduct an Industrial Waste Survey

The National Pretreatment Program is scaled to cities and towns that are generally more developed than those in Maine. Small towns around here tend to wonder what the fuss is about – we know (or at least are pretty sure we know) everything that's going on in our collection systems. A lot can happen, and a lot can change in areas like Portland, Bangor, Lewiston/Auburn, let alone bigger places like Boston or NY. Regardless of community size, or whether or not you have any new facilities (or existing facilities that have changed what they're doing), the Industrial Waste Survey (IWS) is a federal requirement that has been adopted into Maine's MEPDES wastewater licensing program.

Step 1: For a small community, the quickest, easiest thing to do is take a day when not much is going on at the plant, get in the vehicle, & drive the entire extent of your collection system. Take the attached logsheet with you & make a list of every industrial or significant commercial facility that discharges to your system. The IWS list is basically a summary of the dischargers in your system that may have wastewater with different characteristics than the wastewater discharge from the sinks, toilets, bathtub, dishwasher and washing machine at your typical home or commercial building.

(Note: Do not include homes, rentals, restaurants, delis & fast food joints. You may need a FOG/grease trap program for those kinds of places, but that's a different consideration than an IWS and most small-scale commercial activity. Even some larger-scale places, like schools, cafeterias, managed care homes, etc., generally have wastewater that is similar in characteristics to residential wastewater, just more of it.)

Step 2 – Take your logsheet and compare each facility to this set of conditions:

- ▶ Does the facility discharge a monthly average of >25,000 gallons a day of process wastewater?
- ▶ Does the facility's process wastewater discharge make up 5% or more of your daily influent flow?
- ▶ Does the facility's process wastewater discharge make up 5% or more of your daily influent BOD?
- ▶ Does the facility's process wastewater discharge make up 5% or more of your daily influent TSS?

► Does the facility's **process** wastewater have a reasonable potential to adversely affect your POTW operations, cause a problem with your discharge, or cause a problem with your sludge disposal?

If "yes" to any of the above, then the facility is a potential **Significant Industrial User** of your system. Put a check in that column on the spreadsheet.

Step 3 - Indicate on the spreadsheet if any of the facilities fall under one of the National Categorical Standards, 40 CFR 405 through 471 (Use the attached list of Categorical Industrial Users to determine if any of the facilities on your list are included).

If yes to this consideration, then the facility may be a **Categorical Industrial User** of your system. Put a check in that column also.

Step 4 - If any of the facilities on your list meet one or more of those conditions, then you're going to want to go back and take a closer look at them; find out more detail on their process(es), wastewater characteristics, discharge pattern. You will likely find that most facilities are not a problem. Only a few will need closer scrutiny.

(Note – having industries within your collection system does not automatically require increased regulatory activity on your part; the only uniform requirement is that you know what you have.) The first time through the IWS process takes some time but after that it is relative easy to update it on an as-needed basis.

Though this requirement has only recently explicitly appeared in MEPDES permits, it has actually been a federal requirement all along. Again, the first time through will be a bit of a project, but from then on, it shouldn't be difficult.

If you have questions regarding whether a particular discharger is a Significant Industrial User or Categorical Industrial User contact your assigned MeDEP wastewater treatment system inspector or the MEDEP Pretreatment coordinator.

James R. Crowley Compliance Supervisor, State Pretreatment Coordinator Department of Environmental Protection Division of Water Quality Management 207-287-8898 james.r.crowley@maine.gov

Industrial User Survey

Date:_____

Surveyor:_____

	Facility name/Address/ Contact	Type of business	Wastewater flow (GPD)	Wastewater characteristics, conc., constituents, etc	Comments	Onsite Pretreatment?	Significant Industrial User?	Categorical Industrial User?
1								

Categorical Industrial Users (from 40 CFR Sections 403-471)

5	Dairy Products	26	Glass Manu.	46	Paint formulating
6	Grain Mill	27	Asbestos manu.	47	Ink formulating
7	Canned/preserv fruits&	28	Rubber manu.	49	Airport deicing
	vegs				
8	Canned/preserved	29	Timber products processing	50	Construction & Development
	seafood				
9	Sugar processing	30	Pulp/paper/paperboard	51	Conc. aquatic animal prod.
10	Textile mill	32	Meat & Poultry products	54	Gum & Wood chemicals
11	Cement manufacturing	33	Metal Finishing	55	Pesticide Chemicals
12	Conc. animal feeding ops.	34	Coal mining	57	Explosives
13	Electroplating	35	Oil& Gas extraction	58	Carbon Black Manu.
14	Organic chemicals,	36	Mineral mining/processing	59	Photographic
	plastics & syn. fiber				
15	Inorganic chemicals	37	Centralized waste treatment	60	Hospital
17	Soap & Detergent Manu.	38	Metal products	61	Battery manufacturing
18	Fertilizer manu.	39	Pharmaceutical Manu	63	Plastics molding/forming
19	Petroleum refining	40	Ore mining/processing	64	Metal molding/casting
20	Iron & Steel manu.	42	Transportation equip.	64	Coil coating
			cleaning		
21	Non-Ferrous metals	43	Paving & roofing materials	66	Porcelain
22	Phosphate	44	Waste combustors	67	Aluminum forming
23	Steam Electric power	45	Landfill	68	Copper forming
24	Ferroalloy manu.			69	Electrical & electronic
					components
25	Leather tanning/finishing			71	Nonferrous metals
					forming/Metals powders



DEP INFORMATION SHEET Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-2811

SUMMARY

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

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

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

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

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

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

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

HOW TO SUBMIT AN APPEAL TO THE BOARD

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

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

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

OCF/90-1/r95/r98/r99/r00/r04/r12

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

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

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

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

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

II. JUDICIAL APPEALS

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

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

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

ADDITIONAL INFORMATION

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

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