



JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



MELANIE LOYZIM
COMMISSIONER

August 12, 2024

Mr. Matthew Palmer
Washburn Water and Sewer District
1287 Main Street
Washburn, ME. 04786

*Sent via electronic mail
Delivery confirmation requested*

RE: *Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101028
Maine Waste Discharge License (WDL) Application #W006710-6C-J-R
Proposed Draft MEPDES Permit Renewal*

Dear Mr. Palmer,

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

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

All comments on the proposed draft permit must be received in the Department of Environmental Protection office on or before the close of business **September 11, 2024**. Failure to submit comments in a timely fashion will result in the proposed draft permit document being issued as drafted.

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

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

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

Washburn Water and Sewer District
August 12, 2024
Page 2 of 2

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

Maine Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, ME 04333-0017
Benjamin.S.Pendleton@Maine.gov

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

Sincerely,

Benjamin S Pendleton

Benjamin Pendleton
Division of Water Quality Management
Bureau of Water Quality
ph: 207-592-6871

Enc.

cc: Sean Bernard, MEDEP
Wendy Garland, MEDEP
Laura Crossley, MEDEP
Lori Mitchell, DEP
Fred Corey, Aroostook Band of Micmac Indians
Sharri Venno, Houlton Band of Maliseet Indians
Sean Mahoney, CLF
Environmental Review, DMR
Ellen Weitzler, USEPA
Michael Cobb, USEPA
Richard Carvalho, USEPA
Environmental Review, IFW
Anna Harris, USFWS



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

DEPARTMENT ORDER

IN THE MATTER OF

WASHBURN WATER & SEWER DISTRICT)	MAINE POLLUTANT DISCHARGE
WASHBURN, AROOSTOOK COUNTY, MAINE)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS)	AND
ME0101028)	WASTE DISCHARGE LICENSE
W007610-6C-J-R)	RENEWAL
APPROVAL		

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

APPLICATION SUMMARY

On April 26, 2022, the Department accepted as complete for processing an application from the permittee for renewal of combination Waste Discharge License (WDL) # W007610-6C-H-R / Maine Pollutant Discharge Elimination System (MEPDES) permit # ME0101028, which was issued by the Department on April 24, 2017, for a five-year term. The April 24, 2017, permit authorized the monthly average discharge of 0.283 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to the Aroostook River, Class B, in Washburn, Maine.

On June 12, 2018, the Department approved a modification to WDL # W007610-6C-H-R/ MEPDES permit # ME0101028. The permittee requested that effluent limitations for biochemical oxygen demand (BOD₅), total suspended solids (TSS), as well as percent removal requirements for both parameters be made consistent with the limitations for treatment equivalent to secondary treatment established in 06-096 C.M.R. ch. 525, *Effluent Guidelines and Standards*.

PERMIT SUMMARY

a. Terms and conditions

This permitting action is carrying forward all the terms and conditions from the previous permitting action and it is:

1. Establishing a seasonal monitoring requirement for *Escherichia coli* (*E. coli*) bacteria from April 15th – October 31st starting from the authorization date on this permit. This permit is also establishing monthly average limit not to exceed a geometric mean of 64 CFU or MPN per 100 milliliters and daily maximum limit not to exceed 236 CFU or MPN per 100 milliliters in accordance with *Standards for classification of fresh surface waters* 38 M.R.S. § 465 (3)(B).
2. Establishing effluent limitations consistent with the standards for secondary treatment for BOD₅ and TSS as follows:
 - (a) BOD₅.
 - I. The 30-day average must not exceed 30 mg/L.
 - II. The 7-day average must not exceed 45 mg/L.
 - III. The maximum daily concentration must not exceed 50 mg/L.
 - IV. The 30-day average percent removal must not be less than 85 percent.
 - V. At the option of the NPDES permitting authority, in lieu of the parameter BOD₅ and the levels of the effluent quality specified in paragraphs (a)(1), (a)(2) and (a)(3), the parameter CBOD₅ may be substituted with the following levels of the CBOD₅ effluent quality provided:
 - i. The 30-day average must not exceed 25 mg/L.
 - ii. The 7-day average must not exceed 40 mg/L.
 - iii. The 30-day average percent removal must not be less than 85 percent.
 - (b) TSS.
 - I. The 30-day average must not exceed 30 mg/L.
 - II. The 7-day average must not exceed 45 mg/L.
 - III. The maximum daily concentration must not exceed 50 mg/L.
 - IV. The 30-day average percent removal must not be less than 85 percent.
3. Establishing water quality-based mass limitations for total aluminum and total copper as a statistical evaluation on the most current 60-months of test results submitted to the Department indicates the discharge contained aluminum and copper at levels having a reasonable potential to exceed the chronic ambient water quality criteria (AWQC).

PERMIT SUMMARY (cont'd)

4. Amending the required reporting units for Mercury from micrograms per liter (ug/L) to nanograms per liter (ng/L) to align with laboratory test results.
5. Updating Special Condition A, *Effluent Limitations and Monitoring Requirements*, footnote 1, Sampling to the Department's most current requirements.
6. Establishing surveillance level testing for analytical chemistry to be conducted every year except in the year that screening level testing is being performed. The permittee must conduct analytical chemistry testing at a minimum frequency of once per year (1/Year). Testing must be conducted in a different calendar quarter each year such that a test is conducted in all four calendar quarters during the term of the permit.
7. Removing the former Special Condition L, *Asset Management Program*.

CONCLUSIONS

BASED on the findings in the attached and incorporated Fact Sheet dated August 12, 2024, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

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

ACTION

Based on the findings and conclusions as stated above, the Department APPROVES the above noted application of the WASHBURN WATER & SEWER DISTRICT to discharge a monthly average of 0.283 million gallons per day (MGD) of secondary treated sanitary wastewater from the permittee’s facility to the Aroostook River, Class B, in Washburn, Maine, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

1. “*Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable to All Permits*,” revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 C.M.R. Ch. 2 § 21)(A) (amended June 9, 2018)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS ___ DAY OF _____, 2024

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
For Melanie Loyzim, Commissioner

Date of initial receipt of application April 19, 2022

Date of application acceptance April 24, 2022

Date filed with Board of Environmental Protection _____

This order prepared by Benjamin Pendleton, Bureau of Water Quality

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- The permittee is authorized to discharge secondary treated sanitary wastewater from **Outfall #001A** to the Aroostook River in Washburn, Maine. Such discharges are limited and must be monitored by the permittee as specified below ⁽¹⁾:

Effluent Characteristic	Discharge Limitations							
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow <i>[50050]</i>	0.283 MGD <i>[03]</i>	---	Report MGD <i>[03]</i>	---	---	---	Continuous <i>[99/99]</i>	Recorder <i>[RC]</i>
BOD₅ <i>[00310]</i>	71 lbs./day <i>[26]</i>	106 lbs./day <i>[26]</i>	118 lbs./day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	1/Week <i>[01/07]</i>	24-Hour Composite <i>[24]</i>
BOD₅ Percent Removal ⁽²⁾ <i>[81010]</i>	---	---	---	85% <i>[23]</i>	---	---	1/Month <i>[01/30]</i>	Calculate <i>[CA]</i>
TSS <i>[00530]</i>	71 lbs./day <i>[26]</i>	106 lbs./day <i>[26]</i>	118 lbs./day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	1/Week <i>[01/07]</i>	24-Hour Composite <i>[24]</i>
TSS Percent Removal ⁽²⁾ <i>[81011]</i>	---	---	---	85% <i>[23]</i>	---	---	1/Month <i>[01/30]</i>	Calculate <i>[CA]</i>
Settleable Solids <i>[00545]</i>	---	---	---	---	---	0.3 ml/L <i>[25]</i>	1/Week <i>[01/07]</i>	Grab <i>[GR]</i>
<i>E. coli</i> Bacteria ⁽³⁾ <i>[31633]</i> <i>(April 15 – Oct. 31)</i>	---	---	---	64/100 mL: ⁽⁴⁾ <i>[13]</i>	---	236/100 mL ⁽⁴⁾ <i>[13]</i>	1/Week <i>[01/07]</i>	Grab <i>[GR]</i>
Total Residual Chlorine ⁽⁵⁾ <i>[50060]</i>	---	---	---	---	---	1.0 mg/L <i>[19]</i>	5/Week ⁽⁵⁾ <i>[05/07]</i>	Grab <i>[GR]</i>

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports. **FOOTNOTES:** See Pages 11 through 15 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

1. The permittee is authorized to discharge secondary treated sanitary wastewater from **Outfall #001A** to the Aroostook River in Washburn, Maine. Such discharges are limited and must be monitored by the permittee as specified below ⁽¹⁾:

Effluent Characteristics	Discharge Limitations							
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
pH [00400]	---	---	---	---	---	6.0 – 9.0 SU [12]	5/Week ⁽⁵⁾ [05/07]	Grab [GR]
Mercury (Total)⁽⁶⁾ [71900]	---	---	---	5.2 ng/L [3M]	---	7.8 ng/L [3M]	1/Year [01/YR]	Grab [GR]
Aluminum (Total) [01105]	0.146 lbs/day	---	---	Report ug/L	---	---	1/Year [01/YR]	Grab [GR]
Copper (Total) [01042]	0.069 lbs/day	---	---	Report ug/L	---	---	1/Year [01/YR]	Grab [GR]

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports. **FOOTNOTES: See pages 11 through 15 of this permit for applicable footnotes.**

SPECIAL CONDITIONS

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

2. **SCREENING LEVEL TESTING.** During the calendar year **2025 and every five years thereafter, for Outfall #001A**, the permittee must be limited and monitored as follows:

WHOLE EFFLUENT TOXICITY (WET) ⁽⁷⁾	<u>Daily Maximum</u>	<u>Minimum Frequency</u>	<u>Sample Type</u>
<u>Acute No Observed Effect Level (A-NOEL)</u>			
Water Flea (<i>Ceriodaphnia dubia</i>) [TDA3B]	Report % [23]	1/Year [01/YR]	24-Hour Composite [24]
Brook Trout (<i>Salvelinus fontinalis</i>) [TDA6F]	Report % [23]	1/Year [01/YR]	24-Hour Composite [24]
<u>Chronic No Observed Effect Level (C-NOEL)</u>			
Water Flea (<i>Ceriodaphnia dubia</i>) [TBP3B]	Report % [23]	1/Year [01/YR]	24-Hour Composite [24]
Brook Trout (<i>Salvelinus fontinalis</i>) [TBQ6F]	Report % [23]	1/Year [01/YR]	24-Hour Composite [24]
Analytical Chemistry^{(8) (10)} [51477]	Report µg/L [28]	1/Quarter [01/90]	24-Hour Composite/Grab [24/GR]
Priority Pollutant^{(9) (10)} [50008]	Report µg/L [28]	1/Year [01/YR]	24-Hour Composite/Grab [24/GR]

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports. **FOOTNOTES: See pages 11 through 15 of this permit for applicable footnotes.**

SPECIAL CONDITIONS

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

3. SURVEILLANCE LEVEL TESTING. Except in the year that screening level testing is conducted the permittee must conduct surveillance level testing for **Outfall #001A** as described below.

WHOLE EFFLUENT TOXICITY (WET) ⁽⁷⁾	Daily Maximum	Minimum Frequency	Sample Type
<u>Acute No Observed Effect Level (A-NOEL)</u>			
Water Flea (<i>Ceriodaphnia dubia</i>) [TDA3B]	<i>WAIVED</i>	<i>WAIVED</i>	<i>WAIVED</i>
Brook Trout (<i>Salvelinus fontinalis</i>) [TDA6F]			
<u>Chronic No Observed Effect Level (C-NOEL)</u>			
Water Flea (<i>Ceriodaphnia dubia</i>) [TBP3B]	<i>WAIVED</i>	<i>WAIVED</i>	WAIVED
Brook Trout (<i>Salvelinus fontinalis</i>) [TBO6F]			
Analytical Chemistry^{(8) (10)} [51477]	Report µg/L [28]	1/Year [01/YR]	24-Hour Composite/Grab [24/GR]
Priority Pollutant^{(9) (10)} [50008]	<i>WAIVED</i>	<i>WAIVED</i>	<i>WAIVED</i>

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports. **FOOTNOTES:** See pages 11 through 15 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

4. **UNDER-DRAIN POINTS #002A:** The permittee is required to conduct sampling on lagoon under-drain #002A as specified below⁽¹¹⁾:

Effluent Characteristic		Minimum Monitoring Requirements	
<u>Parameter</u>	<u>Daily Maximum</u> (units specified)	<u>Measurement</u> <u>Frequency</u> ⁽¹¹⁾	<u>Sample Type</u>
Flow Rate <i>[00058]</i>	Report GPM <i>[78]</i>	3/Year <i>[03/YR]</i>	Measure <i>[MS]</i>
Conductivity <i>[00094]</i>	Report (umhos/cm) <i>[11]</i>	3/Year <i>[03/YR]</i>	Grab <i>[GR]</i>
Temperature, °C <i>[00010]</i>	Report (°C) <i>[04]</i>	3/Year <i>[03/YR]</i>	Grab <i>[GR]</i>
<i>E. coli</i> Bacteria <i>[31633]</i>	Report # / 100 mL <i>[13]</i>	3/Year <i>[03/YR]</i>	Grab <i>[GR]</i>

5. **GROUND WATER MONITORING WELL MW 1A:** The permittee is required to conduct sampling on the ground water monitoring well MW 1A as specified below⁽¹²⁾:

Effluent Characteristic		Minimum Monitoring Requirements	
<u>Parameter</u>	<u>Daily Maximum</u> (units specified)	<u>Measurement</u> <u>Frequency</u> ⁽¹²⁾	<u>Sample Type</u>
Conductivity <i>[00094]</i>	Report (umhos/cm) <i>[11]</i>	1/Year <i>[01/YR]</i>	Grab <i>[GR]</i>
Temperature, °C <i>[00010]</i>	Report (°C) <i>[04]</i>	1/Year <i>[01/YR]</i>	Grab <i>[GR]</i>
pH (Std. Unit) <i>[00400]</i>	Report (SU) <i>[12]</i>	1/Year <i>[01/YR]</i>	Grab <i>[GR]</i>
Chlorides <i>[00940]</i>	Report mg/L <i>[19]</i>	1/Year <i>[01/YR]</i>	Grab <i>[GR]</i>
Total Sodium <i>[00929]</i>	Report mg/L <i>[19]</i>	1/Year <i>[01/YR]</i>	Grab <i>[GR]</i>
Total Nitrate Nitrogen (as N) <i>[00620]</i>	10 mg/L <i>[19]</i>	1/Year <i>[01/YR]</i>	Grab <i>[GR]</i>

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

FOOTNOTES: See pages 11 through 15 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

Footnotes:

- 1. Sampling** – Influent sampling must be conducted at the headworks building influent channel. Effluent sampling must be sampled at the end of the chlorine contact chamber but prior to the discharge pipe. Any change in sampling location must be approved by the Department in writing. The permittee must conduct sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (C.F.R.) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 C.F.R. 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 wastewater. Samples that are sent to a POTW pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 C.M.R. Ch. 263 (amended March 15, 2023). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of 10 – 144 C.M.R. Ch. 263. If the licensee monitors any pollutant more frequently than required by the license using test procedures approved under 40 C.F.R. Part 136 or as specified in this license, the results of this monitoring must be included in the calculation and reporting of the data submitted in the discharge monitoring report (DMR).

In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the permittee must monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 or required under 40 C.F.R. chapter I, subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is “sufficiently sensitive” when: 1) The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) The method has the lowest ML of the analytical methods approved under 40 C.F.R. Part 136 or required under 40 C.F.R. chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The term “minimum level” refers either to the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in the following ways: they may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.

- 2. BOD₅ and TSS Percent Removal** – The treatment facility must maintain a minimum of 85 percent removal of BOD₅ and a minimum of 85 percent removal for TSS for all flows receiving secondary treatment. Compliance with the limitation is based on a twelve-month rolling average. Calendar monthly average percent removal values must be calculated based on influent and effluent concentrations. The twelve-month rolling average calculation is based on the most recent twelve-month period.

SPECIAL CONDITIONS

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

Footnotes:

3. ***E. coli* bacteria** – *E. coli* bacteria limits and monitoring requirements are seasonal and apply between April 15th and October 31st of each year. In accordance with 38 M.R.S. § 414-A, the Department may, at any time and with notice to the permittee, modify this permit to establish bacteria limitations on a year-round basis to protect the health, 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. Results must be expressed in MPN/100mL or CFU/100mL.
5. **Total residual chlorine (TRC)/ pH** – Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine-based compounds are being used to disinfect the discharge. The permittee must utilize approved test methods that are capable of bracketing the limitations in this permit. Monitoring for TRC and pH is not required on legally recognized state and federal holidays.
6. **Mercury** – The permittee must conduct all mercury monitoring required by this permit required to determine compliance with interim limitations established pursuant to 06-096 C.M.R. Ch. 519 in accordance with the U.S. Environmental Protection Agency's (USEPA) "clean sampling techniques" found in USEPA Method 1669, *Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels*. All mercury analysis must be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry*. For the most up-to-date reporting form, go to https://www.maine.gov/dep/water/wd/municipal_industrial/index.html or (DEP website at [maine.gov/dep/index.html](https://www.maine.gov/dep/index.html), and search "wastewater reporting forms" and select "Whole Effluent Toxicity, Chemistry, and Mercury Reporting Forms" for a reporting form for mercury test results. Compliance with the monthly average limitation established in Special Condition A of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Method 1669 and analysis Method 1631E on file with the Department for this facility.
7. **Whole effluent toxicity (WET) testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 0.36% and 0.31% respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points. The critical acute and chronic thresholds were derived as the mathematical inverse of the applicable acute and chronic dilution factors of 280:1 and 321:1, respectively.

SPECIAL CONDITIONS

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

Footnotes:

- a. **Surveillance level testing** – Waived pursuant 06-096 C.M.R. Ch. 530 § 2(D)(3)(b) *Surface water Toxics Control Program*
- b. **Screening level testing** – Beginning in the calendar year 2025 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 WET testing at a minimum frequency of once per year (1/Year) on the water flea and brook trout.

WET test results must be submitted to the Department not later than the next DMR required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedances of the critical acute and chronic water quality thresholds of 0.36% and 0.31%, respectively.

Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following USEPA methods manuals.

- a. U.S. Environmental Protection Agency. 2002. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, 5th ed. EPA 821-R-02-012. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the acute method manual).
- b. U.S. Environmental Protection Agency. 2002. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, 4th ed. EPA 821-R-02-013. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the freshwater chronic method manual).

Results of WET tests must be reported on the “Whole Effluent Toxicity Report Fresh Waters” form each time a WET test is performed. The form can be found at:

https://www.maine.gov/dep/water/wd/municipal_industrial/index.html

The permittee must analyze the effluent for the analytical chemistry and priority pollutant parameters specified on the “WET and Chemical Specific Data Report Form” form each time a WET test is performed. The form can be found at:

https://www.maine.gov/dep/water/wd/municipal_industrial/index.html

SPECIAL CONDITIONS

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

Footnotes:

8. **Analytical Chemistry** – Refers to those pollutants listed in their respective categories on the “WET and Chemical Specific Data Report Form” found at:
https://www.maine.gov/dep/water/wd/municipal_industrial/index.html
 - a. **Surveillance level testing** – Except in the year that screening level testing is being performed, the permittee must conduct analytical chemistry testing at a minimum frequency of once per year (1/Year). Testing must be conducted in a different calendar quarter each year such that a test is conducted in all four calendar quarters during the term of the permit.
 - b. **Screening level testing** – Beginning in the calendar year 2025 and every five years thereafter, the permittee must conduct screening level analytical chemistry testing at a minimum frequency of four times per year (4/Year) in successive calendar quarters.

9. **Priority Pollutant Testing** – Refers to those pollutants listed in their respective categories on the “WET and Chemical Specific Data Report Form” found at:
https://www.maine.gov/dep/water/wd/municipal_industrial/index.html
 - a. **Surveillance level testing** - Priority pollutant testing is not required for this facility pursuant to 06-096 Ch. 530 § 2(D)(1).
 - b. **Screening level testing** – Beginning in the calendar year 2025 and every five years thereafter, the permittee must conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year) in any calendar quarter provided the sample is representative of the discharge and any seasonal or other variations in effluent quality.

10. **Analytical chemistry and priority pollutant tests** - Testing must be conducted on samples collected at the same time as those collected for whole effluent toxicity tests, when applicable, and must be conducted using methods that permit detection of a pollutant at existing levels in the effluent.

Analytical chemistry and priority pollutant 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 laboratory reports for up to 10 business days after receiving the test results from the laboratory conducting the testing before submitting them. The permittee must evaluate test results being submitted and identify to the Department, possible

SPECIAL CONDITIONS

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

Footnotes:

exceedances of the acute, chronic, or human health AWQC as established in 06-096 C.M.R. ch. 584. For the purposes of DMR reporting, enter a “1” for yes, testing done this monitoring period or “N-9” monitoring not required this period.

11. **Lagoon Under-Drain Monitoring** – Monitoring must be conducted during the months of May, July and October of each year.
12. **Ground Water Well Monitoring** – Monitoring must be conducted during the month of May of each year. Ground water monitoring results that exceed 250 mg/L for chlorides, 120 mg/L for sodium, or 10 mg/L for total nitrate nitrogen must be reported to the Department within five (5) working days of obtaining sample results.

B. NARRATIVE EFFLUENT LIMITATIONS

1. The permittee must not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the usages designated for the classification of the receiving waters.
2. The permittee must not discharge effluent that contains materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated for the classification of the receiving waters.
3. The permittee must not discharge effluent that imparts color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their classification.
4. The permittee must not discharge effluent that lowers the quality of any classified body of water below such classification or lowers the existing quality of any body of water if the existing quality is higher than the classification.

C. TREATMENT PLANT OPERATOR

The person who has management responsibility over the treatment facility must hold a **Maine Grade II**, Biological Treatment certificate (or higher) or must be a Maine Registered Professional Engineer pursuant to *Wastewater Treatment Plant Operators*, 32 M.R.S. § 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 C.M.R. Ch. 531 (effective July 24, 2023). 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.

SPECIAL CONDITIONS

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 April 24, 2022, 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of wastewater from any other point source are not authorized under this permit and must be reported in accordance with Standard Condition D(1)(f), *Twenty-four-hour reporting*, of this permit.

E. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the wastewater collection and treatment system by a non-domestic source (user) must not pass through or interfere with the operation of the treatment system. **The permittee must conduct an Industrial Waste Survey (IWS) any time a new industrial user proposes to discharge within its jurisdiction; an existing user proposes to make a significant change in its discharge; or at an alternative minimum, once every permit cycle**, and submit the results to the Department. The IWS must identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of the federal Clean Water Act, 40 C.F.R. Part 403 (general pretreatment regulations) or *Pretreatment Program*, 06-096 C.M.R. ch. 528 (last amended March 17, 2008).

F. NOTIFICATION REQUIREMENT

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

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

SPECIAL CONDITIONS

G. STATEMENT FOR REDUCED/WAIVED TOXICS TESTING

In accordance with 06-096 C.M.R. Ch. 530 § 2(D)(4), and by December 31 of each calendar year, the permittee must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit [ICIS Code 75305]. See **Attachment C** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

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

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

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

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

H. OPERATION & MAINTENANCE PLAN

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

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

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

SPECIAL CONDITIONS

I. WET WEATHER FLOW MANAGEMENT PLAN

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

The plan must conform to Department guidelines for such plans and must include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events.

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

J. 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 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 Department toxsheet reporting form. An electronic copy of the Toxsheet reporting document must be submitted to your Department compliance inspector as an attachment to an email. 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.

SPECIAL CONDITIONS

K. REOPENING OF PERMIT FOR MODIFICATION

In accordance with 38 M.R.S. § 414-A(5) and upon evaluation of the test results in the Special Conditions of this permitting action, new site-specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at any time and with notice to the permittee, modify this permit to: (1) include effluent limitations necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded; (2) require additional monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

L. SEVERABILITY

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

**MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE LICENSE**

FACT SHEET

Date: **August 12, 2024**

MEPDES PERMIT: **ME0101028**
WASTE DISCHARGE LICENSE: **W007610-6C-J-R**

NAME AND ADDRESS OF APPLICANT:

**WASHBURN WATER & SEWER DISTRICT
1287 Main Street
Washburn, Maine 04786**

COUNTY: **AROOSTOOK**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**WASHBURN WATER & SEWER DISTRICT
2136 Parsons Road
Washburn, Maine 04786**

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

COGNIZANT OFFICIAL CONTACT INFORMATION: **Mr. Matthew Palmer**
(207) 455-1042
Wsdmanager@washburnmaine.org

1. APPLICATION SUMMARY

- a. Application: On April 26, 2022, the Department of Environmental Protection (Department) accepted as complete for processing an application from the Washburn Water & Sewer District (permittee) for renewal of combination Waste Discharge License (WDL) # W007610-6C-H-R / Maine Pollutant Discharge Elimination System (MEPDES) permit # ME0101028, which was issued by the Department on April 24, 2017, for a five-year term. The April 24, 2017, permit authorized the monthly average discharge of 0.283 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to the Aroostook River, Class B, in Washburn, Maine.

On June 13, 2018, the Department approved a modification to WDL # W007610-6C-H-R/ MEPDES permit # ME0101028. The permittee requested that effluent limitations for biochemical oxygen demand (BOD₅), total suspended solids (TSS), as well as percent removal requirements for both parameters be made consistent with the limitations for treatment equivalent to secondary treatment established in 06-096 C.M.R. ch. 525, *Effluent Guidelines and Standards*.

- b. Source Description: The wastewater treatment facility receives residential sanitary and commercial wastewater from customers within the boundaries of the Town of Washburn. Based on information contained in the previous MEPDES permit, the facility was designed for and services a population equivalent of 1,200 people. There are no significant industrial users connected to and no combined sewer overflow (CSO) points associated with the collection system.

Based on information contained in the previous MEPDES permit and on information provided by the permittee in its' application, the collection system is approximately 8 miles in length and contains six main pump stations (lift stations): Station No. 1 on McManus Street, Station No. 2 on Bridge Street, and Station No. 3 (the Main Pump Station). Each pump station is equipped with an emergency generator and radio telemetry. The fourth pump station is located on Trafton Street and services a small trailer park, elderly housing complex and three houses. Three thousand (3,000) linear feet of 8-inch diameter sewer main was added to the collection system in calendar years 2004-2005 to replace failing private septic systems. This addition required the installation of a fifth lift station on Church Street. The sixth pump station handles filter backwash and one bathroom at the Water treatment plant.

The permittee has not applied to the Department for authorization to receive or introduce transported wastes into the treatment process. A map showing the location of the facility and the receiving water is included as Fact Sheet **Attachment A**.

- c. Wastewater Treatment: The facility provides preliminary wastewater treatment via a bar screen and an aerated grit removal chamber. The facility provides a secondary level of wastewater treatment via two aerated lagoons (total capacity of approximately 6 million gallons) equipped with diffused aeration. During calendar year 2004-2005, the permittee upgraded Lagoon No.1

1. APPLICATION SUMMARY (cont'd)

to three treatment cells including an anoxic zone. Screened influent is conveyed to the first (anoxic) cell for settling of solids to the lagoon floor. Sludge is mechanically removed from the anoxic zone as needed by a sludge dredge and pumped to two reed beds for treatment and disposal.

Treated effluent is seasonally disinfected with chlorine tablets for compliance with the *E. coli* bacteria limits established for Class B waters and is conveyed to the Aroostook River at Washburn via a twelve (12) inch diameter outfall pipe designated Outfall #001A in this permit. The pipe is fitted with a series of two (2) inch diameter steel diffuser ports at 8-foot on center to enhance mixing of the effluent with the receiving waters. The Department's Division of Environmental Assessment (DEA) has determined that this outfall structure provides complete and rapid mixing of the effluent with the receiving waters. See **Attachment B** of this Fact Sheet for a schematic of the wastewater treatment facility.

2. PERMIT SUMMARY

a. Terms and conditions

This permitting action is carrying forward all the terms and conditions from the previous permitting action and it is:

1. Establishing a seasonal monitoring requirement for *Escherichia coli* (*E. coli*) bacteria from April 15th – October 31st starting from the authorization date on this permit. This permit is also establishing monthly average limit not to exceed a geometric mean of 64 CFU or MPN per 100 milliliters and daily maximum limit not to exceed 236 CFU or MPN per 100 milliliters in accordance with *Standards for classification of fresh surface waters* §465 (3)(B).
2. Establishing effluent limitations consistent with the standards for secondary treatment for BOD₅ and TSS as follows:
 - a. BOD₅.
 - ii. The 30-day average must not exceed 30 mg/L.
 - iii. The 7-day average must not exceed 45 mg/L.
 - iv. The maximum daily concentration must not exceed 50 mg/L.
 - v. The 30-day average percent removal must not be less than 85 percent.
 - vi. At the option of the NPDES permitting authority, in lieu of the parameter BOD₅ and the levels of the effluent quality specified in paragraphs (a)(1), (a)(2) and (a)(3), the parameter CBOD₅ may be substituted with the following levels of the CBOD₅ effluent quality provided:
 - i. The 30-day average must not exceed 25 mg/L.
 - ii. The 7-day average must not exceed 40 mg/L.
 - iii. The 30-day average percent removal must not be less than 85 percent.

2. PERMIT SUMMARY (cont'd)

- b. TSS.
 - i. The 30-day average must not exceed 30 mg/L.
 - ii. The 7-day average must not exceed 45 mg/L.
 - iii. The maximum daily concentration must not exceed 50 mg/L.
 - iv. The 30-day average percent removal must not be less than 85 percent.
3. Establishing water quality-based mass limitations for aluminum and copper as a statistical evaluation on the most current 60-months of test results submitted to the Department indicates the discharge contained aluminum and copper at levels having a reasonable potential to exceed the chronic ambient water quality criteria (AWQC).
4. Amending the required reporting units for Mercury from micrograms per liter (ug/L) to nanograms per liter (ng/L) to align with laboratory test results.
5. Updating Special Condition A, *Effluent Limitations and Monitoring Requirements*, footnote 1, Sampling to include using sufficiently sensitive methods.
6. Establishing surveillance level testing for analytical chemistry to be conducted every year except in the year that screening level testing is being performed. The permittee must conduct analytical chemistry testing at a minimum frequency of once per year (1/Year). Testing must be conducted in a different calendar quarter each year such that a test is conducted in all four calendar quarters during the term of the permit.
7. Removing the former Special Condition L, *Asset Management Program*.
- b. History: This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the permittee's facility.

March 15, 1995 – The United States Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0101028 to the permittee for a five-year term, which superseded the previous NPDES permit issued to the permittee for this facility by the USEPA on March 28, 1986.

June 27, 2000 –The Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL #W007610-59-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 5.2 parts per trillion (ppt) and 7.8 ppt, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permit program in Maine. From that point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES)

2. PERMIT SUMMARY (cont'd)

program, and MEPDES permit #ME0101028 has been utilized to identify the permittee's facility.

December 21, 2001 – The Department issued WDL #W007610-5L-C-R / MEPDES permit #ME0101028 to the permittee for a five-year term. The December 21, 2001 permit superseded WDL #W007610-59-B-R issued on August 24, 1996, and WDL #W007610-58-A-N issued on January 29, 1990 (earliest Order on file with the Department), as well as the March 14, 1995 NPDES permit issued by the USEPA.

December 7, 2006 – The Department issued combination MEPDES permit #ME0101028/WDL #W007610-5L-D-R for a five-year term.

September 1, 2011 – The permittee submitted a timely and complete application to the Department to renew the December 7, 2006, MEPDES permit/WDL.

December 5, 2011 – The Department issued combination MEPDES permit #ME0101028/WDL #W007610-6C-E-R for a five-year term.

March 8, 2012 – The Department issued a minor revision to combination MEPDES permit #ME0101028/WDL #W007610-6C-E-R. The minor revision enrolled the permittee in the Department's Clean Water State Revolving Fund and directed the permittee to create and maintain an Asset Management Plan for the life of the permit.

May 31, 2016 – The permittee submitted a timely and complete application to the Department to renew the December 5, 2011, MEPDES permit/WDL.

April 24, 2017- The Department issued combination MEPDES permit #ME0101028/WDL #W007610-6C-E-R for a five-year term.

June 12, 2018- The Department issued a modification to combination MEPDES permit #ME0101028/WDL #W007610-6C-H-R. The minor revision incorporated effluent limitations for biochemical oxygen demand (BOD₅) and total suspended solids (TSS) along with percent removal requirements for both parameters that are consistent with the limitations for treatment equivalent to secondary treatment established in 06-096 C.M.R. ch. 525, *Effluent Guidelines and Standards*

April 19, 2022- The permittee submitted a timely and complete application to the Department to renew the April 24, 2017, MEPDES permit/WDL.

3. CONDITIONS OF PERMIT

Conditions of licenses, 38 M.R.S. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require the application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and Department rule *Surface Water Toxics Control Program*, 06-096 C.M.R. Ch. 530, require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 C.M.R. Ch. 584 (last amended February 16, 2020), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classification of major river basins, 38 M.R.S. § 467(15)(C)(1)(c) classifies the main stem of the Aroostook River from the Sheridan Dam to its confluence with the Presque Isle Stream, including the point of discharge, as a Class B waterway that is subject to a sustenance fishing designated use pursuant to *Sustenance Fishing Designated Use* 38 M.R.S. §466-A.

Standards for classification of fresh surface waters, 38 M.R.S. § 465(3) describes the standards for Class B waters as follows:

- A. *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.*
- B. *Class B waters must be of sufficient quality to support all aquatic species indigenous to those waters without detrimental changes in the resident biological community. 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 one-day minimum dissolved oxygen concentration may not be less than 8.0 parts per million in identified fish spawning areas. Between April 15th and October 31st, the number of Escherichia coli bacteria in these waters may not exceed a geometric mean of 64 CFU or MPN per 100 milliliters over a 90-day interval or 236 CFU or MPN per 100 milliliters in more than 10% of the samples in any 90-day interval.*
- C. *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.*

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

- (1-A) For the purpose of allowing the discharge of aquatic pesticides or chemicals approved by the department and conducted by the department, the Department of Inland Fisheries and Wildlife or an agent of either agency to restore resident biological communities affected by an invasive species, the department may find that the discharged effluent will not cause adverse impact to aquatic life as long as the materials and methods used do not cause a significant loss of any nontarget species and allow restoration of nontarget species. The department may find that an unavoidable, temporary loss of nontarget species does not constitute a significant loss of nontarget species.*
- (2) For the purpose of allowing the discharge of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety, the department may find that the discharged effluent will not cause adverse impact to aquatic life as long as the materials and methods used provide protection for nontarget species. When the department issues a license for the discharge of aquatic pesticides authorized under this subparagraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website.*

5. REASONABLE POTENTIAL

Pursuant to 33 U.S.C. § 1311(b)(1)(C) and 40 C.F.R. § 122.44(d)(1), NPDES permits must contain any requirements in addition to technology based effluent limitations (TBELs) that are necessary to achieve water quality standards established under 33 U.S.C. § 1311(b)(1)(C). In addition, limitations “must control any pollutant or pollutant parameter (conventional, non-conventional, or toxic) which the permitting authority determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any water quality standard (WQS), including State narrative criteria for water quality.” 40 C.F.R. § 122.44(d)(1)(i). To determine if the discharge causes, or has the reasonable potential to cause, or contribute to an excursion above any WQS, EPA considers: 1) existing controls on point and non-point sources of pollution; 2) the variability of the pollutant or pollutant parameter in the effluent; 3) the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity); and 4) where appropriate, the dilution of the effluent by the receiving water. *See* 40 C.F.R. § 122.44(d)(1)(ii).

If the permitting authority determines that the discharge of a pollutant will cause, has the reasonable potential to cause, or contribute to an excursion above WQSs, the permit must contain water quality-based effluent limitations (WQBELs) for that pollutant. *See* 40 C.F.R. § 122.44(d)(1)(i).

6. RECEIVING WATER QUALITY CONDITIONS

The State of Maine Department of Environmental Protection 2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the Aroostook River at the point of discharge as the Main stem between Washburn Gauge and confluence with Presque Isle Stream (Assessment Unit ID #ME0101000412 _148R) as, “*Category 2: Rivers and Streams Attaining Some Designated Uses – Insufficient Information for Other Uses.*”

The Report lists all of Maine’s fresh waters as, “Category 4-A: Waters Impaired by Atmospheric Deposition of Mercury.” Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, “All freshwaters are listed in Category 4A (Total Maximum Daily Load (TMDL) Completed) due to USEPA approval of a Regional Mercury TMDL. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many fish from any given waters do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine 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 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.” Pursuant to 06-096 C.M.R. Ch. 519, the Department has established interim monthly average and daily maximum mercury concentration limits and requirements for this facility.

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

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limitation of 0.283 MGD based on the monthly average dry weather design capacity of the facility, and a daily maximum discharge flow reporting requirement to assist in compliance evaluations.

A review of the monthly average flow data as reported on the Discharge Monitoring Reports (DMRs) submitted to the Department for the period May 2017- October 2023 indicates the following.

Flow Outfall #001A (DMRs=71)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	0.283	0.01 – 0.44	0.086
Daily Maximum	Report	0.03 – 1.33	0.220

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

The monthly average flow limit was exceeded four times between May 2017-October 2023.

- b. Dilution Factors: The Department established applicable dilution factors for the discharge in accordance with freshwater protocols established in *Surface Water Toxics Control Program*, 06-096 C.M.R. ch. 530 (last amended March 21, 2012). The previous permitting action established dilution factors based on the 0.283 MGD flow limit to ensure that water quality-based limits are protective of receiving water quality on a year-round basis.

$$\text{Acute: } 1\text{Q}10 = 120 \text{ cfs} \quad \Rightarrow \frac{(120 \text{ cfs})(0.6464) + 0.283 \text{ MGD}}{0.283 \text{ MGD}} = 275:1$$

$$\text{Modified Acute: } \frac{1}{2} \text{ of } 1\text{Q}10 = 60 \text{ cfs}^{(1)} \Rightarrow \frac{(60 \text{ cfs})(0.6464) + 0.283 \text{ MGD}}{0.283 \text{ MGD}} = 138:1$$

$$\text{Chronic: } 7\text{Q}10 = 136 \text{ cfs} \quad \Rightarrow \frac{(136 \text{ cfs})(0.6464) + 0.283 \text{ MGD}}{0.283 \text{ MGD}} = 312:1$$

$$\text{Harmonic Mean} = 866 \text{ cfs} \quad \Rightarrow \frac{(866 \text{ cfs})(0.6464) + 0.283 \text{ MGD}}{0.283 \text{ MGD}} = 1,979:1$$

$$1 \text{ cfs} = 0.6464 \text{ MGD}$$

The critical low flows cited above for the Aroostook River were recalculated by the Department based on a statistical evaluation of historic river gauge data through 2023 from the United States Geological Survey (USGS) gauge at Washburn.

- (1) The Department has determined that mixing of the effluent with the receiving water is complete and rapid. In accordance with Department rule 06-096 Ch. 530 § 4(B)(1) and the previous permitting action, the Department's Division of Environmental Assessment (DEA) recommends that the acute evaluation of the 1Q10 low river flow value utilized in the acute dilution calculation be based on a value that is equivalent to one-half the prorated river gage flow value rather than the default stream design flow of $\frac{1}{4}$ of the 1Q10, due to the presence of an island in the river at the point of discharge (see attached map).

- c. Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS): The 2018 modification established concentration limits consistent with the equivalent of secondary treatment. Based on Department rule, 06-096 C.M.R. ch. 523, *Effluent Guidelines and Standards* and data collected since the 2018 modification that demonstrates the facility has the capability of meeting secondary treatment standards at least 95% of the time, this permitting action is establishing monthly and weekly average BOD₅ and TSS concentration limits of 30 mg/L and 45 mg/L, respectively. Also, this permitting action is establishing technology-based daily maximum BOD₅ and TSS concentration limits of

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

50mg/L based on a Department best professional judgment (BPJ) of best practicable treatment (BPT). This permitting action carries forward the previously established monitoring frequencies of once per week (1/Week) for both BOD and TSS.

Department rule 06-096 C.M.R. ch. 523 § (6)(f) states that all pollutants limited in permits must have limitations, standards or prohibitions expressed in terms of mass. This permitting action is establishing, monthly average, weekly average, and daily maximum mass limits based on calculations using the average design flow for the facility of 0.283 MGD and the appropriate concentration limits as follows:

Monthly Average Mass Limit: $(0.283 \text{ MGD})(8.34 \text{ lbs./gal})(30 \text{ mg/L}) = 71 \text{ lbs./day}$
 Weekly Average Mass Limit: $(0.283 \text{ MGD})(8.34 \text{ lbs./gal})(45 \text{ mg/L}) = 106 \text{ lbs./day}$
 Daily Maximum Mass Limit: $(0.283 \text{ MGD})(8.34 \text{ lbs./gal})(50 \text{ mg/L}) = 118 \text{ lbs./day}$

This permitting action is establishing a requirement to achieve a minimum 30-day average removal of 85 percent for BOD₅ and TSS pursuant to Department rule, 06-096 C.M.R. Ch. 525 §§ (3)(III)(a)-(c). Compliance with this limitation is based on a 12-month rolling average.

A review of the data as reported on the Discharge Monitoring Reports (DMRs) submitted to the Department for the period May 2017 – October 2023 indicates values have been reported as follows:

BOD mass (DMRs = 72)

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	71	1 – 47	10
Weekly Average	106	2 – 108	20
Daily Maximum	118	2 – 108	20

There was one exceedance of the weekly average mass limitation between May 2017-October 2023.

BOD concentration (DMRs = 72)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	45	7 - 34	15.5
Weekly Average	60	10 – 80	22.9
Daily Maximum	65	10 – 80	23

The Concentration limits in this table represent the limits established in the 2018 modification.
There was one exceedance of the weekly average concentration limit and one exceedance of the daily maximum concentration limit between May 2017-October 2023.

TSS mass (DMRs = 72)

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	71	1 - 41	9
Weekly Average	106	1 – 82	17
Daily Maximum	118	1 – 82	17

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

TSS concentration (DMRs = 72)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	45	3 - 50	13
Weekly Average	60	4 – 67	19
Daily Maximum	65	4 – 67	19

The Concentration limits in this table represent the limits established in the 2018 modification. *There was one exceedance of the monthly average concentration limitation, two exceedances of the weekly average concentration limitation, and one exceedance of the daily maximum concentration limitation between May 2017-October 2023.*

- d. **Settleable Solids:** The previous permitting action established, and this permitting action carries forward, a technology-based daily maximum concentration limit of 0.3 mL/L for settleable solids, which is considered a best practicable treatment limitation (BPT) for secondary treated wastewater. This permitting action also carries forward the previously established once per week (1/Week) minimum monitoring frequency requirement.

A review of the monthly Discharge Monitoring Report (DMR) data for the period May 2017 – October 2023 indicates settleable solids have been reported as follows:

Settleable solids concentration (DMRs = 71)

Value	Limit (mL/L)	Range (mL/L)	Average (mL/L)
Daily Maximum	0.3	<0.01 - <0.3	0.10

- e. ***Escherichia coli* bacteria:** This permitting action establishes a seasonal monthly average and daily maximum *Escherichia coli* bacteria limitations of 64 CFU or MPN/100 mL (geometric mean) and 236 CFU or MPN/100 mL (instantaneous), respectively, that are in effect inclusively and between April 15th and October 31st of each year.

A review of the bacterial testing data as reported on the monthly DMRs for the period of May 2017 - October 2023 indicates the permittee to have been in compliance with the previous permit limits 100% of the time. A statistical summary of the reported *E. coli* bacteria test results is as follows:

***E. coli* Bacteria (DMRs = 31)**

Value	Limit (col/100 mL)	Range (col/100 mL)	Mean (col/100 mL)
Monthly Average	64	0 – 51	11.5
Daily Maximum	427	0 – 410	74.5

This permitting action is carrying forward the seasonal, 1/Week monitoring and reporting frequency.

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

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

Acute (A) Criterion	Chronic (C) Criterion	Modified A & C Dilution Factors	Calculate Acute Threshold	Calculated Chronic Threshold
0.019 mg/L	0.011 mg/L	138:1 (Mod A) 312:1 (C)	2.6 mg/L	3.4 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that must dechlorinate the effluent in order to consistently achieve compliance with water quality based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. The permittee conducts seasonal treatments of effluent with chlorine to aid in compliance with *E. coli* limitations. This permitting action carries forward the daily maximum BPT-based concentration limit of 1.0 mg/L as it is more stringent than the water quality-based thresholds of 2.7 mg/L (acute) and 3.5 mg/L (chronic) as calculated above. Although bacteria limitations are seasonal and apply between April 15 and October 31 of each year, the facility must monitor and report TRC during any period that chlorine-based compounds are in use at the facility because chlorine compounds are toxic at all times of the year.

A summary of TRC data as reported on the monthly DMRs for the period of May 2017 – October 2023 is as follows:

Total residual chlorine (DMRS = 31)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.10 – 1.0	0.76

This permitting action carries forward the minimum monitoring requirement of five times per week (5/Week).

- g. pH: The previous permitting action established, and this permitting action is carrying forward a technology-based pH range limitation of 6.0 – 9.0 standard units pursuant to 06-096 C.M.R. Ch. 525 § 3(III)(c). This permitting action is carrying forward the monitoring frequency of five times per week (5/Week).

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

A summary of pH data as reported on the monthly DMRs for the period of May 2017 – October 2023 is as follows:

pH (DMRs = 71)

Value	Limit (su)	Minimum (su)	Maximum (su)
Range	6.0 – 9.0	7.28	9.89

There were 5 exceedances in the pH limitation between May 2017-October 2023.

- h. Mercury: Pursuant to 38 M.R.S. § 420 and 38 M.R.S. § 413 and 06-096 C.M.R. ch. 519, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W007610-59-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 5.2 parts per trillion (ppt) and 7.8 ppt, respectively, and a minimum monitoring frequency requirement of 4 tests per year for mercury. 38 M.R.S. § 420(1-B)(B)(1) provides that a facility is not in violation of the Ambient Water Quality Criteria (AWQC) for mercury if the facility is in compliance with an interim discharge limit established by the Department. A review of the Department’s database for the period May 2017 through October 2023 is as follows:

Mercury (DMRs= 7)

Value	Limit (ug/L)	Range (ug/L)	Mean (ug/L)
Monthly Average	5.2	1.2 – 3.7	2.3
Daily Maximum	7.8		

On February 6, 2012, the Department issued a minor revision to amend the minimum monitoring frequency requirement from four times per year to once per year pursuant to 38 M.R.S. § 420(1-B)(F). This minimum monitoring frequency is carried forward in this permitting action. See **Attachment D** of this Fact Sheet for a summary of mercury test results.

- i. WET, Priority Pollutant, and Analytical Chemistry Testing: 38 M.R.S. § 414-A and 38 M.R.S. § 420 prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. 06-096 C.M.R. ch. 530 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. 06-096 C.M.R. ch. 530 § (2)(A) states, “...all licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedances of narrative or numerical water quality criteria.”

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

Dischargers are categorized based on the dilution of the receiving water and the potential risk of toxic contamination. The four categories for dischargers are as follows:

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

Based on the criteria, the permittee’s facility is considered a Level III discharger as the chronic dilution of the receiving water is 312:1.

Using the categorization criteria as stated above, and pursuant to 06-096 C.M.R. ch. 530 § (1)(D)(1), routine screening and surveillance level testing requirements are as follows:

Screening level testing – Screening level testing - During calendar year 2025 and every five years thereafter under an administratively continued permit the permittee must conduct screening level WET testing at a minimum frequency of once per year (1/Year) on the water flea and brook trout.

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

Surveillance level testing - Except in the year that screening level testing is being performed, the permittee must conduct analytical chemistry testing at a minimum frequency of once per year (1/Year). Testing must be conducted in a different calendar quarter each year such that a test is conducted in all four calendar quarters during the term of the permit.

Level	WET Testing	Priority pollutant testing	Analytical chemistry
III	Waived	None required	1 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 E** of this Fact Sheet for a summary of the WET test results and **Attachment F** of this Fact Sheet for a summary of the chemical-specific test results. Department rule 06-096 C.M.R. Ch. 530 § D(3)(b) states in part, *Dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3(E).*

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

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 exceedance 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 16, 2023, 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 AWQC thresholds (0.36% and 0.31% – mathematical inverse of the acute dilution factor 280:1 and the chronic dilution factor 321:1).

Given the absence of exceedances or reasonable potential to exceed critical WET thresholds, the permittee meets the surveillance level monitoring frequency waiver criteria found at Department rule 06-096 C.M.R. Ch. 530 § D(3)(b). Therefore, this permit is carrying forward the previously established requirement for the permittee to only conduct screening level testing for both the water flea and the brook trout. Testing must be conducted in the calendar year 2025 and every five years thereafter.

In accordance with Department rule 06-096 C.M.R. Ch. 530 § 2(D)(4) and Special Condition G, *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.

Analytical Chemistry & Priority Pollutant Testing Evaluation:

On October 23, 2023, the Department conducted a statistical evaluation, Report 1355, of the most recent 60 months of chemical-specific test results on file with the Department. The evaluation indicated that the discharge demonstrates a reasonable potential to exceed the chronic AWQC for aluminum and copper.

Statistical evaluation, Report ID 1355, was based on 15% of the ambient water quality criteria reserve being withheld.

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

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. The Department may increase this amount where it has information that significant non-point sources of a pollutant are present in a watershed. The Department may allocate quantities held in water quality reserve to new or changed dischargers according to the principles of the State's anti-degradation policy described in 38 MRSA, section 464(4)(F). Notwithstanding the above, for the purpose of calculating waste discharge license limits for toxic substances, the department may use any unallocated assimilative capacity that the Department has set aside for future growth if the use of that unallocated assimilative capacity would avoid an exceedance of applicable ambient water quality criteria or a determination by the Department of a reasonable potential to exceed applicable water quality criteria"

To determine if utilizing the unallocated assimilative capacity would avoid an exceedance or a reasonable potential to exceed AWQC for toxic pollutants, on November 7, 2023 another report was run, Report 1367, with 0% of the reserve being withheld.

06-096 C.M.R. ch. 530 §4(C) states "The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions. The Department shall use the same general methods as those in section 4(D) to determine background concentrations. For pollutants not listed by the Department, based on previously collected data from 60 rivers and streams statewide, in the absence of ambient data, 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. The Department is in the early stages of developing an ambient sampling plan to gather accurate information regarding the background concentration of metals in Waters of the State. Until updated data is gathered a default background concentration of 10% of the applicable water quality criteria is being used in the calculation for this permit. In accordance with Special Condition L, *Reopening of Permit for Modification*, this permit can be reopened if the Department receives new information that would allow for effluent limitations that are more protective of the Water Quality Criteria.

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

06-096 C.M.R ch. 530 § (3)(D) states: *“Where the need for effluent limits has been determined, limits derived from acute water quality criteria must be expressed as daily maximum values. Limits derived from chronic or human health criteria must be expressed as monthly average values.”*

The statistical evaluation, Report 1355, based on 15% of the AWQC reserve being withheld and Report 1367 based on 0% of the AWQC reserve being withheld were produced to determine if the unallocated assimilative capacity would avoid an exceedance or avoid a reasonable potential to exceed applicable AWQC for toxic pollutants. The report indicates the Limestone facility would no longer have a reasonable potential to exceed the copper AWQC. Therefore, 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. According to the November 7, 2023, statistical evaluation (Report 1367) aluminum and copper are to be limited based on the segment allocation method. The Department maintains copies of all reports used to assess the reasonable potential for exceedances in the AWQC and derive limits in the permit record.

Segment Allocation Methodology

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, within the statistical evaluation time frame. The mean concentration is multiplied by a conversion factor of 8.34 and the monthly average permit limit for flow. For the permittee, the historical average for aluminum and copper are calculated below. It is noted that two of the reported aluminum concentration values were below the detection limit at < 20 µg/L. In this case a value equal to ½ of the detection limit, 10 µg/L, was utilized for calculations.

Aluminum

Mean Concentration = 17.95 ug/L or 0.01795 mg/L

Permit Flow Limit = 0.283 MGD

Historical Average Mass = (0.01795 mg/L)(8.34 lbs/gal)(.283 MGD) = 0.042 lbs./day

The November 07, 2023 statistical evaluation indicates the historical average mass of aluminum discharged by the Washburn POTW is 0.178% of the aluminum discharged to the Aroostook River. Therefore, the permittee's segment allocation for aluminum is calculated as 0.178% of the chronic assimilative capacity of the Aroostook River at Fort Fairfield, the most downstream facility.

The chronic assimilative capacity of the Aroostook River at Fort Fairfield is calculated as follows:

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

$$7Q_{10\text{Fort Fairfield}} = 190\text{cfs or } 123\text{ MGD}$$

$$\text{Chronic AWQC} = 87\text{ ug/L or } 0.087\text{ mg/L (based on } T=25^{\circ}\text{C and pH}=7.0\text{ SU)}$$

Taking into consideration 90% of the applicable AWQC (includes a 10% reduction to account for background and 0% reduction for reserve, totaling 10%), The river's chronic assimilative capacity for aluminum at Fort Fairfield would be as follows:

$$\begin{aligned}\text{Chronic Assimilative Capacity} &= (0.087\text{ mg/L})(0.90)(8.34\text{ lbs/gal})(123\text{ MGD}) \\ &= \mathbf{80.3\text{ lbs./day}}\end{aligned}$$

The monthly average (chronic) mass limitation for aluminum for the permittee is calculated as follows:

$$\begin{aligned}(\text{Chronic assimilative capacity mass})(\% \text{ of total aluminum discharged}) \\ (80.3\text{ lbs./day})(0.00178) = \mathbf{0.143\text{ lbs./day}}\end{aligned}$$

Copper

Mass limits

$$\text{Mean concentration (n=5)} = 6.64\text{ ug/L or } 0.00664\text{ mg/L}$$

$$\text{Permit flow limit} = 0.283\text{ MGD}$$

$$\text{Historical average mass} = (0.00664\text{ mg/L})(8.34\text{ lbs/gal})(0.283\text{ MGD}) = 0.0156\text{ lbs/day}$$

The 11/7/2023 statistical evaluation indicates the historical average mass of copper discharged by the permittee's facility is 1.687% of the copper discharged by the facilities on the Aroostook River and its tributaries. Therefore, the permittee's segment allocation for copper is calculated as 1.687% 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 4.0 lbs/day of copper at Fort Fairfield. The chronic assimilative capacity 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 = 190 cfs). The calculation for copper is as follows:

Chronic:

$$7Q_{10\text{ @ Fort Fairfield}} = 190\text{ cfs or } 123\text{ MGD}$$

$$\text{AWQC} = 4.3\text{ ug/L}^*$$

$$4.3\text{ ug/L}(0.90) = 3.9\text{ ug/L or } 0.0039\text{ mg/L}$$

* Based on a hardness of 40 mg/L

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

$$\text{Chronic Assimilative Capacity} = (123 \text{ MGD})(8.34 \text{ lbs/gal})(0.0039\text{mg/L}) = 4.0$$

Therefore, the monthly average (chronic) mass limitation for copper for the permittee can be calculated as follows:

$$\text{Monthly average: (Acute assimilative capacity mass)(\% of total copper discharged)} \\ (4.0 \text{ lbs/day})(0.01687) = \mathbf{0.067 \text{ lbs/day}}$$

In May 2012, Maine law 38 M.R.S. §464(4)(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 POTW.

Therefore, this permitting action is not establishing a monthly average concentration limit for aluminum or copper in this permit.

The receiving water is subject to a sustenance fishing designated use pursuant to section 38 M.R.S. §466-A, therefore reasonable potential evaluations for human health AWQC were conducted using a fish consumption rate of 200 grams per day in accordance with 38 M.R.S. §466-A.1. and 06-096 C.M.R. Ch. 584.

- j. Lagoon Under-Drain and Ground Water Well Monitoring: The previous permitting action established lagoon under-drain (Outfall 002A) and ground water monitoring well (MW1A) monitoring and reporting requirements. The basis for these monitoring requirements as stated in the previous permit was that site permit L-015831-29-A-N issued by the Department on June 28, 1989 required certain ground water monitoring in order to monitor the potential effects of lagoon leakage on the ground water quality. The parameters and monitoring frequencies are being carried forward in this permitting action.

A review of the lagoon under-drain data on record with the Department for the period May 2017- October 2023 (applicable monitoring months only) demonstrates no upward or downward trends, which indicates the lagoons remain secure. Monitoring results as summarized in Table 1 below.

Outfall #002A (DMRs = 18)

Parameter	Range	Arithmetic Mean
Flow, gallons/minute	1 - 40	10.17
Conductivity, umhos/cm	115- 381	208
Temperature, °C	9.9 – 20	15.3
Fecal Coliform Bacteria, #colonies/100mL	0 - 12	1.4

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

A review of the ground water monitoring well data on record with the Department for the period May 2017- October 2023 (applicable monitoring months only) demonstrates no upward or downward trends, which indicates ground water quality is not impacted by any lagoon leakage. Monitoring results as summarized in Table 2 below.

MW1A (DMRs = 7)

Parameter	Range	Arithmetic Mean
Conductivity, umhos/cm	261 - 286	274
Temperature, °C	7.2 – 11	9.5
pH, standard units	6.03 – 6.81	6.6
Nitrate (as N), mg/L	<1.0 – <1.0	<1.0
Total Sodium (as Na), mg/L	2.30 – 7.5	3.98
Chloride (as Cl), mg/L	3.00 – 6.4	4.8

Footnotes:

- (1) The USEPA has established a primary maximum contaminant level (MCL) for nitrate which is the highest level of a contaminant allowed in drinking water and is an enforceable standard. The USEPA has established secondary drinking water standards (SDWS) for certain pollutants, which are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. The SDWS for chloride is 250 mg/L.

- k. *Total Phosphorus*: Prior phosphorus testing completed by the permittee yielded results less than 50% of the reasonable potential threshold. The permittee has not made any significant changes to its operations or had any significant changes to its waste stream since the previous permitting action. Furthermore, there have been no indications of nutrient enrichment in the segment of the Aroostook River identified in Section 6 of this Fact Sheet. At this time the Department has determined that the conditions of the previous permit will carry forward, and there will not be a monitoring requirement or limitation established for phosphorus. The Department reserves the right to reopen this permit for modification if there are changes in the operation of the facility or that would lead to a greater potential that the permittee would have a reasonable potential to exceed the AWQC for phosphorus.

8. ANTI-BACKSLIDING

Federal regulation 40 C.F.R. §122.44(l) contains the criteria for what is often referred to as the anti-backsliding provisions of the Federal Water Pollution Control Act (Clean Water Act). In general, the regulation states that except for provisions specified in the regulation, effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards or conditions in the previous permit. Applicable exceptions include: (1) material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation and (2) information is available which was not available at the time of the permit issuance (other than revised regulations, guidance, or test methods) and which would justify the application of less stringent effluent limitations at the time of permit issuance. All limitations in this permit are equally or more stringent than those in the previous permit.

9. ANTI-DEGRADATION

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 subsistence fishing classification.

10. PUBLIC COMMENTS

Public notice of this application was made in the *Star Herald* newspaper on or about May 25, 2022. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 C.M.R. ch. 522 (effective January 12, 2001).

11. DEPARTMENT CONTACTS

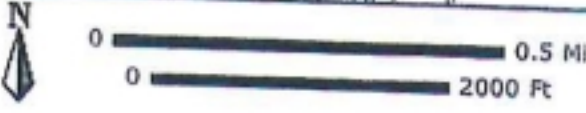
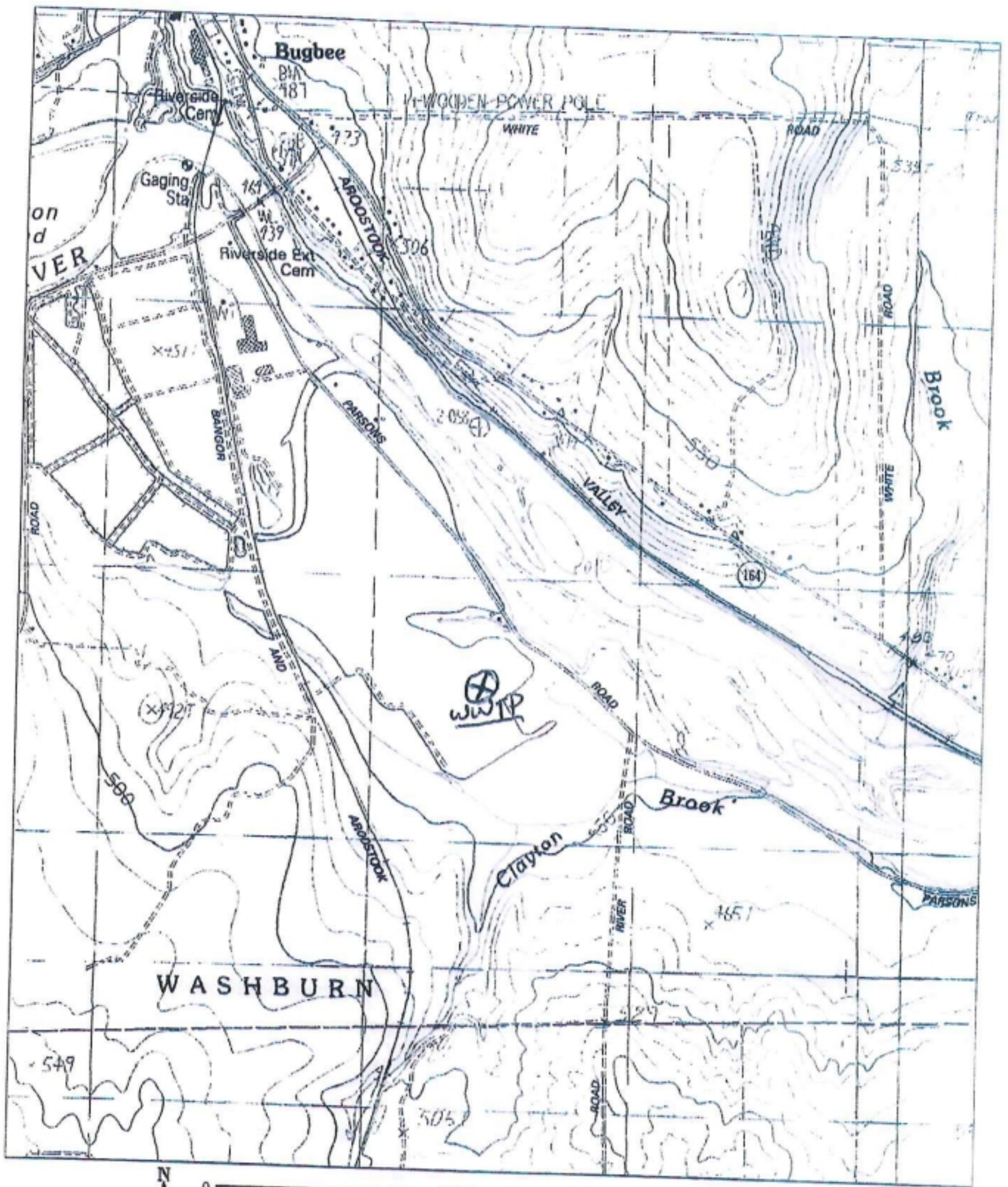
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Benjamin Pendleton
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017
Telephone: (207) 592-6871 e-mail: Benjamin.s.pendleton@maine.gov

12. RESPONSE TO COMMENTS

Reserved until the end of the thirty (30) day comment period.

**FACT SHEET
ATTACHMENT A**



Map provided by MyTopo.com

Label #1

**FACT SHEET
ATTACHMENT B**

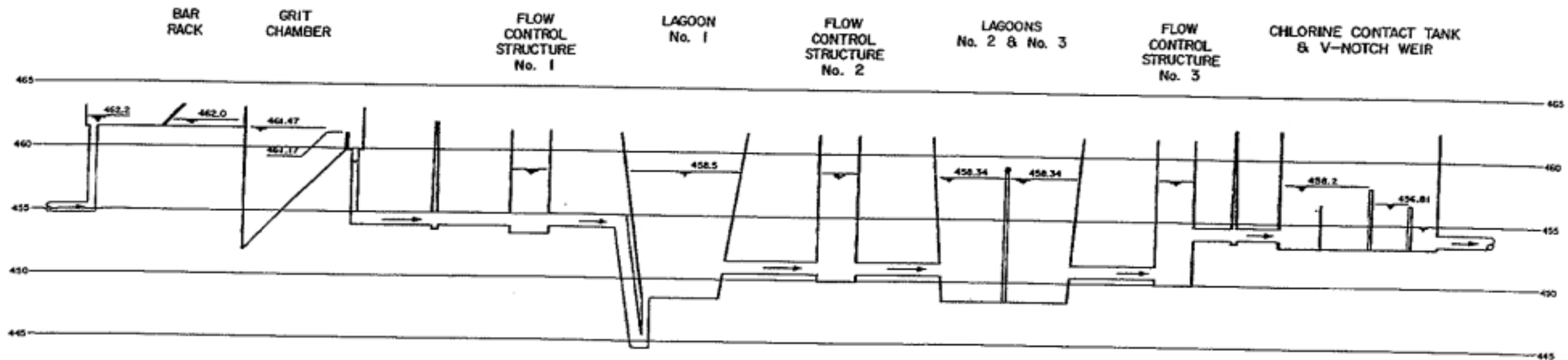


FIGURE 1-5
HYDRAULIC
PROFILE

**FACT SHEET
ATTACHMENT C**



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
Commissioner

MEPDES# _____ Facility Name _____

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

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

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

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

Scheduled Toxicity Testing for the next calendar year

Test Conducted	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
WET Testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Priority Pollutant Testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analytical Chemistry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other toxic parameters ¹	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

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

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

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

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

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

**FACT SHEET
ATTACHMENT D**

6/24/2024

MERCURY REPORT - Clean Test Only



Data Date Range: 05/01/2017 - 06/24/2024

Inspector Name: MARCEL CHALOU

Facility: WASHBURN WATER & SEWER DISTRICT

Permit Number: ME0101028

Max (ng/l): 3.7200

Average (ng/l): 2.2886

Sample Date	Result (ng/l)	Lsthan	Clean
06/12/2017	2.79	N	T
08/30/2018	1.21	N	T
10/29/2019	1.75	N	T
05/26/2020	2.55	N	T
03/03/2021	3.72	N	T
03/02/2022	2.60	N	T
05/12/2023	1.40	N	T

**FACT SHEET
ATTACHMENT E**



FACILITY WET EVALUATION REPORT

Facility: WASHBURN WATER & SEWER DISTRICT	Permit Number: ME0101028	Report Date: 6/25/2024
Receiving Water: AROOSTOOK RIVER		Rapidmix: Y
Dilution Factors: 1/4 Acute: N/A	Acute: 280.000	Chronic: 321
Effluent Limits: Acute (%): 0.357	Chronic (%): 0.312	Date range for Evaluation: From 25/Jun/2019 To: 25/Jun/2024

Test Type: A_NOEL

Test Species: TROUT	Test Date	Result (%)	Status
	05/26/2020	100.000	OK

Species Summary:

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

Test Species: TROUT	Test Date	Result (%)	Status
	05/26/2020	100.000	OK

Species Summary:

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

Test Type: A_NOEL

Test Species: WATER FLEA	Test Date	Result (%)	Status
	05/26/2020	100.000	OK

Species Summary:

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

Test Type: C_NOEL

Test Species: WATER FLEA	Test Date	Result (%)	Status
	05/26/2020	50.000	OK

Species Summary:

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

**FACT SHEET
ATTACHMENT F**

CHEMICAL TEST REPORT

Data entered into Toxscan for the period

01/May/2017 - 31/Oct/2023

Facility Name: **WASHBURN WATER & SEWER DISTRICT**

Permit Number: ME0101028

ALKALINITY

Test Date	Result (ug/l)	Lsthan	Status
05/26/2020	200000.000	N	

ALUMINUM

Test Date	Result (ug/l)	Lsthan	Status
09/15/2020	23.700	N	
03/03/2021	28.100	N	

AMMONIA

Test Date	Result (ug/l)	Lsthan	Status
05/26/2020	4400.000	N	
09/15/2020	7900.000	N	
11/17/2020	17000.000	N	
03/03/2021	25000.000	N	

COPPER

Test Date	Result (ug/l)	Lsthan	Status
05/26/2020	5.850	N	
09/15/2020	2.500	N	
11/17/2020	5.190	N	
03/03/2021	13.000	N	

LEAD

Test Date	Result (ug/l)	Lsthan	Status
09/15/2020	0.263	N	
11/17/2020	0.206	N	
03/03/2021	0.365	N	

MERCURY

Test Date	Result (ng/l)	Lsthan	Status
06/12/2017	2.790	N	
08/30/2018	1.210	N	
10/29/2019	1.750	N	
05/26/2020	2.550	N	
03/03/2021	3.720	N	
03/02/2022	2.600	N	
05/12/2023	1.400	N	

NICKEL

Test Date	Result (ug/l)	Lsthan	Status
05/26/2020	0.500	N	
09/15/2020	1.530	N	
11/17/2020	1.170	N	
03/03/2021	0.920	N	

PH

Test Date	Result (ug/l)	Lsthan	Status
05/26/2020	8.010	N	

SOLIDS

Test Date	Result (ug/l)	Lsthan	Status
05/26/2020	414000.000	N	

SPECIFIC CONDUCTANCE (UMHOS)

Test Date	Result (ug/l)	Lsthan	Status
05/26/2020	670.000	N	

TOTAL CALCIUM

Test Date	Result (ug/l)	Lsthan	Status
05/26/2020	79300.000	N	

TOTAL HARDNESS

Test Date	Result (ug/l)	Lsthan	Status
05/26/2020	230000.000	N	

TOTAL MAGNESIUM

Test Date	Result (ug/l)	Lsthan	Status
05/26/2020	7700.000	N	

TOTAL ORGANIC CARBON

Test Date	Result (ug/l)	Lsthan	Status
05/26/2020	14000.000	N	

TOTAL RESIDUAL CHLORINE (MG/L) (9)

Test Date	Result (ug/l)	Lsthan	Status
05/26/2020	310.000	N	

TOTAL SUSPENDED SOLIDS

Test Date	Result (ug/l)	Lsthan	Status
05/26/2020	40000.000	N	

ZINC

Test Date	Result (ug/l)	Lsthan	Status
05/26/2020	10.300	N	
09/15/2020	6.600	N	
11/17/2020	11.200	N	
03/03/2021	18.400	N	

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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 of 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 MAINTENANCE 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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- 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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- (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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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).

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (i) Five hundred micrograms per liter (500 ug/l);
 - (ii) One milligram per liter (1 mg/l) for antimony;
 - (iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
 - (iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

5. Publicly owned treatment works.

- (a) All POTWs must provide adequate notice to the Department of the following:
 - (i) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA or Chapter 528 if it were directly discharging those pollutants.
 - (ii) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (iii) For purposes of this paragraph, adequate notice shall include information on (A) the quality and quantity of effluent introduced into the POTW, and (B) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (b) When the effluent discharged by a POTW for a period of three consecutive months exceeds 80 percent of the permitted flow, the permittee shall submit to the Department a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

E. OTHER REQUIREMENTS

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

- (a) For municipal sources. During power failure, all wastewaters which are normally treated shall receive a minimum of primary treatment and disinfection. Unless otherwise approved, alternate power supplies shall be provided for pumping stations and treatment facilities. Alternate power supplies shall be on-site generating units or an outside power source which is separate and independent from sources used for normal operation of the wastewater facilities.
- (b) For industrial and commercial sources. The permittee shall either maintain an alternative power source sufficient to operate the wastewater pumping and treatment facilities or halt, reduce or otherwise control production and or all discharges upon reduction or loss of power to the wastewater pumping or treatment facilities.

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 contaminants 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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.