STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION





July 17, 2024

Mr. David Smith City of Old Town Pollution Control Facility 298 Water Street, Old Town ME. 04468

> Sent via electronic mail Delivery confirmation requested

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100471 Maine Waste Discharge License (WDL) Application #W001635-6D-H-R Proposed Draft MEPDES Permit Renewal

Dear Mr. Smith,

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

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

The comment period begins on July 17, 2024 and ends on Friday, August 16, 2024. All comments on the proposed draft permit must be received in the Department of Environmental Protection office on or before the close of business Friday, August 30, 2019. Failure to submit comments in a timely fashion will result in the proposed draft/license permit document being issued as drafted.

City of Old Town Pollution Control Facility July 17, 2024 Page 2 of 2

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

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

ec:,John Adamo , MEDEP
Gary Brooks, MEDEP
Wendy Garland, MEDEP
Laura Crossley, MEDEP
Lori Mitchell, MEDEP
Environmental Review, MEIFW
Environmental Review, MEDMR
Ellen Weitzler, USEPA
Alex Rosenberg, USEPA
Michael Cobb, USEPA
Richard Carvalho, USEPA
Dan Kusnierz, Penobscot Indian Nation
Sean Mahoney, CLF
Anna Harris, USFWS



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

DEPARTMENT ORDER

IN THE MATTER OF

W001635-6D-H-R	APPROVAL)	RENEWAL
ME0100471)	WASTE DISCHARGE LICENSE
OLD TOWN, PENOBSC	OT COUNTY, MAINE)	AND
PUBLICLY OWNED TR	EATMENT WORKS)	ELIMINATION SYSTEM PERMIT
CITY OF OLD TOWN)	MAINE POLLUTANT DISCHARGE

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

APPLICATION SUMMARY

On March 12, 2021, the Department accepted as complete for processing an application from the Permittee for renewal of combination Waste Discharge License (WDL) # W001635-6D-F-R / Maine Pollutant Discharge Elimination System (MEPDES) permit # ME0100471, which was issued by the Department on June 14, 2016, for a five-year term. The June 14, 2016, permit authorized the monthly average discharge of 3.5 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to the Penobscot River, Class B, in Old Town, Maine.

The June 14, 2016, MEPDES permit also authorized the Permittee to discharge an unspecified quantity of primary treated municipal wastewater from a POTW during overflow events while the bypass of secondary treatment is active, and an unspecified quantity of untreated combined sanitary and storm water from three (3) combined sewer overflow (CSO) outfalls. Two CSO's discharge to the Penobscot River, Class B, and one CSO discharges to the Stillwater River, Class B.

On June 28, 2017, the Department issued a permit modification, WDL # W001635-6D-G-M, to extend the Elm Street Area Sewer Rehabilitation Project from July 31, 2017, to December 31, 2017.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the previous permit except that this permitting action 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. Revising the BOD₅ daily maximum mass limitation from 2,851 lbs./day to 2,858 lbs./day for administrative Outfall #003A, based on the results of facility testing.
- 3. Updating Special Condition A(4), *Effluent Limitations and Monitoring Requirements*, in an attempt to clarify the permittee's monitoring responsibilities during an overflow event.
- 4. Modifying Special Condition A, *Effluent Limitations and Monitoring Requirements Footnote 7*, to the Department's most current requirements.
- 5. Modifying Special Condition A, *Effluent Limitations and Monitoring Requirements Footnote 9*, to the Department's most current requirements.
- 6. Modifying Special Condition A, *Effluent Limitations and Monitoring Requirements Footnote 14*, in an effort to clarify the permittee's monitoring requirements during an overflow event.
- 7. Establishing Special Condition A, *Effluent Limitations and Monitoring Requirements Footnote 15,16*, in an effort to clarify the permittee's Flow and *E. coli* reporting requirements during an overflow event.
- 8. Eliminating Special Condition J, Ambient Water Quality Monitoring.
- 9. Updating Special Condition L, 06-096 C.M.R. ch. 530 § (2)(D)(4) Statement for Reduced/Waived Toxics Testing, to the Department's most current requirements.
- 10. Changing the frequency of screening level testing in order to keep the facility on their established 5-year schedule.
- 11. Eliminating the provision that allows the percent removal for Biological Oxygen Demand (BOD₅) and Total Suspended Solids (TSS) to be waived when the monthly average influent concentration is less than 200 mg/L. Upon review of the last 60 months of data, the facility has demonstrated the ability to consistently attain 85% removal.

CONCLUSIONS

BASED on the findings in the attached and incorporated Fact Sheet dated **July 17, 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 (including the three CSOs and the CSO related bypasses of secondary treatment) will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of licenses*, 38 M.R.S. § 414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the application of the CITY of OLD TOWN POLLUTION CONTROL FACILITY to discharge up to a monthly average flow of 3.5 MGD of secondary treated sanitary wastewater and allows the discharge of an unspecified quantity of excess combined sanitary and storm water receiving primary treatment only from a municipal wastewater treatment facility and untreated combined sanitary and storm water from 3 CSO outfalls (two to the Penobscot River-Class B, and one to the Stillwater River-Class B), in Old Town, Maine, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

- 1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable to All Permits," revised July 1, 2002, copy attached.
- 2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
- 3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. *Maine Administrative Procedure Act*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 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	A, MAINE, THIS	_ DAY OF	2024
DEPARTMENT OF ENVIRONMEN	NTAL PROTECTION		
BY:			
For Melanie Loyzim, Commis	ssioner		
Date of initial receipt of application: Date of application acceptance:	March 9, 2021 March 12, 2021		
Date filed with Board of Environmen	tal Protection		

This Order prepared by Benjamin Pendleton, Bureau of Water Quality

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge secondary treated sanitary wastewater from <u>Outfall #001A</u> to the Penobscot River in Old Town. These limitations and monitoring requirements apply to all flows conveyed through the secondary treatment system at all times except as otherwise noted in the associated footnotes ⁽¹⁾.

TECOL A CIL A CIL		Minimum Monitoring Requirements						
Effluent Characteristic	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow [50050]	3.50 MGD [03]		Report MGD [03]				Continuous [99/99]	Recorder [RC]
BOD ₅ June 1 st – September 30 th October1 st – May 31 st [00310]	425 lbs./day 875 lbs./day [26]	638 lbs./day 1,314 lbs./day [26]	Report lbs./day Report lbs./day	30 mg/L ⁽²⁾ 30 mg/L ⁽²⁾ [19]	45 mg/L ⁽²⁾ 45 mg/L ⁽²⁾ [19]	50 mg/L ⁽²⁾ 50 mg/L ⁽²⁾ [19]	2/Week [02/07]	Composite [24]
BOD ₅ , when bypass is active June 1 st – September 30 th October1 st – May 31 st [00310]	425 lbs./day 875 lbs./day [26]	638 lbs./day 1,314 lbs./day [26]	Report lbs./day Report lbs./day [26]	30 mg/L ⁽²⁾ 30 mg/L ⁽²⁾ [19]	45 mg/L ⁽²⁾ 45 mg/L ⁽²⁾ [19]	Report mg/L (2) Report mg/L (2) [19]	2/Week [02/07]	Composite [24]
BOD ₅ Percent Removal ⁽³⁾ [81010]				85% [23]			1/Month [01/30]	Calculate [CA]
TSS June 1 st – September 30 th October1 st – May 31 st [00530]	425 lbs./day 875 lbs./day [26]	638 lbs./day 1,314 lbs./day [26]	Report lbs./day Report lbs./day [26]	30 mg/L ⁽²⁾ 30 mg/L ⁽²⁾ [19]	45 mg/L ⁽²⁾ 45 mg/L ⁽²⁾ [19]	50 mg/L ⁽²⁾ 50 mg/L ⁽²⁾ [19]	2/Week [02/07]	Composite [24]
TSS, when bypass is active June 1st – September 30th October1st – May 31st [00530]	425 lbs./day 875 lbs./day [26]	638 lbs./day 1,314 lbs./day [26]	Report lbs./day Report lbs./day [26]	30 mg/L ⁽²⁾ 30 mg/L ⁽²⁾ [19]	45 mg/L ⁽²⁾ 45 mg/L ⁽²⁾ [19]	Report mg/L (2) Report mg/L (2) [19]	2/Week [02/07]	Composite [24]
TSS Percent Removal ⁽³⁾ [81011]				85% [23]			1/Month [01/30]	Calculate [CA]

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)- OUTFALL #001A (cont'd)

1. The permittee is authorized to discharge secondary treated sanitary wastewater from <u>Outfall #001A</u> to the Penobscot River in Old Town. These limitations and monitoring requirements apply to all flows conveyed through the secondary treatment system at all times except as otherwise noted in the associated footnotes ⁽¹⁾.

Effluent Changetonistic	Discharge Limitations							Minimum Monitoring Requirements	
Effluent Characteristic	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	
Settleable Solids [00545]						0.3 ml/L <i>[25]</i>	2/Week [02/07]	Grab [GR]	
E. coli Bacteria (4,5) April 15 th – October 31 st [31633]				64/100 ml ⁽⁵⁾ [13]		236/100 ml [13]	1/Week [01/07]	Grab [GR]	
TRC ⁽⁶⁾ [50060]						1.0 mg/L <i>[19]</i>	1/Day [01/01]	Grab [GR]	
pH [00400]						6.0–9.0 SU <i>[12]</i>	5/Week [05/07]	Grab [GR]	
Mercury (Total) (7) [71900]				18.6 ng/L [3M]		27.8 ng/L <i>[3M]</i>	1/Year [01/YR]	Grab [GR]	

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

2. The permittee is authorized to discharge **secondary treated municipal wastewaters from Outfall #001A** to the Penobscot River in Old Town. Such discharges must be limited and monitored by the permittee as specified below (1):

SCREENING LEVEL – Beginning in the calendar year 2024, 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.

Eccused Change desired		Discharge	Minimum Monitoring Requirements			
Effluent Characteristic	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity (8) Acute – No Observed Effect Level (NOEL)						
Ceriodaphnia dubia (Water flea) [TDA3B] Salvelinus fontinalis (Brook trout)				Report % [23]	1/Year <i>[01/YR]</i>	Composite [24]
[TDA6F]				Report % [23]	1/Year <i>[01/YR]</i>	Composite [24]
Chronic – NOEL Ceriodaphnia dubia (Water flea) [TBP3B] Salvelinus fontinalis (Brook trout)				Report % [23] Report %	1/Year [01/YR] 1/Year	Composite [24] Composite
[TBQ6F] Analytical chemistry (9) [51477]				[23] Report μg/L [28]	[01/YR] 1/Quarter [01/90]	[24] Composite/Grab [24]
Priority Pollutant ⁽⁹⁾ [50008]				Report µg/L [28]	1/Year [01/YR]	Composite/Grab [24]

W001635-6D-H-R

SPECIAL CONDITIONS

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

3. PRIMARY TREATED WASTEWATER (Administrative OUTFALL #002A – Primary Treatment Only)

Consistent with CSO bypass regulations, the permittee is allowed to bypass secondary treatment and provide primary treatment only prior to combining with secondary treated wastewater. Bypassing secondary treatment is allowed when the influent to the wastewater treatment facility exceeds a peak hourly flow rate of 3,260 gallons per minute (4.7 MGD). Allowance to bypass secondary treatment will be reviewed and may be modified or terminated pursuant to Special Condition M, *Reopening of Permit for Modification*, if there is substantial change in the volume or character of pollutants in the collection/treatment system. Also see supplemental report form, *DEP-49-CSO Form For Use With Dedicated CSO Primary Clarifier*, **Attachment A** of this permit. Outfall #002A must be monitored as follows ⁽¹⁾:

		Discharge Lim	Monitoring Requirements			
Effluent Characteristic	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Influent Flow Rate Minimum [00058]		Report (gpm) (10) [78]			Instantaneous [01/99]	Recorder [RC]
Flow (15) [50050]	Report (Total MG) [3R]	Report (MGD) [03]			Continuous [99/99]	Recorder [RC]
BOD ₅ [00310]		Report lbs./day [26]		Report mg/L [19]	1/Discharge Day (11,13) [01/DD]	Composite [24]
TSS [00530]		Report lbs./day [26]		Report mg/L [19]	1/Discharge Day (11,13) [01/DD]	Composite [24]
Overflow Occurrence (12) [74062]		Report (# of days) [93]			1/Discharge Day (11) [01/DD]	Record Total [RT]
E. coli Bacteria (13) April 15 th – October 31 st [31633]				Report /100 ml [13]	1/Discharge Day (11,13) [01/DD]	Grab [GR]
TRC (13) [50060]				Report mg/L [19]	1/Discharge Day (11,13) [01/DD]	Grab [GR]

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

4. BLENDED EFFLUENT (Administrative OUTFALL #003A)

Consistent with CSO bypass regulations, the permittee is allowed to discharge primary and secondary treated wastewater (blended effluent - Outfall #003A (administrative outfall)) to the Penobscot River. The discharge limitations Outfall #003A are calculated by combining monitoring results from Outfall #001A and Outfall #002A during an overflow occurrence. Sampling is only required when an overflow occurrence coincides with the 2/week monitoring requirement for the secondary treated wastewater (Outfall #001A). Bypassing secondary treatment is allowed when the influent to the wastewater treatment facility exceeds a peak hourly flow rate of 3,260 gallons per minute (4.7 MGD). Allowance to bypass secondary treatment will be reviewed and may be modified or terminated pursuant to Special Condition M, *Reopening of Permit for Modification*, if there is substantial change in the volume or character of pollutants in the collection/treatment system. Also see supplemental report form, *DEP-49-CSO Form For Use With Dedicated CSO Primary Clarifier*, **Attachment A** of this permit. Outfall #003A must be monitored as follows ⁽¹⁾:

		Discharge Limit	Monitoring Requirements			
Effluent Characteristic	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow ⁽¹⁵⁾ [50050]	Report (Total MGD) [03]	Report (MGD) [03]			1/Discharge Day (11) [01/DD]	Calculate [CA]
BOD ₅ ⁽¹⁴⁾ [00310]		2,858 lbs./day [26]		Report mg/L [19]	1/Discharge Day (11,13) [01/DD]	Calculate [CA]
TSS ⁽¹⁴⁾ [00530]		6,683 lbs./day [26]		Report mg/L [19]	1/Discharge Day (11,13) [01/DD]	Calculate [CA]
E. coli Bacteria (4)(13)(16) April 15 th – October 31 st [31633]				236/100 ml [13]	1/Discharge Day (11,13) [01/DD]	Calculate [CA]
TRC ⁽⁶⁾⁽¹³⁾ [50060]				1.0 mg/L <i>[19]</i>	1/Discharge Day (11,13) [01/DD]	Calculate [CA]

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

FOOTNOTES:

1. Sampling – The permittee must conduct all effluent sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (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. Samples that are sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 C.M.R. ch. 263 (effective March 15, 2023). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 C.F.R. Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the discharge monitoring report (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.

Sampling Locations – Any change in sampling location(s) other than those specified below must be reviewed and approved by the Department in writing.

Influent

Flows to the facility are divided into primary and secondary waste streams prior to any sampling. Therefore:

Primary Waste Stream – Flow, BOD₅, and TSS must be sampled after separation from secondary flow.

Secondary Waste Stream – Flow, BOD₅, and TSS must be sampled after screening and grit removal.

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

FOOTNOTES:

Effluent receiving secondary treatment (Outfall #001A)

Must be sampled for all parameters after the chlorine contact chamber on a year-round basis. Sampling of the secondary effluent must be conducted prior to combining with the primary treated effluent during a bypass event.

Effluent receiving primary treatment (Internal Waste Stream - Outfall #002A) Must be sampled (composite and grab samples) after primary clarification but before combining with the secondary treated effluent.

- 2. BOD₅ & TSS When the bypass of secondary treatment is active, sample results obtained for these parameters are not to be included in calculations to determine compliance with monthly or weekly average limitations. Also, when the bypass of secondary treatment is active, the daily maximum concentration limit of 50 mg/L for BOD₅ and TSS at Outfall #001A is not in effect.
- 3. Percent removal For secondary treated wastewater, the facility must maintain a minimum of 85 percent removal of both BOD₅ and TSS. Percent removal will be based on a monthly average value calculated based on influent and effluent concentrations.
- **4.** *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(5), the Department may, at any time and with notice to the permittee, modify this permit to establish bacteria limitations on a year-round basis to protect the health and welfare of the public.
- **5. 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.
- **6. TRC** Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine-based compounds are being used to disinfect the discharge. The permittee must utilize approved test methods that are capable of bracketing the limitations in this permit.
- 7. Mercury The permittee must conduct all mercury monitoring required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 C.M.R. ch. 519 in accordance with the USEPA's "clean sampling techniques"

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

FOOTNOTES:

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. Go to https://www.maine.gov/dep/water/wd/municipal_industrial/index.html and click on "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.

- 8. WET Testing Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions set at levels to bracket the modified acute and chronic critical water quality thresholds of 0.86% and 0.19%, respectively), which provides a point estimate of toxicity in terms of No Observed Effect Limit (NOEL). 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 117:1 and 517:1, respectively, for Outfall #001A.
 - a. **Surveillance level testing** Waived pursuant to 06-096 C.M.R. ch. 530 § (2)(D)(3)(b).
 - b. Screening level testing Beginning in the calendar year 2024 and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the Permittee must conduct screening level acute and chronic WET testing on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*) at a minimum frequency of once per year (1/Year).

Test results must be submitted to the Department no later than the next DMR required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedances of the critical acute and chronic water quality thresholds of 0.86% and 0.19%, respectively.

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

FOOTNOTES:

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

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

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

Each time a WET test is performed, the permittee must sample and analyze for the parameters in the "WET and Chemical Specific Data Report Form". The form can be found at:

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

- **9. Analytical Chemistry** and **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** Waived pursuant to 06-096 C.M.R. ch. 530 § (2)(D)(3)(b).
 - b. Screening level testing Beginning in the calendar year 2024 and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the Permittee must conduct screening level analytical chemistry testing at minimum frequency of once per quarter (1/Quarter) and screening level priority pollutant testing at a minimum frequency of once per year (1/Year).

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

FOOTNOTES:

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

Test results must be submitted to the Department not later than the next 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 acute, chronic or human health Ambient Water Quality Criteria (AWQC) as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective February 16, 2020). For the purposes of DMR reporting, enter a "1" for <u>yes</u>, testing done this monitoring period or "N9" monitoring <u>not required</u> this period.

- **10. Influent Flow Rate Minimum** The permittee must report the <u>minimum</u> instantaneous influent flow rate entering the headworks of the plant at the time each bypass of secondary treatment is activated.
- **11. Discharge Day** A discharge day is defined as a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.
- 12. Overflow Occurrence An overflow occurrence is defined as the period between initiation of flow from the primary bypass and ceasing discharge from the primary bypass. Overflow occurrences are reported in discharge days. Multiple intermittent overflow occurrences in one discharge day are reported as one overflow occurrence and are sampled according to the measurement frequency specified.
- 13. BOD 5, TSS, *E. coli* bacteria, TRC– Samples for BOD₅, TSS, *E. coli* bacteria, and TRC are not required when Outfall #002A and Outfall #003A are active outside of the normal staffing hours, or unless an overflow occurrence coincides with the normal 2/Week sampling for BOD₅ and TSS and 1/Week for *E. coli*. Grab samples are also not required during normal staffing hours if a continuous discharge event lasts less than 60 minutes or during intermittent discharge events lasting less than 120 minutes during a 24-hour period.
- 14. BOD₅ & TSS Blended Effluent –When quantifying the blended effluent, the permittee has the option to use data gathered during the discharge day, or to calculate the characteristics of the final effluent using the monthly average mass of BOD₅ and TSS from the secondary treated effluent (Outfall #001A).

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

FOOTNOTES:

To do this, the permittee must add the monthly average mass of BOD₅ and TSS of the secondary treated wastewater (Outfall #001A) to each of the daily BOD₅ and TSS mass values of the primary treated wastewater when the bypass is active and report the highest combined mass of BOD₅ and TSS values for each month. Example calculation is as follows:

BOD₅ mass (monthly average for secondary) + BOD₅ mass (highest for bypass) =BOD₅ mass (blended effluent)

All calculations and data utilized must be submitted to the Department with the applicable monthly DMR.

- 15. Flow Flow for Outfalls #002A and #003A must be expressed in terms of daily maximum and monthly total. The monthly total is the sum of all measured flow through the outfalls during the month.
- **16**. *E. coli* bacteria concentration- The weighted *E. coli* bacteria concentration for blended effluent must be calculated as follows:

(Daily Max E. coli Outfall 001A)(Daily Flow Outfall 001A) + (Daily Max E. coli Outfall 002A)(Daily Flow 002A)
(Flow outfall 001A) + (Flow Outfall 002A)

If sampling is conducted outside of permit requirements on days that do not coincide with the regular *E. coli* monitoring for outfall 001A, the monthly average concentration may be substituted for the daily maximum.

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.

B. NARRATIVE EFFLUENT LIMITATIONS (cont'd)

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 IV**, Biological Treatment certificate (or higher) or must be a Maine Registered Professional Engineer pursuant to *Sewage Treatment Operators*, 32 M.R.S. § 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 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.

D. NOTIFICATION REQUIREMENT

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

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

E. MONITORING AND REPORTING

Electronic Reporting

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

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

E. MONITORING AND REPORTING (con't)

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

Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Toxics reporting must be done using the DEP Toxsheet reporting form. An electronic copy of the Toxsheet reporting document must be submitted to your Department compliance inspector as an attachment to an email. In addition, a hardcopy form of this sheet must be signed and submitted to your compliance inspector, or a copy attached to your NetDMR submittal will suffice.

Documentation submitted electronically to the Department in support of the electronic DMR must be submitted no later than midnight on the 15th day of the month following the completed reporting period.

F. LIMITATIONS FOR INDUSTRIAL USERS

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

G. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on March 12, 2021; 2) the terms and conditions of this permit; and 3) only from Outfall #001A, #002A, and #003A and three (3) combined sewer overflow outfalls listed in Special Condition L,

1. Combined Sewer Overflows, of this permit. Discharges of wastewater from any other point source are not authorized under this permit and must be reported in accordance with Standard Condition D(1)(f), Twenty-four hour reporting, of this permit.

H. WET WEATHER MANAGEMENT PLAN

The treatment facility staff must have a current written Wet Weather Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall. The plan must conform to Department guidelines for such plans and must include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events.

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

I. OPERATION & MAINTENANCE (O&M) PLAN

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

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

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

K. COMBINED SEWER OVERFLOWS

Pursuant to *Combined Sewer Overflow Abatement*, 06-096 C.M.R. 570 (last amended February 5, 2000), the permittee is authorized to discharge from the following locations of CSO's (stormwater and sanitary wastewater) subject to the conditions and requirements herein.

1. Definitions

For the purposes of this permitting action, the following terms are defined as follows:

K. COMBINED SEWER OVERFLOWS (cont'd)

- a. Combined Sewer Overflow a discharge of excess wastewater from a municipal or quasi-municipal sewerage system that conveys both sanitary wastes and storm water in a single pipe system and that is in direct response to a storm event or snowmelt.
- b. Dry Weather Flows flow in a sewerage system that occurs as a result of non-storm events or are caused solely by ground water infiltration.
- c. Wet Weather Flows flow in a sewerage system that occurs as a direct result of a storm event, or snowmelt in combination with dry weather flows.

2. CSO locations

Outfall #	<u>Location</u>	Receiving Water & Class
002	Prentiss Street	Penobscot River, Class B
003	Gillman Falls Avenue	Penobscot River, Class B
004	Stillwater Avenue PS	Stillwater River, Class B

3. Prohibited Discharges

- a) The discharge of dry weather flows is prohibited. All such discharges must be reported to the Department in accordance with Standard Condition D (1) of this permit.
- b) No discharge may occur as a result of mechanical failure, improper design or inadequate operation or maintenance.
- c) No discharges may occur at flow rates below the maximum design capacities of the wastewater treatment facility, pumping stations or sewerage system.

4. Narrative Effluent Limitations

- a) The effluent must not contain a visible oil sheen, settled substances, foam, or floating solids at any time that impair the characteristics and designated uses ascribed to the classification of the receiving waters.
- b) The effluent must not contain materials in concentrations or combinations that are hazardous or toxic to aquatic life; or which would impair the usage designated by the classification of the receiving waters.
- c) The discharge must not impart color, turbidity, toxicity, radioactivity or other properties that cause the receiving waters to be unsuitable for the designated uses and other characteristics ascribed to their class.

K. COMBINED SEWER OVERFLOWS (cont'd)

d) The effluent by itself or in combination with other discharges must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

5. CSO Master Plan [see 06-096 C.M.R. ch. 570 § (3) and 06-096 C.M.R. ch. 570 § (4)]

The permittee must implement CSO control projects in accordance with an approved CSO Master Plan and abatement schedule. The CSO Master Plan update entitled *The City of Old Town, Maine CSO Master Plan Update Report*, dated November 2009 was approved by the Department on December 21, 2009. The permittee submitted an abatement schedule project update letter with project extension request for Elm Street on October 9, 2015. The project completion date in the schedule modification request was approved on October 15, 2015.

By November 30, 2024, (ICIS Code 81699), the Permittee must submit for review and approval a five-year CSO Master Plan Update summarizing the results of the first post construction monitoring period and identifying additional CSO abatement projects with schedules of implementation if compliance has not been achieved.

To modify the dates and or projects specified in Special Condition A(4) of this permit (but not dates in the Master Plan), the permittee must file an application with the Department to formally modify this permit. The work items identified in the abatement schedule may be amended from time to time based upon approval by the Department. The permittee must notify the Department in writing prior to any proposed changes to the implementation schedule.

6. Nine Minimum Controls (NMC) [see 06-096 C.M.R. ch. 570 § (5)]

The permittee must implement and follow the Nine Minimum Controls documentation as approved by EPA on May 29, 1997. Work performed on the Nine Minimum Controls during the year must be included in the annual CSO Progress Report (see below).

7. CSO Compliance Monitoring Program [see 06-096 C.M.R. ch. 570 (6)]

The permittee must conduct block testing or flow monitoring according to an approved *Compliance Monitoring Program* on all CSO points, as part of the CSO Master Plan.

Annual flow volumes for all CSO locations must be determined by actual flow monitoring, or by estimation using a model such as EPA's Storm Water Management Model (SWMM).

Results must be submitted annually as part of the annual *CSO Progress Report* (see below), and must include annual precipitation, CSO volumes (actual or estimated) and any block test data required. Any abnormalities during CSO monitoring must also be

K. COMBINED SEWER OVERFLOWS (cont'd)

reported. The results must be reported on the Department form "CSO Activity and Volumes" (Attachment C of this permit) or similar format and submitted to the Department electronically.

CSO control projects that have been completed must be monitored for volume and frequency of overflow to determine the effectiveness of the project toward CSO abatement. This requirement must not apply to those areas where complete separation has been completed and CSO outfalls have been eliminated.

- 8. Annual CSO Progress Reports (06-096 C.M.R. Ch. 570 § 7).
 - By March 1 of each year, the permittee must submit *CSO Progress Reports* covering the previous calendar year (January 1 to December 31). The CSO Progress Report must include, but is not necessarily limited to, the following topics:
 - A. CSO abatement projects. CSO abatement projects including milestone dates such as design start and completion and construction start and completion.
 - B. Schedule comparison. A comparison of the existing schedule with the Department-approved implementation schedule. If the existing schedule is behind the approved schedule, list the reasons why, and how the licensee proposes to catch up in order to comply with the approved schedule.
 - C. Progress on inflow sources. Progress made on locating and removing private inflow sources, such as roof leaders and basement sump pumps.
 - D. Costs. Total cost and local share of CSO abatement projects to date, plus an anticipated budget for projects in the next year.
 - E. Flow monitoring results. Results of any specific flow monitoring to determine effectiveness of previous CSO abatement projects. Compare actual CSO abatement with projections made during the CSO Master Plan.
 - F. CSO activity and volumes. Yearly precipitation, CSO volumes (actual or estimated), and any block test data (see Section 6) submitted on department form titled "CSO activity and Volumes". The form must be in electronic form, if possible, to allow easy data entry. Report any abnormalities during CSO monitoring.
 - G. Nine minimum controls update. Work done on the Nine Minimum Controls during the year including, but not limited to the following.
 - (1) Results of operation and maintenance programs for the sewer system and combined sewer overflows during the year, such as, frequency of regulator inspections, number of

K. COMBINED SEWER OVERFLOWS (cont'd)

catch basins cleaned, and feet of sewer cleaned or repaired, with estimates of material removed, if possible.

- (2) Low-cost projects to maximize use of the collection system for storage or to maximize flow to the POTW for treatment.
- (3) Modifications to the pretreatment program to assure the CSO impacts are minimized.
- (4) Low-cost projects that maximize flow to the POTW for treatment.
- (5) Documentation that no CSO discharges occurred during dry weather.
- (6) Projects to control solid and floatable materials in CSO discharges.
- (7) Pollution prevention programs that focus on contaminant reduction activities.
- (8) Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts.
- (9) Any monitoring and sampling results to effectively characterize CSO impacts and the effectiveness of CSO controls.
- H. Sewer extensions and new commercial or industrial flows. List the sewer extensions and new commercial or industrial flows added during the year, along with what mitigating measures were accomplished to prevent these flows from contributing to CSOs (see Section 8).

CSO Coordinator
Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333-0017
e-mail: CSOCoordinator@maine.gov

10. Signs

If not already installed, the permittee must install and maintain an identification sign at each CSO location as notification to the public that intermittent discharges of untreated sanitary wastewater occur. The sign must be located at or near the outfall and be easily readable by the public. The sign must be a minimum of 12" x 18" in size with white lettering against a green background and must contain the following information:

CITY OF OLD TOWN WET WEATHER SEWAGE DISCHARGE CSO # AND NAME

L. 06-096 C.M.R. ch. 530 § (2)(D)(4) STATEMENT FOR REDUCED/WAIVED TOXICS TESTING

In accordance with 06-096 CMR 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 Fact Sheet **Attachment C** 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 (hauled) 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.

M. REOPENING OF PERMIT FOR MODIFICATIONS

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

N. SEVERABILITY

In the event that any provision or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit 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.

ATTACHMENT A

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP-49-CSO FORM FOR USE WITH DEDICATED CSO PRIMARY CLARIFIERS

Doc Num: DEPLW0463

WET WEATHER BYPASS OPERATIONS REPORT FOR State License No. ___ __ MEPDES/NPDES Permit No. _ SIGNED BY:_ _ DATE:__ DEP-49-CSO-Dedicated,xls (rev. 12/12/01) CI RESIDUALS BACTERIA BOD5 T55 WEATHER SECONDARY BYPASS FLOW DATA COMMENTS 10 12 15 20 21 23 24 27 28 30 Total Number of discharge days

ATTACHMENT B

Salmonid Survival and Growth Test

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

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

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

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

Loading Rate - < 0.5 g/l/day

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

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

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

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

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

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

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

ATTACHMENT C

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION CSO ACTIVITY AND VOLUMES

MUNICIPALITY OR DISTRICT							MEPDES / NPDES	PERMIT NO.			
REPORTIN	IG YEAR							SIGNED BY:			
YEARLY 7	TOTAL PRECI	PITATION		INCHES				DATE:			
		PRECI	P. DATA	FLOW DATA	(GALLONS PER D	OAY) OR BLOCK A	CTIVITY("1")	·			
CSO EVENT	START DATE			LOCATION:	LOCATION:	LOCATION:	LOCATION:	LOCATION:	LOCATION:	EVENT OVERFLOW	EVENT DURATION
NO.	OF STORM	TOTAL INCHES	MAX. HR. INCHES	NUMBER:	NUMBER:	NUMBER:	NUMBER:	NUMBER:	NUMBER:	GALLONS	HRS
1											
2											
3											
4											
5											
6											
7											
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25											
	TOTALS		İ								

Note 1: Flow data should be listed as gallons per day. Storms lasting more than one day should show total flow for each day.

Note 2: Block activity should be shown as a "1" if the block floated away.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT AND WASTE DISCHARGE LICENSE

FACT SHEET

DATE: July 17, 2024

MEPDES PERMIT: ME0100471

WASTE DISCHARGE LICENSE: W001635-6D-H-R

NAME AND ADDRESS OF APPLICANT:

CITY OF OLD TOWN 265 MAIN STREET

OLD TOWN, ME 04468-1497

COUNTY: PENOBSCOT

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

CITY OF OLD TOWN POLLUTION CONTROL

FACILITY

298 WATER STREET

OLD TOWN, MAINE 04468-1947

RECEIVING WATER / CLASSIFICATION:

PENOBSCOT RIVER/CLASS B STILLWATER RIVER, CLASS B

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

MR. DAVID D. SMITH

(207) 827-3970

Dsmith2@old-town.org

1. APPLICATION SUMMARY

a. Application: On March 12, 2021, the Department of Environmental Protection (Department) accepted as complete for processing an application from the City of Old Town Pollution Control Facility (Permittee) for renewal of combination Waste Discharge License (WDL) # W001635-6D-F-R / Maine Pollutant Discharge Elimination System (MEPDES) permit # ME0100471, which was issued by the Department on June 14, 2016, for a five-year term. The June 14, 2016, permit authorized the monthly average discharge of 3.5 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to the Penobscot River, Class B, in Old Town, Maine.

The June 14, 2016, MEPDES permit also authorized the Permittee to discharge an unspecified quantity of primary treated municipal wastewater from a POTW during overflow events while the bypass of secondary treatment is active, and an unspecified quantity of untreated combined sanitary and storm water from three (3) combined sewer overflow (CSO) outfalls. Two CSO's discharge to the Penobscot River, Class B, and one CSO discharges to the Stillwater River, Class B.

On June 28, 2017, the Department issued a permit modification to extend the Elm Street Area Sewer Rehabilitation Project from July 31, 2017, to December 31, 2017.

b. <u>Source Description</u>: The Old Town wastewater treatment facility commenced operations in 1977. The facility receives sanitary wastewater from residential and commercial users in the City of Old Town (~9,000 users) and from the Town of Milford (~3,000 users). The sewer collection system is approximately 25 miles in length, has six pump stations (four with on-site backup power and two served by a portable generator) and is 5% combined and 95% separated with three CSO points. Old Town has developed a CSO Master Plan to eliminate the three CSOs that were formally approved by the Department on December 28, 2002. See Special Condition K, *Combined Sewer Overflows (CSOs)* of this permit. The wastewater treatment facility is not authorized to accept septage. A new outfall pipe and diffuser was installed in 2013.

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

c. Wastewater Treatment: The Old Town facility provides a secondary level of treatment via ten rotating biological contactors (RBCs). The Permittee upgraded the wastewater treatment facility in order to modernize the secondary treatment process and to provide the necessary infrastructure to mitigate CSOs. The upgrade allows primary treatment (dedicated storm clarifier) and high-rate disinfection for flows that exceed a flow rate of 3,260 gallons per minute (4.7 MGD), the peak hourly capacity of the secondary treatment process. Other major project components included in the upgrade were new and expanded influent pumping facilities, a new headworks building containing new screening and grit removal facilities, two new primary clarifiers (each measuring 32 feet in diameter) modifications to the RBC treatment process, upgrades to the two secondary clarifiers (each 50 feet in diameter), upgrades to the disinfection system, new process control systems and new electrical systems.

1. APPLICATION SUMMARY (con't)

The primary treated and secondary treated wastewaters are seasonally disinfected with sodium hypochlorite in a separate chlorine contact chamber and the flows are measured by an ultrasonic flow meter. The treated wastewater is discharged to the Penobscot River at 9.90 feet below mean low water via a high-density polyethylene (HDPE) pipe measuring 36 inches in diameter that extends out into the river approximately 250 feet. The end of the outfall pipe is fitted with one 36" "duckbill" style diffuser. The wastewater treatment facility is designed for secondary treatment of an average daily flow of 3.50 MGD and a peak hourly capacity of 4.7 MGD. The facility's storm water-related peak flow design is 15.7 MGD.

See Fact Sheet **Attachment B** for a facility schematic.

2. PERMIT SUMMARY

- a. <u>Terms and conditions:</u> This permitting action is carrying forward all the terms and conditions of the previous permit except that this permitting action 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. Revising the BOD₅ daily maximum mass limitation from 2,851 lbs./day to 2,858 lbs./day for administrative Outfall #003A, based on the results of facility testing.
- 3. Updating Special Condition A(4), *Effluent Limitations and Monitoring Requirements*, in an attempt to clarify the permittee's monitoring responsibilities during an overflow event.
- 4. Modifying Special Condition A, *Effluent Limitations and Monitoring Requirements Footnote 7*, to the Department's most current requirements.
- 5. Modifying Special Condition A, *Effluent Limitations and Monitoring Requirements Footnote 9*, to the Department's most current requirements.
- 6. Modifying Special Condition A, *Effluent Limitations and Monitoring Requirements Footnote 14*, in an effort to clarify the permittee's monitoring requirements during an overflow event.
- 7. Establishing Special Condition A, *Effluent Limitations and Monitoring Requirements Footnote 15*, in an effort to clarify the permittee's Flow reporting requirements during an overflow event.
- 8. Eliminating Special Condition J, Ambient Water Quality Monitoring.

2. PERMIT SUMMARY (cont'd)

- 9. Updating Special Condition L, 06-096 C.M.R. ch. 530 § (2)(D)(4) Statement for Reduced/Waived Toxics Testing, to the Department's most current requirements.
- 10. Changing the frequency of screening level testing in order to keep the facility on their established 5-year schedule.
- 11. Eliminating the provision that allows the percent removal for Biological Oxygen Demand (BOD₅) and Total Suspended Solids (TSS) to be waived when the monthly average influent concentration is less than 200 mg/L. Upon review of the last 60 months of data, the facility has demonstrated the ability to consistently attain 85% removal.
- b. <u>History:</u> This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the Old Town Pollution Control Facility.

November 4, 1999 – The Department issued WDL renewal #W001635-5L-B-R for a five-year term.

February 3, 2000 – The USEPA issued National Pollutant Discharge Elimination System (NPDES) permit renewal #ME0100471 for a five-year term.

May 23, 2000 – Pursuant to Certain deposits and discharges prohibited, 38 M.R.S. § 420, Waste discharge licenses § 413 and Department rule, 06-096 C.M.R. ch. 519, Interim Effluent Limitations and Controls for the Discharge of Mercury, the Department issued a Notice of Interim Limits for the Discharge of Mercury to the permittee thereby administratively modifying WDL #W001635-5L-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 18.6 parts per trillion (ppt) and 27.8 ppt, respectively, and a minimum monitoring frequency requirement of 4 tests per year for mercury.

November 2000 – The City of Old Town completed a comprehensive facility evaluation and CSO Master Plan for the wastewater treatment facility. Both plans were reviewed and approved by the Department on December 28, 2002.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permit program in Maine. From that date forward, the permit program has been referred to as the MEPDES permit program and ME0100471 (same as the NPDES permit) will be the primary reference number for the facility.

May 25, 2004 – The Department issued combination WDL/MEPDES permit #W001635-5L-C-R/ME0100471 to the City of Old Town Pollution Control Facility for a five-year period.

June 11, 2004 – The Department issued an Administrative Modification to correct a typographical error on the Secondary Treated Waste Waters table.

2. PERMIT SUMMARY (cont'd)

April 10, 2006 – The Department issued a modification of the 5/25/04 combination MEPDES Permit/WDL that incorporated the testing requirements of Department rules Chapter 530 and Chapter 584.

May 20, 2011 – The Department issued combination MEPDES permit #ME0100471/WDL W001635-6D-D-R for a five-year term.

September 5, 2012 – The Department issued a modification of the 5/20/11 permit to adjust the milestone date for the Sewer System Evaluation Survey (SSES) and the milestone date for the completion of infiltration and inflow projects.

January 8, 2013 – The Department initiated a modification of the 5/20/11 permit to reduce the monitoring frequency for mercury to once per year.

January 19, 2016 – The permittee submitted a timely and complete General Application to the Department for renewal of the May 20, 2011, permit (including subsequent minor permit revisions and permit modifications). The application was accepted for processing on January 20, 2016, and was assigned WDL #W001635-6D-F-R / MEPDES #ME0100471.

June 14, 2016– The Department issued combination MEPDES permit #ME0100471/WDL W001635-6D-D-R for a five-year term.

June 28, 2017 – The Department issued a modification of the 6/14/2016 permit to extend the Elm Street Area Sewer Rehabilitation Project from July 31, 2017, to December 31, 2017.

March 12, 2021 – The permittee submitted a timely and complete General Application to the Department for renewal of the June 14, 2016, permit (including subsequent minor permit revisions and permit modifications). The application was assigned WDL #W001635-6D-H-R / MEPDES #ME0100471.

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 (effective March 21, 2012), require the regulation of toxic substances not to exceed levels set forth in Surface Water Quality Criteria for Toxic Pollutants, 06-096 C.M.R. ch. 584 (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(7)(A)(6) classifies the Penobscot River at the point of discharge (from the main plant as well as one of the CSO discharges) (from the Milford Dam, but not including the Milford Dam, to the Maine Central Railroad bridge in Bangor-Brewer) as Class B. Further, the Legislature finds that the free-flowing habitat of this river segment provides irreplaceable social and economic benefits and that this use must be maintained. CSO 003 (Gillman Falls Avenue) and CSO 004 (Stillwater Avenue) are located in a different segment of the river and is described at 38 M.R.S. § 467(7)(A)(5) from the West Enfield Dam to the Milford Dam, including all impoundments, and the Stillwater Branch-Class B. That portion of this segment upstream of the Milford Dam and upstream of the Gilman Falls Dam at Route 43 is subject to a sustenance fishing designated use pursuant to section 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 per 100 milliliters over a 90-day interval or 236 CFU 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.
 - (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.

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

(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

<u>The State of Maine Department of Environmental Protection 2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report</u>, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists a 14.51-mile segment of the main stem of the Penobscot River from Orson Island to Veazie Dam including the Stillwater River as Integrated Assessment Unit ID # ME0102000509_233R_01. This assessment unit is listed in the following categories of the 305(b) report:

"Category 4-B: Rivers and Streams Impaired by Pollutants – Pollution Control Requirements Reasonably Expected to Result in Attainment" for dissolved oxygen and nutrient/eutrophication biological indicators. A comment in the report states "2013 – 2019 instantaneous data indicate attainment of DO criteria; collect continuous data to confirm criteria attainment." The report also lists the segment in Category 4-B for dioxin (including 2,3,7,8-TCDD) and states "New Dioxin sources removed, expected to attain standards."

6. RECEIVING WATER QUALITY CONDITIONS (cont'd)

This segment is listed under "Category 5-D: Rivers and Streams Impaired by Legacy Pollutants" for polychlorinated biphenyls (PCBs). It is noted in the report that "This legacy pollutant cannot be addressed with a TMDL or permit. Pollutant effects will continue to diminish naturally over time."

The Stillwater River (Assessment Unit ME0102000509_226R "minor tributaries between Orson Island and Veazie Dam") wherein CSO #004 (Stillwater Avenue PS) discharges, is listed under "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." The Department has established interim monthly average and daily maximum mercury concentration limits and reporting requirements for this facility pursuant to 06-096 C.M.R. ch. 519.

Under Category 4-A: Rivers and Streams with Impaired Use Other than Mercury, TMDL Completed, segment ME0102000509_233R_03 (Penobscot River at Old Town-Milford) is listed as impaired for Primary and Secondary Contact Recreation due to exceedance of the attainment criteria for *E. coli*. It is noted in the report "Abatement plan to separate public sources of inflow and infiltration completed in 2019. Old Town in the Post Construction Monitoring Phase. CSO activity continues at low level but in compliance with CSO Control Policy Presumption Method."

The Permittee has developed and implemented a CSO Master Plan for the elimination of all CSO points associated with the Old Town Pollution Control Facility. The Department acknowledges that elimination of all CSO points is a costly and long-term project. As the Permittee's treatment plant and sewer collection system are upgraded and maintained according to the CSO Master Plan and Nine Minimum Controls, there should be reductions in the frequency and volume of CSO and primary treatment activities and, over time, improvement in the quality of the wastewater discharged to the receiving waters. Compliance with the limitations established in the permit ensures that the discharge of treated wastewater will not cause or contribute to exceedance of water quality standards. The Department's Division of Environmental Assessment conducted biological monitoring at one station

6. RECEIVING WATER QUALITY CONDITIONS (cont'd)

downstream of the permittee's discharge since the last permit was issued. Station S-62 on the Penobscot river approximately 2.8 miles downstream of the discharge attained Class A for macroinvertebrates in 2021.

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

OUTFALL #001A – SECONDARY TREATED EFFLUENT

a. <u>Flow:</u> This permitting action is carrying forward the monthly average discharge flow limitation of 3.50 MGD for Outfall #001A, which is based on the average dry weather design criterion and is carrying forward the daily maximum discharge flow reporting requirement.

The Department reviewed Discharge Monitoring Reports (DMRs) that were submitted for the period of July 2016 through October 2023. A review of data indicates the following:

Flow (DMRs = 87)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	3.50	0.58 - 3.45	1.36
Daily Maximum	Report	0.72 - 5.18	2.72

b. <u>Dilution Factors:</u> The Department established applicable dilution factors for the discharge in accordance with freshwater protocols established in *Surface Water Toxics Control Program*, 06-096 C.M.R. ch. 530 (last amended March 21, 2012). With a monthly average flow limit of 3.50 MGD), dilution factors for the facility are as follows:

Conversion factor: 1cfs = 0.6464 MGD

Modified Acute:
$${}^{1}\!\!/_{4} 1Q10 = 630 \text{ cfs} \Rightarrow \underline{(630 \text{ cfs})(0.6464) + (3.50 \text{ MGD})} = 117.4:1$$
(3.50 MGD)

Acute:
$$1Q10 = 2,521 \text{ cfs}$$
 $\Rightarrow (2,521 \text{ cfs})(0.6464) + (3.50 \text{ MGD}) = 466.6:1$ (3.50 MGD)

Chronic:
$$7Q10 = 2,795 \text{ cfs}$$
 $\Rightarrow (2,795 \text{ cfs})(0.6464) + (3.50 \text{ MGD}) = 517:1$ (3.50 MGD)

Harmonic Mean: 8,404 cfs
$$\Rightarrow$$
 (8,404 cfs)(0.6464) + (3.50 MGD) = 1,553:1 (3.50 MGD)

06-096 C.M.R. ch. 530 § (4)(B)(1) states that analyses using numeric acute criteria for aquatic life must be based on ¼ of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone. The regulation goes on to say that where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water

by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design, up to including all of it.

The Department has made the determination the discharge does not receive rapid and complete mixing with the receiving water, therefore the default stream flow of ½ of the 1Q10 is applicable in acute statistical evaluations.

c. <u>BOD</u>₅ and <u>TSS</u>: Previous permitting action established monthly average and weekly average BOD₅ and TSS concentration limits of 30 milligrams per liter (mg/L) and 45 mg/L, respectively, which were based on secondary treatment requirements pursuant to 40 C.F.R. 133.102 and 06-096 C.M.R. ch. 525 § (3)(III). Previous permitting action also established daily maximum BOD₅ and TSS concentration limits of 50 mg/L based on a Department best professional judgement (BPJ) of Best Practicable Treatment (BPT) for secondary treated wastewater. All three concentration limitations are being carried forward in this permitting action.

Previous permitting action established monthly average and weekly average mass limits based on a monthly average flow limit of 1.70 MGD during the period of June 1st – September 30th of each year and 3.50 MGD for the period of October 1st – May 31st of each year. The purpose of the seasonal limitations were: 1) The wastewater treatment facility completed an upgrade to treat more storm water flows in the non-summer months, resulting in more wastewater receiving both primary only and secondary treatment, 2) Ambient water quality data collected by the Department during the summer months indicates the Penobscot River may not be attaining the Class B dissolved oxygen standards established by law. Therefore, the Department is barred from authorizing an increase in the BOD₅ and TSS loading to the river during the time of the year when the river is most at risk of dissolved oxygen depletion. Should future water quality data and or modeling indicate dissolved oxygen standards are indeed being attained at the higher mass loads, the permittee may request a modification of this permit to increase the loads based on 3.5 MGD.

No daily maximum mass limitations (report only) for BOD₅ or TSS are being established in this permit as doing so may discourage the Permittee from treating as much wastewater as possible through the secondary treatment system during wet weather events.

Mass limitations were derived as follows:

June 1st – September 30th

Monthly Average	(30 mg/L)(8.34 lbs./gallon)(1.70 MGD) =	425 lbs./day
Weekly Average	(45 mg/L)(8.34 lbs./gallon)(1.70 MGD) =	638 lbs./day

October 1st - May 31st

Monthly Average	(30 mg/L)(8.34 lbs./gallon)(3.50 MGD) =	875 lbs./day
Weekly Average	(45 mg/L)(8.34 lbs./gallon)(3.50 MGD) =	1,314 lbs./day

This permitting action is also carrying forward the requirement for a minimum of 85% removal of BOD₅ & TSS pursuant to 06-096 C.M.R. ch. 525 § (3)(III)(a)(3) and (b)(3).

The permittee does not qualify for special considerations pursuant to 06-096 CMR 525(3)(IV) to maintain a waiver from the 85% removal requirement when influent concentration is less than 200 mg/L. Therefore, this permitting action is eliminating the waiver from the 85% removal requirement provided in the previous permitting action when influent concentration is less than 200 mg/L.

The Department reviewed Discharge Monitoring Reports (DMRs) that were submitted for the period of July 2016 through October 2023. A review of data indicates the following:

BOD5 mass (DMRs = 87)

Value	Limit (lbs/day)	Range (Jann-Dec) (lbs/day)	Average (lbs/day)
Monthly Average	425 (June 1-Sept. 30)	42-582	142.89
Weekly Average	875 (Oct. 1-May 31)	62-396	164.34
Daily Maximum	Report	64-620	221.08

BOD5 concentration (DMRs=87)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	7-17	11.62
Weekly Average	45	7-21	13.80
Daily Maximum	50	8-26	15.76

The Department reviewed Discharge Monitoring Reports (DMRs) that were submitted for the period of July 2016 through October 2023. A review of data indicates the following:

TSS mass (DMR = 87)

Value	Limit (lbs/day)	Range (Jan-Dec) (lbs/day)	Average (lbs/day)
Monthly Average	425 (June 1- Sept.30) 875 (Oct. 1- May 31)	20-608	87.17
Weekly Average	638 (June 1- Sept. 30) 1,314 (Oct.1-May 31)	26-591	99.46
Daily Maximum	Report	29-919	161.87

TSS concentration (DMR = 87)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	3.0-16	5.99
Weekly Average	45	4.0-15	7.61
Daily Maximum	50	4.0-22	9.22

In consideration of *Interim Guidance for Performance Based Reductions of NPDES*Permit Monitoring Frequencies (USEPA Guidance April 1996) and, Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996 (Maine DEP May 22, 2014), the June 2016 permitting action established a reduced

monitoring frequency for BOD₅ and TSS of two times per week (2/Week). This permit is carrying that action forward.

d. <u>Settleable Solids</u>: Previous permitting action established a daily maximum concentration limit of 0.3 mL/L for settleable solids and is considered by the Department as a best professional judgement of BPT for secondary treated wastewater.

The Department reviewed Discharge Monitoring Reports (DMRs) that were submitted for the period of July 2016 through October 2023. A review of data indicates the following:

Settleable Solids concentration (DMRs = 87)

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

Due to the consistent nature of the results as well as the compliance history, the June 2016 permitting action reduced the monitoring frequency to twice per week (2/Week). This permit is carrying that action forward.

e. <u>E. coli</u> bacteria: This permitting action is establishing seasonal monthly average and daily maximum *E. coli* bacteria limitations of 64 MPN or CFU/100 ml (geometric mean) and 236 MPN or CFU/100 ml (instantaneous), respectively.

Current EPA guidance recommends that Maine extends the monitoring season within which bacteria criteria apply to reflect a longer time-period for potential human recreational contact. Pursuant to 38 M.R.S. § 465(3)(B), this permitting action is expanding the *E. coli* monitoring season from May 15th – September 30th to April 15th – October 31st for all of the facilities outfalls, Outfall #001A, Outfall #002A and Outfall #003A. The Department

reserves the right to impose year-round bacteria limits, if necessary, to protect the health, safety and welfare of the public.

This permitting action is carrying forward the current monitoring frequency of 1/Week.

The Department reviewed Discharge Monitoring Reports (DMRs) that were submitted for the period of July 2016 through October 2023. The limits in this table reflect those in effect during the previous permitting action. A review of data indicates the following:

E. coli Bacteria (DMRs = 38)

2. con Bucceria (Brillis Co)			
Value	Limit	Range	Mean
v alue	(col/100 ml)	(col/100 ml)	(col/100 ml)
Monthly Average	64	2.0 - 50	8.79
Daily Maximum	427	3.0 - 225	32.53

f. <u>Total Residual Chlorine (TRC)</u>: Previous permitting action established, and this permitting action is carrying forward a daily maximum BPT-based concentration limit of 1.0 mg/L. 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.

1. *Water Quality-Based* Limit: With dilution factors as determined above, end-of-pipe (EOP) water quality-based concentration thresholds must be calculated as follows:

Acute Threshold = Acute Criterion x Acute Dilution Factor

Acute Threshold = 0.019 mg/L x 117 = 2.22 mg/L

2. BPT-Based Limit

- a. 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.
- b. For facilities that must dechlorinate the discharge in order to meet water quality-based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively.

This permitting action is carrying forward the daily maximum BPT-based concentration limit of 1.0 mg/L as it is more stringent than the water quality-based threshold of 2.22 mg/L (modified acute) as calculated above.

This permitting action is also carrying forward the minimum monitoring frequency requirement of 1/Day, year-round. Although bacteria limitations are seasonal and apply between April 15th and October 31st 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.

For blended effluent (Outfall #003A), the June 2016 permitting action established a TRC daily maximum limit of 1.0 mg/L to comply with USEPA's CSO Control Policy and Clean Water Act section 402(q)(1).

The Department reviewed Discharge Monitoring Reports (DMRs) that were submitted for the period of July 2016 through October 2023. A review of data indicates the following:

TRC (DMRs = 43)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.13 - 0.91	0.64

g. <u>pH:</u> 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) along with a monitoring frequency of five times per week (5/Week).

The Department reviewed Discharge Monitoring Reports (DMRs) that were submitted for the period of July 2016 through October 2023. A review of data indicates the following:

pH (DMRs = 87)

Value	Limit (SU)	Minimum (SU)	Maximum (SU)
Range	6.0 - 9.0	6.90	7.40

Whole Effluent Toxicity, 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. 584 sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

WET, priority pollutant and analytical chemistry testing, as required by 06-096 C.M.R. ch. 530, is included in this permit in order to characterize the effluent. WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on the water flea (Ceriodaphnia dubia) and the brook trout (Salvelinus fontinalis). Chemical-specific monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria. Analytical Chemistry and Priority Pollutant 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

06-096 C.M.R. ch. 530 § (2)(A) specifies the dischargers subject to the rule as:

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

The Permittee discharges domestic (sanitary) wastewater to surface waters and is therefore subject to the testing requirements of the toxics rule.

06-096 C.M.R. ch. 530 § (2)(B) categorizes dischargers subject to the toxics rule into one of four levels (Levels I through IV).

The four categories for dischargers are as follows:

Level I	Chronic dilution factor of <20:1
Level II	Chronic dilution factor of ≥20:1 but <100:1.
Level III	Chronic dilution factor ≥100:1 but <500:1 or >500:1 and Q ≥1.0 MGD
Level IV	Chronic dilution factor >500:1 and Q ≤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 517:1 and the permitted flow is greater than or equal to 1.0 MGD. 06-096 C.M.R. ch. 530 § (2)(D) specifies <u>default</u> WET, priority pollutant, and analytical chemistry test schedules for Level III dischargers as follows.

Surveillance level testing

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

Screening level testing

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

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

h. Whole Effluent Toxicity (WET): 06-096 C.M.R. ch. 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."

On November 17, 2023, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department for the Old Town

Pollution Control Facility in accordance with the statistical approach outlined above. The November 17, 2023, statistical evaluation indicates the discharge from the Permittee has not exceeded or demonstrated a reasonable potential to exceed the critical acute or chronic ambient water quality thresholds for the water flea (*Ceriodaphnia dubia*) or brook trout (*Salvelinus fontinalis*). See Fact Sheet **Attachment D** for WET test results.

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

i. <u>Analytical Chemistry & Priority Pollutant Testing Evaluation</u>: On November 17, 2023, the Department conducted a statistical evaluation, Report 1369, of the most recent 60 months of chemical-specific test results on file with the Department. The evaluation indicated no exceedances in the reasonable potential threshold for any of the chemical specific parameters. See Fact Sheet **Attachment D** for Priority Pollutant test results.

With no exceedances or reasonable potential to exceed the applicable acute, chronic or human health AWQC this permitting action maintains the previously established reduced surveillance level analytical chemistry testing.

This permitting action maintains the established screening level analytical chemistry testing at a frequency of four times per year (4/Screening Year) and screening level testing for priority pollutants of once per screening year (1/Screening Year).

- j. 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 #W001635-5L-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 18.6 parts per trillion (ppt) and 27.8 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 AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department.

The Department reviewed Discharge Monitoring Reports (DMRs) that were submitted for the period of July 2016 through October 2023. A review of data indicates the following:

Mercury (DMRs = 7)

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)	
Monthly Average	18.6	2.56 10.2	6.72	
Daily Maximum	27.8	2.56 - 19.2	6.73	
Cumulative Arithmet	ulative Arithmetic Mean of all* Mercury Test Results on File			

^{*}Includes all mercury test results utilizing sampling Method 1669 and analysis Method 1631E Note: The cumulative arithmetic mean is notably high due to a test result of 4000 ng/L on June 26, 2002.

k. *Total Phosphorus*: The May 20, 2011 Permit required total phosphorus monitoring in accordance with the 2011 Waste Load Allocation (WLA) for phosphorus on the Penobscot River. At the time of the WLA paper mills in Millinocket, East Millinocket, Lincoln and Old Town were estimated to discharge over 90 percent of the phosphorus from permitted facilities. Since the 2011 WLA those four sources of phosphorus have either permanently or indefinitely shut down. The permittee conducted seasonal total phosphorus monitoring during the course of the 2011 permit. The results of that sampling were recorded in the June 2016 permit, as was a reasonable potential analysis that determined that the permittee's discharge of phosphorus would not contribute to an exceedance in the water quality criteria for total phosphorus. The previous permitting action removed end of pipe monitoring requirements for total phosphorus. 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. At this time the Department has determined that the conditions of the previous permit will carry forward, and there will not be monitoring requirements, or a mass limit 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.

OUTFALL #002A - INTERNAL WASTE STREAM

1. <u>CSO-Related Bypass of Secondary Treatment:</u> For those flows received at the treatment facility which are greater than that which can be treated to a secondary level of treatment, the Department has made a BPJ that primary treatment and disinfection constitutes appropriate and BPT.

The reporting requirements for the parameters in Special Condition A(2) of this permit (Flow, Overflow Occurrences, *E. coli*, TRC), are being carried forward in this permitting action. These are parameters the Department has deemed necessary to evaluate the performance of the primary treatment process. It is noted that the June 2016 permitting action eliminated the numeric limitations for *E.coli* and TRC based on the Department's revised judgement on regulating internal waste streams. Surface Loading Rate, BOD₅ and TSS percent removal are not included in this permit based on best professional judgment

that these technology-based metrics have not been particularly useful in assessing primary treatment system performance and are not necessary to ensure water quality standards are met.

A review of the DMR data for the period July 2016– October 2023 indicates the following:

Outfall #002A-Overflow Occurrences

Year	Limit (# of days)	Total (# of days)
2017	Report	2
2018	Report	3
2019	Report	9
2020	Report	5
2021	Report	7
2022	Report	8
2023	Report	0

Outfall #002A-Flow - Total Gallons/Month

Year	Limit (MGD)	Range (MGD)	Total (MGD)
2017	Report		0.494
2018	Report	0.865 - 7.901	8.77
2019	Report	0.377 - 3.092	5.04
2020	Report	2.15 - 2.533	4.68
2021	Report	0.193 - 3.142	4.47
2022	Report	.068 - 2.032	4.235
2023	Report		

Outfall #002A-Flow - Daily Maximum Gallons

Year	Limit (MGD)	Range (MGD)	Total (MGD)
2017	Report		0.265
2018	Report	0.865 - 4.481	5.346
2019	Report	0.377 - 1.574	3.014
2020	Report	1.588 - 1.93	3.518
2021	Report	0.193 - 1.469	0.6983
2022	Report	0.068 - 2.032	0.8232
2023	Report		

The permittee maintains a combined sewer system from which wet weather overflows occur. Section 402(q)(1) of the Clean Water Act requires that "each permit, order or decree issued pursuant to this chapter after December 21, 2000, for a discharge from a municipal combined storm and sanitary sewer shall conform to the Combined Sewer Overflow Control Policy signed by the Administrator on April 11, 1994," 33 U.S.C. § 1342(q)(1). The Combined Sewer Overflow Control Policy (CSO Policy, 59 Fed. Reg. 18688-98), states that under USEPA's regulations the intentional diversion of waste streams from any portion of a treatment facility, including secondary treatment, is a bypass and that 40 C.F.R. § 122.41(m), allows for a facility to bypass some or all the flow from its treatment process under specified limited circumstances. Under the regulation, the permittee must show that the bypass was unavoidable to prevent loss of life, personal injury or severe property damage, that there was no feasible alternative to the bypass and that the

permittee submitted the required notices. The CSO Policy also provides that, for some CSO-related permits, the study of feasible alternatives in the control plan may provide sufficient support for the permit record and for approval of a CSO-related bypass to be

included in an NPDES permit.¹ Such approvals will be re-evaluated upon the reissuance of the permit, or when new information becomes available that would represent cause for modifying the permit.

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

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

This permitting action allows a CSO-related bypass of secondary treatment at the Permittee's facility based on an evaluation of feasible alternatives, which indicates it is technically and financially infeasible at this time to provide secondary treatment at the existing facilities as summarized in the original CSO Master Plan.

During wet weather events when the influent to the wastewater treatment facility exceeds a peak hourly flow rate of 3,260 gallons per minute (4.7 MGD), secondary treatment of all wet weather flows is not practicable. Flows delivered to the treatment facility in excess of that which can be given secondary treatment will receive primary treatment using a dedicated storm water clarifier and disinfection using sodium hypochlorite and dechlorinating with sodium bisulfate.

The bypassed flow is recombined with the secondary clarifier effluent and then discharged to the river via Outfall #003A (administrative outfall). This permitting action is

¹ 59 Fed. Reg. 18,688, at 18,693 and 40 C.F.R. § 122.41(m)(4) (April 19, 1994).

² 59 Fed. Reg. at 18,694.

³ 59 Fed. Reg. at 18,693.

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

establishing end-of-pipe limitations to comply with USEPA's CSO Control Policy and Clean Water Act section 402(q)(1).

The CSO Control Policy does not define specific design criteria or performance criteria for primary clarification. The Department and USEPA agree that existing primary treatment

infrastructure was constructed to provide primary clarification, and that for facilities that blend primary and secondary effluent prior to discharge, such as the permittee's facility, compliance must be evaluated at the point of discharge, unless impractical or infeasible. Monitoring to assess compliance with limits based on secondary treatment and other applicable limits is to be conducted following recombination of flows at the point of discharge or, where not feasible, by mathematically combining analytical results for the two waste streams. Where a CSO-related bypass is directly discharged after primary settling and chlorination, monitoring will be at end of pipe if possible.

Due to the variability of CSO-related bypass treatment systems and wet weather related influent quality and quantity, a single technology-based standard cannot be developed for all of Maine's CSO-related bypass facilities. To standardize how the Department will regulate these facilities to ensure compliance with the CSO Control Policy and CWA , the Department has determined that limitations for blended effluent (the discharge of CSO related bypass effluent combined with effluent from the secondary treatment system) should be based on the more stringent of either the past demonstrated performance of the properly operated and maintained treatment system(s) or site-specific water quality-based limits derived from calculations or best professional judgment of Department water quality engineers of assimilative capacity of the receiving water.

The federal secondary treatment regulation does not contain daily maximum effluent limitations for BOD₅ and TSS. The Department established a daily maximum concentration limit of 50 mg/L for secondary treated wastewater as BPJ of BPT prior to NPDES delegation and promulgation of secondary treatment regulations into State rule that are consistent with the Clean Water Act. Following consultation with USEPA, the Department has chosen to waive the requirement to comply with numeric daily maximum concentration limitations for BOD₅ and TSS for days with CSO-related bypass events.

During CSO-related bypasses, secondary treated wastewater is combined with wastewater from the primary treatment system, which is designed to provide primary clarification and solids and floatables removal and disposal, and disinfection. The permittee is not able to consistently achieve compliance with technology based effluent limits (TBELs) derived from the secondary treatment regulation during CSO-related bypasses. As part of its consideration of possible adverse effects resulting from the bypass, the Department must ensure that the bypass will not cause exceedance of water quality standards. CSO Control Policy at 59 Fed. Reg. 18694.

⁵ 40 C.F.R. § 122.45(h).

⁶ Maine currently has 16 permitted facilities with a CSO-related bypass.

⁷ In other words, that any other treatment that can reasonably be provided is, in fact, provided.

OUTFALL #003A-BLENDED EFFLUENT DISCHARGED TO PENOBSCOT RIVER

For data management purposes, the June 2016 permitting action designated an outfall identifier of Outfall #003A for discharges of blended wastewater when the flow rate through secondary treatment has exceeded a peak hourly flow rate of 3,260 gallons per minute (4.7 MGD).

For the discharge of blended effluent to the Penobscot River via administrative outfall (#003A), the Department is establishing daily maximum technology-based effluent limitations for BOD₅ and TSS.

Analysis of Water Quality Impacts During Discharge of Blended Effluent

In this way, we can evaluate the "worst case" for each discharger for both BOD and TSS in the last ten years and calculate a simulated combined discharge to assess the water quality impact in the Penobscot River.

m. Flow, BOD₅ and TSS: Given the configuration of the treatment plant, the permittee has measured flow, BOD₅ and TSS for Outfall #002A. To be conservative, the Department has chosen the highest pollutant loading discharged for both BOD₅ and TSS from Outfall #002A during overflow occurrences, between August 2012 and October 2023. This is different from the previous permit in that the data set has been extended to eleven years.

This allows for additional weather events to be taken in consideration. For the purpose of evaluating the potential impact to the Penobscot River during wet weather events, when blended effluent is being discharged, the values being utilized in calculations are as follows:

BOD₅: **1,398 lbs./day, 49 mg/L** (January 2018)

Flow: **3.421 MGD** (January 2018)

TSS: **5,223 lbs./day, 172 mg/L** (September 2015)

Flow: **3.641 MGD** (September 2015)

For secondary treated effluent, the Department is utilizing the design flow of 3.50 MGD and a daily maximum concentration of 50 mg/L that yields a mass of 1,460 lbs./day for both BOD₅ and TSS. The calculation is as follows:

(3.50 MGD)(8.34 lbs./gal)(50 mg/L) = 1.460 lbs./day

To determine if water quality standards (dissolved oxygen) are maintained during times when discharging blended effluent, one must calculate the increase in the BOD₅ and TSS concentration in the receiving water when the facility is discharging blended effluent. The only remaining unknown variable is what flow does one use for the Penobscot River when discharging blended effluent?

In previous MEPDES permits, to calculate the change in water quality conditions due to a blended effluent addition, the lowest flow in the receiving waterbody that was recorded by the nearest USGS gauge for that month was applied. Due to federal sequestration cuts, the USGS gauge in the vicinity of Old Town is the West Enfield Station #01034500, more than 20 miles north of the discharge. Therefore, the Department used data from the West Enfield gauge in the following calculations.

The Department evaluated the flows of the Penobscot River recorded September 2015 and January 2018 in which there were bypasses of secondary treatment. The Department chose the lowest river flow during the month of January 2018, which was 8,000 cfs, to calculate the increase in BOD₅ and for September 2015, which was 3,980 cfs, to calculate the increase in TSS in the Penobscot River. The calculations are as follows:

What are the BOD₅ and TSS concentrations discharged from the facility when the blended effluent is discharged?

$$BOD_5 = (3.50 \text{ MGD})(50 \text{ mg/L}) + (3.421 \text{ MGD})(49 \text{ mg/L}) = 50 \text{ mg/L}$$

6.921 MGD

$$TSS = (3.50 \text{ MGD})(50 \text{ mg/L}) + (3.641 \text{ MGD})(172 \text{ mg/L}) = 112 \text{ mg/L}$$

$$7.141 \text{ MGD}$$

What is the increase in the concentrations in the Penobscot River after rapid and complete mixing?

Dilution factor BOD₅:
$$(8,000cfs)(0.6464) + (6.921 MGD) = 748:1$$
 (6.921 MGD)

BOD₅:
$$\frac{50 \text{ mg/L}}{748} = 0.07 \text{ mg/L}$$
 (< 2mg/L is not measurable)

Dilution factor TSS:
$$(3.980cfs)(0.6464) + (7.141 MGD) = 361:1$$
 (7.141 MGD)

TSS:
$$\underline{112 \text{ mg/L}} = 0.3 \text{ mg/L} (< 2\text{mg/L is not measurable})$$

Mass loadings of the blended effluent are as follows:

BOD₅:
$$1.460 \text{ lbs./day} + 1.398 \text{ lbs./day} = 2.858 \text{ lbs./day}$$

TSS:
$$1,460 \text{ lbs./day} + 5,223 \text{ lbs./day} = 6,683 \text{ lbs./day}$$

Based on the BOD₅ and TSS values (blended effluent) cited, the Department has made a best professional judgment, maximum effluent discharge limitations of **2,858** lbs./day for BOD₅, established in this permit, and **6,683** lbs./day for TSS provides reasonable assurance that the discharge will not cause or contribute to a violation of an applicable water quality standard in the Penobscot River and complies with the State's antidegradation policy at 38 M.R.S. § 464(4)(F).

These limitations are based on new information concerning treatment system performance data. As such, the Department concludes that the daily maximum effluent limitations listed above for BOD₅ and TSS, for the discharge of primary and secondary blended effluents when the influent to the wastewater treatment facility exceeds a peak hourly flow rate of 3,260 gallons per minute (4.7 MGD), complies with the exceptions to anti-backsliding at Section 402(o)(2)(B)(i) of the Clean Water Act.

The June 2016 permitting action established monthly average and weekly average blended effluent mass reporting requirements for BOD₅ and TSS to assist in comparing the effluent quality against secondary treatment technology based effluent limits. This permit is carrying that action forward.

8. COMBINED SEWER OVERFLOWS

This permit contains effluent limitations and monitoring requirements for the following combined sewer overflow point source discharges.

Outfall #	Location	Receiving Water & Class
002	Prentiss Street	Penobscot River, Class B
003	Gillman Falls Avenue	Penobscot River, Class B
004	Stillwater Avenue PS	Stillwater River, Class B

1) Combined Sewer Overflow Abatement 06-096 C.M.R. ch. 570 (last amended February 5, 2000) states that for discharges from overflows from combined municipal storm and sanitary sewer systems, the requirement of "best practicable treatment" specified in 38 M.R.S. § 414-A(1)(D) may be met by agreement with the discharger, as a condition of its permit, through development of a plan within period specified by the Department. The CSO Master Plan update entitled The City of Old Town, Maine CSO Master Plan Update Report, dated November 2009 was approved by the Department on December 21, 2009. The permittee submitted an abatement schedule project update letter with project extension request for Elm Street on October 9, 2015. The project completion date in the schedule modification request was approved on October 15, 2015.

The Permittee has been actively implementing the recommendations of the Master Plan and to date has significantly reduced the volume of untreated combined sewer overflows to the receiving waters.

8. COMBINED SEWER OVERFLOWS (cont'd)

The Department acknowledges that the elimination of the remaining CSOs in the collection system and the CSO-related bypass of secondary treatment is a costly, long-term project. As the Old Town Pollution Control Facility and the sewer collection system is upgraded and maintained in according to the CSO Master Plan and Nine Minimum Controls, there should be reductions in the frequency and volume of CSO activities and in the wastewater receiving primary treatment only at the treatment plant, and, over time, improvement in the quality of the wastewater discharged to the receiving waters.

9. ANTI-BACKSLIDING

Federal regulation 40 C.F.R. § 122.44(1) 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, aside from the BOD₅ mass loading of the blended effluent, in this permit are equally or more stringent than the previous permit.

10. 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 classification.

11. PUBLIC COMMENTS

Public notice of this application was made in the *Penobscot Times* newspapers on or about <u>March 4, 2021</u>. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 C.M.R. ch. 522 (effective January 12, 2001).

12. DEPARTMENT CONTACTS

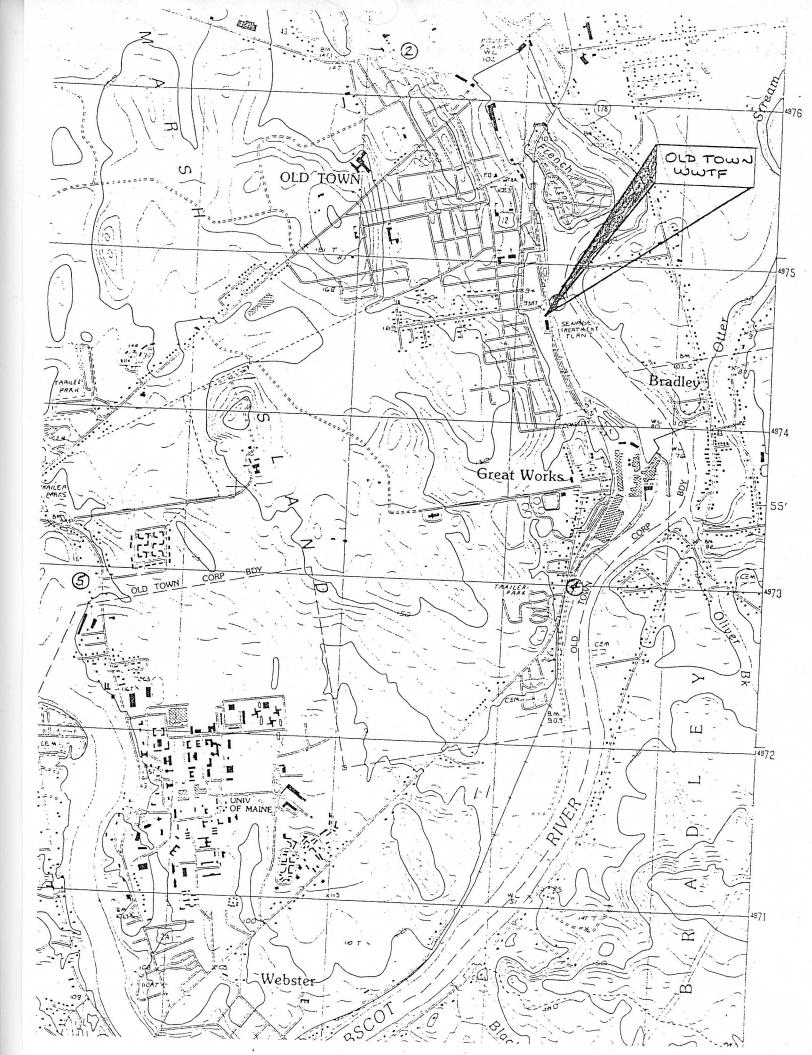
Additional information concerning this permitting action may be obtained from, and written comments sent to:

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

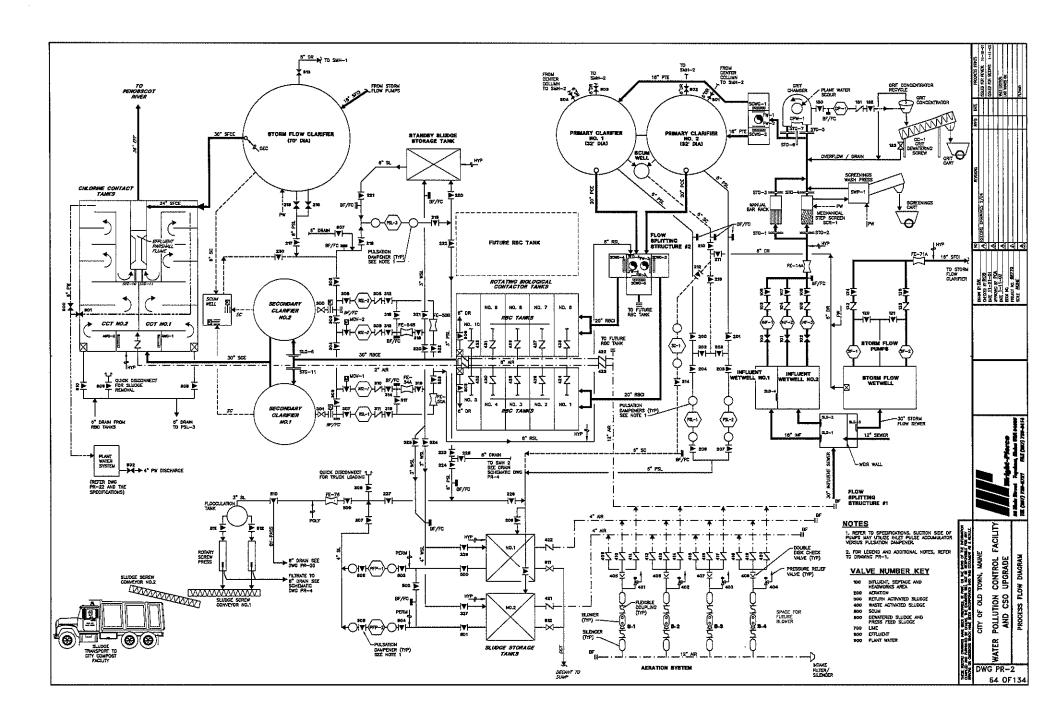
13. RESPONSE TO COMMENTS

This section reserved for future comments

FACT SHEET ATTACHMENT A



FACT SHEET ATTACHMENT B



FACT SHEET ATTACHMENT C

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES#	Facility Name_	
·	_	

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

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

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

Scheduled Toxicity Testing for the next calendar year

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

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

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

FACT SHEET ATTACHMENT D



27/May/2018 - 27/NOV/2023

CHEMICAL TEST REPORT

Facility name: OLD TOWN WWTP	Permit Number: ME0100471	Effluent Limit: Acute (%) = 0.21	Chronic (%) = 0.19
1,1,1-TRICHLOROETHANE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
1,1,2,2-TETRACHLOROETHANE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
1,1,2-TRICHLOROETHANE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
1,1-DICHLOROETHANE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
1,1-DICHLOROETHYLENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	3.0000	Υ
1,2-(O)DICHLOROBENZENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
1,2,4-TRICHLOROBENZENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
1,2-DICHLOROETHANE	Test date	Result (ug/l)	Lsthan
	12/03/2019	3.0000	Υ
1,2-DICHLOROPROPANE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
1,2-DIPHENYLHYDRAZINE	Test date	Result (ug/l)	Lsthan
	12/03/2019	18.0000	Υ
1,2-TRANS-DICHLOROETHYLENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
1,3-(M)DICHLOROBENZENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
1,3-DICHLOROPROPYLENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
1,4-(P)DICHLOROBENZENE	Test date	Result (ug/l)	Lsthan



27/May/2018 - 27/NOV/2023

CHEMICAL TEST REPORT

Facility name: OLD TOWN WWTP	Permit Number: ME0100471	Effluent Limit: Acute (%) = 0.21	Chronic (%) = 0.19
1,4-(P)DICHLOROBENZENE	Test date	Result (ug/l)	Lsthan
, , ,	12/03/2019	4.6000	Υ
2,4,6-TRICHLOROPHENOL	Test date	Result (ug/l)	Lsthan
, ,	12/03/2019	4.6000	Υ
2,4-DICHLOROPHENOL	Test date	Result (ug/l)	Lsthan
, and the second	12/03/2019	4.6000	Υ
2,4-DIMETHYLPHENOL	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
2,4-DINITROPHENOL	Test date	Result (ug/l)	Lsthan
	12/03/2019	23.0000	Υ
2,4-DINITROTOLUENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
2,6-DINITROTOLUENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
2-CHLOROETHYLVINYL ETHER	Test date	Result (ug/l)	Lsthan
	12/03/2019	10.0000	Υ
2-CHLORONAPHTHALENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
2-CHLOROPHENOL	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
2-NITROPHENOL	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
3,3'-DICHLOROBENZIDINE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
3,4-BENZO(B)FLUORANTHENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
4,4'-DDD	Test date	Result (ug/l)	Lsthan



27/May/2018 - 27/NOV/2023

CHEMICAL TEST REPORT

4,4'-DDD Test date Result (ug/l) Lsthan 12/03/2019 0.0200 Y 4,4'-DDE Test date Result (ug/l) Lsthan 12/03/2019 0.0200 Y 4,4'-DDT Test date Result (ug/l) Lsthan 12/03/2019 0.0200 Y	
4,4'-DDE Test date Result (ug/l) Lsthan 12/03/2019 0.0200 Y 4,4'-DDT Test date Result (ug/l) Lsthan 12/03/2019 0.0200 Y	
12/03/2019 0.0200 Y 4,4'-DDT Test date Result (ug/l) Lsthan 12/03/2019 0.0200 Y	
4,4'-DDT Test date Result (ug/l) Lsthan 12/03/2019 0.0200 Y	
12/03/2019 0.0200 Y	
4,6-DINITRO-O-CRESOL Test date Result (ug/l) Lsthan	
12/03/2019 23.0000 Y	
4-BROMOPHENYLPHENYL ETHER Test date Result (ug/l) Lsthan	
12/03/2019 4.6000 Y	
4-CHLOROPHENYL PHENYL ETHER Test date Result (ug/l) Lsthan	
12/03/2019 4.6000 Y	
4-NITROPHENOL Test date Result (ug/l) Lsthan	
12/03/2019 18.0000 Y	
A-BHC Test date Result (ug/l) Lsthan	
12/03/2019 0.0100 Y	
ACENAPHTHENE Test date Result (ug/l) Lsthan	
12/03/2019 4.6000 Y	
ACENAPHTHYLENE Test date Result (ug/l) Lsthan	
12/03/2019 4.6000 Y	
ACROLEIN Test date Result (ug/l) Lsthan	
12/03/2019 10.0000 Y	
ACRYLONITRILE Test date Result (ug/l) Lsthan	
12/03/2019 25.0000 Y	
A-ENDOSULFAN Test date Result (ug/l) Lsthan	
12/03/2019 0.0100 Y	
ALDRIN Test date Result (ug/l) Lsthan	



27/May/2018 - 27/NOV/2023

CHEMICAL TEST REPORT

Facility name: OLD TOWN WWTP	Permit Number: ME0100471	Effluent Limit: Acute (%) = 0.21	Chronic (%) = 0.19
ALDRIN	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0100	Υ
ALUMINUM	Test date	Result (ug/l)	Lsthan
	07/02/2018	43.2000	N
	05/07/2019	24.2000	N
	08/12/2019	96.8000	N
	12/03/2019	33.2000	N
	02/04/2020	20.0000	Υ
AMMONIA	Test date	Result (ug/l)	Lsthan
	05/07/2019	2,300.0000	N
	08/12/2019	440.0000	N
	12/03/2019	2,100.0000	N
	02/04/2020	13,000.0000	N
ANTHRACENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
ANTIMONY	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.2000	Υ
ARSENIC	Test date	Result (ug/l)	Lsthan
	05/07/2019	1.0000	Υ
	08/12/2019	1.2000	N
	12/03/2019	1.0000	Υ
	02/04/2020	10.0000	Υ
В-ВНС	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0100	Υ
B-ENDOSULFAN	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0200	Υ
BENZENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ



27/May/2018 - 27/NOV/2023

CHEMICAL TEST REPORT

Facility name: OLD TOWN WWTP	Permit Number: ME0100471	Effluent Limit: Acute (%) = 0.21	Chronic (%) = 0.19
BENZIDINE	Test date	Result (ug/l)	Lsthan
	12/03/2019	23.0000	Υ
BENZO(A)ANTHRACENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
BENZO(A)PYRENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
BENZO(G,H,I)PERYLENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
BENZO(K)FLUORANTHENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
BERYLLIUM	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.2000	Υ
BIS(2-CHLOROETHOXY)METHANE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
BIS(2-CHLOROETHYL)ETHER	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
BIS(2-CHLOROISOPROPYL)ETHER	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
BIS(2-ETHYLHEXYL)PHTHALATE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
BROMOFORM	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
BUTYLBENZYL PHTHALATE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
CADMIUM	Test date	Result (ug/l)	Lsthan
	05/07/2019	0.2000	Υ
	08/12/2019	0.2000	Υ



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CHEMICAL TEST REPORT

Facility name: OLD TOWN WWTP	Permit Number: ME0100471	Effluent Limit: Acute (%) = 0.21	Chronic (%) = 0.19
CADMIUM	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.2000	Υ
	02/04/2020	0.2000	Υ
CARBON TETRACHLORIDE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
CHLORDANE	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0900	Υ
CHLOROBENZENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
CHLORODIBROMOMETHANE	Test date	Result (ug/l)	Lsthan
	12/03/2019	3.0000	Υ
CHLOROETHANE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
CHLOROFORM	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
CHROMIUM	Test date	Result (ug/l)	Lsthan
	05/07/2019	1.0000	Υ
	08/12/2019	1.0000	Υ
	12/03/2019	1.0000	Υ
	02/04/2020	1.0000	Υ
CHRYSENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
COPPER	Test date	Result (ug/l)	Lsthan
	07/02/2018	31.6000	N
	05/07/2019	26.3000	N
	08/12/2019	34.2000	N
	12/03/2019	25.0000	N
	02/04/2020	60.7000	N



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CHEMICAL TEST REPORT

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Facility name: OLD TOWN WWTP	Permit Number: ME0100471	Effluent Limit: Acute (%) = 0.21	Chronic (%) = 0.19
CYANIDE TOTAL	Test date	Result (ug/l)	Lsthan
	05/07/2019	5.0000	Υ
	08/12/2019	5.0000	Υ
	12/03/2019	5.0000	Υ
	02/04/2020	5.0000	Υ
D-BHC	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0100	Y
DIBENZO(A,H)ANTHRACENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
DICHLOROBROMOMETHANE	Test date	Result (ug/l)	Lsthan
	12/03/2019	3.0000	Υ
DIELDRIN	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0200	Υ
DIETHYL PHTHALATE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
DIMETHYL PHTHALATE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
DI-N-BUTYL PHTHALATE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
DI-N-OCTYL PHTHALATE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
ENDOSULFAN SULFATE	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0200	Υ
ENDRIN	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0200	Υ
ENDRIN ALDEHYDE	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0200	Υ



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Facility name: OLD TOWN WWTP	Permit Number: ME0100471	Effluent Limit: Acute (%) = 0.21	Chronic (%) = 0.19
ETHYLBENZENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
FLUORANTHENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
FLUORENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
G-BHC	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0100	Υ
HEPTACHLOR	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0100	Υ
HEPTACHLOR EPOXIDE	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0100	Υ
HEXACHLOROBENZENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
HEXACHLOROBUTADIENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
HEXACHLOROCYCLOPENTADIENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
HEXACHLOROETHANE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
INDENO(1,2,3-CD)PYRENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
ISOPHORONE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
LEAD	Test date	Result (ug/l)	Lsthan
	07/02/2018	0.6600	N
	05/07/2019	0.3800	N



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CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

Facility name: OLD TOWN WWTP	Permit Number: ME0100471	Effluent Limit: Acute (%) = 0.21	Chronic (%) = 0.19
LEAD	Test date	Result (ug/l)	Lsthan
	08/12/2019	0.5700	N
	12/03/2019	0.3300	N
	02/04/2020	0.2800	N
MERCURY	Test date	Result (ng/l)	Lsthan
	07/02/2018	5.92	N
	11/04/2019	3.71	N
	05/11/2020	19.20	N
	02/03/2021	3.43	N
	06/08/2022	2.56	N
	08/02/2023	3.35	N
METHYL BROMIDE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
METHYL CHLORIDE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
METHYLENE CHLORIDE	Test date	Result (ug/l)	Lsthan
	12/03/2019	5.0000	Υ
NAPHTHALENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
NICKEL	Test date	Result (ug/l)	Lsthan
	05/07/2019	0.8600	N
	08/12/2019	1.2500	N
	12/03/2019	0.7400	N
	02/04/2020	1.0600	N
NITROBENZENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
N-NITROSODIMETHYLAMINE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ



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CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

Facility name: OLD TOWN WWTP	Permit Number: ME0100471	Effluent Limit: Acute (%) = 0.21	Chronic (%) = 0.19
N-NITROSODI-N-PROPYLAMINE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
N-NITROSODIPHENYLAMINE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
PCB-1016	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0900	Υ
PCB-1221	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0900	Υ
PCB-1232	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0900	Υ
PCB-1242	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0900	Υ
PCB-1248	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0900	Υ
PCB-1254	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0900	Υ
PCB-1260	Test date	Result (ug/l)	Lsthan
	12/03/2019	0.0900	Υ
P-CHLORO-M-CRESOL	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
PENTACHLOROPHENOL	Test date	Result (ug/l)	Lsthan
	12/03/2019	18.0000	Υ
PHENANTHRENE	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
PHENOL	Test date	Result (ug/l)	Lsthan
	12/03/2019	4.6000	Υ
PYRENE	Test date	Result (ug/l)	Lsthan



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CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

PYRENE Test date Result (ug/l) Listhan 12/03/2019 4.6000 Y	Facility name: OLD TOWN WWTP	Permit Number: ME0100471	Effluent Limit: Acute (%) = 0.21	Chronic (%) = 0.19
12/03/2019 4.6000 Y	PYRENE	Test date	Result (ug/l)	Lsthan
12/03/2019 1.0000 Y		12/03/2019		Υ
	SELENIUM	Test date	Result (ug/l)	Lsthan
05/07/2019 0.2000 Y 08/12/2019 0.2000 Y 08/12/2019 0.2000 Y 02/03/2019 0.2000 Y 02/03/2019 0.2000 Y 02/04/2020 0.2000 Y 02/03/2019 686.0000 N 02/03/2019 686.0000 N 02/03/2019 0.2000 Y 02/03/2019 0.2000 N 08/12/2019 0.20000 N 08/12/2019 0.200000 N 08/12/2019 0.200000 N 08/12/2019 0.200000 N 0		12/03/2019	1.0000	Υ
08/12/2019 0.2000 Y 12/03/2019 0.2000 Y 12/03/2019 0.2000 Y 22/04/2020 0.2000 Y SPECIFIC CONDUCTANCE (UMHOS) Test date Result (ug/l) Lsthan 12/03/2019 6860000 N TETRACHLOROETHYLENE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y THALLIUM Test date Result (ug/l) Lsthan 12/03/2019 0.2000 Y TOLUENE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y TOXAPHENE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y TRICHLOROETHYLENE Test date Result (ug/l) Lsthan 12/03/2019 0.1800 Y TRICHLOROETHYLENE Test date Result (ug/l) Lsthan 12/03/2019 3.0000 Y VINYL CHLORIDE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y ZINC Test date Result (ug/l) Lsthan 05/07/2019 5.0000 Y ZINC Test date Result (ug/l) Lsthan 06/12/2019 23.3000 N 08/12/2019 23.3000 N	SILVER	Test date	Result (ug/l)	Lsthan
12/03/2019 0.2000 Y		05/07/2019	0.2000	Υ
		08/12/2019	0.2000	Υ
SPECIFIC CONDUCTANCE (UMHOS) Test date Result (ug/l) Lsthan 12/03/2019 686.0000 N TETRACHLOROETHYLENE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y THALLIUM Test date Result (ug/l) Lsthan 12/03/2019 0.2000 Y TOLUENE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y TOXAPHENE Test date Result (ug/l) Lsthan 12/03/2019 0.1800 Y TRICHLOROETHYLENE Test date Result (ug/l) Lsthan 12/03/2019 3.0000 Y VINYL CHLORIDE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y ZINC Test date Result (ug/l) Lsthan 05/07/2019 27.5000 N 05/07/2019 23.3000 N 05/07/2019 23.3000 N		12/03/2019	0.2000	Υ
12/03/2019 686.0000 N		02/04/2020	0.2000	Υ
TETRACHLOROETHYLENE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y THALLIUM Test date Result (ug/l) Lsthan 12/03/2019 0.2000 Y TOLUENE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y TOXAPHENE Test date Result (ug/l) Lsthan 12/03/2019 0.1800 Y TRICHLOROETHYLENE Test date Result (ug/l) Lsthan 12/03/2019 3.0000 Y VINYL CHLORIDE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y ZINC Test date Result (ug/l) Lsthan 05/07/2019 27.5000 N 08/12/2019 23.3000 N 12/03/2019 20.6000 N	SPECIFIC CONDUCTANCE (UMHOS)	Test date	Result (ug/l)	Lsthan
12/03/2019 5.0000 Y		12/03/2019	686.0000	N
THALLIUM Test date Result (ug/l) Lsthan 12/03/2019 0.2000 Y TOLUENE Test date Result (ug/l) Lsthan 12/03/2019 5.00000 Y TOXAPHENE Test date Result (ug/l) Lsthan 12/03/2019 0.1800 Y TRICHLOROETHYLENE Test date Result (ug/l) Lsthan 12/03/2019 3.0000 Y VINYL CHLORIDE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y ZINC Test date Result (ug/l) Lsthan 05/07/2019 27.5000 N 08/12/2019 23.3000 N 12/03/2019 20.6000 N	TETRACHLOROETHYLENE	Test date	Result (ug/l)	Lsthan
12/03/2019 0.2000 Y		12/03/2019	5.0000	Υ
TOLUENE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y TOXAPHENE Test date Result (ug/l) Lsthan 12/03/2019 0.1800 Y TRICHLOROETHYLENE Test date Result (ug/l) Lsthan VINYL CHLORIDE Test date Result (ug/l) Lsthan 21/03/2019 5.0000 Y ZINC Test date Result (ug/l) Lsthan 05/07/2019 27.5000 N 08/12/2019 23.3000 N 12/03/2019 20.6000 N	THALLIUM	Test date	Result (ug/l)	Lsthan
12/03/2019 5.0000 Y		12/03/2019	0.2000	Υ
TOXAPHENE Test date Result (ug/l) Lsthan 12/03/2019 0.1800 Y TRICHLOROETHYLENE Test date Result (ug/l) Lsthan 12/03/2019 3.0000 Y VINYL CHLORIDE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y ZINC Test date Result (ug/l) Lsthan 05/07/2019 27.5000 N 08/12/2019 23.3000 N 12/03/2019 20.6000 N	TOLUENE	Test date	Result (ug/l)	Lsthan
TRICHLOROETHYLENE Test date Result (ug/l) Lsthan 12/03/2019 3.0000 Y VINYL CHLORIDE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y ZINC Test date Result (ug/l) Lsthan 05/07/2019 27.5000 N 08/12/2019 23.3000 N 12/03/2019 20.6000 N		12/03/2019	5.0000	Υ
TRICHLOROETHYLENE Test date Result (ug/l) Lsthan 12/03/2019 3.0000 Y VINYL CHLORIDE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y ZINC Test date Result (ug/l) Lsthan 05/07/2019 27.5000 N 08/12/2019 23.3000 N 12/03/2019 20.6000 N	TOXAPHENE	Test date	Result (ug/l)	Lsthan
VINYL CHLORIDE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y ZINC Test date Result (ug/l) Lsthan 05/07/2019 27.5000 N 08/12/2019 23.3000 N 12/03/2019 20.6000 N		12/03/2019	0.1800	Υ
VINYL CHLORIDE Test date Result (ug/l) Lsthan 12/03/2019 5.0000 Y ZINC Test date Result (ug/l) Lsthan 05/07/2019 27.5000 N 08/12/2019 23.3000 N 12/03/2019 20.6000 N	TRICHLOROETHYLENE	Test date	Result (ug/l)	Lsthan
ZINC Test date Result (ug/l) Lsthan 05/07/2019 27.5000 N 08/12/2019 23.3000 N 12/03/2019 20.6000 N		12/03/2019	3.0000	Υ
ZINC Test date Result (ug/l) Lsthan 05/07/2019 27.5000 N 08/12/2019 23.3000 N 12/03/2019 20.6000 N	VINYL CHLORIDE	Test date	Result (ug/l)	Lsthan
05/07/2019 27.5000 N 08/12/2019 23.3000 N 12/03/2019 20.6000 N		12/03/2019	5.0000	Υ
08/12/2019 23.3000 N 12/03/2019 20.6000 N	ZINC	Test date	Result (ug/l)	Lsthan
12/03/2019 20.6000 N		05/07/2019	27.5000	N
		08/12/2019	23.3000	N
02/04/2020		12/03/2019	20.6000	N
U2/U4/2U2U 35.6UUU N		02/04/2020	35.6000	N



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WET TEST REPORT						
OLD TOWN WWTP		Permit Number:	ME0100471			
	Species	Test	Percent	Sample date	Critical %	Exception
	TROUT	A_NOEL	100	12/03/2019	0.214	
	TROUT	C_NOEL	100	12/03/2019	0.193	
	WATER FLEA	A_NOEL	100	12/03/2019	0.214	
	WATER FLEA	C_NOEL	100	12/03/2019	0.193	

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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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).

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- **7. Oil and hazardous substances.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under section 311 of the Federal Clean Water Act; section 106 of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980; or 38 MRSA §§ 1301, et. seq.
- **8.** Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.
- **9. Confidentiality of records.** 38 MRSA §414(6) reads as follows. "Any records, reports or information obtained under this subchapter is available to the public, except that upon a showing satisfactory to the department by any person that any records, reports or information, or particular part or any record, report or information, other than the names and addresses of applicants, license applications, licenses, and effluent data, to which the department has access under this subchapter would, if made public, divulge methods or processes that are entitled to protection as trade secrets, these records, reports or information must be confidential and not available for public inspection or examination. Any records, reports or information may be disclosed to employees or authorized representatives of the State or the United States concerned with carrying out this subchapter or any applicable federal law, and to any party to a hearing held under this section on terms the commissioner may prescribe in order to protect these confidential records, reports and information, as long as this disclosure is material and relevant to any issue under consideration by the department."
- **10. Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- 11. Other laws. The issuance of this permit does not authorize any injury to persons or property or invasion of other property rights, nor does it relieve the permittee if its obligation to comply with other applicable Federal, State or local laws and regulations.
- **12. Inspection and entry**. The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), upon presentation of credentials and other documents as may be required by law, to:
 - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - (d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

B. OPERATION AND MAINTENACE OF FACILITIES

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

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.

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(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.

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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.

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D. REPORTING REQUIREMENTS

1. Reporting requirements.

when:

- (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
 - (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

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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).

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- (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.

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- **2. Spill prevention.** (applicable only to industrial sources) Within six months of the effective date of this permit, the permittee shall submit to the Department for review and approval, with or without conditions, a spill prevention plan. The plan shall delineate methods and measures to be taken to prevent and or contain any spills of pulp, chemicals, oils or other contaminates and shall specify means of disposal and or treatment to be used.
- 3. **Removed substances.** Solids, sludges trash rack cleanings, filter backwash, or other pollutants removed from or resulting from the treatment or control of waste waters shall be disposed of in a manner approved by the Department.
- 4. **Connection to municipal sewer.** (applicable only to industrial and commercial sources) All wastewaters designated by the Department as treatable in a municipal treatment system will be cosigned to that system when it is available. This permit will expire 90 days after the municipal treatment facility becomes available, unless this time is extended by the Department in writing.
- **F. DEFINITIONS.** For the purposes of this permit, the following definitions shall apply. Other definitions applicable to this permit may be found in Chapters 520 through 529 of the Department's rules

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

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

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

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

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

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

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

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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.