



JANET T. MILLS  
GOVERNOR

STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



MELANIE LOYZIM  
COMMISSIONER

February 20, 2025

Mr. Tony Griffin  
Superintendent, Town of Bar Harbor  
136 LedgeLawn Avenue  
Bar Harbor, Maine 04609

*Sent via electronic mail  
Delivery confirmation requested*

**RE:** *Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0102466  
Maine Waste Discharge License (WDL) Application #W002590-6C-J-R  
Proposed Draft MEPDES Permit Renewal*

Dear Mr. Griffin,

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

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

All comments on the proposed draft permit must be received in the Department of Environmental Protection office on or before the close of business **March 24, 2025**. Failure to submit comments in a timely fashion will result in the proposed draft permit document being issued as drafted.

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

BANGOR  
106 HOGAN ROAD, SUITE 6  
BANGOR, MAINE 04401  
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312 CANCO ROAD  
PORTLAND, MAINE 04103  
(207) 822-6300 FAX: (207) 822-6303

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

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](mailto:Benjamin.S.Pendleton@Maine.gov)

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

Sincerely,

*Benjamin S Pendleton*

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

Enc.

cc: Gary Brooks, MEDEP  
Wendy Garland, MEDEP  
Laura Crossley, MEDEP  
Lori Mitchell, MEDEP  
Charlene Moore, MEDEP  
Sean Mahoney, CLF  
Emily Green, CLF  
Environmental Review, DMR  
Ellen Weitzler, USEPA  
Kathryn Rosenberg, USEPA  
Michael Cobb, USEPA  
Richard Carvalho, USEPA  
Environmental Review, IFW



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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF BAR HARBOR	)	MAINE POLLUTANT DISCHARGE
BAR HARBOR, HANCOCK COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
ME0102466	)	WASTE DISCHARGE LICENSE
W002590-6C-J-R	)	RENEWAL
<b>APPROVAL</b>	)	
<b>HULLS COVE FACILITY</b>		

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

**APPLICATION SUMMARY**

On October 15, 2020, the Department accepted as complete for processing, an application from the permittee for the renewal of combination Waste Discharge License (WDL) W0002590-6C-I-R/ Maine Pollutant Discharge Elimination System (MEPDES) permit ME0102466, which was issued on October 13, 2015, for a five-year term. The October 13, 2015, MEPDES permit authorized the monthly average discharge of up to 0.15 MGD (million gallons per day) of secondary treated sanitary wastewater from the Town's Hull's Cove Plant, and an unspecified quantity of excess combined sanitary and stormwater during wet weather events from one (1) combined sewer overflow (CSO) outfall to the Atlantic Ocean at Frenchman Bay, Class SB, in Bar Harbor, Maine.

**PERMIT SUMMARY**

- a. Terms and Conditions: This permitting action is carrying forward all the terms and conditions of the previous permitting and it is:
1. Establishing a seasonal monitoring requirement for Enterococci bacteria from April 15<sup>th</sup> – October 31<sup>st</sup>, as well as establishing monthly average and daily maximum limits of 8 CFU or MPN/100 mL and 54 CFU or MPN/100 mL, respectively.
  2. Establishing year-round monitoring (beginning November 1, 2025) and reporting requirement for Fecal coliform limits from a monthly average of 15 CFU/100 mL and a daily maximum of 50 CFU/100 mL to 14 CFU or MPN/100 mL and 31 CFU or MPN/100 mL, respectively, in order to be consistent with the U.S. Food and Drug Administration's National Shellfish Sanitation Program.
  3. Eliminating the provision that allows the percent removal for Biochemical Oxygen Demand (BOD<sub>5</sub>) and Total Suspended Solids (TSS) to be waived when the monthly average influent concentration is less than 200 mg/L.

**PERMIT SUMMARY (cont'd)**

4. Establishing Special Condition A, *Monitoring and Reporting Requirements*, Footnote 2, 2/month sampling.
5. Revising Special Condition C, *Treatment Plant Operator*, to require the person who has the management responsibility over the treatment facility to hold a Maine Grade III certificate or higher.

**CONCLUSIONS**

BASED on the findings summarized in the attached Fact Sheet dated February 20, 2025, 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 natural resource, that water quality will be maintained and protected;
  - (c) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
  - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
  - (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharges will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of licenses*, 38 M.R.S. § 414-A(1)(D).

**ACTION**

THEREFORE, the Department APPROVES the above noted application of the TOWN OF BAR HARBOR to discharge a monthly average flow of up to 0.150 million gallons per day of secondary treated municipal waste water from the Town's Hulls Cove Plant and an unspecified quantity of excess combined sanitary and storm water during wet weather events from one (1) combined sewer overflow (CSO) outfall to the Atlantic Ocean at Frenchman Bay, Class SB, in Bar Harbor Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

1. *Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits*, revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 C.M.R. Ch. 2 § 21(A) (effective September 15, 2024)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS \_\_\_\_ DAY OF \_\_\_\_\_ 2025.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
for MELANIE LOYZIM, Commissioner

Date of initial receipt of application: October 6, 2020  
Date of application acceptance: October 15, 2020

### A.1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge secondary treated sanitary wastewater from **Outfall #001Aw** (Hulls Cove Plant) to the Atlantic Ocean at Frenchman Bay. Such discharges must be limited and monitored by the permittee as specified below<sup>(1)</sup>:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow [50050]	0.150 MGD [03]	---	Report MGD [03]	---	---	---	Continuous [99/99]	Recorder [RC]
Biochemical Oxygen Demand (BOD <sub>5</sub> ) [00310]	38 lbs/day [26]	56 lbs/day [26]	62 lbs/day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Month <sup>(2)</sup> [02/30]	24-Hour Composite [24]
BOD <sub>5</sub> % Removal <sup>(3)</sup> [81010]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]
Total Suspended Solids (TSS) [00530]	38 lbs/day [26]	56 lbs/day [26]	62 lbs/day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Month <sup>(2)</sup> [02/30]	24-Hour Composite [24]
TSS % Removal <sup>(3)</sup> [81011]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]
Settleable Solids [00545]	---	---	---	---	---	0.3 ml/L [25]	3/Week [03/07]	Grab [GR]
Fecal Coliform Bacteria <sup>(4)</sup> (Seasonal April 15 – October 31, 2025) [31616]	---	---	---	14/100 mL [13]	---	31/100 CFU/mL [13]	2/Month <sup>(2)</sup> [02/30]	Grab [GR]
Fecal Coliform Bacteria <sup>(4)</sup> Year-round beginning November 1, 2025) [31616]	---	---	---	14/100 mL [13]	---	31/100 CFU/mL [13]	2/Month <sup>(2)</sup> [02/30]	Grab [GR]
Enterococci Bacteria <sup>(5)</sup> (Seasonally April 15 <sup>th</sup> -October 31 <sup>st</sup> ) [61211]	---	---	---	8/100 CFU/mL [13]	---	54/100 CFU/mL [13]	2/Month <sup>(2)</sup> [2/30]	Grab [GR]
Total Residual Chlorine <sup>(6)</sup> [50060]	---	---	---	0.1 mg/L [19]	---	0.3 mg/L [19]	3/Week [03/07]	Grab [GR]
Mercury (Total) <sup>(7)</sup> [71900]	---	---	---	24.4 ng/L [3M]	---	36.6 ng/L [3M]	1/Year [01/YR]	Grab [GR]
pH (Std. Units) [00400]	---	---	---	---	---	6.0 – 9.0 SU [12]	1/Day [01/01]	Grab [GR]

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

**FOOTNOTES:** See Pages 6 – 9 of this permit for applicable footnotes.

**A.2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)**

***SCREENING LEVEL TESTING***

Beginning in calendar year **2028** and every five years thereafter if a timely request for renewal has been made and the permit continues in force or is replaced by a permit renewal containing this requirement.

Effluent Characteristic	Discharge Limitations		Minimum Monitoring Requirements	
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Whole Effluent Toxicity <sup>(8)</sup> <b><u>Acute – NOEL</u></b> <i>Americamysis bahia</i> (Mysid shrimp) [TDM3E]	---	Report% [23]	1/Year [01/YR]	Composite [24]
<b><u>Chronic – NOEL</u></b> <i>Arbacia punctulata</i> (Sea urchin) [TBH3A]	---	Report% [23]	1/Year [01/YR]	Composite [24]
Analytical Chemistry <sup>(9,11)</sup> [51477]	---	Report ug/L [28]	1/Quarter [01/90]	Composite/Grab [24/GR]
Priority Pollutant <sup>(10,11)</sup> [50008]	---	Report ug/L [28]	1/Year [01/YR]	Composite/Grab [24/GR]

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

**FOOTNOTES:** See Pages 6 through 9 of this permit for applicable footnotes.

## SPECIAL CONDITIONS

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

#### Footnotes:

1. **Sampling** –All influent monitoring shall be conducted at the facility headworks at the effluent end of the influent grinder or bar screen. All effluent monitoring must be conducted at a location following the last treatment unit in the treatment process as to be representative of end-of-pipe effluent characteristics.

Any change in sampling location must be approved by the Department in writing. The permittee must conduct sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (C.F.R.) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 C.F.R. Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for wastewater. Samples that are sent to a publicly owned treatment works (POTW) pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 C.M.R. Ch. 263 (amended March 15, 2023). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of 10 – 144 C.M.R. Ch. 263. If the licensee monitors any pollutant more frequently than required by the license using test procedures approved under 40 C.F.R. Part 136 or as specified in this license, the results of this monitoring must be included in the calculation and reporting of the data submitted in the discharge monitoring report (DMR).

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

2. **Twice per Month Monitoring:** Monitoring required at a minimum frequency of 2/month must be collected no less than 14 days between sampling events, unless specifically authorized by the Department's compliance inspector.
3. **Percent Removal** – The treatment facility must maintain a minimum of 85 percent removal of both biochemical oxygen demand and total suspended solids for all flows receiving secondary treatment. The percent removal must be calculated based on influent and effluent concentration values.



## SPECIAL CONDITIONS

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

#### **Footnotes:**

4. **Fecal coliform bacteria Reporting** – Limits apply on a year-round basis in order to protect local shellfish resources fecal coliform bacteria in order to be consistent with the National Shellfish Sanitation Program. The monthly average fecal coliform bacteria limitation is a geometric mean limitation and sample results must be reported as such. Results must be expressed in CFU or MPN/100 mL.
5. **Enterococcus Bacteria Reporting** – Enterococcus bacteria limits and monitoring requirements are seasonal running from April 15<sup>th</sup> – October 31<sup>st</sup>. The monthly average limitation for enterococci is a geometric mean and results must be calculated and reported as such. Results must be expressed in CFU or MPN/100 mL.
6. **Total Residual Chlorine** – Limitations and monitoring requirements are in effect any time elemental chlorine or chlorine-based compounds are utilized to disinfect the discharge(s). The permittee must utilize a USEPA-approved test method capable of bracketing the TRC limitations specified in this permitting action.
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" found in USEPA Method 1669, *Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels*. All mercury analysis must be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry*. Go to [https://www.maine.gov/dep/water/wd/municipal\\_industrial/index.html](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. **Whole effluent toxicity (WET) testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 3.7% and 0.21% respectively), which provides an estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points. The critical acute and chronic thresholds were derived as the mathematical inverse of the applicable acute and chronic dilution factors of 27:1 and 478:1, respectively.
  - a. **Screening level testing** – Beginning in calendar year **2028** and every five years thereafter if a timely request for renewal has been made and the permit continues in force or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level WET testing at a minimum frequency of once per year (1/Year). Acute tests must be conducted on

## SPECIAL CONDITIONS

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

#### **Footnotes:**

the mysid shrimp (*Americamysis bahia*) chronic tests must be conducted on the sea urchin (*Arbacia punctulata*).

- b. **Surveillance level testing** – Surveillance level testing has been waived pursuant to Department rule 06-096 C.M.R. Ch. 530 § 2(D)(3)(b).

WET test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedances of the critical acute and chronic water quality thresholds of 3.7% and 0.21%, respectively.

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

- a. U.S. Environmental Protection Agency. 2002. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, 5th ed. 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 Marine and Estuarine Organisms*, 3rd ed. EPA 821-R-02-014. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the marine chronic method manual).

Results of WET tests must be reported on the “Whole Effluent Toxicity Report Marine Waters” form found at: [https://www.maine.gov/dep/water/wd/municipal\\_industrial/index.html](https://www.maine.gov/dep/water/wd/municipal_industrial/index.html) permit each time a WET test is performed. Each time a WET test is performed, the permittee must sample and analyze for the parameters in the WET Chemistry and the Analytical Chemistry sections of the Department form entitled, *Maine Department of Environmental Protection, Chemical Specific Data Report Form* found at: [https://www.maine.gov/dep/water/wd/municipal\\_industrial/index.html](https://www.maine.gov/dep/water/wd/municipal_industrial/index.html)

9. **Analytical chemistry** – Refers to those pollutants listed under “Analytical Chemistry” on the form found at: [https://www.maine.gov/dep/water/wd/municipal\\_industrial/index.html](https://www.maine.gov/dep/water/wd/municipal_industrial/index.html)
- a. **Screening-level testing** – Beginning in calendar year **2028** 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 analytical chemistry testing at a minimum frequency of once per calendar quarter (1/Quarter) for four consecutive calendar quarters.
- b. **Surveillance-level testing** – Surveillance level testing has been waived pursuant to Department rule 06-096 C.M.R. Ch. 530 § 2(D)(3)(b).

## SPECIAL CONDITIONS

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

#### **Footnotes:**

10. **Priority Pollutant Testing** – Refers to those pollutants listed under “Priority Pollutants” on the form found at: [https://www.maine.gov/dep/water/wd/municipal\\_industrial/index.html](https://www.maine.gov/dep/water/wd/municipal_industrial/index.html)

- a. **Screening-level testing** – Beginning in the calendar year 2028 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 priority pollutant testing at a minimum frequency of 1/Year.
- b. **Surveillance-level testing** – Pursuant to 06-096 C.M.R. Ch. 530 § 2(D)(1) priority pollutant surveillance testing is not required for Level III facilities.

11. **Analytical chemistry and priority pollutant** – 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 C.M.R. Ch. 584 (amended February 16, 2020). For the purposes of DMR reporting, enter a “1” for yes, testing done this monitoring period or “N9” monitoring not required this period.

### B. NARRATIVE EFFLUENT LIMITATIONS

1. The permittee must not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the uses designated by the classification of the receiving waters.
2. The permittee must not discharge effluent that contains materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the uses designated by 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 unsafe for the designated uses and characteristics ascribed to their classification.
4. The permittee must not discharge effluent that lowers the quality of any classified body of water below such classification or lower the existing quality of any body of water if the existing quality is higher than the classification.

## SPECIAL CONDITIONS

### C. TREATMENT PLANT OPERATOR

The person who has management responsibility over the treatment facility must hold a minimum of a **Maine Grade III** biological certificate (or be a Registered Maine 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. 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).

### E. NOTIFICATION REQUIREMENT

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

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

## **SPECIAL CONDITIONS**

### **F. 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 October 15, 2020; 2) the terms and conditions of this permit; and 3) only from Outfalls #001A (secondary treated wastewater) and the combined sewer overflow outfall (Outfall #008) listed in Special Condition I, *Effluent Conditions And Limitations For Combined Sewer Overflows*, of this permit. Discharges of wastewater from any other point source(s) 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.

### **G. OPERATIONS AND 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.

### **H. WET WEATHER MANAGEMENT PLAN**

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

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

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

## **SPECIAL CONDITIONS**

### **I. EFFLUENT CONDITIONS AND LIMITATIONS FOR COMBINED SEWER OVERFLOWS (CSOs)**

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

#### **1. Definitions**

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

- a. Combined Sewer Overflow - a discharge of excess wastewater from a municipal or quasi-municipal sewerage system that conveys both sanitary wastes and stormwater 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**

<b>Outfall #</b>	<b>Location</b>	<b>Receiving Water and Class</b>
008	Beaver Dam Road	Frenchman Bay, Class SB

#### **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 for the classification of the receiving waters.

## SPECIAL CONDITIONS

### I. EFFLUENT CONDITIONS AND LIMITATIONS FOR CSOs (cont'd)

- 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.

#### 5. CSO Master Plan (see 06-096 C.M.R. Ch. 570 § 2,3)

The permittee must implement CSO control projects in accordance with the most current approved CSO Master Plan entitled, *Updated Master Plan For CSO Abatement, The Town of Bar Harbor, Maine January 2021.*, prepared by Olver Associates. The updated Master Plan was approved by the Department in March 2022.

**On or before March 28, 2027, [ICIS Code 81699]** the permittee must submit a CSO Master Plan Update evaluating the overall success of the CSO abatement effort.

**On or before December 31, 2025** the permittee must submit a report summarizing the flow monitoring results in Hull's Cove and the next steps needed to continue to reduce with the intention to eliminate CSO activity at CSO 008.

To modify the dates and or projects specified above, the permittee must file an application with the Department to formally modify the permit. The remaining work items identified in the abatement schedule may be amended from time to time based on mutual agreements between the permittee and 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 Control documentation as approved by EPA on August 2, 2000. 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 reported. The results must be reported on the Department form "*CSO Activity and Volumes*" included as **Attachment A** of this permit or similar format and submitted to the Department.

## **SPECIAL CONDITIONS**

### **I. EFFLUENT CONDITIONS AND LIMITATIONS FOR CSOs (cont'd)**

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. Additions of New Wastewater (see 06-096 C.M.R. Ch. 570 § 8)

06-096 C.M.R. Ch. 570 § 8 lists requirements relating to any proposed addition of wastewater to the combined sewer system. Documentation of the new wastewater additions to the system and associated mitigating measures must be included in the annual *CSO Progress Report* (see below). Reports must contain the volumes and characteristics of the wastewater added or authorized for addition and descriptions of the sewer system improvements and estimated effectiveness.

9. 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:



## **SPECIAL CONDITIONS**

### **I. EFFLUENT CONDITIONS AND LIMITATIONS FOR CSOs (cont'd)**

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 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  
e-mail: [CSOCoordinator@maine.gov](mailto: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:

**TOWN OF BAR HARBOR  
WET WEATHER  
SEWAGE DISCHARGE  
CSO # AND NAME OF OUTFALL**

## SPECIAL CONDITIONS

### J. STATEMENT FOR REDUCED/WAIVED TOXICS TESTING

**By December 31 of each calendar year**, the permittee must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit *[ICIS Code 75305]*. See **Attachment E** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

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

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

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

The Department may require that routine 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.

### K. MONITORING AND REPORTING

#### Electronic Reporting

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

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

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

## **SPECIAL CONDITIONS**

### **L. REOPENING OF PERMIT FOR MODIFICATION**

In accordance with 38 M.R.S. § 414-A(5) and upon evaluation of the tests results or monitoring requirements specified in 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 limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded, (2) require additional monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

### **M. SEVERABILITY**

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

# MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

## CSO ACTIVITY AND VOLUMES

MUNICIPALITY OR DISTRICT				MEPDES / NPDES PERMIT NO. SIGNED BY: DATE:							
REPORTING YEAR											
YEARLY TOTAL PRECIPITATION INCHES											
CSO EVENT NO.	START DATE OF STORM	PRECIP. DATA		FLOW DATA (GALLONS PER DAY) OR BLOCK ACTIVITY("1")							
		TOTAL INCHES	MAX. HR. INCHES	LOCATION:	LOCATION:	LOCATION:	LOCATION:	LOCATION:	LOCATION:	EVENT OVERFLOW GALLONS	EVENT DURATION HRS
				NUMBER:	NUMBER:	NUMBER:	NUMBER:	NUMBER:	NUMBER:		
1											
2											
3											
4											
5											
6											
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24											
25											
TOTALS											

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  
MAINE WASTE DISCHARGE LICENSE**

**FACT SHEET**

DATE: **February 20, 2025**

PERMIT NUMBER: **ME0102466**

WASTE DISCHARGE LICENSE: **W002590-6C-J-R**

NAME AND ADDRESS OF APPLICANT:  
**TOWN OF BAR HARBOR  
BAR HARBOR WASTEWATER DIVISION  
136 LEDGELAWN AVENUE  
BAR HARBOR, MAINE 04609**

COUNTY: **HANCOCK**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):  
**HULLS COVE PLANT  
36 CROOKED RD  
BAR HARBOR MAINE, 04609**

RECEIVING WATER CLASSIFICATION: **FRENCHMAN BAY/CLASS SB**

COGNIZANT OFFICIAL CONTACT INFORMATION:  
**TONY GRIFFIN  
BAR HARBOR WASTEWATER DIVISION  
(207) 288-4028  
e-mail: [tgriffin@barharbormail.org](mailto:tgriffin@barharbormail.org)**

## 1. APPLICATION SUMMARY

- a. Application: On October 15, 2020, the Department of Environmental Protection (Department) accepted as complete for processing, a renewal application from the Town of Bar Harbor (Town/permittee) for a Maine Pollutant Discharge Elimination System (MEPDES) ME0102466/Waste Discharge License (WDL) W0002590-6C-I-R, which was issued on October 13, 2015, for a five-year term. The 10/13/15 MEPDES permit authorized the monthly average discharge of up to 0.15 MGD (million gallons per day) of secondary treated sanitary wastewater from the Town's Hull's Cove Plant, and an unspecified quantity of excess combined sanitary and stormwater during wet weather events from one (1) combined sewer overflow (CSO) outfalls to the Atlantic Ocean at Frenchman Bay, Class SB, in Bar Harbor, Maine.
- b. Source Description: The Town's three wastewater treatment facilities receive wastewater generated by residential and commercial users (approximately 1,450 customer accounts on approximately 1,380 lots) located within the Town of Bar Harbor. The Town does not have specific information as to the exact number of customers connected to each of the three treatment systems. The Hulls Cove facility receives wastewater generated by residential and commercial customers located in the Hulls Cove area of Bar Harbor (Crooked Road, State Route 3 along Hulls Cove, and Dewey Street). There are no significant industrial facilities discharging to the system. The collection system for Hulls Cove is approximately 1.2 miles in length and contains four (4) pump stations, the main pump station located on Route 3 adjacent to Hulls Cove and which is equipped with emergency back-up power source. There are 3 minor pump stations serving the public works building, Whitcomb Lane, and Ocean Avenue, respectively. The collection system also contains one (1) combined sewer overflow (CSO) outfall, which is located at the intersection of Route #3 and Beaver Dam Road and is referred to as Outfall #008. The Town completed a facility upgrade in November 2000, which increased the capacity of the facility to 0.150 MGD. The previous permitting action identified that the Town treats leachate from an on-site sludge composting facility, however, the Town has identified that the sludge composting and leachate collection systems are not currently in use. The Town maintains the composting facility and may resume use for the purpose of composting vegetation (leaves, lawn clippings, etc.) and collecting leachate within the effective term of this permit. If the Town resumes use of the composting facility, leachate generated by compost piles will be collected and introduced into the treatment system for full secondary treatment. **See Fact Sheet Attachment A** for a map detailing the location of the facility and its outfall.
- c. Wastewater Treatment: The Town's Hulls Cove Plant provides a secondary level of wastewater treatment via a conventional activated sludge treatment process. The treatment process includes a headworks with influent grinder and bypass channel with bar screen from which wastewater flows to a modified oxidation ditch with two (2) rotor aerators. Flow from the oxidation ditch is then equally distributed to two (2) 16-foot diameter by 12-foot-deep circular secondary clarifiers before continuing to a 165-foot long by 3-foot-wide foot by 3-foot deep chlorine contact chamber for disinfection using sodium hypochlorite, and ascorbic acid for dechlorination. Final effluent is conveyed for discharge to Frenchman Bay (Atlantic Ocean) via an 8-inch diameter outfall pipe that extends out into the receiving water approximately 1,240 linear feet to a depth of approximately 8.75 feet below the surface of the water at mean low tide. Sludge generated at the Hulls Cove facility is transported to the Town's Main Plant and introduced into the facility's sludge digester.

A process flow schematic of the Hulls Cove Plant is included as **Fact Sheet Attachment B**.

## 2. PERMIT SUMMARY

- a. Terms and Conditions: This permitting action is carrying forward all the terms and conditions of the previous permitting action and it is:
1. Establishing a seasonal monitoring requirement for Enterococci bacteria from April 15<sup>th</sup> – October 31<sup>st</sup>, as well as establishing monthly average and daily maximum limits of 8 CFU or MPN/100 mL and 54 CFU or MPN/100 mL, respectively.
  2. Establishing year-round monitoring and reporting requirement for Fecal coliform limits from a monthly average of 15 CFU/100 mL and a daily maximum of 50 CFU/100 mL to 14 CFU or MPN/100 mL and 31 CFU or MPN/100 mL, in order to be consistent with the U.S. Food and Drug Administration's National Shellfish Sanitation Program.
  3. Eliminating the provision that allows the percent removal for Biological Oxygen Demand (BOD<sub>5</sub>) and Total Suspended Solids (TSS) to be waived when the monthly average influent concentration is less than 200 mg/L.
  4. Establishing Special Condition A, *Monitoring and Reporting Requirements*, Footnote 2, 2/month sampling.
  5. Revising Special Condition C, *Treatment Plant Operator*, to require the person who has the management responsibility over the treatment facility to hold a Maine Grade III certificate or higher.
- b. History: This section provides a summary of significant licensing actions and milestones that have been completed for the Town of Bar Harbor:

*June 12, 1990* – The Department issued WDL #W002591-46-C-R to the Town for separate discharges from three wastewater treatment facilities (Hulls Cove Plant, Main Plant, and DeGregoire Park Plant). As a matter of convenience and expedience, the Department combined the licensing of the three facilities into the one document.

*July 18, 1990* – The Natural Resources Council of Maine (NRCM) filed an appeal with the Board of Environmental Protection (Board) of the June 12, 1990, WDL.

*February 10, 1993* – The Department issued revised WDL #W002591-46-C-Z to the Town based on a settlement of the appeal filed by NRCM on July 18, 1990. The license was modified to contain requirements for the Town to conduct toxicity testing of wastewater discharges, work to eliminate combined sewer overflows (CSOs) at the Main and Hulls Cove facilities, and to eliminate the discharge of chlorine in toxic amounts via construction/reconfiguration of outfall structures that provide adequate dilution for the flows discharged.

*May 18, 1993* – The USEPA issued NPDES permit #ME0102695 to the Town for the discharges from the Main Plant, Hulls Cove Plant and DeGregoire Park facilities. The May 18, 1993, permit superseded previous NPDES permits issued to the Town for the three facilities. See Page 1 of 11 of the May 18, 1993, permit for a complete listing of NPDES permit numbers



## 2. PERMIT SUMMARY (cont'd)

and their associated effective dates.

*November 3, 1997* – The Department issued a letter to the Town, thereby administratively modifying the February 10, 1993, WDL, to establish a monthly average concentration limit of 15 colonies/100 ml and to revise the daily maximum concentration limit from 15 colonies/100 ml to 50 colonies/100 ml for fecal coliform bacteria.

*December 14, 2000* – The Department issued WDL #W002590-5L-D-R to the Town for the discharge from the Hulls Cove Plant. It is noted the Town's Main and DeGregoire Park wastewater treatment facilities were licensed independently.

*July 10, 2000* – Pursuant to, 38 M.R.S. §420 and §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 # W002591-46-C-Z by establishing interim monthly average and daily maximum effluent concentration limits of 24.4 parts per trillion (ppt) and 36.6 ppt, respectively, and a minimum monitoring frequency requirement of 2 tests per year for mercury.

*January 12, 2001* – The Department received authorization from the USEPA to administer the NPDES program in Maine.

*June 18, 2001* – The Town submitted an application to the Department to modify the December 14, 2000, WDL for the Hulls Cove Plant to incorporate the terms and conditions of the MEPDES program.

*August 28, 2001* – The Department issued WDL #W002590-5L-E-M / MEPDES permit #ME0102466 to the Town for the monthly average discharge of up to 0.150 MGD from the Hulls Cove Plant to Frenchman Bay of the Atlantic Ocean. The August 28, 2001, WDL Modification/MEPDES permit superseded the December 14, 2000, WDL.

*November 21, 2005* – The Department issued MEPDES permit #ME0102466/WDL #W002590-5L-F-R for a five-year term.

*April 21, 2010* – The Department and the Town entered into a Consent Agreement pertaining to overflows at the Hulls Cove Pump Station.

*September 2, 2010* - The Department issued MEPDES permit #ME0102466/WDL #W002590-6C-G-R for a five-year term.

*February 6, 2012* – The Department Issued a Minor Revision MEPDES #ME0102466/WDL #W002590-6C-H-M to MEPDES permit #ME0102466/WDL #W002590-6C-G-R originally issued September 2, 2010, reducing the monitoring frequency of Mercury from 2/YR to 1/YR.

## 2. PERMIT SUMMARY (cont'd)

*May 29, 2015* – The Town submitted a timely and complete application to the Department to renew MEPDES permit #ME0102466/WDL#W002590-6C-G-R.

*October 13, 2015* – The Department issued WDL W002591-6D-I-R/MEPDES permit #ME0101466 for five-year term.

*October 6, 2020* – The Town submitted a timely and complete application to the Department for the renewal of the October 13, 2015, WDL/permit W002591-6C-I-R/ME0102466 that was issued for a five-year term.

## 3. CONDITIONS OF PERMIT

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

## 4. RECEIVING WATER QUALITY STANDARDS

*Classification of estuarine and marine waters*, 38 M.R.S. § 469 (2) classifies “All estuarine and marine waters lying within the boundaries of Hancock County and that are not otherwise classified are Class SB waters.” This includes the point of discharge into Frenchmen’s Bay. *Standards for classification of estuarine and marine waters*, 38 M.R.S. § 465-B(2) describes the standards for classification of Class SB waterways as follows:

- A. Class SB waters must be of such quality that they are suitable for the designated uses of recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation and as habitat for fish and other estuarine and marine life. The habitat must be characterized as unimpaired.
- B. Class SB waters must be of sufficient quality to support all estuarine and marine species indigenous to those waters without detrimental changes in the resident biological community. The dissolved oxygen content of Class SB waters may not be less than 85% of saturation. Between April 15th and October 31st, the number of enterococcus bacteria in these waters may not exceed a geometric mean of 8 CFU or MPN per 100 milliliters in any 90-day interval or 54 CFU or MPN per 100 milliliters in more than 10% of the samples in any 90-day interval. The number of total coliform bacteria or other specified indicator organisms in samples representative of the waters in shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish Sanitation Program, United States Food and Drug

#### 4. RECEIVING WATER QUALITY STANDARDS (cont'd)

Administration as set forth in its publication "Guide for the Control of Molluscan Shellfish" (2019 revision) or any successor publication.

- C. Discharges to Class SB waters may not cause adverse impact to estuarine and marine life in that the receiving waters must be of sufficient quality to support all estuarine and marine species indigenous to the receiving water without detrimental changes in the resident biological community. There may be no new discharge to Class SB waters that would cause closure of open shellfish areas by the Department of Marine Resources. 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 estuarine and marine 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 paragraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website.

#### 5. REASONABLE POTENTIAL

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

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

#### 6. RECEIVING WATER QUALITY CONDITIONS

*The State of Maine Department of Environmental Protection 2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report*, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists marine waters at the permittee’s outfall (ME010500021410\_SB1\_E) as “Category 4-A: Estuarine and Marine Waters with Impaired Shellfish Harvesting Designated Use– TMDL Completed (Bacteria from Combined Sewer Overflows).”

The Maine Department of Marine Resources (MEDMR) closes shellfish harvesting areas if there are known sources of discharges with unacceptable bacteria levels (thresholds established in the National Shellfish Sanitation Program) or maintains shellfish harvesting closure areas due to lack of updated information regarding ambient water quality conditions and current shoreline surveys. In addition, the

## 6. RECEIVING WATER QUALITY CONDITIONS (cont'd)

MEDMR prohibits shellfish harvesting in the immediate vicinity of all wastewater treatment outfall pipes as a precautionary measure in the event of a failure in the treatment plant's disinfection system.

Thus, shellfish Growing Area EI, section P10 is closed to the harvesting of shellfish due to the location of the Town's wastewater treatment plant outfall. The Maine Department of Marine Resources Growing Area EI map can be found at <https://www.maine.gov/dmr/shellfish-sanitation-management/closures/index.html>

Category 5-D: *Estuarine and Marine Waters Impaired by Legacy Pollutants*. All estuarine and marine waters capable of supporting American lobster are listed in Category 5-D, partially supporting fishing ("shellfish" consumption) due to elevated levels of polychlorinated biphenyls (PCBs) and other persistent, bioaccumulating substances in lobster tomalley.

## 7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- a. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limit of 0.150 million gallons per day (MGD) based on the design capacity of the treatment facility, a daily maximum discharge flow reporting requirement and a "continuous recorder" minimum monitoring frequency requirement.

The Department reviewed data from Discharge Monitoring Reports (DMRs) that were submitted for the period July 2019 – July 2024. A review of the data indicates the following:

### Flow (n=58)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	0.150	0.03–0.11	0.06
Daily Maximum	Report	0.04–0.48	0.18

- b. Dilution Factors:

06-096 C.M.R. Ch. 530 § 4(A)(2)(a), regarding Water Quality Based limits, states that, "*For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model.*" With a permitted flow limitation of 0.150 MGD and the location and configuration of the outfall structure, the Department has established dilution factors as follows:

Acute = 27:1

Chronic = 478:1

Harmonic mean<sup>1</sup> = 1,434:1

Mean far-field dilution factor<sup>2</sup> = 3,330:1

<sup>1</sup> The harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3). This multiplying factor is based on guidelines for estimation of human health dilution presented in the U.S. EPA publication, "*Technical Support Document for Water Quality-Based Toxics Control*" (Office of Water; EPA/505/2-90-001, page 88). <sup>2</sup> The far-field dilution factor is a "lower-bound" estimate derived from WASP modeling of the cove's volume landward of a nearshore, submerged ledge.

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

- c. Biochemical Oxygen Demand (BOD<sub>5</sub>) and Total Suspended Solids (TSS): The previous permitting action established, and this permitting action is carrying forward, monthly average and weekly average technology-based effluent limits of 30 mg/L and 45 mg/L, respectively, for BOD<sub>5</sub> and TSS pursuant to the secondary treatment regulation at 40 C.F.R. § 133.102 and 06-096 C.M.R. Ch. 525 § 3(III). The previous permit also established the daily maximum effluent limit of 50 mg/L for both BOD<sub>5</sub> and TSS based on a Department best professional judgment of best practicable treatment for secondary treated wastewater.

As for mass limitations, the previous permitting action established monthly average, weekly average and daily maximum mass limitations that are being carried forward in this permitting action and are based on a monthly average flow of 0.150 MGD. The mass limits were derived as follows:

Monthly Average Mass Limit: (30 mg/L)(8.34 lbs/gallon)(0.150 MGD) = 38 lbs./day  
Weekly Average Mass Limit: (45 mg/L)(8.34 lbs/gallon)(0.150 MGD) = 56 lbs./day  
Daily Maximum Mass Limit: (50 mg/L)(8.34 lbs/gallon)(0.150 MGD) = 62 lbs./day

The Department reviewed DMR data that was submitted for the period July 2019 – July 2024. A review of the data indicates the following:

**BOD<sub>5</sub> mass (n=58)**

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	38	0.5 – 8.2	2.7
Weekly Average	56	0.5 – 14.0	3.5
Daily Maximum	62	0.5 – 14.0	3.5

**BOD<sub>5</sub> concentration (n= 58)**

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	3.0 – 11	5.2
Weekly Average	45	3.0 – 12	6.03
Daily Maximum	50	3.0 – 12	6.03

**TSS mass (n=58)**

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	38	0.7 – 9.1	2.7
Weekly Average	56	0.9 – 14.0	3.6
Daily Maximum	62	0.9 – 14.0	3.6

**TSS concentration (n=58)**

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	3.0 – 8.5	5.4
Weekly Average	45	3.0 – 11.0	6.3
Daily Maximum	50	3.0 – 11.0	6.3

The previous permitting action established, and this permitting action is carrying forward a 2/month monitoring frequency for BOD<sub>5</sub> and TSS.

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

- d. Settleable Solids: The previous permitting action established, and this permitting action is carrying forward a daily maximum technology limit of 0.3 ml/L for settleable solids, which is considered by the Department as a best professional judgment of best practicable control technology available (BPT) for secondary treated wastewater, along with a minimum monitoring frequency requirement of 3/Week.

The Department reviewed DMR data that was submitted for the period July 2019 – July 2024. A review of the data indicates the following:

### Settleable solids concentration (n=58)

Value	Limit (ml/L)	Range (ml/L)	Average (ml/L)
Daily Maximum	0.3	<0.1 – 0.1	<0.1

- e. Percent Removal: This permitting action is carrying forward a requirement for secondary treatment, a minimum of 85% removal of BOD<sub>5</sub> and TSS concentration as required by 06-096 C.M.R. Ch. 525 § 3(III)(a)(3) and (b)(3) of the Department's rules.

The Department reviewed data from 58 DMRs that were submitted for the period July 2019 – July 2024. A review of the data indicates the following:

### BOD % Removal (n=58)

Value	Limit %	Range %	Mean %
Monthly Average	85	91-98	95

### TSS % Removal (n=58)

Value	Limit %	Range %	Mean %
Monthly Average	85	88-98	94

- f. Fecal Coliform Bacteria: The previous permitting action established seasonal monthly average and daily maximum concentration limits of 15 colonies/100 ml and 50 colonies/100 ml, for fecal coliform bacteria. In order to be consistent with the U.S. Food and Drug Administration's National Shellfish Sanitation Program, this permitting action is establishing a year-round, beginning November 1<sup>st</sup> 2025, monthly average and daily maximum concentration limits of 14 CFU or MPN/100 ml and 31 CFU or MPN/100 ml, respectively, for fecal coliform bacteria.

The Department reviewed DMR data that was submitted for the period July 2019 – July 2024. A review of the data indicates the following:

### Fecal coliform bacteria (n= 23)

Value	Limit (col/100 mL)	Range (col/100 mL)	Mean (col/100 mL)
Monthly Average	15	0.0 – 11	4.05
Daily Maximum	50	0.0 – 17	5.96

The previous permitting action established, and this permit is carrying forward a minimum monitoring frequency for fecal coliform bacterial of (2/Month) based on the Department best professional judgment (BPJ).

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

- g. Enterococcus Bacteria: This permitting action is establishing a seasonal monthly average and daily maximum concentration limits of 8 CFU or MPN/100 mL and 54 CFU or MPN/100 mL. Monitoring and reporting requirements for enterococcus bacteria are based on current Maine criteria. In addition to fecal coliform limits to protect the designated use of “propagation and harvesting of shellfish”, it is appropriate to require end-of-pipe limits for enterococcus bacteria, based on current Maine criteria, to protect the designated use of “recreation in and on the water” on a seasonal basis. The seasonal reporting period will be from April 15<sup>th</sup> through October 31<sup>st</sup>. A 2/Month monitoring requirement is also being established in this permitting action.
- h. Total Residual Chlorine (TRC): The previous permitting action established water quality-based monthly average and maximum concentration limits of 0.3 mg/L along with a minimum monitoring frequency requirement of 5/Week for TRC. The Department has established a daily maximum BPT limitation of 0.3 mg/L for facilities that need to dechlorinate their effluent unless calculated water quality-based limits are lower than 0.3 mg/L. In the case of the Town, the calculated acute (daily maximum) water quality-based threshold of 0.35 mg/L which is higher than the BPT limit of 0.3 mg/L, thus the technology-based limit of 0.3 mg/L is imposed. For the monthly average, the calculated chronic water quality-based threshold of 3.6 mg/L is higher than the BPT limit of 0.1 mg/L, thus the BPT limit of 0.1 mg/L is imposed. With dilution factors as determined above, end-of-pipe water quality-based concentration thresholds for TRC may be calculated as follows:

Acute Criterion (A)	Chronic Criterion (C)	A&C Dilution Factors	Calculated Acute Threshold	Calculated Chronic Threshold
0.013 mg/L	0.0075 mg/L	27:1 (A) 478:1 (C)	0.35 mg/L	3.6 mg/L

The Department reviewed DMR data that was submitted for the period July 2019 – July 2024. A review of the data indicates the following:

### Total residual chlorine (n=26)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	0.1	0.0 – 0.05	0.03
Daily Maximum	0.3	0.0 – 0.30	0.107

- i. pH: The previous permitting action established, and this permitting action is carrying forward, a technology-based pH limit of 6.0 – 9.0 standard units (SU), which is based on 06-096 C.M.R. Ch. 525 § 3(III)(c) and a minimum monitoring frequency requirement of 1/day.

### pH (n=58)

Value	Limit (SU)	Minimum (SU)	Maximum (SU)
Range	6.0 – 9.0	6.0	8.1

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

- j. Mercury: Pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and *Waste Discharge Licenses*, 38 M.R.S. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 C.M.R. Ch. 519 (last amended October 6, 2001), the Department issued an interim average and daily maximum effluent concentration limits of 24.4 parts per trillion (ppt) and 36.6 ppt, respectively, and a minimum monitoring frequency requirement of two (2) tests per year for mercury. 38 M.R.S. § 420(1-B)(B)(1) provides that a facility is not in violation of the Ambient Water Quality Criteria (AWQC) for mercury if the facility is in compliance with an interim discharge limit established by the Department.

A review of the Department's database for the period December 1999 – July 2024 indicates the results have been reported as follows:

**Mercury (n=34)**

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Monthly Average	24.4	0.60 – 20.0	3.07
Daily Maximum	36.6		

This permitting action is carrying forward the 1/Year monitoring frequency established in the February 6, 2012, permit modification.

- k. Nitrogen:

The USEPA requested the Department evaluate the reasonable potential for the discharge of total nitrogen to cause or contribute to non-attainment of applicable water quality standards in estuarine and marine waters, namely dissolved oxygen (DO) and aquatic life support. The permittee voluntarily participated in a Department-coordinated project to determine typical effluent nitrogen concentrations, and submitted monthly composite samples from June-October, 2015 (n = 5). The mean value of the permittee's five samples was 15.3 mg/L. For this reasonable potential evaluation and in the absence of knowledge of operational changes occurring since 2015 that would alter the treatment efficacy for nitrogen, the Department considers 15.3 mg/L to be representative of total nitrogen discharge concentration from the Bar Harbor Hulls Cove facility.

As of the date of this permitting action, the State of Maine has not promulgated numeric ambient water quality criteria for total nitrogen. According to several studies in USEPA's Region 1, numeric total nitrogen criteria have been established for relatively few estuarine and marine receiving waters, but the criteria that have been set typically fall between 0.35 mg/L and 0.50 mg/L to protect estuarine and marine life using dissolved oxygen as the indicator. While the thresholds are site-specific, nitrogen thresholds set for the protection of eelgrass habitat range from 0.30 mg/L to 0.39 mg/L. Based on studies in USEPA's Region 1 and the Department's best professional judgment of thresholds that are protective of Maine water quality standards, the Department is utilizing a threshold of 0.45 mg/L for the protection of aquatic life in estuarine and marine waters using dissolved oxygen as the indicator, and 0.32 mg/L for the protection of aquatic life using eelgrass as the indicator.

Two known surveys have been completed along the Bar Harbor shoreline that specifically documented presence/absence of eelgrass. The 1996 and 2008 surveys were conducted by the ME Department of Marine Resources, and mapped three small beds within Hulls Cove, the closest of which is 0.1 km to the discharge point and 0.37 ha in size. The mapped eelgrass bed shifted during



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

the 2008 survey was documented as approximately 7.43 ha in size and 0.1 km from the discharge point. Given the historic mapped presence of eelgrass in proximity to the outfall, the use of 0.32 mg/L as a total nitrogen threshold value for protection of eelgrass is appropriate for this receiving water.

Except for ammonia, nitrogen is not toxic to aquatic life. Therefore, the department considers far-field dilution to be more appropriate when evaluating impacts of total nitrogen to marine receiving waters. Hulls Cove is a shallow embayment partially bounded seaward by a submerged ledge. The Hulls Cove wastewater outfall is located eight feet below mean lower low water and the effluent plume evolves towards the surface. For these conditions, the far-field mixing volume is taken to be outfall-to-surface vertical mixing within a 125-acre, nearshore area. Using a WASP model for this area's bathymetry, tidal range, and effluent re-entrainment potential, the department's Division of Environmental Assessment estimates a mean dilution factor of 3,330:1 for the license discharge limit of 0.15 MGD. Using this dilution factor, the increase in the ambient total nitrogen concentration due to the permittee's effluent discharge is as follows:

TN concentration in effluent = 15.3 mg/L

Mean far-field dilution factor = 3,330:1

TN concentration increase after far-field dilution:  $\frac{15.3 \text{ mg/L}}{3,330} = 0.005 \text{ mg/L}$

The Department and external partners have been collecting ambient total nitrogen data along Maine's coast. For the permittee's facility in the 2016 permit, the Department calculated a mean background concentration of 0.22 mg/L based on ambient surface water data collected in 2009 and 2010 from exposed embayments ranging from Penobscot Bay in the west through Narraguagus Bay in the east. For this 2024 permit, the Department has revised the mean background concentration based on new National Coastal Condition Assessment data from 2015 and 2020 and has only used data from Frenchman Bay to best characterize receiving water condition. Given this reassessment of the available total nitrogen data, the calculated median surface water total nitrogen concentration of 0.17 (n=6) will be used for the current permit.

Using the calculated ambient TN concentration for Frenchman Bay, the resultant total nitrogen concentration in Hulls Cove after a reasonable opportunity for mixing of the effluent in the far-field is  $0.17 \text{ mg/L} + 0.005 \text{ mg/L} = 0.175 \text{ mg/L}$ . This concentration value of 0.175 mg/L is less than the department and USEPA's total nitrogen threshold of 0.32 mg/L for the protection of aquatic life using eelgrass as an indicator. Given the reasonable potential calculations above and the absence of any information that the receiving water is not attaining standards, the department is making a best professional judgment determination that the discharge of total nitrogen from the Town of Bar Harbor's Hulls Cove facility does not exhibit a reasonable potential to exceed applicable water quality standards for Class SB waters. This permitting action is not establishing any discharge limitations or monitoring requirements for total nitrogen.

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

1. Whole Effluent Toxicity (WET) and Chemical-Specific 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 mysid shrimp (*Americamysis bahia*) and the sea urchin (*Arbacia punctulata*). Chemical-specific monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria. Priority pollutant testing refers to the analysis for levels of priority pollutants listed under "Priority Pollutants" on the form on the form found at:

[https://www.maine.gov/dep/water/wd/municipal\\_industrial/index.html](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 City 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 discharges subject to the toxics rule into one of four levels (Level I through IV). The four categories for dischargers are as follows:

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

Based on the 06-096 C.M.R. Ch. 530 criteria, the permittee's facility falls into Level III frequency category as the facility has a chronic dilution factor of  $\geq 100:1$  but <500:1. 06-096 C.M.R. Ch. 530 § 2(D)(1) specifies that routine screening and surveillance level testing requirements are as follows:

**7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)****Screening level testing**

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

**Surveillance level testing**

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

m. Whole Effluent Toxicity (WET) Evaluation: 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 must 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 July 15, 2024, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department for the City in accordance with the statistical approach outlined above. July 15, 2024, statistical evaluation indicates that none of the results had a reasonable potential to exceed the chronic or acute ambient water quality threshold. See **Attachment C** of this Fact Sheet for a summary of the WET test results.

Based on the provisions of 06-096 C.M.R. Ch. 530 § 2(D)(3)(b) and Department best professional judgment, this permitting action is waiving surveillance level WET testing requirements for this facility. Special Condition J. Statement for Reduced/Waived Toxics Testing of this Permit explains the statement required by the discharger to reduce WET testing.

n. Chemical Specific Evaluation:

06-096 C.M.R. Ch. 530 § 4(C), states “The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions. The Department shall use the same general methods as those in section 4(D) to determine background

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

*concentrations. For pollutants not listed by the Department, an assumed concentration of 10% of the applicable water quality criteria must be used in calculations.”* The Department has no information on the background levels of metals in the water column in Frenchman’s Bay in the vicinity of the permittee’s outfall. Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

06-096 C.M.R. Ch. 530 § 4(E), states *“In allocating assimilative capacity for toxic pollutants, the Department shall hold a portion of the total capacity in an unallocated reserve to allow for new or changed discharges and non-point source contributions. The unallocated reserve must be reviewed and restored as necessary at intervals of not more than five years. The water quality reserve must be not less than 15% of the total assimilative quantity.”*

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

On July 15, 2024, the Department conducted a statistical evaluation on the chemical specific test results submitted to the Department for the last 60 months. Report 1443 indicates the discharge does not have any test results that exceed or have a reasonable potential to exceed applicable AWQC for any of the chemical specific parameters. The reports generated during the Department’s statistical evaluation are maintained in the permit record for the facility. See Fact Sheet **Attachment D** for a list of the chemical specific test results.

As a result, the permittee qualifies for waived surveillance level testing in accordance with 06-096 C.M.R. Ch. 530 § D(3)(b). Special Condition J, Statement for Reduced/Waived Toxics Testing, of this Permit explains the statement required by the discharger to reduce analytical chemistry testing. This permitting action is establishing screening level testing of 4 tests per screening year and waives surveillance level testing.

## 8. COMBINED SEWER OVERFLOWS

This permit does not contain effluent limitations on the individual CSO outfall listed in the table below. However, CSO discharges are tracked in the permittee’s CSO Master Plan update.

<b><u>Outfall #</u></b>	<b><u>Outfall Location</u></b>	<b><u>Receiving Water and Class</u></b>
008	Beaver Dam Road	Frenchman Bay, SB

06-096 C.M.R. Ch. 570, *“Combined Sewer Overflow Abatement,”* 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., section 414-A(1)(D) may be met by agreement with the discharger, as a condition of its permit, through development of a plan within a time period specified by the Department. The Town submitted to the Department a CSO Master Plan entitled, *Updated Master Plan For CSO Abatement, The Town of Bar Harbor, Maine January 2021.*

The Town 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 water. Special Condition I, *Conditions For Combined Sewer Overflows*, of this permit contains a schedule of compliance for items in the most current up-to-date abatement plan which must be completed.

## **8. COMBINED SEWER OVERFLOWS (cont'd)**

The Department acknowledges that the elimination of the remaining CSO in the collection system is a costly, long-term project. As the Town of Bar Harbor Hull's Cove treatment facility and the sewer collection system are upgraded and maintained in accordance to the CSO Master Plan and Nine Minimum Controls, there should be reductions in the frequency and volume of CSO activities 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(l) contains the criteria for what is often referred to as the anti-backsliding provisions of the Federal Water Pollution Control Act (Clean Water Act). In general, the regulation states that except for provisions specified in the regulation, effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards or conditions in the previous permit. Applicable exceptions include: (1) material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation and (2) information is available which was not available at the time of the permit issuance (other than revised regulations, guidance, or test methods) and which would justify the application of less stringent effluent limitations at the time of permit issuance. All limitations in this permit are equally or more stringent than those in the previous permit.

## **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 water bodies to meet standards for Class SB classification.

## **11. PUBLIC COMMENTS**

Public notice of this application was made in the *Mount Desert Islander* newspaper on or about September 29, 2020. 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  
Bureau of Water Quality  
Department of Environmental Protection  
17 State House Station  
Augusta, Maine 04333-0017 Telephone: (207) 592-6871  
e-mail: [Benjamin.S.Pendleton@maine.gov](mailto:Benjamin.S.Pendleton@maine.gov)

### **13. RESPONSE TO COMMENTS**

*This space left blank until end of comment period.*

## **FACT SHEET ATTACHMENT A**



Hulls Cove

BAR HARBOR WWTF HULLS COVE FACILITY

008

Hulls  
Cove

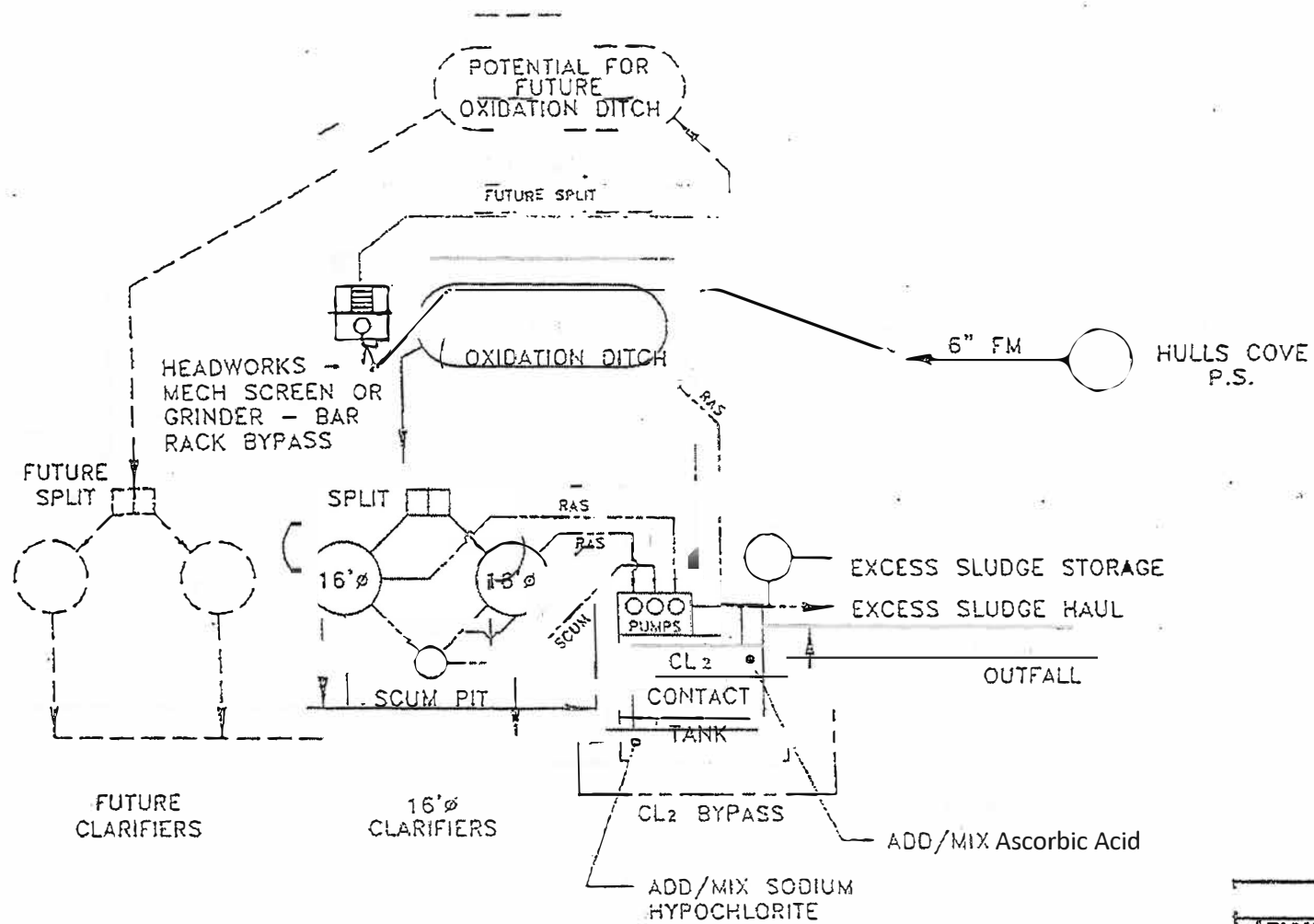
001

Fawn  
Pond

Peakneck Brook



## **FACT SHEET ATTACHMENT B**



NOT TO SCALE

FIGURE 5-1  
PROPOSED UPGRADES  
SCHEMATIC FLOW DIAGRAM  
HULLS COVE WWTW  
BAR HARBOR, MAINE

**EER** Environmental Engineering & Remediation, Inc.

222 St. John Street, Suite 714 Portland, Maine 04102

File: E:\437\FG\_5-1r

## **FACT SHEET ATTACHMENT C**

# FACILITY WET EVALUATION REPORT



**Facility:** BAR HARBOR WWTP (HULLS COVE)

**Permit Number:** ME0102466

**Report Date:** 7/15/2024

**Receiving Water:** ATLANTIC OCEAN

**Rapidmix:** Y

**Dilution Factors:** 1/4 Acute: N/A

Acute: 27.000

Chronic: 478

**Effluent Limits:** Acute (%): 3.704

Chronic (%): 0.209

**Date range for Evaluation: From**

15/Jul/2019

**To:** 15/Jul/2024

**Test Type:** A\_NOEL

**Test Species:** MYSID SHRIMP

**Test Date**  
10/17/2023

**Result (%)**  
100.000

**Status**  
OK

**Species Summary:**

**Test Number:** 1

**RP:** 6.200

**Min Result (%):** 100.000

**RP factor (%):** 16.129

**Status:** OK

**Test Type:** C\_NOEL

**Test Species:** SEA URCHIN

**Test Date**  
10/17/2023

**Result (%)**  
25.000

**Status**  
OK

**Species Summary:**

**Test Number:** 1

**RP:** 6.200

**Min Result (%):** 25.000

**RP factor (%):** 4.032

**Status:** OK

## **FACT SHEET ATTACHMENT D**

## CHEMICAL TEST REPORT

Data entered into Toxscan for the period

15/Jul/2019 - 15/Jul/2024

Facility Name: **BAR HARBOR WWTP (HULLS COVE)**

Permit Number: ME0102466

**ALUMINUM**

Test Date	Result (ug/l)	Lsthan	Status
08/27/2019	48.000	N	
10/08/2019	15.000	N	
10/17/2023	71.540	N	

**AMMONIA**

Test Date	Result (ug/l)	Lsthan	Status
10/17/2023	120.000	N	

**ARSENIC**

Test Date	Result (ug/l)	Lsthan	Status
10/17/2023	1.060	N	

**CADMIUM**

Test Date	Result (ug/l)	Lsthan	Status
10/08/2019	1.100	N	

**COPPER**

Test Date	Result (ug/l)	Lsthan	Status
08/27/2019	6.000	N	
10/08/2019	7.000	N	
10/17/2023	9.080	N	

**LEAD**

Test Date	Result (ug/l)	Lsthan	Status
10/17/2023	2.160	N	

**MERCURY**

Test Date	Result (ng/l)	Lsthan	Status
07/22/2020	2.630	N	
10/05/2021	0.704	N	
08/01/2022	0.500	N	
02/14/2023	0.643	N	

**PH**

Test Date	Result (ug/l)	Lsthan	Status
10/08/2019	8.300	N	
10/17/2023	7.140	N	

**SALINITY**

Test Date	Result (ug/l)	Lsthan	Status
10/17/2023	0.000	N	

**SILVER**

Test Date	Result (ug/l)	Lsthan	Status
10/08/2019	1.000	N	

**SOLIDS**

Test Date	Result (ug/l)	Lsthan	Status
10/17/2023	240000.000	N	

**TOTAL ORGANIC CARBON**

Test Date	Result (ug/l)	Lsthan	Status
10/17/2023	5910.000	N	

**TOTAL SUSPENDED SOLIDS**

	<b>Test Date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>	<b>Status</b>
	10/17/2023	2600.000	N	

**ZINC**

	<b>Test Date</b>	<b>Result (ug/l)</b>	<b>Lsthan</b>	<b>Status</b>
	08/27/2019	46.000	N	
	10/08/2019	50.000	N	
	10/17/2023	65.300	N	

## **FACT SHEET ATTACHMENT E**



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES# \_\_\_\_\_ Facility Name \_\_\_\_\_

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

COMMENTS:

Name (printed): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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

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

**Scheduled Toxicity Testing for the next calendar year**

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

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

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

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### 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).

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**7. Oil and hazardous substances.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under section 311 of the Federal Clean Water Act; section 106 of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980; or 38 MRSA §§ 1301, et. seq.

**8. Property rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.

**9. Confidentiality of records.** 38 MRSA §414(6) reads as follows. "Any records, reports or information obtained under this subchapter is available to the public, except that upon a showing satisfactory to the department by any person that any records, reports or information, or particular part or any record, report or information, other than the names and addresses of applicants, license applications, licenses, and effluent data, to which the department has access under this subchapter would, if made public, divulge methods or processes that are entitled to protection as trade secrets, these records, reports or information must be confidential and not available for public inspection or examination. Any records, reports or information may be disclosed to employees or authorized representatives of the State or the United States concerned with carrying out this subchapter or any applicable federal law, and to any party to a hearing held under this section on terms the commissioner may prescribe in order to protect these confidential records, reports and information, as long as this disclosure is material and relevant to any issue under consideration by the department."

**10. Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

**11. Other laws.** The issuance of this permit does not authorize any injury to persons or property or invasion of other property rights, nor does it relieve the permittee of its obligation to comply with other applicable Federal, State or local laws and regulations.

**12. Inspection and entry.** The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), upon presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

## **B. OPERATION AND MAINTENANCE OF FACILITIES**

### **1. General facility requirements.**

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

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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.**

- (a) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
  - (i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
  - (ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).
  - (iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
- (b) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Transfers. This permit is not transferable to any person except upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.
- (d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
  - (i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.
  - (ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.
  - (iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.
- (e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- (f) Twenty-four hour reporting.
  - (i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance



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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 contaminants and shall specify means of disposal and or treatment to be used.

**3. Removed substances.** Solids, sludges trash rack cleanings, filter backwash, or other pollutants removed from or resulting from the treatment or control of waste waters shall be disposed of in a manner approved by the Department.

**4. Connection to municipal sewer.** (applicable only to industrial and commercial sources) All wastewaters designated by the Department as treatable in a municipal treatment system will be cosigned to that system when it is available. This permit will expire 90 days after the municipal treatment facility becomes available, unless this time is extended by the Department in writing.

**F. DEFINITIONS.** For the purposes of this permit, the following definitions shall apply. Other definitions applicable to this permit may be found in Chapters 520 through 529 of the Department's rules

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

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

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

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

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

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

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

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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.

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**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.