



PAUL R. LEPAGE  
GOVERNOR

STATE OF MAINE  
DEPARTMENT OF  
ENVIRONMENTAL PROTECTION



PAUL MERCER  
COMMISSIONER

March 14, 2017

Mr. Thomas Connolly  
Town of Yarmouth  
200 Main Street  
Yarmouth, ME 04096  
[tconnolly@yarmouth.me.us](mailto:tconnolly@yarmouth.me.us)

*Sent via electronic mail  
Delivery confirmation requested*

**RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit # ME0102377  
Maine Waste Discharge License (WDL) Application # W002234-6B-H-R  
Proposed Draft MEPDES Permit Renewal**

Dear Thomas Connolly:

Enclosed 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 conditions (special conditions specific to this permit are enclosed; standard conditions applicable to all permits are available upon request). 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, as required by our new regulations, and from any other parties who have notified the Department of their interest in this matter.

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

All comments must be received in the Department of Environmental Protection office on or before the close of business **Thursday, April 13, 2017**. Failure to submit comments in a timely fashion will result in the final document being issued as drafted.

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

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

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

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

Thomas Connolly  
March 14, 2017  
Page 2 of 2

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

Maine Department of Environmental Protection  
Bureau of Water Quality  
Division of Water Quality Management  
17 State House Station  
Augusta, ME 04333-0017  
[Aaron.A.Dumont@maine](mailto:Aaron.A.Dumont@maine)

If you have any questions regarding the matter, please feel free to call me at (207)-592-7161.

Sincerely,



Aaron Dumont  
Division of Water Quality Management  
Bureau of Water Quality  
[Aaron.A.Dumont@maine.gov](mailto:Aaron.A.Dumont@maine.gov)  
Phone: 207-592-7161

Enclosure

cc: Matt Hight, DEP/SMRO  
Lori Mitchell, DEP/CMRO  
David Webster, EPA  
David Pincumbe, EPA  
Olga Vergara, EPA  
Marelyn Vega, EPA  
Richard Carvalho, EPA  
DMR Environmental Review  
IF&W Environmental Review  
Ivy Frignoca, Friends of Casco Bay  
Sean Mahoney, Conservation Law Foundation



DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF YARMOUTH	)	MAINE POLLUTANT DISCHARGE
YARMOUTH, CUMBERLAND COUNTY, ME	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
ME0102377	)	WASTE DISCHARGE LICENSE
W002234-6B-H-R	)	<b>RENEWAL</b>
<b>APPROVAL</b>	)	

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

**APPLICATION SUMMARY**

On June 21, 2016, the Department accepted as complete for processing, a renewal application from the Town for the renewal of Waste Discharge License (WDL) W002234-6B-E-R/Maine Pollutant Discharge Elimination System (MEPDES) permit ME0102377, which was issued on October 12, 2011, for a five-year term. The 10/12/11 MEPDES permit authorized the Town to discharge a monthly average of 0.028 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to Casco Bay, Class SB, in Yarmouth, Maine.

It is noted that the Department made two permit revisions since issuing the 10/12/11 permit. On August 13, 2012, the Department issued a minor permit revision to replace the monthly average and daily maximum technology based Total Residual Chlorine (TRC) limits of 0.1 mg/L and 0.3 mg/L with a daily maximum technology based concentration limit of 1.0 mg/L. On February 6, 2012, the permit was modified to reduce mercury monitoring requirements to once per year.

**PERMIT SUMMARY**

This permitting action is carrying forward all the terms and conditions of the previous permitting action except that this permitting action is:

1. Eliminating the waiver to achieve 85 percent removal of both biochemical oxygen demand and total suspended solids when the influent strength is less than 200 mg/L.

## CONCLUSIONS

Based on the findings summarized in the attached and incorporated **draft** Fact Sheet dated March 3, 2017, and subject to the special and standard conditions that follow, 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. Where the standards of classification of the receiving waterbody are not met, the discharge will not cause or contribute to the failure of the waterbody to meet the standards of classification;
  - d. Where the actual quality of any classified receiving waterbody exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
  - e. Where a discharge will result in lowering the existing water quality of any waterbody, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharges will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of licenses*, 38 M.R.S. § 414-A(1)(D).

**ACTION**

Based on the findings and conclusions as stated above, the Department APPROVES the above noted application of the Town of Yarmouth to discharge a monthly average of 0.028 MGD of secondary treated wastewater to Casco Bay, Class SB, in Yarmouth, 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 CMR 2(21)(A) (amended October 19, 2015)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
PAUL MERCER, Commissioner

Date filed with Board of Environmental Protection \_\_\_\_\_

Date of initial receipt of application: June 17, 2016

Date of application acceptance: June 21, 2016

This Order prepared by Aaron Dumont, BUREAU OF WATER QUALITY

**SPECIAL CONDITIONS****A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. The permittee is authorized to discharge **secondary treated municipal sanitary wastewater from Outfall #001** to Casco Bay, Class SB, in Yarmouth. Such discharges are limited and must be monitored by the permittee as specified below<sup>(1)</sup>:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	<u>Monthly Average</u> as specified	<u>Weekly Average</u> as specified	<u>Daily Maximum</u> as specified	<u>Monthly Average</u> as specified	<u>Weekly Average</u> as specified	<u>Daily Maximum</u> as specified	<u>Measurement Frequency</u> as specified	<u>Sample Type</u> as specified
<b>Flow</b> <i>[50050]</i>	0.028 MGD <i>[03]</i>	---	Report MGD <i>[03]</i>	---	---	---	Continuous <i>[99/99]</i>	Recorder <i>[RC]</i>
<b>BOD<sub>5</sub></b> <i>[00310]</i>	3.0 lbs./day <i>[26]</i>	4.5 lbs./day <i>[26]</i>	5.0 lbs./day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	1/Month <i>[01/30]</i>	Composite <i>[24]</i>
<b>BOD<sub>5</sub> Percent Removal<sup>(2)</sup></b> <i>[81010]</i>	---	---	---	85% <i>[23]</i>	---	---	1/Month <i>[01/30]</i>	Calculate <i>[CA]</i>
<b>TSS</b> <i>[00530]</i>	3.0 lbs./day <i>[26]</i>	4.5 lbs./day <i>[26]</i>	5.0 lbs./day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	1/Month <i>[01/30]</i>	Composite <i>[24]</i>
<b>TSS Percent Removal<sup>(2)</sup></b> <i>[81011]</i>	---	---	---	85% <i>[23]</i>	---	---	1/Month <i>[01/30]</i>	Calculate <i>[CA]</i>
<b>Settleable Solids</b> <i>[00545]</i>	---	---	---	---	---	0.3 ml/L <i>[25]</i>	1/Month <i>[01/30]</i>	Grab <i>[GR]</i>
<b>Fecal Coliform Bacteria<sup>(3)</sup></b> <i>[31616]</i>	---	---	---	15/100 ml <i>[13]</i>	---	50/100 ml <i>[13]</i>	1/Month <i>[02/07]</i>	Grab <i>[GR]</i>
<b>Total Residual Chlorine<sup>(4)</sup></b> <i>[00665]</i>	---	---	---	---	---	1.0 mg/L <i>[19]</i>	1/Week <i>[01/07]</i>	Grab <i>[GR]</i>
<b>Mercury (Total)<sup>(5)</sup></b> <i>[71900]</i>	---	---	---	8.1 ng/L <i>[3M]</i>	---	12.2 ng/L <i>[3M]</i>	1/Year <i>[01/YR]</i>	Grab <i>[GR]</i>
<b>pH</b> <i>[00400]</i>	---	---	---	---	---	6.0 – 9.0 SU <i>[12]</i>	1/Week <i>[01/07]</i>	Grab <i>[GR]</i>

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

**FOOTNOTES:** See Pages 5 - 6 of this permit for applicable footnotes.

## SPECIAL CONDITIONS

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

#### FOOTNOTES

- 1. Sampling** – Influent sampling must be conducted at the headworks building influent channel. Effluent sampling must be sampled at the end of the chlorine contact chamber but prior to the discharge pipe. Any change in sampling location must be approved by the Department in writing. The permittee must conduct sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for wastewater. Samples that are sent to a POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (effective April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR.
- 2. Percent Removal** – The permittee must achieve a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand for all flows receiving secondary treatment. The percent removal is calculated based on influent and effluent concentration values. For influent concentrations an assumed value of 300 mg/L will be used for total suspended solids and biochemical oxygen demand.
- 3. Bacteria Reporting** – The monthly average fecal coliform bacteria limitation is a geometric mean limitation and sample results must be reported as such. **Monitoring requirements are in effect year-round at the request of the Maine Department of Marine Resources in order to protect local shellfish resources near the outfall and to protect the health, safety and welfare of the public.**
- 4. Total residual chlorine (TRC)** – Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine based compounds are being used to disinfect the discharge. The permittee must utilize approved test methods that are capable of bracketing the limitations in this permit. For instances when a facility has not disinfected with chlorine-based compounds for an entire reporting period, the facility must report "N9" for this parameter on the monthly DMR
- 5. Mercury** – The permittee must conduct all mercury monitoring required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the 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*. See **Attachment A** of this permit for a Department report form for mercury test results. Compliance with the monthly average limitation established in Special Condition A of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Method 1669 and analysis Method 1631E on file with the Department for this facility.

## **SPECIAL CONDITIONS**

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

#### **FOOTNOTES**

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

### **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.

### **C. TREATMENT PLANT OPERATOR**

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



## **SPECIAL CONDITIONS**

### **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 CFR Part 403 (general pretreatment regulations) or *Pretreatment Program*, 06-096 CMR 528 (last amended March 17, 2008).

### **E. 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 June 21, 2016; 2) the terms and conditions of this permit; and 3) only from Outfall #001. 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.

### **F. NOTIFICATION REQUIREMENT**

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

1. Any introduction of pollutants into the wastewater collection and treatment system from an indirect discharger in a primary industrial category discharging process wastewater; and
2. Any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants 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

### G. 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.

### H. OPERATIONS AND MAINTENANCE PLAN

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

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

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

### I. REPORTING DISCHARGES NOT RECEIVING SECONDARY TREATMENT

Pursuant to *Classification of Maine waters*, 38 M.R.S. § 464(1)(C) and *Standards for classification of estuarine and marine waters*, 38 M.R.S. § 465-B, which contain standards to achieve Maine's water quality goals for the designated uses of fishing, aquaculture, and propagation and harvesting of shellfish, the permittee must report all occurrences of secondary wastewater treatment system bypasses, upsets, disinfection system malfunctions, combined sewer overflows, and discharges resulting from sanitary sewer overflows, pump stations or broken sewer pipes immediately upon becoming aware of such a condition.

Reporting must be provided through the Maine Department of Marine Resources' website at [http://www.maine.gov/dmr/rm/public\\_health/rain/rpthevent.htm](http://www.maine.gov/dmr/rm/public_health/rain/rpthevent.htm) or by calling the Maine Department of Marine Resources' Pollution Event Reporting Hotline at 207-633-9564.

## SPECIAL CONDITIONS

### I. REPORTING DISCHARGES NOT RECEIVING SECONDARY TREATMENT (cont'd)

The permittee must initiate the current Emergency Response Plan prepared in conjunction with the Maine Department of Marine Resources, as appropriate, to prevent or minimize conditions that may endanger health or the environment. The permittee must report the event in accordance with the Emergency Response Plan between the permittee and the Maine Department of Marine Resources and provide the following information at the time the report is made:

1. Name of facility/individual reporting event;
2. Contact phone number and e-mail address;
3. Location of event (physical address or description);
4. Pollution event type (for example, bypass, CSO, sewer line break);
5. Pollution event quantity (for example approximate number of gallons discharged);
6. Date and time event began;
7. Date and time event ended, or state that the event is on-going;
8. Additional comments;
9. First and last name of person reporting event; and
10. Authorization code.

The immediate reporting requirements by this Special Condition are in addition to Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit, which contains reporting requirements to the Department for conditions that may endanger health or the environment.

### J. MONITORING AND REPORTING

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

Department of Environmental Protection  
Southern Maine Regional Office  
Bureau of Water Quality  
Division of Water Quality Management  
312 Canco Road  
Portland, ME 04103

#### **J. MONITORING AND REPORTING (cont'd)**

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

#### **K. 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.

#### **L. 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.

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

**FACT SHEET**

DATE: **March 3, 2017**

PERMIT NUMBER: **ME0102377**  
WASTE DISCHARGE LICENSE: **W002234-6B-H-R**

NAME AND ADDRESS OF APPLICANT: **TOWN OF YARMOUTH  
200 MAIN STREET  
YARMOUTH, ME 04096**

COUNTY: **CUMBERLAND**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):  
**TOWN OF YARMOUTH  
SEA MEADOWS WASTEWATER TREATMENT FACILITY  
YARMOUTH, ME 04096**

RECEIVING WATER CLASSIFICATION: **Casco Bay/Class SB**

COGNIZANT OFFICIAL CONTACT INFORMATION:  
**Mr. Thomas Connolly  
(207)-846-2415  
[tconnolly@yarmouth.me.us](mailto:tconnolly@yarmouth.me.us)**

**1. APPLICATION SUMMARY**

On June 21, 2016, the Department of Environmental Protection accepted as complete for processing, a renewal application from the Town of Yarmouth for Waste Discharge License (WDL) W002234-6B-E-R/Maine Pollutant Discharge Elimination System (MEPDES) permit ME0102377, which was issued on October 12, 2011, for a five-year term. The 10/12/11 MEPDES permit authorized the Town to discharge a monthly average of 0.028 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to Casco Bay, Class SB, in Yarmouth, Maine. See **Attachment A** of this Fact Sheet for a location map.

It is noted that the Department made two permit revisions since issuing the 10/12/11 permit. On August 13, 2012, the Department issued a minor permit revision to replace the monthly average and daily maximum technology based Total Residual Chlorine (TRC) limits of 0.1 mg/L and 0.3 mg/L with a daily maximum technology based concentration limit of 0.1 mg/L. On February 6, 2012, the permit was modified to reduce mercury monitoring requirements to once per year.

1. Eliminating the waiver to achieve 85 percent removal of both biochemical oxygen demand and total suspended solids when the influent strength is less than 200 mg/L.

## 2. PERMIT SUMMARY

- a. Terms and Conditions: This permitting action is carrying forward all the terms and conditions of the previous permitting action and subsequent minor revisions.
- b. History: This section provides a summary of significant permitting actions and milestones that have been completed for the permittee.

*April 12, 1996* – The United States Environmental Protection Agency (USEPA) issued a letter to the facility owner John G. Gibson notifying him that his renewal application for a National Pollutant Discharge Elimination System (NPDES) permit was accepted as complete. The USEPA never issued a NPDES permit for this facility.

*May 23, 2000* – Pursuant to *Waters and Navigation*, 38 M.R.S. §420 and §413 and 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee that administratively modified WDL W002234-58-B-R and established interim monthly average and daily maximum effluent concentration limits of 8.1 parts per trillion (ppt) and 12.2 ppt.

*January 12, 2001* – The Department received authorization from the U.S. Environmental Protection Agency (USEPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine. The facility was assigned a Maine Pollution Elimination Permit number of ME0102377.

*June 27, 2001* – The Department issued WDL W002234-5L-C-R / MEPDES permit ME0102377 to the Town for a five year term.

*December 22, 2006* – The Department issued WDL W002234-5L-D-R / MEPDES permit ME0102377 to the Town for a five year term.

*October 12, 2011* – The Department issued WDL W002234-6B-E-R / MEPDES permit ME0102377 to the Town of Yarmouth Sea Meadows facility for a five year term.

*August 15, 2012* – The Department issued a minor revision WDL W002234-6B-E-R / MEPDES permit ME0102377 to replace the monthly average and daily maximum technology based concentration limits of 0.1 mg/L and 0.3 mg/L respectively, for TRC with a daily maximum technology based limit of 1.0 mg/L for the Sea Meadows wastewater treatment facility on the Eben Hill Road in Yarmouth, Maine.

*January 8, 2013* – The Department issued a minor revision to WDL W002234-6B-G-R pursuant to 38 M.R.S. § 420(1)(B)(F) and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001) to reduce the monitoring frequency for mercury to once per year.

*June 17, 2016* – The applicant submitted a timely and complete application for the renewal of combination WDL/MEPDES permit W002234-6B-E-R/ME0102377 that was received by the Department on June 17, 2016 and accepted for processing on June 21, 2016.

## 2. PERMIT SUMMARY

- c. Source Description: The Town of Yarmouth Sea Meadows Wastewater Treatment Facility receives residential sanitary wastewater from a 40-lot subdivision located on the east side of Cousins Island. Based on information provided by the permittee, the facility currently services 38 residential dwellings on the island. The previous MEPDES permit stated that there is one small grinder pump station (McAvoy pump station) on the collection system, which serves approximately six houses. A gravity flow line services the rest of the system. There are no significant industrial or commercial users, and no combined sewer overflow (CSO) points associated with the collection and treatment systems. The Town has not applied for nor is it authorized to accept transported wastes into the treatment process.
- d. Wastewater Treatment: The Town provides a secondary level of wastewater treatment at the Sea Meadows Wastewater Treatment Facility via a 14,400-square foot sand filter. The facility provides primary wastewater treatment (*i.e.* settling) via a 10,000-gallon septic tank up-gradient of the sand filter. Treated effluent from the sand filter is chlorinated for disinfection for compliance with the year-round fecal coliform bacteria limits and is conveyed for discharge to Casco Bay at Yarmouth, which is Class SB water. The outfall structure is a 4-inch diameter pipe extending out 100 feet beyond the mean high tide mark. Effluent is discharged for up to 2 hours on the outgoing high tide each day. Based on review of the outfall extension plans, the Department's Division of Environmental Assessment has determined that this outfall structure provides improved mixing of the effluent with the receiving waters and improved dilution. See Section 6.b of this fact sheet for applicable dilution calculations.

## 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, *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and *Surface Water Toxic Control Program*, require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective July 29, 2012), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

## 4. RECEIVING WATER QUALITY STANDARDS

*Classification of Estuarine and Marine Waters*, 38 M.R.S. § 469 classifies Casco Bay at the point of discharge as Class SB waters. *Standards for classification of estuarine and marine waters*, 38 M.R.S. § 465-B(2), describes the standards for Class SB waters.

## 5. RECEIVING WATER QUALITY CONDITIONS

*The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report*, prepared pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the marine waters in the Royal River Estuary as, “Category 4-A: Estuarine and Marine Waters with Impaired Use, Total Maximum Daily Loads (TMDL) Completed.” The Report states that bacteria may impair either recreational uses (swimming) or shellfish consumption uses, or both. Shellfish consumption impairments only apply to waters naturally capable of supporting the shellfish-harvesting use (*i.e.*, waters of high enough salinity for propagation of shellfish.) On September 28, 2009, the USEPA approved the Department’s Maine Statewide Bacteria TMDL, dated August 2009, for fresh, marine and estuarine waters impaired by bacteria.

Category 5-A: The Report also lists the Casco Bay “*Category 5-A: Estuarine and Marine Waters Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)*.” The estuary is listed as impaired for failure to meet the marine life standards ascribed to Class SB waters and for the presence of toxic compounds in toxic amounts. The Report lists sources as municipal point source, and CSOs. The Report lists the TMDL priority as low. Once a TMDL has been approved by the USEPA, stormwater discharges from impervious areas in the Casco Bay watershed will be addressed. At this time, the Department is not aware that the permitted discharge from this facility cause or contribute to the non-attainment status of Class SB waters.

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 biphenyl (PCBs) and other persistent, bioaccumulating substances in lobster tomalley.

Currently, the Maine Department of Marine Resources (MEDMR) lists Pollution Area 14, Royal River: west of a line beginning at the northeast tip of Browns Point (Yarmouth), then running southeast across the mouth of the Royal River to the “C 5” navigational buoy and continuing south to the southeastern tip of Parker Point (Yarmouth); and east of a line beginning at the stone pier on the shore of the Royal River, just south of navigational buoy N ‘14’, then running in a northwesterly direction approximately 360 yards, to the southwestern lobe of the land that forms Browns Point (Yarmouth) are classified as “Conditionally Restricted” and shall be closed to the harvest of clams, quahogs, oysters and mussels during any malfunction at the Yarmouth Wastewater Treatment Plant. This area is available only for a MEDMR permitted project for male specific coliphage (MSC) depuration harvest, and is not suitable for relay purposes. See **Attachment B** of this Fact Sheet for a map of Pollution Area 14. The MEDMR closes or restricts areas based on ambient water quality data that indicate the area did not meet or marginally met the standards in the National Shellfish Sanitation Program. In addition, MEDMR closes areas by default in the vicinity of outfall pipes associated with treated sanitary wastewater discharges in the event of a failure of the disinfection system.



**6. 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 0.028 MGD based on the dry weather capacity for the treatment facility, and a daily maximum discharge flow reporting requirement.

The Department reviewed 55 Discharge Monitoring Reports (DMRs) that were submitted for the period October 2011 – July 2016. A review of the data indicates the following:

**Flow (DMRs=54)**

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	0.028	0.01 – 0.02	0.010
Daily Maximum	Report	0.01 – 0.06	0.021

- b. Dilution Factors: 06-096 CMR 530(4)(A)(2)(a) 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 0.028 MGD and the location and configuration of the outfall structure, the Department has established dilution factors as follows:

Acute = 87:1                  Chronic = 198:1                  Harmonic mean<sup>(1)</sup> = 594:1

<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 USEPA publication, “Technical Support Document for Water Quality-Based Toxics Control” (Office of Water; EPA/505/2-90-001, page 88), and represents an estimation of harmonic mean flow on which human health dilutions are based in a riverine 7Q10 flow situation.

- 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, technology based monthly and weekly average BODs and TSS concentration limits of 30 mg/L and 45 mg/L, respectively, based on secondary treatment requirements found in 06-096 CMR, Chapter 525(3)(III). The previous permitting action established, and this permitting action is carrying forward, technology-based daily maximum BODs and TSS concentration limits of 50 mg/L based on a Department best professional judgment (BPJ) of best practicable treatment (BPT).

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

06-096 CMR Chapter 523(6)(f) states that all pollutants limited in permits must have limitations, standards or prohibitions expressed in terms of mass. The previous permitting action established, and this permitting action is carrying forward, monthly average, weekly average, and daily maximum mass limits based on calculations using the average design flow for the facility of 0.012 MGD and the appropriate concentration limits as follows:

Monthly average:  $(0.012)(8.34 \text{ lbs./gallon})(30 \text{ mg/L}) = 3.0 \text{ lbs./day}$

Weekly average:  $(0.012)(8.34 \text{ lbs./gallon})(45 \text{ mg/L}) = 4.5 \text{ lbs./day}$

Daily Maximum:  $(0.012)(8.34 \text{ lbs./gallon})(50 \text{ mg/L}) = 5.0 \text{ lbs./day}$

This permitting action is carrying forward a requirement for a minimum of 85% removal of BOD<sub>5</sub> and TSS as required by 06-096 CMR 525(3)(III)(a)(3) and (b)(3) of the Department's rules. This permitting action is allowing a provision to calculate the percent removal value based on an assumed influent value in consideration that the Sea Meadows Wastewater Treatment Facility does not contain a representative influent sampling location. According to the USEPA's *Onsite Wastewater Treatment Systems Manual*, dated February 2002, table 3-7 entitled "Constituent Mass Loadings and Concentrations in Typical Residential Wastewater" high end range of values, influent values for BOD<sub>5</sub> and TSS may be assumed to be 300 mg/L. Therefore, this permitting action authorizes the Town to assume an influent BOD<sub>5</sub> and TSS concentration value of 300 mg/L for purposes of calculating the monthly percent removal value until such time that the infrastructure is modified or replaced such that collection of a representative raw influent sample is practical. See Special Condition A Footnote #2 of this permit.

The Department reviewed 55 DMRs that were submitted for the period October 2011 – July 2016. A review of the data indicates the following:

**BOD<sub>5</sub> Mass (DMRs=55)**

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	3.0	0.10 – 1.00	0.25
Weekly Average	4.5	0.10 – 1.00	0.25
Daily Maximum	5.0	0.10 – 1.00	0.25

**BOD<sub>5</sub> Concentration (DMRs=55)**

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	0.10 – 6.0	2.24
Weekly Average	45	0.10 – 6.0	2.24
Daily Maximum	50	0.10 – 6.0	2.24

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

**TSS Mass (DMRs=55)**

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	3.0	0.10 – 2.00	0.20
Weekly Average	4.5	0.10 – 2.00	0.20
Daily Maximum	5.0	0.10 – 2.00	0.20

**TSS Concentration (DMRs=55)**

	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	0.10 – 3.00	1.50
Weekly Average	45	0.10 – 3.00	1.50
Daily Maximum	50	0.10 – 3.00	1.50

The previous permit established a minimum monitoring frequency for BOD<sub>5</sub> and TSS of one time per month (1/Month) based on the Department best professional judgment. Minimum monitoring frequency requirements in MEPDES permits are prescribed by 06-096 CMR Chapter 523(5)(i). The USEPA has published guidance entitled, *Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies* (USEPA Guidance April 1996). In addition, the Department has supplemented the USEPA guidance with its own guidance entitled, *Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996* (Maine DEP May 22, 2014). Both documents are being utilized to evaluate the compliance history for each parameter regulated by the previous permit to determine if a reduction in the monitoring frequencies is justified.

Although EPA’s 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering 60 months of data (October 2011 – July 2016). A review of the mass monitoring data for seasonal BOD<sub>5</sub> & TSS indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as 8.2% and 6.5% respectively. According to Table I of the EPA Guidance and Department Guidance, a 1/Month monitoring requirement can be reduced to 1/6 months. However, Department Guidance does not allow for greater than a fifty percent reduction. In order to better ascertain compliance the department is carrying forward the 1/Month monitoring frequency for BOD<sub>5</sub> and TSS.

- d. Settleable Solids: The previous permitting action a daily maximum technology based concentration limit of 0.3 ml/L. An evaluation of data from the monitoring period of October 2011 – May 2016 indicates the following:

**Settleable Solids Concentration (DMRs=55)**

Value	Limit (ml/L)	Range (ml/L)	Average (ml/L)
Daily Maximum	0.3	0.1 – 0.1	0.10

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

The previous permitting action established a daily maximum technology based concentration limit of 0.3 ml/L and a minimum monitoring frequency requirement of 3/Week for settleable solids. This permitting action is carrying forward the technology based daily maximum concentration limit of 0.3 ml/L as it is considered by the Department to be BPT for secondary treated sanitary wastewater. A review of the monitoring data for settleable solids indicates the ratio (expressed in percent) of the daily maximum limits can be calculated as 33%. According to Table I of the USEPA Guidance, a 1/Month monitoring requirement can be reduced to 1/Quarter. However Department Guidance does not allow for greater than a fifty percent reduction. In order to better ascertain compliance the Department is carrying forward the 1/Month monitoring frequency for Settleable Solids.

- e. Fecal Coliform Bacteria: The previous permitting action established monthly average and daily maximum concentration limits of 15 colonies/100 ml and 50 colonies/100 ml, respectively, for fecal coliform bacteria, which are consistent with the National Shellfish Sanitation Program.

Minimum monitoring frequency requirements in MEPDES permits are prescribed by 06-096 CMR Chapter 523(5)(i). The USEPA has published guidance entitled, *Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies* (USEPA Guidance April 1996). In addition, the Department has supplemented the USEPA guidance with its own guidance entitled, *Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996* (Maine DEP May 22, 2014). Both documents are being utilized to evaluate the compliance history for each parameter regulated by the previous permit to determine if a reduction in the monitoring frequencies is justified.

Although USEPA's 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering 55 months of data (October 2011 – June 2016). The previous permitting action established a minimum monitoring frequency of 1/Month for fecal coliform bacteria. A review of the fecal coliform bacteria monitoring data indicates the ratios (expressed in percent) of the monthly average limits can be calculated as 8.4% and 16% respectively. According to Table I of the USEPA Guidance and Department Guidance, a 1/Month monitoring requirement can be reduced to 1/6months. However, the Department has determined that any reduction in the minimum monitoring frequency to 1/Month is not sufficient to assess compliance. At the request of MEDMR **Fecal coliform bacteria and TRC limits and monitoring requirements are in effect year-round at the request of the Maine Department of Marine Resources in order to protect local shellfish resources near the outfall and to protect the health, safety and welfare of the public.**

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

A summary of effluent fecal coliform bacteria data as reported on the DMRs for the period of October 2011 – July 2016 is as follows:

**Fecal coliform bacteria (DMR = 55)**

<b>Value</b>	<b>Limit (col/100 mL)</b>	<b>Range (col/100 mL)</b>	<b>Mean (col/100 mL)</b>
Monthly Average	15	1 – 5	1.17
Daily Maximum	50	1 – 43	3.70

During this time period, the permittee reported no excursions from the numeric bacteria limits.

- f. Total Residual Chlorine: The previous permitting action established a technology-based daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. With modified and chronic dilution factors associated with the discharge water quality-based concentration thresholds the discharge may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	A & C Acute Dilution Factors	Calculated	
			Acute Threshold	Chronic Threshold
0.013 mg/L	0.0075 mg/L	87:1 (A) 198:1 (C)	1.31 mg/L	1.49 mg/L

Although USEPA’s 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering 60 months of data (June 2010 – June 2015). The previous permitting action established a minimum monitoring frequency of 1/Week for TRC. A review of the TRC monitoring data indicates the ratio (expressed in percent) of the monthly average limit can be calculated as 20% respectively. According to Table I of the USEPA Guidance and Department Guidance, a 1/Week monitoring requirement can be reduced to 1/2 Months. However, the Department has determined that a reduction in the minimum monitoring frequency to 1/2 Month is not sufficient to assess compliance. At the request of MEDMR **TRC limits and monitoring requirements are in effect year-round at the request of the Maine Department of Marine Resources in order to protect local shellfish resources near the outfall and to protect the health, safety and welfare of the public.**

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

The Department reviewed 55 DMRs that were submitted for the period June 2010 – June 2015. A review of data indicates the following:

**Total Residual Chlorine (DMRs=60)**

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	0.3	0.04 – 3.57	0.51

During this time period, the permittee reported 3 excursions from the numeric water quality standards for Daily Maximum Total Residual Chlorine.

- g. 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 CMR 525(3)(III) and a minimum monitoring frequency requirement of 1/Week.

A summary of pH data as reported on the monthly DMRs for the period of October, 2010 through July, 2016 (DMRs = 55) indicates the effluent pH has ranged from 5.90 SU to 7.40 standard units (SU).

**pH (DMRs=)**

Value	Limit (SU)	Range (SU)	Maximum (SU)
Range	6.0 – 9.0	5.70 – 6.40	6.03

During this time period, the permittee reported 17 excursions from the numeric water quality standards for pH.

Although USEPA’s 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering 55 months of data (October 2011 – July 2016). According to USEPA and Department Guidance, a 1/Week monitoring requirement can be reduced to 2/Month. Therefore this permitting action is establishing a 2/Month minimum monitoring frequency for pH. However, the Department has made the determination that a 2/Month sampling frequency is inadequate for determining compliance for pH with respect to the numeric water quality standards and this permit is carrying forward the 1/Week monitoring requirement for pH.

- h. 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 CMR 519 (last amended October 6, 2001), the Department issued a by establishing interim average and daily maximum effluent concentration limits of 24 parts per trillion (ppt) and 36 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.

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

A review of the Department’s data base for the period June 2010 through June 2015 for calendar indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows:

**Mercury**

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average	8.1	3.06 – 4.69	3.53
Daily Maximum	12.2		

Pursuant to 38 M.R.S. § 420(1-B)(F), the Department issued a minor revision on February 6, 2012, to the October 12, 2011, permit thereby revising the minimum monitoring frequency requirement from twice per year to once per year given the permittee has maintained at least 5 years of mercury testing data.

Pursuant to 38 M.R.S. § 420(1-B)(F), this permitting action is carrying forward the 1/Year monitoring frequency established in the October 12, 2011, permit modification.

- i. 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 marine waters, namely dissolved oxygen (DO) and marine life support. To date, the permittee has not conducted total nitrogen testing on its discharge. The Department has 140 total nitrogen effluent values with an arithmetic mean of 17.2 mg/L collected from various municipally-owned treatment works that discharge to marine waters of the State. None of the facilities whose effluent data were used are specifically designed to remove total nitrogen. For the MEPDES permitting program, the Department considers 17.2 mg/L to be representative of total nitrogen discharge levels for all facilities providing secondary treatment that discharge to marine waters in the absence of facility specific data, and therefore 17.2 mg/L is being used as the total nitrogen discharge concentration from the Sea Meadows 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 estuaries, but the criteria that have been set typically fall between 0.35 mg/L and 0.50 mg/L to protect 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 marine waters using dissolved oxygen as the indicator, and 0.32 mg/L for the protection of aquatic life using eelgrass as the indicator. Four known surveys have been completed within the vicinity of the Sea Meadows discharge that document presence/absence of eelgrass. The first occurred in the 1970’s by Timson of the Maine Geological Survey, the second (1993) and third (2001) by the Maine Department of Marine Resources, and fourth as coordinated by the Department (2013) (Figure 1).

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

The Timson survey noted a wide band of eelgrass lining the shallow subtidal environment of the cove surrounding the discharge point. In 1993, eelgrass of varying percent cover was mapped in the subtidal environment, predominantly near the mouth of the cove (Figure 1). Eelgrass acreage in 2001 was comparable to 1993, but distributed more notably in shallower water within the cove. The 2013 survey mapped approximately 14 acres of eelgrass within the shallow subtidal portions of the cove (Figure 1). Since the subtidal environment on the northeast shoreline of Cousins Island has historically and continues to host an eelgrass resource, the use of 0.32 mg/L as a threshold value is appropriate for this receiving water.

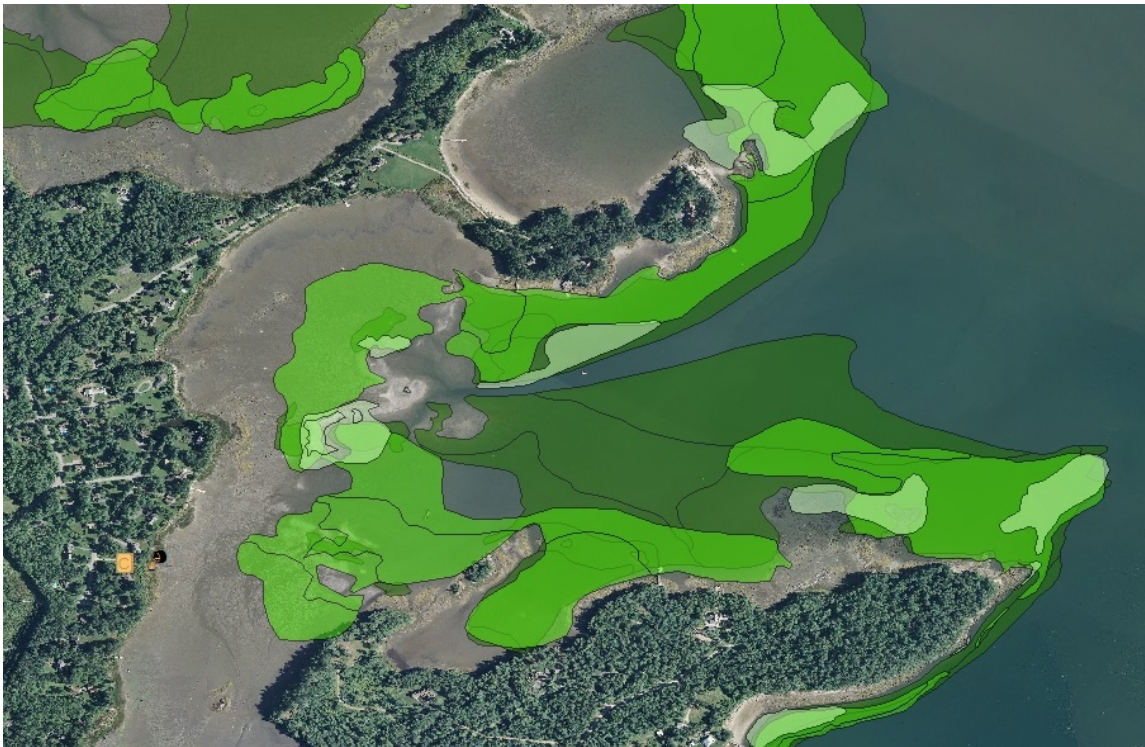


Figure 1. 2013 aerial imagery showing eelgrass distribution in 1993 (darkest green), 2001 (intermediate green) and 2013 (lightest green). Yarmouth Sea Meadows outfall location shown in the lower left corner.

With the exception of ammonia, nitrogen is not acutely toxic; thus, the Department is considering a far-field dilution to be more appropriate when evaluating impacts of total nitrogen to the marine environment. The permittee's facility has a chronic near-field dilution of 198:1. Far field dilutions are significantly higher than the near-field dilution, depending on the location of the outfall pipe and nature of the receiving waterbody. The permittee's facility discharges via a single pipe outlet located 100 feet out from mean high water to the 324-acre cove at the east ends of Cousins Island and Littlejohn Island. Daily discharges of up to 28,000 gallons and lasting up to two hours occur during outgoing tides. The receiving embayment is very shallow and exposed only to Casco Bay on the east, with an intertidal channel to the south separating Cousins Island from the immediately adjacent Littlejohn Island.



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

For these conditions, far-field dilutions are estimated to be a 28,700:1. The increase in total nitrogen concentration within the cove as a result of the discharge is estimated to be 0.0006 mg/L.

Total nitrogen concentrations in effluent = 17.2 mg/L

Far-field dilution factor = 28,700:1

In-stream concentration after dilution:  $\frac{17.2 \text{ mg/L}}{28,700} = 0.0006 \text{ mg/L}$

The Department and external partners have been collecting ambient total nitrogen data along Maine's coast. For the cove to which the Sea Meadows effluent discharges, the Department calculated a mean background concentration of 0.25 mg/L (n=36) based on surface water data collected at 14 comparable sites in the Casco Bay vicinity. Comparable sites include those occurring in shallow water adjacent to developed shorelines without notable riverine inputs. Data utilized for the background concentration originated from surface grabs collected between May and October of 1996, 2006, 2010 and 2013-2015. Based on the calculated ambient value for this receiving water, the estimated increase in ambient total nitrogen after reasonable opportunity for mixing in the far-field is 0.25 mg/L + 0.0006 mg/L = 0.2506 mg/L. The in-stream concentration value of 0.2506 mg/L is less than the Department and USEPA's best professional judgment based total nitrogen threshold of 0.32 mg/L for the protection of aquatic life using eelgrass as an indicator. In the absence of any information that the receiving water is not attaining standards, the Department has determined that the discharge of total nitrogen from the Yarmouth Sea Meadows outfall does not exhibit a reasonable potential to exceed applicable water quality standards for Class SB waters. This permitting action is not establishing limitations or monitoring requirements for total nitrogen.

## 7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of Casco Bay to meet standards for Class SB classification.

## 8. PUBLIC COMMENTS

Public notice of this application was made in the *Forcaster* newspaper on or about May 26, 2016. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

## **9. DEPARTMENT CONTACTS**

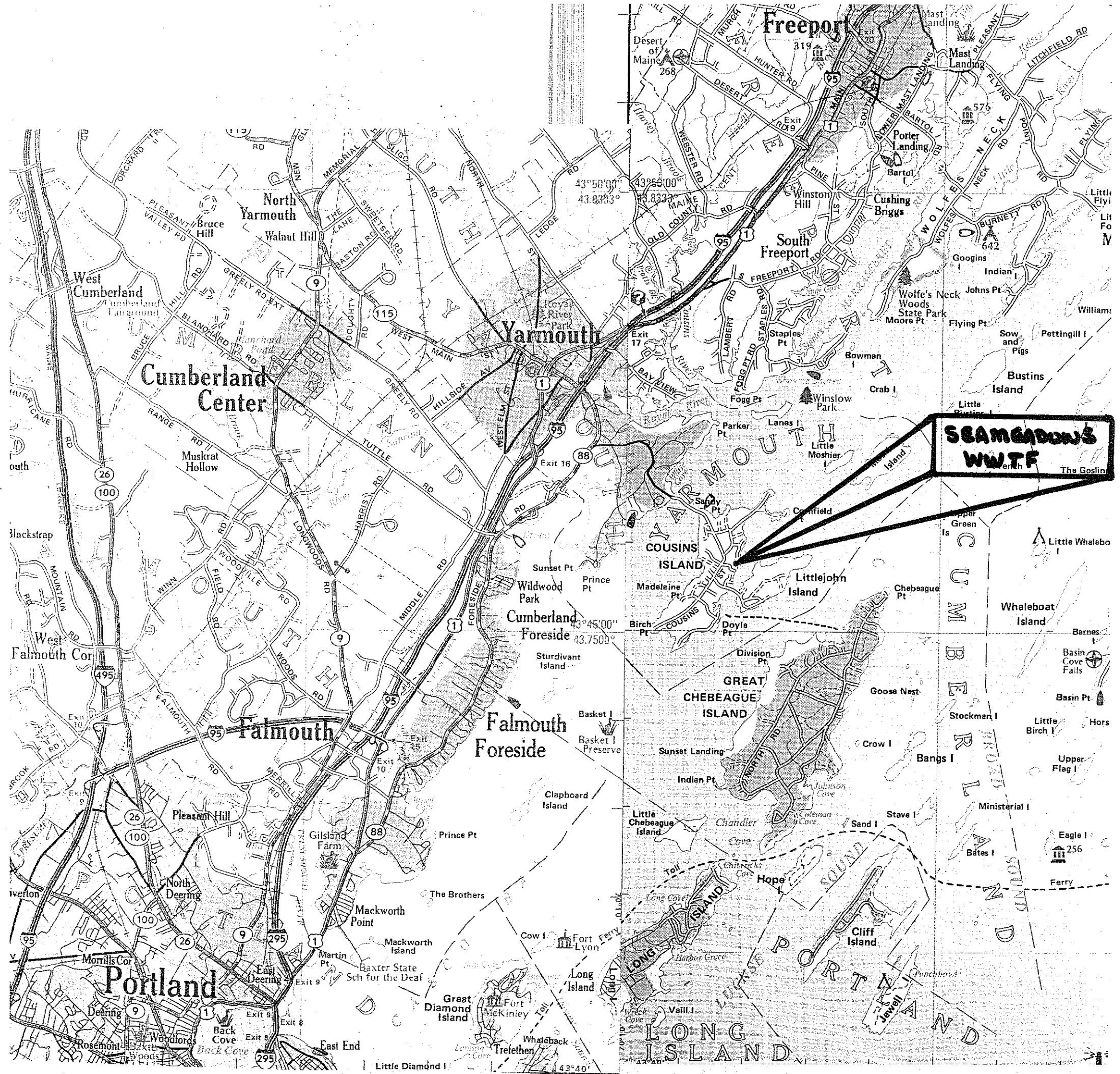
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Aaron Dumont  
Bureau of Water Quality  
Department of Environmental Protection  
17 State House Station  
Augusta, Maine 04333-0017 Telephone: (207) 592-7161  
e-mail: [Aaron.A.Dumont@maine.gov](mailto:Aaron.A.Dumont@maine.gov)

## **10. RESPONSE TO COMMENTS**

*Reserved until end of formal comment period*

# **ATTACHMENT A**



**SEAGARDEN'S**  
**WWTF**  
The Gosling

# **ATTACHMENT B**



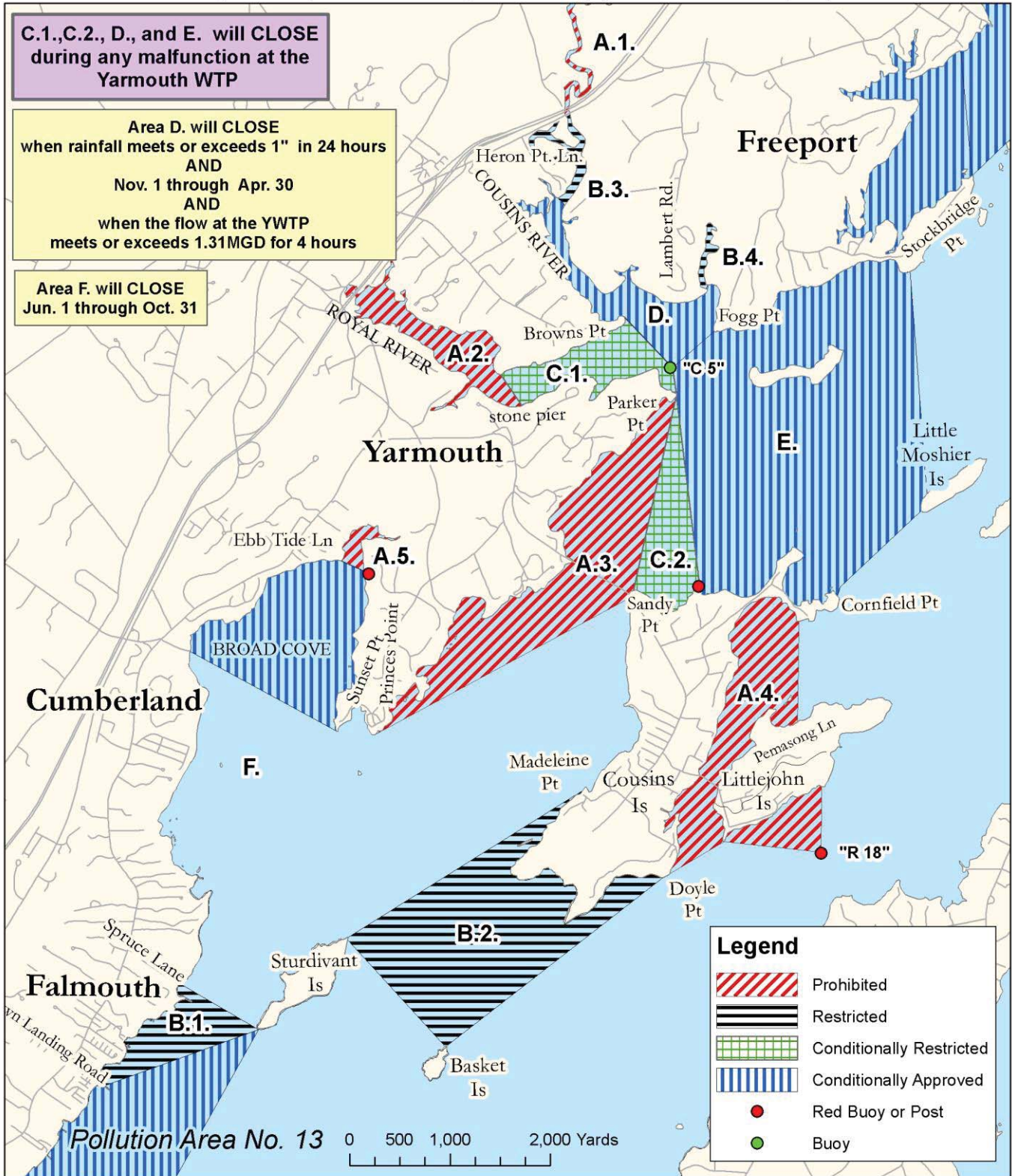
# Maine Department of Marine Resources

## Pollution Area No. 14



Royal River, Cousins River, and vicinity (Falmouth to Freeport)

7/6/16



MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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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.