

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

DEPARTMENT ORDER

IN THE MATTER OF

NEWAGEN SEASIDE INN, INC.) MAINE POLLUTANT DISCHARGE
SOUTHPORT, LINCOLN COUNTY, MA	AINE) ELIMINATION SYSTEM PERMIT
OVERBOARD DISCHARGE) AND
ME0021229) WASTE DISCHARGE LICENSE
W001689-5C-F-R APPROVA	AL) RENEWAL

In compliance with the provisions of the *Federal Water Pollution Control Act*, Title 33 U.S.C. § 1251, *Conditions of licenses*, 38 M.R.S. § 414-A, and applicable rules, the Department of Environmental Protection (Department) has considered the application of the NEWAGEN SEASIDE INN, INCORPORATED (Permittee), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On April 19, 2022, the Department accepted as complete for processing an application from the Newegan Seaside Inn, Incorporated for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit ME0021229/Maine Waste Discharge License (WDL) W001689-5C-E-R (permit) which was issued by the Department on February 3, 2017. The 2/3/17 permit authorized the seasonal discharge (April 1st – November 30th) of 12,500 gallons per day (gpd) of secondary treated wastewater from NEWAGEN SEASIDE INN, INCORPORATED to Cape Newagen Harbor, Class SB water, in Southport, Maine.

PERMIT SUMMARY

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

- 1. Revising the fecal coliform monthly average and daily maximum limits from 15 CFU/100 ml and 50 CFU/100 ml to 14 CFU/100 mL and 31 CFU/100, respectively, pursuant to 38 MRS § 465 (B)(2)(B);
- 2. Establishing a seasonal monitoring requirement of once per month (1/Month) for enterococci bacteria from April 15th October 31st, pursuant to 38 MRS § 465 (B)(2)(B); beginning April 2024.
- 3. Establishing enterococci bacteria monthly average and daily maximum limits of 8 CFU/100 mL and 54 CFU/100 mL, respectively, pursuant to 38 MRS § 465 (B)(2)(B).

CONCLUSIONS

BASED on the findings in the attached **Fact Sheet** dated January 5, 2024, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

- 1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
- 2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with State law.
- 3. The provisions of the State's antidegradation policy, *Classification of Maine waters*, 38 M.R.S. § 464(4)(F), will be met, in that:
 - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected.
 - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected.
 - (c) Where the standards of classification of the receiving waterbody are not met, the discharge will not cause or contribute to the failure of the waterbody to meet the standards of classification.
 - (d) Where the actual quality of any classified receiving waterbody exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing water quality of any waterbody, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
- 4. The discharges will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of licenses*, 38 M.R.S. § 414-A(1)(D) and 414-A(1-B).
- 5. The overboard discharge system was in continuing existence for the 12 months preceding June 1, 1987.

CONCLUSIONS (cont'd)

- 6. The Department finds that there are no technologically proven alternative methods of wastewater disposal consistent with the plumbing code adopted by the Department of Health and Human Services pursuant to Title 22, section 42 that will not result in an overboard discharge.
- 7. A publicly owned sewer line is not located on or abutting land owned or controlled by the permittee or is not available for the permittee's use.
- 8. The discharge is not located within the boundaries of a sanitary district or sewer district however connection to the existing infrastructure is not practicable.

This space intentionally left blank

ACTION

THEREFORE, the Department APPROVES the application of NEWAGEN SEASIDE INN, INCORPORATED to seasonally discharge (April 1- November 30) 12,500 gallons per day of secondary treated sanitary wastewater from the NEWAGEN SEASIDE INN, INCORPORATED, Atlantic Ocean, Cape Newagen Harbor, Class SB, in Southport, Maine, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS	_ DAY OF	2024.
DEPARTMENT OF ENVIRONMENTAL PROTECTION		
BY: MELANIE LOYZIM, Commissioner		
Date of initial receipt of application: April 4, 2022		

Filed March 9, 2023

State of Maine Board of Environmental Protection Date filed with Board of Environmental Protection

This Order prepared by Rod Robert, Bureau of Water Quality

Date of application acceptance: April 4, 2022

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge secondary treated sanitary wastewater from <u>Outfall #001</u> to Cape Newagen Harbor, Atlantic Ocean, Class SB. Such discharges are limited and must be monitored by the permittee as specified below⁽¹⁾:

April 1st- November 30th

Effluent Characteristic Discharge Limitations Monitoring Requirements

Emuent Characteristic	Discharge Limitations			Monitoring Keq	urrements			
	Monthly	Monthly Weekly Daily Monthly Weekly Da			Daily	Measurement	Sample	
	<u>Average</u>	Average	<u>Maximum</u>	<u>Average</u>	<u>Average</u>	<u>Maximum</u>	<u>Frequency</u>	Type
Flow	Report gpd		12,500 gpd				1/Week	Metered
[50050]	[07]		[07]				[01/07]	[MT]
BOD ₅	3.1 lbs./day	4.7 lbs./day	5.2 lbs./day	30 mg/L	45 mg/L	50 mg/L	1/Month	Grab
[00310]	[26]	[26]	[26]	[19]	[19]	[19]	[01/30]	[GR]
BOD ₅ Percent Removal ⁽²⁾				85%			1/Month	Calculate
[81010]				[23]			[01/30]	[CA]
TSS	3.1 lbs./day	4.7 lbs./day	5.2 lbs./day	30 mg/L	45 mg/L	50 mg/L	1/Month	Grab
[00530]	[26]	[26]	[26]	[19]	[19]	[19]	[01/30]	[GR]
TSS Percent Removal ⁽²⁾				85%			1/Month	Calculate
[81011]				[23]			[01/30]	[CA]
Fecal Coliform				14/100 ml		31/100 ml	2/Month	Grab
Bacteria ⁽³⁾⁽⁴⁾ [31633]				[14/100 III] [13]		/13/	[02/30]	[GR]
(April 15 – October 31)				[13]		[13]	[02/30]	ĮŪKJ
Enterococci Bacteria ⁽⁵⁾				8 CFU/100 ml		54 CFU/100 ml	1/Month	Grab
(April 15th - October 31st)				[13]		[13]	[01/30]	[GR]
[61211]				[13]		[13]	[01/30]	ĮŪKJ
Total Residual Chlorine ⁽⁶⁾						1.0 mg/L	2/Week	Grab
[50060]					-2-	[19]	[02/07]	[GR]
pH (Standard Unit)						6.0 - 9.0 SU	1/Month	Grab
[00400]						[12]	[01/30]	[GR]

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports. **Footnotes:** See Page 6 and 7 of this permit for applicable footnotes.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Footnotes

1. **Monitoring** – All effluent monitoring must be conducted at a location following the last treatment unit in the treatment process as to be representative of end-of-pipe effluent characteristics. A routine sampling program must be developed in which samples are taken at the same location, same time and same days of the week each month. Occasional deviations from the routine sampling program are allowed, but the reason for the deviation must be documented as an electronic attachment to the applicable discharge monitoring report.

All effluent monitoring must be conducted at a location following the last treatment unit in the treatment process as to be representative of end-of-pipe effluent characteristics. Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for wastewater testing. Samples that are sent to another POTW licensed pursuant to Waste discharge licenses, 38 M.R.S. § 413 or laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

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

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

- 2. **Percent Removal** The permittee must maintain a minimum of 85 percent removal of both BOD₅ and TSS for all flows receiving secondary treatment. The percent removal must be calculated based on influent and effluent concentration values. The permittee's wastewater treatment system does not contain an influent sampling location that is representative of raw wastewater conditions. Therefore, this permitting action authorizes the permittee to assume an influent BOD₅ and TSS concentration value of 286 mg/L for purposes of calculating the monthly percent removal value. See page 5 of fact sheet for a basis statement.
- 3. **Bacteria Limits** Fecal coliform bacteria limits and monitoring requirements are in effect between April 15th and October 31st of each year. The Department reserves the right to require year-round disinfection to protect the health, safety, and welfare of the public.
- 4. **Bacteria Reporting** The monthly average fecal coliform bacteria limitation is a geometric mean limitation and sample results must be reported as such.
- 5. **Enterococci Bacteria Reporting** Enterococcus bacteria limits and monitoring requirements are seasonal running from April 15th October 31st. The monthly average limitation is a geometric mean limitation and results must be calculated and reported as such.
- 6. **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 shall utilize approved test methods that are capable of bracketing the TRC limitation in this permit. There shall be at least 14 days between sampling events.

B. ANNUAL DISCHARGE FEES

Pursuant to *Annual waste discharge license fees*, 38 M.R.S. § 353(B), the permittee is required to pay an applicable annual fee for discharges authorized by this permit. Failure to pay an annual fee within 30 days of the billing date of a permit is sufficient grounds for accruing interest charges, penalties or revocation of the permit.

C. 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 for the classification of the receiving waters.
- 2. The permittee must not discharge effluent that contains materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the uses designated for the classification of the receiving waters.
- 3. The permittee must not discharge effluent that causes visible discoloration or turbidity in the receiving waters that causes those waters to be unsuitable for the designated uses and characteristics ascribed to their class.
- 4. The permittee must not discharge effluent that lowers the quality of any classified body of water below such classification or lowers the existing quality of any body of water if the existing quality is higher than the classification.

D. TREATMENT PLANT OPERATOR

The person that has direct responsibility for the operation of the treatment facility must be operated by a person holding a minimum of a **Maine Grade II** certificate (or higher) or must be a Maine Registered Professional Engineer pursuant to *Sewerage Treatment Operators*, 32M.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.

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 April 4, 2022.

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 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.
- 2. 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.

G. SITE EVALUATION FOR TRANSFER OF OWNERSHIP

Pursuant to 38 M.R.S. § 413(3-A)(B)(1), except when it has been demonstrated within 5 years prior to a transfer of ownership of the property containing an overboard discharge, or some other time period acceptable to the Department, that there is no technologically proven alternative to an overboard discharge, prior to transfer of ownership of property containing an overboard discharge, the parties to the transfer must determine the feasibility of technologically proven alternatives to the overboard discharge that are consistent with the plumbing standards adopted by the Department of Health and Human Services pursuant to Title 22, section 42.

Notwithstanding other applicable provisions of 38 M.R.S. § 413(3-A), if an alternative to the overboard discharge is identified, the alternative system must be installed within 180 days of property transfer, except that, if soil conditions are poor due to seasonal weather, the alternative may be installed as soon as soil conditions permit.

H. OPERATION & MAINTENANCE (O&M) PLAN

The permittee must have a current written comprehensive Operation & Maintenance (O&M) Plan. The plan shall provide a systematic approach by which the permittee must always, 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 always kept on site 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. SEPTIC TANKS

- 1. Septic tanks and other treatment tanks must be regularly inspected (at least once per calendar year) and maintained to ensure that they are providing best practicable treatment. The permittee must maintain logs of inspections/maintenance that records the date, notes on observations, repairs conducted etc. The logs must be always maintained on site and made available to Department personnel upon request.
- 2. Tank contents must be removed whenever the sludge and scum occupy one-third of the tank's liquid capacity or whenever levels approach maximum design capacity. Following pumping, the tanks must be checked for damage at key joints and the inlet and outlet baffles and repaired promptly if damaged. The permittee must keep a pumping log including the date of pumping, quantity of material removed, name and number of licensed contractors, and pumping frequency.

J. MONITORING AND REPORTING

Electronic Reporting

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

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

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

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

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

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:

Overboard Discharge Compliance Inspector Department of Environmental Protection Bureau of Land and Water Quality Division of Water Quality Management 17 State House Station Augusta, Maine 04333-0017

K. REOPENING OF PERMIT FOR MODIFICATIONS

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 effluent or ambient water quality monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

L. SEVERABILITY

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT AND WASTE DISCHARGE LICENSE

FACT SHEET

Date: January 5, 2024

MEPDES PERMIT: ME0021229

WASTE DISCHARGE LICENSE: W001689-5C-F-R

NAME AND ADDRESS OF APPLICANT:

NEWAGEN SEASIDE INN, INC. P.O. BOX 29 NEWAGEN, ME 04576

COUNTY: LINCOLN COUNTY

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

NEWAGEN SEASIDE INN, INC. 60 CAPE NEWAGEN ROAD NEWAGEN, ME 04576

RECEIVING WATER/CLASSIFICATION:

CAPE NEWEGAN HARBOR, ATLANTIC OCEAN/Class SB

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Dan Uberoi**

(207) 315-5503

dan@midcoasthospitality.com

1. APPLICATION SUMMARY

<u>Application</u>: On April 19, 2022, the Department accepted as complete for processing an application from the Newegan Seaside Inn, Incorporated for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit ME0021229/Maine Waste Discharge License (WDL) W001689-5C-E-R (permit) which was issued by the Department on February 3, 2017. The 2/3/17 permit authorized the seasonal discharge (April 1st – November 30th) of 12,500 gallons per day (gpd) of secondary treated wastewater from NEWAGEN SEASIDE INN, INCORPORATED to Cape Newagen Harbor, Class SB water, in Southport, Maine

2. PERMIT SUMMARY

a. Terms and conditions

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

- 1. Revising the fecal coliform monthly average and daily maximum limits from 15 CFU/100 ml and 50 CFU/100 ml to 14 CFU/100 mL and 31 CFU/100, respectively, pursuant to 38 MRS § 465 (B)(2)(B);
- 2. Establishing a seasonal monitoring requirement of once per month (1/Month) for enterococci bacteria from April 15th October 31st, pursuant to 38 MRS § 465 (B)(2)(B);
- 3. Establishing enterococci bacteria monthly average and daily maximum limits of 8 CFU/100 mL and 54 CFU/100 mL, respectively, pursuant to 38 MRS § 465 (B)(2)(B).
- b. <u>Source description:</u> The discharge is from an inn complex on Southport Island consisting of one 26-room inn with private baths, an 80-seat restaurant and two public restrooms, three 2-bedroom housekeeping cottages, one 1-bedroom housekeeping cottage, one 7-bedroom staff quarter, and one 10-bedroom staff quarters.
- c. <u>Wastewater treatment:</u> The wastewater receives secondary treatment from an overboard discharge system consisting of two serially connected 6,000-gallon septic tanks, four 2,000 square foot sand filters and one 1,500-gallon four-tube tablet disinfection unit. The treated wastewater is discharged from the treatment system to Cape Newagen Harbor at a depth of 4 feet below the mean low water mark.
- d. Replacement options: Pursuant to 38 M.R.S. § 414-A(1-B), the Department finds that the discharge from an OBD meets the requirements of best practicable treatment for purposes of licensing when it finds that there are no technologically proven alternative methods of wastewater disposal consistent with the plumbing code adopted by the Department of Health and Human Services pursuant to Title 22, section 42 that will not result in an overboard discharge. The Department's finding must be based on documentation from a licensed site evaluator (LSE) having experience in designing replacement systems for overboard discharges and provided by the overboard discharge owner.

W001689-5C-F-R

3. CONDITIONS OF PERMIT

Conditions of licenses, 38 M.R.S. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require the application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in *Maine's Surface Water Classification System*. In addition, *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and Department rule *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective March 21, 2012), require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (amended February 16, 2020), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classification of estuarine and marine waters, 38 M.R.S. § 469(3-A) classifies all estuarine and marine waters lying within the boundaries of Lincoln County and that are not otherwise classified, which includes Southport at the point of discharge, as Class SB waters. Standards for classification of estuarine and marine waters, 38 M.R.S. § 465(B)(2) establishes classification standards for Class SB waters.

5. RECEIVING WATER QUALITY CONDITIONS

<u>The State of Maine 2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report</u>, prepared by the Department pursuant to Sections 303(d) and 305(b) of the *Federal Water Pollution Control Act* lists Southwestern Southport Island (Southport) and Boothbay as:

Category 2: Estuarine and Marine Waters Attaining Some Designated Uses, Insufficient Information for Other Uses. Impairment in this context is in regard to the designated use of harvesting of shellfish which is prohibited due to overboard discharges.

The DMR traditionally closes shellfish harvesting areas if there are known sources of discharges with unacceptable bacteria levels (instream thresholds established in the National Shellfish Sanitation Program) or keeps areas closed due to lack of updated information. In addition, a small area is closed in the immediate vicinity of all wastewater treatment outfall pipes in the unlikely event of a failure in the disinfection system for the treatment plant. It is noted the Boothbay Harbor area has one of the largest concentrations of permitted overboard discharge systems in the State which is the primary reason for the shellfish area closures. Classification information for specific locations, can be found at www.maine.gov/dmr/shellfish-sanitation-management/closures/pollution.html.

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

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 PCBs and other persistent, bioaccumulating substances in lobster tomalley.

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

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Best Practicable Treatment (BPT): The Department will find that the discharge meets the requirements of best practicable treatment pursuant to 38 M.R.S. § 414-A(1-B) for purposes of licensing when it finds that there are no technologically proven alternative methods of wastewater disposal consistent with the plumbing code adopted by the Department of Health and Human Services pursuant to Title 22, section 42 that will not result in an overboard discharge. Pursuant to Overboard Discharges: Licensing and Abandonment, 06-096 CMR 596(9), Criteria and Standards for Waste Discharge Licenses 06-096 CMR 524(2) (effective January 12, 2001) and 06-096 CMR 525(3)(III), BPT for overboard discharges is secondary treatment.

The secondary treatment regulation establishes technology-based effluent limitations for BOD₅, TSS, and pH which are discussed in more detail in the individual parameter sections below.

- b. <u>Flow</u>: The previous permitting action established, and this permitting action is carrying forward, a daily maximum flow limitation of 12,500 gallons per day (GPD), which is based on the design of the treatment facility, and a daily maximum discharge flow monitoring and reporting requirement.
- c. <u>Dilution Factors:</u> 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." Based on the configuration of the proposed Outfall #001A and daily maximum discharge flow design criterion of 12,000 GPD (0.0125 MGD), the Department has made a best professional judgment that dilution factors are as follows:

Acute = 400:1 Chronic = 1,200:1 Harmonic mean $^1 = 3,600:1$

¹The harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3). This multiplying factor is based on guidelines for estimation of human health dilution presented in the U.S. EPA publication, "*Technical Support Document for Water Quality-Based Toxics Control*" (Office of Water; EPA/505/2-90-

d. Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS): The previous permitting action established, and this permitting action is carrying forward a modified seasonal requirement (April 1 – November 30), monthly average and weekly average technology-based effluent limits (TBELs) of 30 mg/L and 45 mg/L. For BOD₅ and TSS pursuant to the secondary treatment regulation at 40 CFR 133.102 and 06-096 CMR 525(3)(III). The previous permit also established daily maximum TBELs of 50 mg/L for both BOD₅ and TSS based on a Department best professional judgment of best practicable treatment for secondary treated wastewater. Monthly average, weekly average and daily maximum TBELs of 3.1 lbs./day, 4.7 lbs./day, and 5.2 lbs./day, respectively, established in the previous permitting action for BOD₅ and TSS were based on the daily maximum flow design criterion of 12,500 GPD (same as 0.0125 million gallons per day, MGD) and the applicable concentration limits.

The mass-based limits were calculated as follows:

Monthly Average Mass Limit: (30 mg/L)(8.34 lbs./gallon)(0.0125 MGD) = 3.1 lbs./day

Weekly Average Mass Limit: (45 mg/L)(8.34 lbs./day)(0.0125 MGD) = 4.7 lbs./day

Daily Maximum Mass Limit: (50 mg/L)(8.34 lbs./day)(0.0125 MGD) = 5.2 lbs./day

A summary of BOD₅ and TSS data as reported on the DMRs submitted to the Department for the period of February 2017- August 2023 is as follows:

$BOD_5 Mass (DMRs = 39)$

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	3.1	0.0 - 3.2	0.7
Weekly Average	4.7	0.0 - 3.9	1.05
Daily Maximum	5.2	0.01 - 3.9	1.03

BOD_5 concentration (DMRs = 39)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	2-100	29.4
Weekly Average	45	2-100	29.2
Daily Maximum	50	2-100	33.1

TSS Mass (DMRs = 39)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	3.1	0.0-2.15	0.47
Weekly Average	4.7	0.0-2.42	0.54
Daily Maximum	5.2	0.01-2.42	0.63

^{001,} page 88), and represents an estimation of harmonic mean flow on which human health dilutions are based in a riverine 7Q10 flow situation.

TSS concentration (DMRs = 39)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	2.5 - 65.0	20.59
Weekly Average	45	2.5 - 65.0	20.21
Daily Maximum	50	2.5 - 65.0	21.08

This permitting action carries forward the minimum monitoring frequency requirement of 1/Month for BOD5 and TSS. This permitting action carries forward the requirement for a minimum of 85% removal of BOD5 and TSS pursuant to 06-096 CMR 525(3)(III)(a)(3) and (b)(3). This permitting action carries forward a minimum monitoring frequency requirement of once per month for percent removal. The permittee's wastewater treatment system does not contain an influent sampling location that is representative of raw wastewater conditions.

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 BOD₅ and TSS may be assumed to be 286 mg/L. This permitting action also is carrying forward authorization for the Newagen Seaside Inn, Inc. to assume a midrange influent BOD5 and TSS concentration value of 286 mg/L for the purpose 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.

e. Fecal Coliform Bacteria: The previous permitting action established, and this permitting action is carrying forward, seasonal 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. This permitting action establishes seasonal monthly average and daily maximum concentration limits of 14 colonies/100 ml and 31 colonies/100 ml pursuant to 38 MRS § 465 (B)(2)(B). The twice per month (2/month) monitoring frequency is carried forward in this permitting action. Bacteria limits are seasonal and apply between May 15 and September 30 of each year. However, the Department reserves the right to require year-round disinfection to protect the health, safety and welfare of the public.

A summary of effluent fecal coliform bacteria data as reported on the DMRs for the period February 2017- August 2023 (applicable months only) follows:

Fecal coliform bacteria (DMR = 33)

Value	Limit (col/100 mL)	Range (col/100 mL)	Mean (col/100 mL)
Monthly Average	15	1 - 2,400	82.34
Daily Maximum	50	1 - 2,400	199.4

During this period, the permittee reported a total of 9 excursions from the numeric bacteria limits.

f. Enterococcus Bacteria: Pursuant to 38 MRS § 465 (B)(2)(B), this permitting action is establishing a monitoring requirement for enterococcus bacteria with monthly average and daily maximum limits of 8 CFU/100 ml and 54 CFU/100 ml respectfully. In addition to fecal coliform limits to protect the designated use of "propagation and harvesting of shellfish", it is appropriate to require end-of-pipe limits for enterococcus bacteria to protect the designated use of "recreation in and on the water." The reporting period will be seasonal, April 15th through October 31st, beginning April 2024.

The monitoring frequency requirement for enterococcus bacteria is once per month (1/Month)

g. Total Residual Chlorine (TRC): The previous permitting action established a daily maximum water quality-based concentration limit of 1.0 mg/L for TRC with 2/Week monitoring requirement. Limitations on TRC are specified to ensure that ambient water quality standards are maintained at all times of the year and that BPT technology is being applied to the discharge. Department permitting actions impose the more stringent of either a water quality-based or BPT-based limit. With dilution factors as determined in Section 6(c) of this Fact Sheet, end-of-pipe (EOP) water quality-based concentration thresholds for TRC may be calculated as follows:

			Calculated	
Acute (A)	Chronic (C)	A & C	Acute	Chronic
Criterion	Criterion	Dilution Factors	Limit	Limit
0.013 mg/L	0.0075 mg/L	400:1(A) 1,200:1(C)	5.2 mg/L	9.0 mg/L

The water quality-based acute threshold of 1.0 mg/L is more stringent than either calculated water quality-based threshold above and is therefore being carried forward in this permitting action. The Department is identifying that dechlorination may be required to comply with this water quality-based threshold.

A summary of the effluent TRC data as reported on the DMRs submitted to the Department for the period of February 2017- August 2023 is as follows;

Total residual chlorine (DMRs = 20)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.00 - 0.47	0.022

- h. <u>pH:</u> The previous permitting action established, and this permitting action carries forward, a technology-based pH limit of 6.0 9.0 standard units (SU), which is based on 06-096 CMR 525(3)(III). The previous permitting action established, and this permit carries forward a monitoring frequency of 1/month for pH. A review of the DMR data submitted by the permittee for the period February 2017- August 2023 show the facility experienced one exceedance during the permit cycle.
- i. Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing: 38 M.R.S. § 414-A and 38 M.R.S. § 420 prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. 06-096 CMR 530 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. 06-096 CMR 584 sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

06-096 CMR 530(2)(A) specifies the dischargers subject to the rule as, "...all licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedances of narrative or numerical water quality criteria."

W001689-5C-F-R

Page 9 of 11

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

06-096 CMR 530(2)(A) further specifies the criteria for the exemption of certain discharges from toxics testing as follows:

- (1) Discharges from individual discharge points licensed to discharge less than 50,000 gallons per day of solely domestic wastewater and with a chronic dilution factor of at least 50 to 1, provided no holding tank wastes containing chemicals are accepted by the facility;
- (2) Discharges from residential overboard discharge systems; or
- (3) Discharges from combined sewer overflow discharge points, provided the owner of the sewerage system is conducting or participating in a discharge abatement program.

The permittee's facility is exempt from the 06-096 CMR 530 requirements as the characteristics of the wastewater are similar to that of a residential overboard discharge. Additionally, the permit authorizes a discharge of less than 50,000 gpd of solely domestic wastewater and the chronic dilution factor is greater than 50:1. However, should there be a substantial change in the characteristics of the discharge in the future; the Department may reopen this permit pursuant to Special Condition K, *Reopening of Permit for Modifications*, to incorporate the applicable whole effluent toxicity (WET), priority pollutant or analytical testing requirements cited above.

j. Nitrogen: Pursuant to 40 C.F.R. §122.44(d)(1), and Department rule 06-096 CMR Chapter 523 §5(d) NPDES/MEPDES permits must contain any requirements in addition to TBELs necessary to achieve water quality standards established under § 303 of the CWA. In addition, limitations "must control any pollutant or pollutant parameter (conventional, non-conventional, or toxic) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any water quality standard, including State narrative criteria for water quality". See 40 C.F.R. § 122.44(d)(1)(i) and Department rule 06-096 CMR Chapter 523 §5(d). There is reasonable potential to cause or contribute to an excursion if the projected or actual instream concentration exceeds the applicable criterion. If the permitting authority determines that a discharge causes, has the reasonable potential to cause, or contributes to such an excursion, the permit must contain WQBELs for the pollutant. See 40 C.F.R. 122.44(d)(1)(iii) and Department rule 06-096 CMR Chapter 523 §5(d).

The Department has no information as to the concentration of total nitrogen being discharged from the facility. However, the Department does have information from other small dischargers and small POTW's that indicate discharges are in the 15-17 mg/L range. With a permitted flow limitation of 0.0125 MGD and an estimated discharge concentration of 17 mg/L, the discharge from the facility would be 1.77 lbs/day.

$$(0.0125 \text{ MGD})(8.34 \text{ lbs/gal})(17 \text{ mg/L}) = 1.77 \text{ lbs/day}$$

With a discharge to the open ocean and the dilution factors associated with the discharge, the Department has determined this discharge does not have a reasonable to cause or contribute to excursions of any water quality standard. Therefore, no limitations or monitoring requirements are being established in this permitting action.

7. ANTI-DEGRADATION/DISCHARGE IMPACT ON RECEIVING WATER QUALITY

Federal regulation 40 CFR, §122(l) contains the criteria for what is often referred to as the anti-backsliding provisions of the Federal Water Pollution Control Act (Clean Water Act). In general, the regulation states that except for provisions specified in the regulation, effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards or conditions in the previous permit. Applicable exceptions include (1) material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation and (2) information is available which was not available at the time of the permit issuance (other than revised regulations, guidance, or test methods) and which would justify the application of less stringent effluent limitations at the time of permit issuance. All limitations in this permit are equally or more stringent than those in the previous permit.

8. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

9. PUBLIC COMMENTS

Public notice of this application was made in the <u>Boothbay Register</u> newspaper on or about April 7, 2022. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, CMR 522 (effective January 12, 2001).

10. DEPARTMENT CONTACTS

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

Rodney Robert
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station

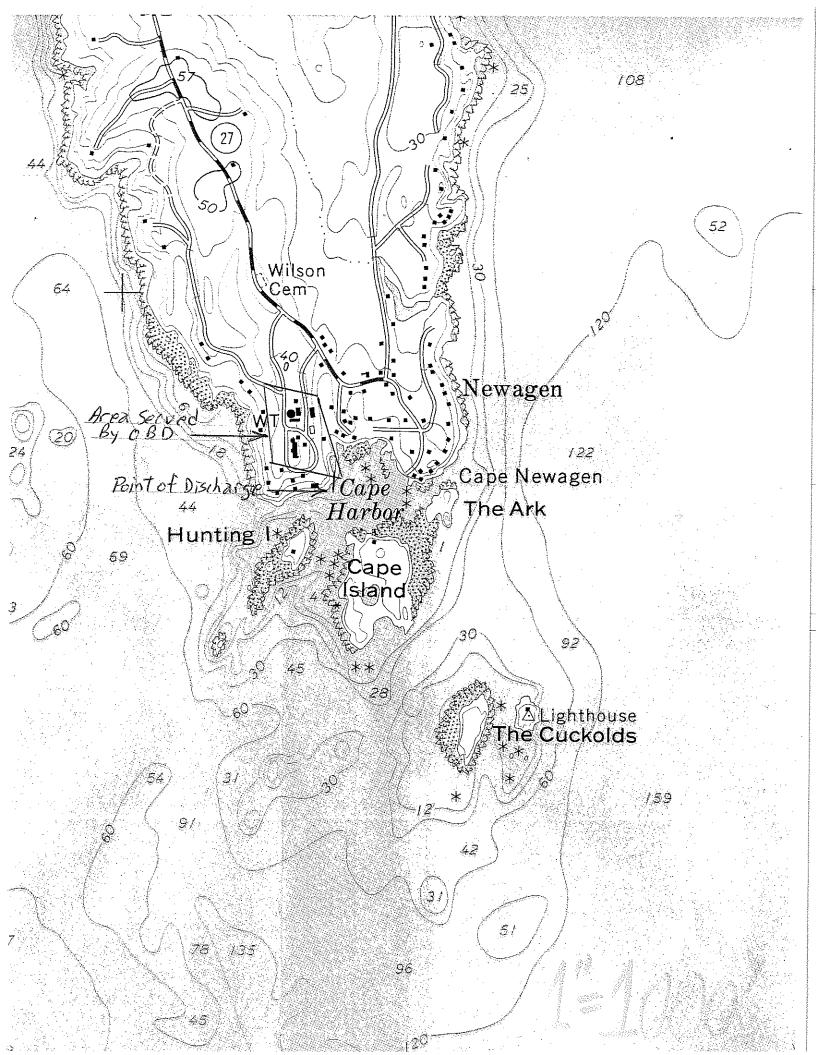
Augusta, Maine 04333-0017 Telephone: (207) 680-0576

e-mail: rodney.robert@maine.gov

11. RESPONSE TO COMMENTS

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









Maine Department of Marine Resources Pollution Area No. 21-F



Lower Sheepscot River and Sheepscot Bay (Georgetown, Southport)

4/29/11

