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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF SORRENTO	)	MAINE POLUTANT DISCHARGE
SORRENTO, HANCOCK COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
#ME0102130	)	WASTE DISCHARGE LICENSE
#W002280-6A-H-R **APPROVAL**	)	**RENEWAL**

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

APPLICATION SUMMARY

On April 8, 2022, the Department accepted as complete for processing an application from the TOWN of SORRENTO for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit ME0102130/ Maine Waste Discharge License (WDL) #W002280-6A-G-R which was issued by the Department on March 2, 2017 and authorized the daily maximum discharge of 3,420 gallons per day (GPD) of secondary treated sanitary wastewater from a municipal wastewater treatment facility to the Atlantic Ocean at Back Cove, Class SB, in Sorrento, Maine.

PERMIT SUMMARY

This permit carries forward all the terms and conditions of the previous permit except this permit:

1. Establishes a monthly average limit of 8 CFU or MPN/100 mL and a daily maximum limit of 54 CFU or MPN/100 mL for Enterococci bacteria from April 15th through October 31st with a 1/Month monitoring frequency pursuant to *Standards for Classification of Estuarine and Marine Waters,* 38 M.R.S. §465-B (2).

2. Establishes a 1/month testing requirement for fecal coliform bacteria with a monthly average of 14 CFU or MPN / 100mL and a daily maximum of 31 CFU or MPN / 100mL pursuant to *Standards for Classification of Estuarine and Marine Waters*, 38 M.R.S. §465-B (2) and The National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish – 2023 Revision.

3. Establishes a monthly average limit of 12 ng/L and daily maximum limit of 18 ng/L with a once per year monitoring frequency during the period April 15th- October 31st for Total Mercury.

PERMIT SUMMARY (cont'd)

4. Expands the monitoring period for BOD5, TSS, Total Residual Chlorine, Settleable Solids and pH, to April 15th through October 31st to align with the enterococcus monitoring period.

CONCLUSIONS

BASED on the findings summarized in the attached **PROPOSED DRAFT** Fact Sheet dated March 27, 2026, 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 water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification.

   (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and

   (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

4. The discharge will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of Licenses,* 38 M.R.S. § 414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the application of the TOWN of SORRENTO to discharge a daily maximum flow of 3,420 gallons per day of secondary treated sanitary wastewater to the Atlantic Ocean at BACK COVE, Class SB, in SORRENTO, Maine, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

1. *Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits*, revised July 1, 2002, copy attached.

2. The attached Special Conditions, including any effluent limitations and monitoring requirements.

3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions remain in effect until final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S. § 10002 and Department Rule *Concerning the Processing of Applications and Other Administrative Matters,* 06-096 C.M.R. ch. 2 § 20(A) (effective September 15, 2024)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS ___ DAY OF _____2026.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY_____
For MELANIE LOYZIM, Commissioner

Date of initial receipt of application March 29, 2022
Date of application acceptance April 8, 2022

This Order prepared by Rod Robert, Bureau of Water Quality

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **secondary treated sanitary wastewater via Outfall #001A** to the Atlantic Ocean at Back Cove in Sorrento, Maine. Such discharges must be limited and monitored by the permittee as specified below [(1)]:

Effluent Characteristic	Discharge Limitations			Minimum Monitoring Requirements				
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	--	--	3,420 GPD *[07]*	--	--	--	--	--
BOD_5[(2)] *(April 15th-October 31st) [00310]*	1.0 lbs./day *[26]*	1.3 lbs./day *[26]*	1.4 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Month [(2)] *[01/30]*	Grab *[GR]*
TSS[(2)] *(April 15th-October 31st) [00530]*	1.0 lbs./day *[26]*	1.3 lbs./day *[26]*	1.4 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Month [(2)] *[01/30]*	Grab *[GR]*
Settleable Solids[(2)] *(April 15th-October 31st) [00545]*	--	--	--	--	--	0.3 ml/L *[25]*	1/Month [(2)] *[01/30]*	Grab *[GR]*
Fecal Coliform Bacteria [(3)] *(April 15th-October 31st) [31616]*	--	--	--	14 CFU/100 mL [(5)] *[13]*	--	31 CFU/100 mL [(5)] *[13]*	1/Month *[01/30]*	Grab *[GR]*
Enterococci Bacteria [(4)] *(April 15th-October 31st) [61211]*	---	---	---	8 CFU/100mL *[13]*	---	54 CFU/100mL *[13]*	1/Month *[1/30]*	Grab *[GR]*
Total Residual Chlorine [(5)] *(April 15th-October 31st) [50060]*	--	--	--	**--**	--	1.0 mg/L *[19]*	1/Month *[12/30]*	Grab *[GR]*
pH *(April 15th-October 31st) [00400]*	--	--	--	--	--	6.0 – 9.0 SU *[12]*	1/Month [(2)] *[01/30]*	Grab *[GR]*
Mercury, total [(2, 6)] *[71900]*	--	--	--	12.0 ng/L *[3M]*	--	18.0 ng/L *[3M]*	1/Year *[01/01]*	Grab *[GR]*

SPECIAL CONDITIONS

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

Footnotes

1. **Sampling** - All effluent monitoring shall be conducted at a location following the last treatment unit in the treatment process 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.

   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 shall be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. Samples that are sent to a publicly owned treatment works (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 ch.263 (last amended March 15, 2023). 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 (DMR).

   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.

SPECIAL CONDITIONS

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

2. **Monitoring –** Monitoring for BOD5, TSS, TRC, Settleable Solids, Fecal Coliform, Enterococcus bacteria, and pH, are required only during the period of April 15 through October 31.

3. **Fecal Coliform –**. The monthly average fecal coliform limit is a geometric mean, and results must be calculated and reported as such. The minimum monitoring frequency is twice per month. Sampling events must be separated by at least 14 days.

4. **Enterococcus bacteria –** The monthly average enterococcus bacteria limitation is a geometric mean and sample results must be calculated and reported as such. The minimum monitoring frequency is once per month. Sampling events must be separated by at least 14 days.

5. **Total residual chlorine (TRC) –** Limitations and monitoring requirements are in effect any time elemental chlorine or chlorine-based compounds are utilized to disinfect the discharge(s). The minimum monitoring frequency is once per month. Sampling events must be separated by at least 14 days. The permittee must utilize a USEPA-approved test method capable of bracketing the TRC limitations specified in this permitting action. Monitoring for TRC is only required when elemental chlorine or chlorine-based compounds are in use for effluent disinfection. For instances when a facility has not disinfected with chlorine-based compounds for an entire reporting period, the facility must report "NODI-9" for this parameter on the monthly DMR or "N9" if the submittal is an electronic DMR.

6. **Total mercury**- The permittee must conduct all mercury monitoring required by this permit or required to determine compliance with interim limitations established pursuant to Interim Effluent Limitations and Controls for the Discharge of Mercury, 06-096 C.M.R. ch. 519 in accordance with the USEPA's "clean sampling techniques" found in USEPA Method 1669, Sampling Ambient Water for Trace Metals At EPA Water Quality Criteria Levels. All mercury analyses must be conducted in accordance with USEPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. The Department's reporting form for mercury test results is available on the Department's website at: https://www.maine.gov/dep/water/wd/municipal_industrial/ToxSheetMay2020.xlsx

   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.

SPECIAL CONDITIONS

A. NARRATIVE EFFLUENT LIMITATIONS (cont'd)

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.

B. TREATMENT PLANT OPERATOR

The treatment facility must be operated by a person holding a minimum of a **Maine Grade II** Biological Treatment certificate (or higher) or must be a Professional Engineer licensed in the State of Maine pursuant to *Sewerage Treatment Operators*, 32 M.R.S. § 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 C.M.R. Ch. 531 (effective July 24, 2023). All proposed contracts for facility operation by any person must be reviewed by the Department before the permittee may engage the services of the contract operator.

C. 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 8, 2022, 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of wastewater from any other point source are not authorized under this permit and must be reported in accordance with Standard Condition D(1)(f), *Twenty-four-hour reporting*, of this permit.

SPECIAL CONDITIONS

D. NOTIFICATION REQUIREMENT

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

1. Any introduction of pollutants into the wastewater collection and treatment system from an indirect discharger in a primary industrial category discharging process wastewater; and

2. Any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants into the system at the time of permit issuance.

3. For the purposes of this section, adequate notice must include information on:

   (a) The quality and quantity of wastewater introduced to the wastewater collection and treatment system; and

   (b) Any anticipated impact of the change in the quantity or quality of the wastewater to be discharged from the treatment system.

E. OPERATION & MAINTENANCE (O&M) PLAN

The permittee must have a current written comprehensive Operation & Maintenance (O&M) Plan. The plan must provide a systematic approach by which the permittee must always, properly operate and maintain all facilities and systems of transport, 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 or substantial upgrades of the wastewater treatment facility the permittee must submit the updated O&M Plan to their Department inspector for review and comment.

SPECIAL CONDITIONS

F. SEPTIC TANK MAINTENANCE

1. The permittee must regularly inspect and maintain septic tanks and other treatment tanks to ensure that they are providing the best practicable treatment in accordance with Maine State Rule, *Subsurface Wastewater Disposal Rule,* 10-144 Ch. 241. Tank contents must be removed whenever the sludge and scum occupy one-third of the tank's liquid capacity or whenever contents' level approaches the maximum design capacity. After pumping, the tanks must be checked for damage at key joints and the inlet and outlet baffles. Any damage must be promptly repaired.

2. The permittee must maintain log(s) of inspections and maintenance activities that record:
   a) the date of inspection or maintenance activity,
   b) notes on observations,
   c) repairs conducted,
   d) dates of pumping,
   e) quantities of material removed,
   f) name and phone number of the licensed contractor(s) performing the work,
   g) pumping frequency,
   h) other information relevant to the safe and effective operation and maintenance of septic tanks.

The permittee must always maintain the inspection and maintenance log(s) onsite and available to Department personnel upon request.

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

SPECIAL CONDITIONS

H. REOPENING OF PERMIT FOR MODIFICATIONS

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

I. SEVERABILITY

In the event that any provision or part thereof of this permit is declared to be unlawful by a reviewing court, the remainder of the permit 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: **MARCH 27, 2026**

MEPDES PERMIT: **#ME0102130**
WASTE DISCHARGE LICENSE: **#W002280-6A-H-R**

NAME AND ADDRESS OF APPLICANT:

TOWN OF SORRENTO
79 POMELA AVENUE
SORRENTO, MAINE 04677

COUNTY: **HANCOCK**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

TOWN OF SORRENTO
OCEAN AVENUE
SORRENTO, MAINE 04677

RECEIVING WATER / CLASSIFICATION: **ATLANTIC OCEAN AT BACK COVE / CLASS SB**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

ANNALEIS HAFFORD
SENIOR PROCESS ENGINEER
(207) 223-2232
annaleis@olverassociatesinc.com

1. APPLICATION SUMMARY

a. Application: On April 8, 2022, the Department of Environmental Protection ("Department") accepted as complete for processing an application from the TOWN of SORRENTO ("town" or "permittee") for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit ME0102130/ Maine Waste Discharge License (WDL) #W002280-6A-G-R which was issued by the Department on March 2, 2017 and authorized the daily maximum discharge of 3,420 gallons per day (GPD) of secondary treated sanitary wastewater from a municipal wastewater treatment facility to the Atlantic Ocean at Back Cove, Class SB, in Sorrento, Maine.

2. PERMIT SUMMARY

a. Terms and conditions: This permit carries forward all the terms and conditions of the previous permit, except that this permit:

1. Establishes a monthly average limit of 8 CFU or MPN/100 mL and a daily maximum limit of 54 CFU or MPN/100 mL for Enterococci bacteria from April 15th through October 31st with a 1/Month monitoring frequency pursuant to Standards for Classification of Estuarine and Marine Waters, 38 M.R.S. §465-B (2).

2. Establishes a 1/month testing requirement for fecal coliform bacteria with a monthly average of 14 CFU or MPN / 100mL and a daily maximum of 31 CFU or MPN / 100mL pursuant to Standards for Classification of Estuarine and Marine Waters, 38 M.R.S. §465-B (2) and The National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish – 2023 Revision.

3. Establishes a monthly average limit of 12 ng/L and daily maximum limit of 18 ng/L with a once per year monitoring frequency during the period April 15th through October 31st for Total Mercury.

4. Expands the monitoring period for BOD5, TSS, Total Residual Chlorine, Settleable Solids and pH, to April 15th through October 31st to align with the enterococcus monitoring period.

b. History: This section provides a summary of significant regulatory actions associated with the Town's wastewater treatment facility.

August 21, 1978 - The Department issued WDL #2280 that authorized the discharge of untreated sanitary wastewater from a municipal sewer system to the tidewaters of Sorrento. Prior to this licensing action, the Town of Sorrento held a Time Schedule Variance which allowed for the discharge of untreated wastewater.

January 3, 1984 - The Department renewed WDL #2280 that authorized the discharge of untreated sanitary wastewater. At the time of license renewal, the Town held a Time Schedule Variance from the Department which allowed for the discharge of untreated wastewater. The waste discharge license expired on January 3, 1987.

September 17, 1986 – The U.S. Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) permit renewal #ME0102130 for a five-year term.

Fall of 1989 – Ten sandfilter systems were installed and fully functional.

2. **PERMIT SUMMARY (cont'd)**

November 2, 1993 - The Department renewed the WDL for the Sorrento facility by issuing WDL #W002280-58-A-R for the discharge of 3,420 GPD of secondary treated wastewater to Back Cove, Class SB, in Sorrento, Maine.

February 15, 1995 - The Department issued a letter notifying the licensee that the facility was exempt from toxicity testing requirements of Department Rule Chapter 530.5, *Surface Water Toxics Control Program*, which was adopted on October 12, 1994.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permit program in Maine, excluding areas of special interest to Maine Indian Tribes. From that point forward, the program has been referred to as the MEPDES program, and MEPDES permit #ME0102130 has been utilized as the primary reference number for the Town's wastewater treatment facility.

December 18, 2001 – The Department issued combination WDL/MEPDES permit #W002280-5K-B-R/#ME0102130 to the Town for a five-year term.

December 11, 2006 – The Town submitted a timely and complete General Application to the Department for renewal of the December 18, 2001, MEPDES permit. The application was accepted for processing on December 13, 2006, and was assigned WDL #W002280-6A-C-R / MEPDES #ME0102130.

April 27, 2007 – The Department issued a minor permit revision to modify the minimum monitoring frequency requirements for TRC and fecal coliform bacteria to twice per month.

September 6, 2011 – The Department issued combination WDL/MEPDES permit #W002280-6A-C-R/#ME0102130 to Town for a five-year term.

December 6, 2011 – The Department issued a minor permit revision to modify the minimum monitoring frequency requirements for biological oxygen demand, total suspended solids, settleable solids and pH to once per month during the period of May1 through September 30.

August 24, 2015 – The Department issued a minor permit revision to modify the water quality based total residual chlorine concentration limits in Waste Discharge License W002280-6A-C-R/ME0102130.

March 15, 2016 – The Department accepted as complete for processing an application from the TOWN of SORRENTO to renew WDL #W002280-6A-C-R / MEPDES #ME0102130.

March 2, 2017 – The Department issued combination WDL/MEPDES permit #W002280-6A-G-R/#ME0102130 to Town for a five-year term.

2. PERMIT SUMMARY (cont'd)

April 8, 2022 – The Department accepted as complete for processing an application from the TOWN of SORRENTO to renew WDL #W002280-6A-G-R / MEPDES #ME0102130.

c. Source Description: Sorrento's wastewater treatment facilities receive sanitary wastewater from residential and commercial buildings. The facilities do not receive industrial flows and are not authorized to receive septage. The collection system does not have any combined sewer overflows but does have two stormwater catch basins that direct stormwater to the final dechlorination maintenance hole. During the winter months the town's system is only utilized by one residence and the town's post office restroom.

d. Wastewater Treatment: The Town operates a small central treatment system in the village area that includes ten individual sand filters that discharge into a common outfall sewer. Twelve buildings and associated onsite septic systems discharge to sand filters. Eight of these filters serve individual properties and two filters serve groups of multiple properties. Tablet chlorination units provide disinfection of the filtered wastewater, which then flows into a common collector sewer (comprising approximately 900 linear feet of 10-in diameter clay pipe) to the dechlorination maintenance hole. At the dechlorination maintenance hole, a tablet dechlorination system provides removal of residual chlorine. An 18-in diameter HDPE pipe conveys water by gravity from the maintenance hole to the outfall.

The total sanitary wastewater design flow rate through the sand filters is 3,420 gpd (monthly average). The permittee discharges treated wastewater through Outfall #001A, which is an 18-in diameter outfall pipe, 11 ft below mean sea level and 5.81 ft below mean low water in Back Cove.

Subsurface, onsite septic systems with leach fields also provide treatment for several private lots within the Town of Sorrento.

Fact Sheet's Attachment A shows the location of the facility and receiving waters and Attachment B provides a layout of the treatment facilities.

3. CONDITIONS OF PERMITS

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

4. RECEIVING WATER QUALITY STANDARDS

Classification of estuarine and marine waters, 38 M.R.S. § 469 classifies the estuarine and marine waters of Sorrento 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 as follows:

2. *Class SB waters. Class SB waters shall be the 2nd highest classification.*

A. Class SB waters must be of such quality that they are suitable for the designated uses of recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation and as habitat for fish and other estuarine and marine life. The habitat must be characterized as unimpaired.

B. Class SB waters must be of sufficient quality to support all estuarine and marine species indigenous to those waters without detrimental changes in the resident biological community. The dissolved oxygen content of Class SB waters may not be less than 85% of saturation. Between April 15th and October 31st, the number of enterococcus bacteria in these waters may not exceed a geometric mean of 8 CFU or MPN per 100 milliliters in any 90-day interval or 54 CFU or MPN per 100 milliliters in more than 10% of the samples in any 90-day interval. The number of total coliform bacteria or other specified indicator organisms in samples representative of the waters in shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish Sanitation Program, United States Food and Drug Administration as set forth in its publication "Guide for the Control of Molluscan Shellfish" (2019 revision) or any successor publication.

C. Discharges to Class SB waters may not cause adverse impact to estuarine and marine life in that the receiving waters must be of sufficient quality to support all estuarine and marine species indigenous to the receiving water without detrimental changes in the resident biological community. There may be no new discharge to Class SB waters that would cause closure of open shellfish areas by the Department of Marine Resources. For the purpose of allowing the discharge of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety, the department may find that the discharged effluent will not cause adverse impact to estuarine and marine life as long as the materials and methods used provide protection for nontarget species. When the department issues a license for the discharge of aquatic pesticides authorized under this paragraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report (Report), prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists Back Cove, which includes the point of discharge at as: Assessment Unit ID ME010500021410_SB_EI_PE, in Category 3: Estuarine and Marine Waters with Insufficient Data or Information to Determine if Shellfish Harvesting Designated Use is Attained, and Category 5-D: Estuarine and Marine Waters Impaired for Non-Shellfish Harvesting Designated Uses by Legacy Pollutants

The Maine Department of Marine Resources (MEDMR) closes shellfish harvesting areas if there are known sources of discharges with unacceptable bacteria levels (thresholds established in the National Shellfish Sanitation Program) or maintains shellfish harvesting closure areas due to lack of updated information regarding ambient water quality conditions and current shoreline surveys. In addition, the MEDMR prohibits shellfish harvesting in the immediate vicinity of all wastewater treatment outfall pipes as a precautionary measure in the event of a failure in the treatment plant's disinfection system. Thus, the Back Cove in proximity to Outfall #001A is closed to shellfish harvesting. The shellfish closure area can be found at https://www.maine.gov/dmr/shellfish-sanitation-management/maps/index.html

The report states that all estuarine and marine water capable of supporting American lobster are listed in Category 5-D for shellfish consumption due to elevated levels of PBCs and other persistent, bioaccumulating substances in tomalley. The report notes that there is a statewide marine consumption advisory for a variety of saltwater finfish and shellfish based on elevated mercury, PCB, and dioxin levels.

The Department is making the determination that compliance with the fecal coliform bacteria and other secondary wastewater treatment limits established in this permitting action ensure that the discharge of secondary treated wastewater from the Town of Sorrento will not cause or contribute to the failure of the receiving waters to meet the standards of its designated classification.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Flow: This permit carries forward a daily maximum discharge flow limit of 3,420 gallons per day (GPD) for secondary treated wastewater via Outfall #001A, which is based on the design capacities of the ten sandfilter systems. Effluent flow monitoring is not required given the relatively small volume of wastewater the residential dwellings connected to the system generate.

b. Dilution Factors: 06-096 CMR ch.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."*

The Department has calculated dilution factors using plan and profile information provided by the permittee and the CORMIX model. The Department has determined the dilution factors for the discharge of 3,420 gallons per day from the wastewater treatment facility are as follows:

Acute: 110:1 Chronic: 3,875:1 Harmonic Mean 11,625:1

c. Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS): This permit carries forward, monthly average and weekly average technology-based concentration limits (TBELS) of 30 mg/L and 45 mg/L, respectively, for BOD_5 and TSS based on the secondary treatment requirements specified at *Effluent Guidelines and Standards*, 06-096 CMR Ch. 525(3)(III) (effective January 12, 2001), and a daily maximum concentration limit of 50 mg/L, which is based on a Department best professional judgment of best practicable treatment for secondary treated wastewater. The technology-based monthly average, weekly average, and daily maximum mass limits of 1.0 lbs./day, 1.3 lbs./day, and 1.4 lbs./day, respectively, established in a previous permitting action for BOD_5 and TSS are based on the discharge flow limit of 3,420 GPD and the applicable concentration limits which are also carried forward in this permit.

A review of the quarterly effluent BOD_5 and TSS data as reported on the DMRs submitted to the Department for the period March 2017 – March 2024 indicates the Town has been in 100 % compliance with all numeric limits. This permit carries forward the previously established once per month minimum monitoring frequency requirement for BOD_5 and TSS and expands the monitoring period to April 15th through October 31st.

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

d. Settleable Solids: This permit carries forward, a daily maximum concentration limit of 0.3 ml/L, which is considered by the Department as best professional judgment of best practicable treatment.

A summary of the effluent settleable solids data as reported on the DMRs submitted to the Department for the period March 2017 through March 2024 (N=24) indicates that the facility has been in compliance with the 0.3 ml/L limit during each sampling event. This permit carries forward the minimum monitoring frequency requirement of once per month for settleable solids and expands the monitoring period to April 15 through October 31.

e. Fecal Coliform Bacteria: The previous permit established a seasonal monthly average and daily maximum concentration limits of 15/100 mL and 50/100 mL, respectively, for fecal coliform bacteria. The fecal coliform limits applied between May 15th and September 30th of each year.

This permit amends the fecal coliform effluent limits to a monthly average of 14CFU/100 mL and a daily maximum of 31CFU/100 mL, pursuant to 38 M.R.S. 465-B (2)B and the National Shellfish Sanitation Program (NSSP) and the United States Food and Drug Administration (USDA) as set forth in its publication "Guide for the Control of Molluscan Shellfish" (2023 revision). These effluent limits apply from April 15th through October 31st of each year of the permit.

A review of the monthly Discharge Monitoring Report (DMR) data for calendar years March 2017 through March 2024 indicates the following:

Summary of fecal coliform data for Outfall #001A (N = 34)

Value	Limit (#/100 mL)	Range (#/100 mL)	Mean (#/100 mL)
Monthly average (as geometric mean)	15	<1.0 – 8.0	3.07
Daily maximum	50	<1.0 – 64	6.85

- The Town had one excursion above the daily maximum limit in mid-2017.

Minimum monitoring frequency requirements in MEPDES permits are prescribed by 06-096 C.M.R. ch. 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 fecal coliform regulated by the previous permit to determine if a reduction in the monitoring frequencies is justified.

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

Although USEPA's 1996 Guidance recommends evaluation of the most current two years of effluent data for a parameter, the Department is considering 34 months of data reports (March 2017 through March 2024).

A review of the monitoring data for fecal coliform indicates the ratio (expressed in percent) of the long-term effluent average to the monthly average limits can be calculated as 20% for fecal coliform.. According to Table I of the USEPA Guidance the monitoring requirement can be reduced 2/month to 1/month. Department guidance only allows monitoring frequencies to be reduced by no more than 50% of the initial testing frequency. This permitting action is reducing the monitoring frequency for Fecal Coliform from 2/month to 1/month.

f. Enterococcus Bacteria: In addition to fecal coliform limits to protect the designated use of "propagation and harvesting of shellfish", it is appropriate to require end-of-pipe limits for enterococcus bacteria, based on current Maine criteria, to protect the designated use of "recreation in and on the water" on a seasonal basis. This permit newly establishes a monthly average limit of 8 colony forming units (CFU)/100 ml and a daily maximum of 54 CFU/100 ml for enterococcus bacteria based on current Maine criteria found in *Standards for classification of estuarine and marine waters,* 38 M.R.S. §465-B (2). The seasonal reporting period is from April 15th through October 31st. A 1/Month monitoring requirement is also established in this permit.

g. Total Residual Chlorine (TRC): Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is applied to the discharge. This permit carries forward the previously established daily maximum concentration limit of 1.0 mg/L for TRC. Department permitting actions impose the more stringent of either a water quality-based or BPT-based limit. With dilution factors as determined above, end-of-pipe (EOP) water quality-based concentration thresholds for TRC may be calculated as follows by using water quality-based effluent limits (WQBELS) derived from the above-described dilution factors and the water quality criteria from *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 C.M.R. Ch. 584 (Appendix A, Table II; last amended February 16, 2020). End-of-pipe (EOP) WQBELs for TRC are as follows:

Acute WQBEL = (acute criterion) × (acute dilution factor)
Acute WQBEL = (0.013 mg/L) × (110) =1.43 mg/L

Chronic WQBEL= (chronic criterion) × (chronic dilution factor)
Chronic WQBEL= (0.0075 mg/L) × (3,875) =29.1 mg/L

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

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that dechlorinate the discharge to meet water quality-based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. The calculated water quality-based thresholds above are greater than the applicable technology-based standard of 1.0mg/L, therefore, the previously established 1.0 mg/L limitation is carried forward in this permit.

This permit carries forward the minimum monitoring frequency requirement for TRC of twice per month any time chlorine-based compounds are in use for effluent disinfection. Sampling events must be separated by at least 14 days. For instances when the chlorine-based compounds have not been utilized for effluent disinfection for an entire reporting period, the permittee must report "NODI-9" for this parameter on the monthly discharge monitoring report (DMR).

h. pH: This permit carries forward the previously established pH range limit of 6.0 – 9.0 standard units (SU), based on the secondary treatment requirements prescribed at *Effluent Guidelines and Standards*, 06-096 CMR ch.525(3)(III)(c). This permit carries forward the minimum monitoring frequency requirement of once per month and expands the monitoring period to April 15th through October 31st.

i. Mercury: Pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and *Waste Discharge Licenses*, 38 M.R.S. § 413 and Interim Effluent Limitations and Controls for the Discharge of Mercury, 06-096 C.M.R. Ch. 519 (last amended October 6, 2001), licensed dischargers in the State of Maine have effluent limits for mercury and monitor their effluents for this parameter unless they meet the exclusion requirements provided in the rule.

In 2001, the Department established interim daily maximum and monthly average effluent limits for mercury for eligible dischargers using effluent mercury data collected by the permittees. At the time, the Town of Sorrento did not formally receive mercury effluent limits. However, the Department's records show the permittee has been collecting effluent samples and analyzing for mercury since 1999.

The Department's files indicate that the Department calculated interim effluent limits for mercury in 2010 and communicated the limits via email to the permittee. However, subsequent permits did not contain these limits. This permit incorporates the effluent limits that the Department previously calculated for Sorrento, based on data points submitted to the Department, to be a monthly average of 12.0 ppt and a daily maximum of 18.0 ppt total mercury.

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

06-096 C.M.R. Ch. 519(7)(A) requires that Group II dischargers, which includes the Town of Sorrento, to sample and analyze their effluent for mercury twice per year. However, the rule also allows the Department to adjust this frequency for seasonal and intermittent dischargers. As this fact sheet previously describes, the permittee's effluent varies seasonally, therefore this permit establishes a monitoring frequency of once per year, during the period of April 15th to October 31st, which aligns with the monitoring period for other effluent parameters.

k. Nitrogen: Pursuant to 40 C.F.R. §122.44(d)(1), and Department rule 06-096 CMR Ch. 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 Ch. 523 §5(d). There is reasonable potential to cause or contribute to an excursion if the projected or actual in-stream 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 Ch. 523 §5(d).

In determining reasonable potential, the permitting authority considers: 1) existing controls on point and non-point sources of pollution; 2) the variability of the pollutant or pollutant parameter in the effluent; 3) the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity); and 4) where appropriate, the dilution of the effluent in the receiving water. The permitting authority typically considers the statistical approach outlined in Technical Support Document for Water Quality-based Toxics Control (TSD) to determine if the discharge causes, or has the reasonable potential to cause, or contribute to an excursion above any WQS. See 40 C.F.R. § 122.44(d) and Department rule 06-096 CMR Ch. 523 §5(d). The permitting authority's quantitative approach statistically projects effluent concentrations based on available effluent data, which are then compared to the applicable WQC

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 indicates that at the end of 2025 discharges averaged 19.55 mg/L (N=336). Using the last ten years of data the average is 19.14 mg/L. (N=281) With a permitted flow limitation is 0.0034 MGD and an estimated discharge concentration of 19.14 mg/L, the discharge from the facility would be 0.54 lbs./day.

(0.0034 MGD) (8.34 lbs./gal) (19.14 mg/L) = 0.54 lbs./day

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

Given the small volume of the discharge, the large dilution factors in the receiving water, and the potential influence of infiltration and stormwater on effluent characteristics, the Department's Division of Environmental Assessment determined that a reasonable potential analysis for total nitrogen for Sorrento's discharge is not necessary. Therefore, no limitations or monitoring requirements for Nitrogen are established in this permit.

l. 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 Ch.530 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected, and narrative and numeric water quality criteria are met. Surface Water Quality Criteria for Toxic Pollutants, 06-096 CMR Ch. 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 Ch. 530(2)(A) specifies the dischargers subject to the rule as, "…all licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedances of narrative or numerical water quality criteria." 06-096 CMR Ch. 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 Ch.530 requirements as it permitted to discharge less than 50,000 gpd or 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 J, Reopening of Permit for Modifications, to incorporate the applicable whole effluent toxicity (WET), priority pollutant or analytical testing requirements cited above.

7. ANTI-BACKSLIDING

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

8. ANTI-DEGRADATION

As permitted, the Department has determined the existing water uses will be maintained and protected and that the discharge will not cause or contribute to the failure of the Atlantic Ocean at Back Cove to meet the applicable standards for Class SB classification.

9. PUBLIC COMMENTS

Public notice of this application was made in the *Ellsworth American* newspaper on or about March 31, 2022. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses,* 06-096 CMR Ch. 522 (effective January 12, 2001).

10. DEPARTMENT CONTACTS

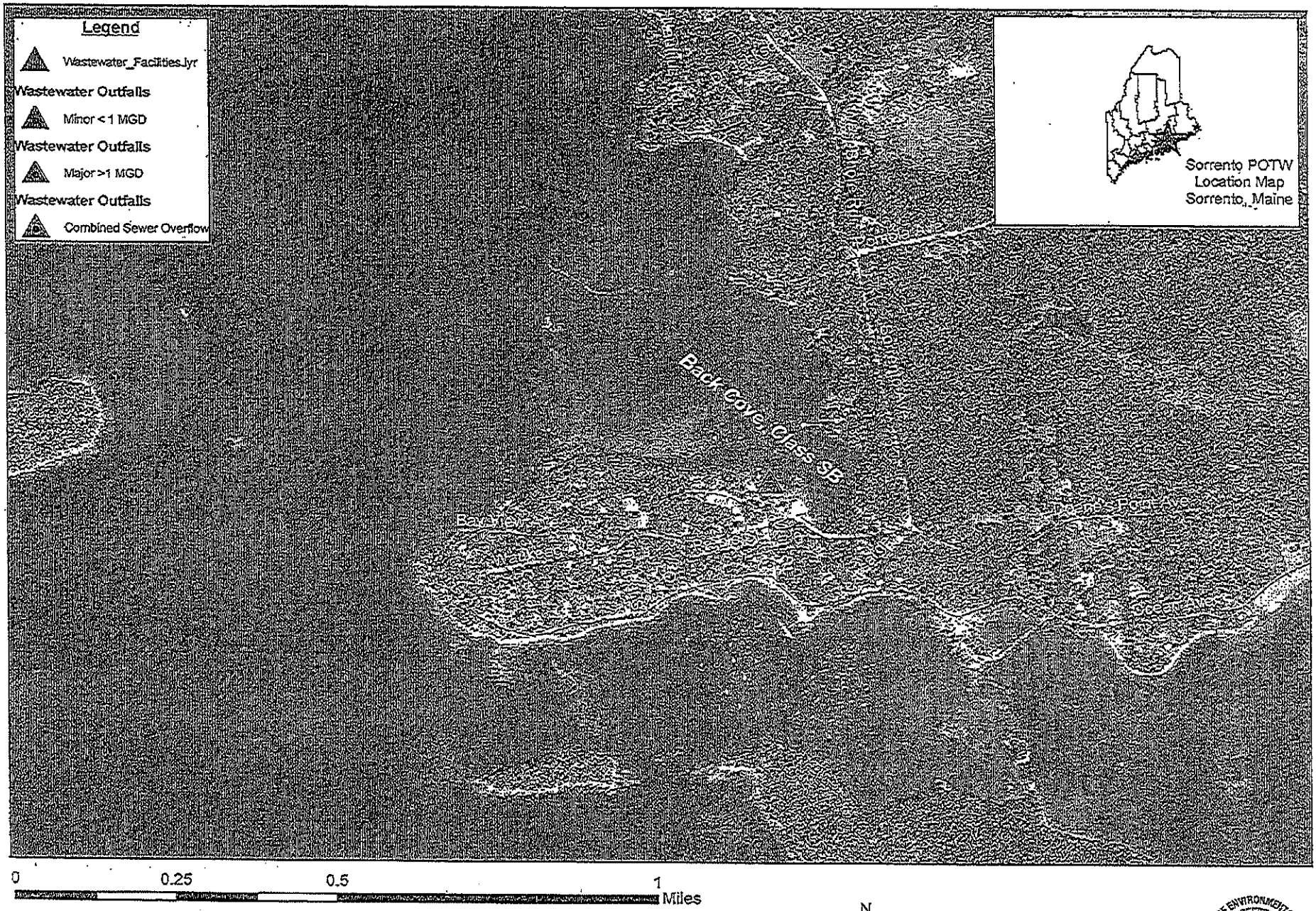
Additional information concerning this permitting action may be obtained from, and written comments sent to:

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-day (30) comment period.

ATTACHMENT A

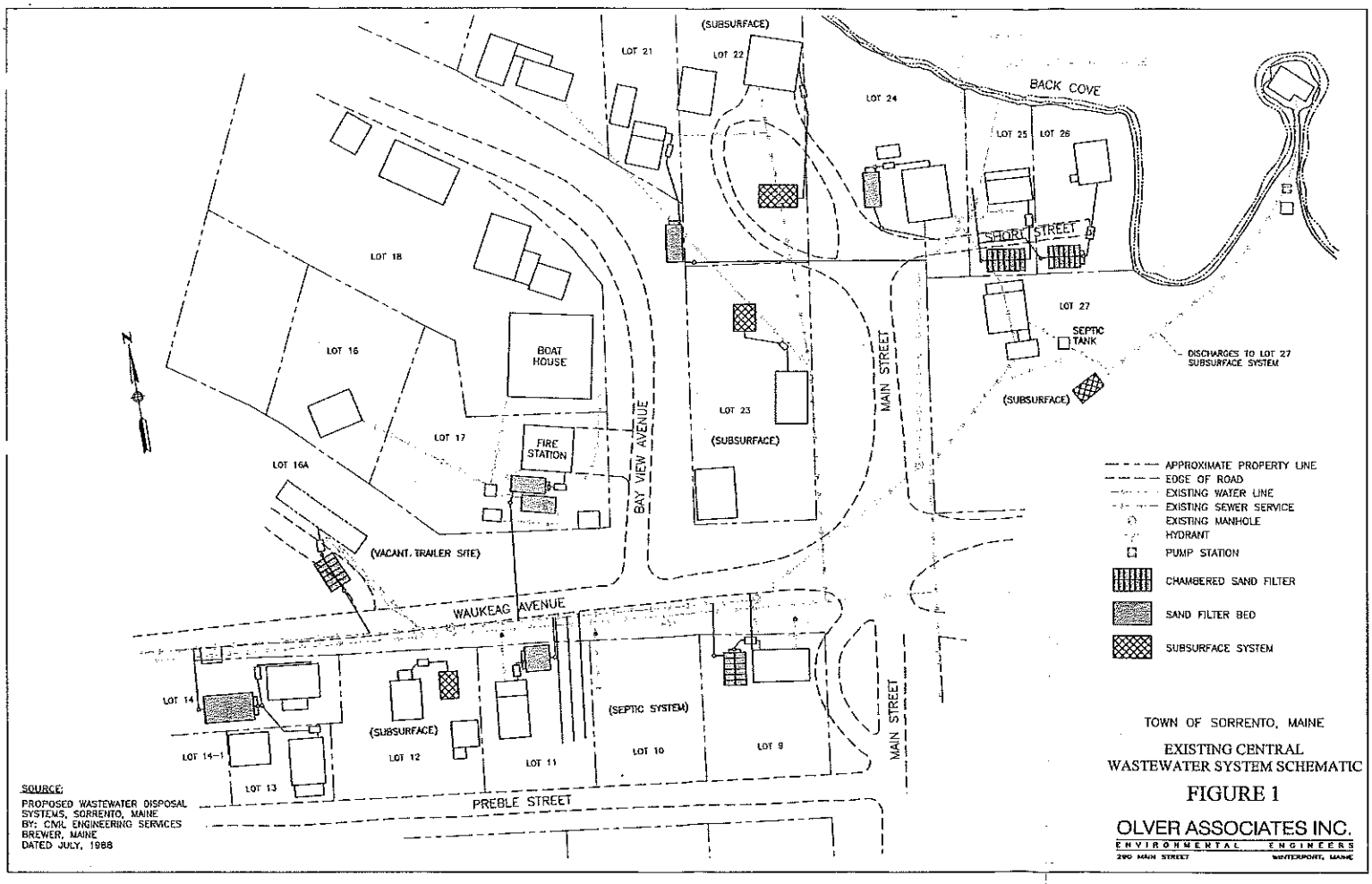


Town of Sorrento Wastewater Treatment Facility
(Community Sandfilters), Sorrento, Maine

Map created by
Maine DEP
June 2011

DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE OF MAINE

ATTACHMENT B



SOURCE:
PROPOSED WASTEWATER DISPOSAL SYSTEMS, SORRENTO, MAINE
BY: CMA ENGINEERING SERVICES
BREWER, MAINE
DATED JULY, 1988

TOWN OF SORRENTO, MAINE

EXISTING CENTRAL
WASTEWATER SYSTEM SCHEMATIC

FIGURE 1

OLVER ASSOCIATES INC.
ENVIRONMENTAL ENGINEERS
290 MAIN STREET WINTERPORT, MAINE