



JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



MELANIE LOYZIM
COMMISSIONER

November 5, 2021

Mr. Chris Higgins
Boothbay Harbor Sewer District
27 Sea Street
Boothbay Harbor, Maine 04538

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100064
Maine Waste Discharge License (WDL) Application #W002750-6C-J-R
Final Permit/License

Dear Mr. Higgins,

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL **renewal** which was approved by the Department of Environmental Protection. Please read this permit/license renewal and its attached conditions carefully. Compliance with this permit/license will protect water quality.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "*Appealing a Commissioner's Licensing Decision.*"

If you have any questions regarding the matter, please feel free to call me at 287-1298.

Your Department compliance inspector copied below is also a resource that can assist you with compliance. Please do not hesitate to contact them with any questions.

Thank you for your efforts to protect and improve the waters of the great state of Maine!

Sincerely,

Breanne Blaisdell
Division of Water Quality Management
Bureau of Water Quality

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

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

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

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

Enc.

cc:

Cindy Dionne, MDEP
James Knight, MDEP
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Irene Saumur, MDEP
Sandy Mojica, USEPA
Nathan Chien, USEPA
Richard Carvalho, USEPA



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: November 2018

Contact: (207) 287-2452

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner: (1) an administrative process before the Board of Environmental Protection (Board); or (2) a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This information sheet, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S. §§ 341-D(4) & 346; the *Maine Administrative Procedure Act*, 5 M.R.S. § 11001; and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 C.M.R. ch. 2.

DEADLINE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed more than 30 calendar days after the date on which the Commissioner's decision was filed with the Board will be dismissed unless notice of the Commissioner's license decision was required to be given to the person filing an appeal (appellant) and the notice was not given as required.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017. An appeal may be submitted by fax or e-mail if it contains a scanned original signature. It is recommended that a faxed or e-mailed appeal be followed by the submittal of mailed original paper documents. The complete appeal, including any attachments, must be received at DEP's offices in Augusta on or before 5:00 PM on the due date; materials received after 5:00 pm are not considered received until the following day. The risk of material not being received in a timely manner is on the sender, regardless of the method used. The appellant must also send a copy of the appeal documents to the Commissioner of the DEP; the applicant (if the appellant is not the applicant in the license proceeding at issue); and if a hearing was held on the application, any intervenor in that hearing process. All of the information listed in the next section of this information sheet must be submitted at the time the appeal is filed.

INFORMATION APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time the appeal is submitted:

1. *Aggrieved Status.* The appeal must explain how the appellant has standing to maintain an appeal. This requires an explanation of how the appellant may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions, or conditions objected to or believed to be in error.* The appeal must identify the specific findings of fact, conclusions regarding compliance with the law, license conditions, or other aspects of the written license decision or of the license review process that the appellant objects to or believes to be in error.
3. *The basis of the objections or challenge.* For the objections identified in Item #2, the appeal must state why the appellant believes that the license decision is incorrect and should be modified or reversed. If possible, the appeal should cite specific evidence in the record or specific licensing requirements that the appellant believes were not properly considered or fully addressed.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those matters specifically raised in the written notice of appeal.
6. *Request for hearing.* If the appellant wishes the Board to hold a public hearing on the appeal, a request for public hearing must be filed as part of the notice of appeal, and must include an offer of proof in accordance with Chapter 2. The Board will hear the arguments in favor of and in opposition to a hearing on the appeal and the presentations on the merits of an appeal at a regularly scheduled meeting. If the Board decides to hold a public hearing on an appeal, that hearing will then be scheduled for a later date.
7. *New or additional evidence to be offered.* If an appellant wants to provide evidence not previously provided to DEP staff during the DEP's review of the application, the request and the proposed evidence must be submitted with the appeal. The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered in an appeal only under very limited circumstances. The proposed evidence must be relevant and material, and (a) the person seeking to add information to the record must show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process; or (b) the evidence itself must be newly discovered and therefore unable to have been presented earlier in the process. Specific requirements for supplemental evidence are found in Chapter 2 § 24.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, and is made easily accessible by the DEP. Upon request, the DEP will make application materials available during normal working hours, provide space to review the file, and provide an opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer general questions regarding the appeal process.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed, the license normally remains in effect pending the processing of the appeal. Unless a stay of the decision is requested and granted, a license holder may proceed with a project pending the outcome of an appeal, but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge receipt of an appeal, and will provide the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, any materials submitted in response to the appeal, and relevant excerpts from the DEP's application review file will be sent to Board members with a recommended decision from DEP staff. The appellant, the license holder if different from the appellant, and any interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. The appellant and the license holder will have an opportunity to address the Board at the Board meeting. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, the license holder, and interested persons of its decision.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court (see 38 M.R.S. § 346(1); 06-096 C.M.R. ch. 2; 5 M.R.S. § 11001; and M.R. Civ. P. 80C). A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452, or for judicial appeals contact the court clerk's office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.



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

DEPARTMENT ORDER

IN THE MATTER OF

BOOTHBAY HARBOR SEWER DISTRICT)	MAINE POLLUTANT DISCHARGE
BOOTHBAY HARBOR,)	ELIMINATION SYSTEM PERMIT
LINCOLN COUNTY, MAINE)	
PUBLICLY OWNED TREATMENT WORKS)	AND
ME0100064)	WASTE DISCHARGE LICENSE
W002750-6C-J-R)	RENEWAL
APPROVAL)	

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

APPLICATION SUMMARY

On July 10, 2020, the Department accepted as complete for processing from the District a renewal application for Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100064/Waste Discharge License (WDL) #W002750-6C-I-R, which was issued on October 6, 2015 for a five-year term. The October 6, 2015 permit authorized the District to discharge a monthly average flow of 0.64 million gallons per day (MGD) of secondary treated wastewater from a municipally owned wastewater treatment facility to the tidal waters of Boothbay Harbor, Class SB, in Boothbay Harbor, Maine.

PERMIT SUMMARY

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

1. Increasing the *monitoring period* of Fecal coliform from seasonal to year-round pursuant to 38 MRS § 465 (B)(2)(B).
2. 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).

PERMIT SUMMARY (cont'd)

3. Establishing a seasonal monitoring requirement of 2/Month for Enterococci bacteria from April 15th – October 31st, starting on April 15th, 2022. As well as establishing 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).
4. Amends the “2/Month” footnote, language in the Footnotes section of Special Conditions A.

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CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated November 1, 2021, 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, 38 M.R.S., Section 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 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 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).

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ACTION

THEREFORE, the Department APPROVES the above noted application of the BOOTHBAY HARBOR SEWER DISTRICT to discharge a monthly average of 0.64 million gallons per day (MGD) of secondary treated municipal wastewaters to the waters of the Boothbay Harbor, Class SB, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations, including:

1. *“Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits,”* revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit 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 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) (effective June 9, 2018)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES DONE

AND DATED AT AUGUSTA, MAINE, THIS 4 DAY OF November 2021.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:



For Melanie Loyzim, Commissioner

FILED

NOV 4, 2021

**State of Maine
Board of Environmental Protection**

Date filed with Board of Environmental Protection _____

Date of initial receipt of application: June 26, 2020

Date of application acceptance: July 10, 2020

This order prepared by Breanne Blaisdell, BUREAU OF WATER QUALITY

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

The permittee is authorized to discharge secondary treated waste waters from **Outfall #001**, to the tidal waters of Boothbay Harbor. Such discharges are limited and must be 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, MGD [50050]	0.64 MGD [03]	---	Report MGD [03]	---	---	---	Continuous [99/99]	Recorder [RC]
BOD ₅ [00310]	160 lbs./day [26]	240 lbs./day [26]	267 lbs./day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Month ⁽²⁾ [02/30]	Composite [24]
BOD ₅ % Removal ⁽³⁾ [81010]	---	---	---	85 % [23]	---	---	1/Month [01/30]	Calculate [CA]
TSS [00530]	160 lbs./day [26]	240 lbs./day [26]	267 lbs./day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Month [02/30]	Composite [24]
TSS % Removal ⁽³⁾ [81011]	---	---	---	85 % [23]	---	---	1/Month [01/30]	Calculate [CA]
Settleable Solids [00545]	---	---	---	---	---	0.3 ml/L [25]	2/Month [02/30]	Grab [GR]
Fecal Coliform Bacteria ⁽⁴⁾ (<i>year-round</i>) [74055]	---	---	---	14 CFU/100 ml [13]	---	31 CFU/100 ml [13]	2/Month [02/30]	Grab [GR]
Enterococci Bacteria ⁽⁵⁾ (<i>April 15th - October 31st</i>) [61211]	---	---	---	8 CFU/100 ml [13]	---	54 CFU/100 ml [13]	2/Month [02/30]	Grab [GR]
Total Residual Chlorine ⁽⁶⁾ [50060]	---	---	---	0.1 mg/L [19]	---	0.2 mg/L [19]	5/Week [05/07]	Grab [GR]
Mercury (Total) ⁽⁷⁾ [71900]	---	---	---	32.6 ng/L [3M]	---	48.8 ng/L [3M]	1/Year [01/YR]	Grab [GR]
pH (Standard Units) [00400]	---	---	---	---	---	6.0-9.0 [12]	1/Day [01/01]	Grab [GR]

The italicized numeric values in brackets in the tables above and the tables that follow are not limitations but codes used by Department personnel to code monthly Discharge Monitoring Reports (DMR's).

FOOTNOTES: See Pages 7 – 10 of this permit for applicable footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

SCREENING LEVEL TESTING

Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level testing as follows:

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
<u>Whole Effluent Toxicity</u> ⁽⁸⁾						
<u>Acute No Observed Effect Level (A-NOEL)</u> <i>Americamysis bahia</i> (Mysid shrimp) [TDM3E]	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
<u>Chronic No Observed Effect Level (C-NOEL)</u> <i>Arbacia punctulata</i> (Sea urchin) [TBH3A]	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Analytical chemistry ^(9,11) [51477]	---	---	---	Report ug/L [28]	1/Quarter [01/90]	Composite/Grab [24]
Priority pollutant ^(10,11) [50008]	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/Grab [24]

The italicized numeric values in brackets in the tables above and the tables that follow are not limitations, but codes used by Department personnel to code monthly Discharge Monitoring Reports (DMR's).

FOOTNOTES: See Pages 7 – 10 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES

- 1. Sampling** - Sampling and analysis must be conducted in accordance with; a) methods approved in 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 Human Services. 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 (effective December 19, 2018). 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.

Sampling Locations: Any change in sampling location(s) must be reviewed and approved by the Department in writing.

Influent sampling for biochemical oxygen demand (BOD₅) and total suspended solids (TSS) must be sampled in the influent wetwell.

Effluent sampling- All effluent monitoring, with the exception of total residual chlorine, must be conducted before the effluent well (after the chlorination but before dechlorination) and is considered to be representative of end-of-pipe effluent characteristics.

- 2. 2/Month-Monitoring** required at a minimum frequency of 2/month, must be collected no less than 14 days between sampling events, unless specifically authorized by the Department's compliance inspector.
- 3. Percent Removal** – The treatment facility must maintain a minimum of 85 percent removal of both BOD₅ and TSS for all flows receiving secondary treatment. The percent removal must be calculated based on influent and effluent concentration values.
- 4. Fecal coliform bacteria** - The monthly fecal coliform average limitation is a geometric mean limitation and results must be calculated and reported as such. Limits apply on a year-round basis.
- 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. These monitoring and reporting requirements commence on April 15th, 2022.

SPECIAL CONDITIONS

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

6. **Total Residual Chlorine** – Limitations and monitoring requirements are in effect any time elemental chlorine or chlorine-based compounds are utilized to disinfect the discharge(s). The permittee must utilize a USEPA-approved test method capable of bracketing the TRC limitations specified in this permitting action. 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 “N9” on the electronic DMR.
7. **Mercury** – The permittee must conduct all mercury sampling required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519, in accordance with the USEPA’s “clean sampling techniques” found in USEPA Method 1669, *Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels*. All mercury analysis must be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry*. For a mercury test results reporting form, select “Whole effluent Toxicity, Chemistry and Mercury Reporting forms” at https://www.maine.gov/dep/water/wd/municipal_industrial/index.html. Compliance with the monthly average limitation established in Special Condition A of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Method 1669 and analysis Method 1631E on file with the Department for this facility.
8. **Whole Effluent Toxicity (WET) Testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic water quality thresholds of 6.7% and 0.8%, respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points. The critical acute and chronic thresholds were derived as the mathematical inverse of the applicable acute and chronic dilution factors of 15:1 and 125:1, respectively. See https://www.maine.gov/dep/water/wd/municipal_industrial/index.html for a copy of the Department’s WET reporting form.
 - a. **Surveillance level testing** – Waived pursuant to 06-096 CMR Chapter 530(2)(D)(3)(b).
 - b. **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level testing. Acute tests must be conducted on the mysid shrimp (*Americamysis bahia*) formerly referenced as *Mysidopsis bahia* and chronic tests must be conducted on the sea urchin (*Arbacia punctulata*).

SPECIAL CONDITIONS

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

WET test results must be submitted to the Department no later than the next DMR required by the permit, provided, however, the permittee may review the toxicity reports for up to 10 business days after receiving the test results from the laboratory conducting the testing before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedances of the critical acute and chronic water quality thresholds of 6.7% and 0.8%, respectively. See https://www.maine.gov/dep/water/wd/municipal_industrial/index.html for WET reporting forms.

Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following U.S.E.P.A. methods manuals:

- a. Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Marine and Estuarine Organisms, Third Edition, October 2002, EPA-821-R-02-014.
- b. Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002, EPA-821-R-02-012.

Results of WET tests must be reported each time a WET test is performed. Reporting forms can be found at: https://www.maine.gov/dep/water/wd/municipal_industrial/index.html, under *Whole Effluent Toxicity, Chemistry, and Mercury Reporting Forms*. Each time a WET test is performed, the permittee must sample and analyze for the parameters in the WET Chemistry and the Analytical Chemistry section of the reporting forms.

9. Analytical chemistry

- a. **Surveillance level testing** – Waived pursuant to 06-096 CMR Chapter 530(2)(D)(3)(b).
- b. **Screening level testing** – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level testing at a minimum frequency of once per calendar quarter (1/Quarter).

10. Priority pollutant testing

- a. **Surveillance level testing** – Not required pursuant to 06-096 CMR Chapter 530.

SPECIAL CONDITIONS

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

- b. Screening level testing** -- Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement the permittee must conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year). It is noted Chapter 530 does not require routine surveillance level priority pollutant testing in the first four years of the term of this permit.

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

Test results must be submitted to the Department not later than the next DMR required by the permit provided, however, that the permittee may review the toxicity reports for up to 10 business days after receiving the test results from the laboratory before submitting them. The permittee must evaluate test results being submitted and identify to the Department, possible exceedances of the acute, chronic or human health ambient water quality criteria as established in Department rule Chapter 584 (amended February 16, 2020).

For the purposes of Discharge Monitoring Report (DMR) reporting, enter a "1" for yes, testing done this monitoring period or "N-9" monitoring not required this period.

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent must not contain 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 effluent must not contain 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 discharge must not impart 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. Notwithstanding specific conditions of this permit, the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of.

SPECIAL CONDITIONS

C. TREATMENT PLANT OPERATOR

The person who has the management responsibility over the treatment facility must hold a **Grade III** certificate (or higher) or must be a Maine Registered Professional Engineer pursuant to *Sewage Treatment Operators*, Title 32 M.R.S., Sections 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.

D. LIMITATIONS FOR INDUSTRIAL USERS

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

E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on July 10, 2020; 2) the terms and conditions of this permit; and 3) only from Outfall #001. 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.

F. NOTIFICATION REQUIREMENT

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

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

F. NOTIFICATION REQUIREMENT (cont'd)

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 quality or quantity of the wastewater to be discharged from the treatment system.

G. WET WEATHER FLOW MANAGEMENT PLAN

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

The plan must conform to Department guidelines for such plans and must include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events. The plan must be kept on-site at all times and made available to Department and other regulatory personnel upon request. **The permittee must review their plan annually** and record any necessary changes to keep the plan up to date.

H. PUMP STATION EMERGENCY BYPASSES

Discharges from emergency overflow structures in pump stations and manholes are not authorized by this permit. The permittee must monitor the pump stations listed below in accordance with the DEP approved monitoring plan to determine the frequency and quantity (via measurement or estimation) of wastewater discharged from the overflow structures. Discharges from the following pump stations and manholes must be reported in accordance with Standard Condition B(5), *Bypasses*, and Special Condition E, *Authorized Discharges*, of this permit.

Outfall #	Location	Receiving Water & Classification
002	Pump Station #1, Union St.	Boothbay Harbor, Class SB
003	Pump Station #3, Mill Cove (Western Ave. /Mill Cove)	Boothbay Harbor, Class SB
004	Pump Station #2, Atlantic Ave.	Boothbay Harbor, Class SB
005	Pump Station #5, Townsend Ave/Meadow Rd.	Mill Creek, Class SB
006	Manhole ID 2-53, Western Ave.	Boothbay Harbor, Class SB
007	Pump Station, DMR, McKown Pt.	Boothbay Harbor, Class SB

SPECIAL CONDITIONS

I. OPERATION & MAINTENANCE (O&M) PLAN

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

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

J. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

Pursuant to this permit and *Standards for the Addition of Transported Wastes to Wastewater Treatment Facilities*, 06-096 CMR 555 (effective March 9, 2009), during the effective period of this permit, the permittee is authorized to receive and introduce into the treatment process or solids handling stream up to **a daily maximum of 6,400 gallons per day** of transported wastes, subject to the following terms and conditions.

1. "Transported wastes" means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.
2. The character and handling of all transported wastes received must be consistent with the information and management plans provided in application materials submitted to the Department.
3. At no time shall the addition of transported wastes cause or contribute to effluent quality violations. Transported wastes may not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility.

Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. Odors and traffic from the handling of transported wastes may not result in adverse impacts to the surrounding community. If any adverse effects exist, the receipt or introduction of

SPECIAL CONDITIONS

J. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY (cont'd)

transported wastes into the treatment process or solids handling stream must be suspended until there is no further risk of adverse effects.

4. The permittee must maintain records for each load of transported wastes in a daily log which must include at a minimum the following.
 - (a) The date;
 - (b) The volume of transported wastes received;
 - (b) The source of the transported wastes;
 - (d) The person transporting the transported wastes;
 - (e) The results of inspections or testing conducted;
 - (f) The volumes of transported wastes added to each treatment stream; and
 - (g) The information in (a) through (d) for any transported wastes refused for acceptance.

These records must be maintained at the treatment facility for a minimum of five years.

5. The addition of transported wastes into the treatment process or solids handling stream must not cause the treatment facility's design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of transported wastes into the treatment process or solids handling stream must be reduced or terminated in order to eliminate the overload condition.
6. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added must not be recorded as transported wastes but should be reported in the treatment facility's influent flow.
7. During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current Wet Weather Flow Management Plan approved by the Department that provides for full treatment of transported wastes without adverse impacts.
8. In consultation with the Department, chemical analysis is required prior to receiving transported wastes from new sources that are not of the same nature as wastes previously received. The analysis must be specific to the type of source and designed to identify concentrations of pollutants that may pass through, upset or otherwise interfere with the facility's operation.
9. Access to transported waste receiving facilities may be permitted only during the times specified in the application materials and under the control and supervision of the person responsible for the wastewater treatment facility or his/her designated representative.

SPECIAL CONDITIONS

J. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY (cont'd)

10. The authorization is subject to annual review and, with notice to the permittee and other interested parties of record, may be suspended or reduced by the Department as necessary to ensure full compliance with Chapter 555 of the Department's rules and the terms and conditions of this permit.

K. 06-096 CMR 530(2)(D)(4) STATEMENT FOR REDUCED/WAIVED TOXICS TESTING

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

- a. Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;
- b. Changes in the operation of the treatment works that may increase the toxicity of the discharge; and
- c. Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge.
- d. Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge.
- e. Increases in the type or volume of hauled wastes accepted by the facility.

Further, the Department may require that annual WET or priority pollutant testing be reinstituted if it determines that there have been changes in the character of the discharge or if annual certifications described above are not submitted.

L. 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:

SPECIAL CONDITIONS

L. MONITORING AND REPORTING (cont'd)

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.

M. REOPENING OF PERMIT FOR MODIFICATIONS

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.

N. SEVERABILITY

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

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

FACT SHEET

DATE: **NOVEMBER 1, 2021**

PERMIT NUMBER: **ME0100064**

LICENSE NUMBER: **W002750-6C-J-R**

NAME AND ADDRESS OF APPLICANT: **BOOTHBAY HARBOR SEWER DISTRICT
27 SEA STREET
BOOTHBAY HARBOR, MAINE 04538**

COUNTY: **LINCOLN COUNTY**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:
**BOOTHBAY HARBOR SEWER DISTRICT
27 SEA STREET
BOOTHBAY HARBOR, MAINE 04538**

RECEIVING WATER/CLASSIFICATION: **TIDEWATERS OF BOOTHBAY HARBOR/CLASS SB**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:
**Mr. Chris Higgins, Supt.
(207) 633-4663
e-mail: crhiggins@bbhsd.org**

1. APPLICATION SUMMARY

On July 10, 2020, the Department of Environmental Protection (Department) accepted as complete for processing from the Boothbay Harbor Sewer District (District) a renewal application for Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100064/Waste Discharge License (WDL) #W002750-6C-I-R, which was issued on October 7, 2015 for a five-year term. The October 7, 2015 permit authorized the District to discharge a monthly average flow of 0.64 million gallons per day (MGD) of secondary treated wastewater from a municipally owned wastewater treatment facility to the tidal waters of Boothbay Harbor, Class SB, in Boothbay Harbor, Maine.

2. PERMIT SUMMARY

- a. Terms and Conditions: This permitting action is carrying forward all the terms and conditions of the previous permitting action except that this permitting action is:
 1. Increasing the *monitoring period* of Fecal coliform from seasonal to year-round pursuant to 38 MRS § 465 (B)(2)(B).

2. PERMIT SUMMARY (cont'd)

2. 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).
 3. Establishing a seasonal monitoring requirement of 2/Month for Enterococci bacteria from April 15th – October 31st, starting on April 15th, 2022. As well as establishing 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).
 4. Amends the “2/Month” footnote, language in the Footnotes section of Special Conditions A.
- b. History: This section provides a summary of significant licensing actions and milestones that have been completed for the Boothbay Harbor Sewer District.

January 19, 1994 – The Department issued WDL #W002750-46-B-R for a five-year term.

October 5, 1998 - The U.S. Environmental Protection Agency (EPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0100064 for a five-year term.

May 23, 2000 – The Department administratively modified WDL #W002750-46-B-R by establishing interim average and maximum concentration limits of 32.6 part per trillion (ppt) and 48.8 ppt respectively, for mercury.

December 8, 2000 – The Department issued Waste Discharge License #W002750-5L-C-R for a five-year term.

January 12, 2001 - The Department received authorization from the EPA to administer the NPDES permitting program in Maine. From that point forward, the program has been referred to as the MEPDES permitting program.

August 13, 2001 - The Boothbay Harbor Sewer District submitted an application to the Department to modify WDL #W002750-5L-C-R to incorporate the terms and conditions of the MEPDES program.

August 21, 2001 – The Boothbay Harbor Sewer District submitted a letter to the Department authorizing the EPA to retire NPDES permit #ME0100064, last issued by the EPA on October 5, 1998. Upon issuance of the MEPDES permit, all terms and conditions of the NPDES were null and void.

2. PERMIT SUMMARY (cont'd)

September 24, 2001 – The Department issued combination MEPDES permit #ME0100064/WDL #W002750-5L-D-R for a five-year term.

December 13, 2005 – The Department issued combination MEPDES permit #ME0100064/WDL #W002750-5L-E-R for a five-year term.

August 5, 2010 - The Department issued combination MEPDES permit #ME0100064/WDL #W002750-6C-F-R for a five-year term.

February 6, 2012 – The Department issued a minor revision of the August 5, 2010, permit that reduced the monitoring frequency for mercury to 1/Year.

June 18, 2012 - The Department issued a minor revision of the August 5, 2010 permit that incorporated the list of new reporting limits for pollutants published by the Department on April 25, 2012.

September 9, 2013 - The Department issued a minor revision of the August 5, 2010, permit that eliminated the water quality based mass limits for inorganic arsenic based on a revision to the applicable ambient water quality criteria for inorganic arsenic.

April 28, 2015 – The District submitted a timely and complete application to the Department to renew the MEPDES permit/WDL issued on August 5, 2010.

October 7, 2015 - The Department issued combination MEPDES permit #ME0100064/WDL #W002750-6C-I-R for a five-year term.

June 26, 2020 – The District submitted a timely and complete application to the Department to renew the MEPDES permit/WDL issued on October 7, 2015.

- c. Source Description: Wastewater conveyed to the wastewater treatment facility is generated by domestic, and non-domestic entities within Boothbay Harbor, Boothbay, Squirrel Island, and Capital Island. The District also receives wastewater and process wastewater from the Boothbay Region Water District Water Filtration Plant. The facility is not required to implement a formal pretreatment program. The collection system is 100% separated, approximately fifteen miles in length and utilizes twenty pump stations to convey flows to the treatment facility. All twenty pump stations have emergency generator receptacles and manual transfer switches such that back-up power via a portable generator can be supplied to the stations in the event of a power failure. In addition, six of the twenty pump stations have on-site generators with automatic transfer switches for back-up power. There are six emergency discharge points (EDPs) in the District's sewer system. The EDPs were apparently constructed to protect the area around the pump stations and treatment plant from damage in the event of an extended power failure, pump station failures, or excessively high flows. The collection system is separated and does not treat storm water, however, the District does experience inflow and infiltration.

2. PERMIT SUMMARY (cont'd)

There are no combined sewer overflow (CSO) outfalls associated with the collection system.

A map showing the location of the treatment facility is included as Fact Sheet **Attachment B**.

- d. Wastewater Treatment: The District utilizes preliminary treatment, secondary treatment, disinfection, and dechlorination prior to discharge into Boothbay Harbor. Wastewater entering the plant first flows through a mechanical bar rack to remove screenings. Grit is then separated out through a grit chamber, washed, and removed with a screw conveyor. The grit is stored with the dewatered biosolids. The remaining wastewater is conveyed to the wetwell for storage.

Sequencing batch reactors (SBRs) are then used to treat the wastewater. As wastewater enters the SBRs, the SBR fills according to the operational phase it is in. Once the fill cycle ends, the flow moves into a second SBR and starts the treatment cycle again. From here the wastewater is allowed to settle. This provides for the separation of activated sludge from the wastewater. After settling, the effluent is discharged to a chlorine contact tank where sodium hypochlorite is added for disinfection. The wastewater remains in contact with the chlorine for 30 minutes. Sodium bisulfite is then added to dechlorinate the water. Any scum or floatable solids are removed, by skimmers, to an aerated sludge holding tank to be thickened for later treatment. The remaining wastewater is discharged to Boothbay Harbor via a pipe measuring 24 inches in diameter with three diffuser ports, each measuring 8 inches in diameter. The depth below mean low water at the outlet is 25 feet.

The sludge in the aerated sludge holding tank is thickened to 1 to 2 percent. The sludge is then dewatered with an Andritz centrifuge. Sludge cake out of the centrifuge averages 19 to 22 percent solids. Solids disposal is accomplished through either composting at the Hawk Ridge Composting facility, located in Unity Maine, or by disposal in the Juniper Ridge Landfill in Old Town.

The facility is authorized to introduce up to 6,400 gallons per day of septage into the wastewater treatment process provided it is done so in accordance with the most recent Department approved written Septage Management Plan required by Department rule Chapter 555. The District currently accepts domestic septage only. No industrial waste is accepted. Grease trap waste is not accepted. The District offers a 5,000-gallon aerated holding tank for use. The tank is screened with a 1-inch manual bar rack. The rack is cleaned after each dump. All screenings are collected, treated with hydrated lime, and disposed of at the Boothbay Region Refuse District transfer station. The District holds septage in the holding tank and allows the septage to aerate. Sodium hypochlorite is added to eliminate odors and kill filamentous bacteria prior to addition. After this process, the septage is metered into the influent wastewater through the plant headworks. Septage is introduced into the plant at night during low flow periods at a rate of 400 gallons per 2-hour period until the tank is empty. A process flow diagram submitted by the permittee is included as Fact Sheet **Attachment C**.

3. CONDITIONS OF PERMITS

Maine law, 38 M.R.S. Section 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S., Section 420 and Department rule 06-096 CMR Chapter 530, *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 Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants* (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

Maine Law, 38 M.R.S., Section 469, classifies Boothbay Harbor at the point of discharge as Class SB waters. *Standards for classification of estuarine and marine waters*, 38 M.R.S. § 465-B(2) describes the standards for classification of Class SB waterways as follows:

- A. *Class SB waters must be of such quality that they are suitable for the designated uses of recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation and as habitat for fish and other estuarine and marine life. The habitat must be characterized as unimpaired.*
- B. *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 per 100 milliliters in any 90-day interval or 54 CFU 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.*
- 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 2016 Integrated Water Quality Monitoring and Assessment Report (Report), prepared by the Department pursuant to Sections 303(d) and (305b) of the Federal Water Control Act, lists DEP Waterbody # 730 as Category 5-B-1(a): Estuarine and Marine Waters Impaired for Bacteria Only-TMDL Required, for elevated fecal indicators. This area is also listed in Category 5-B-1(b): Estuarine and Marine Waters Impaired for Bacteria Only (Formerly Category 2)-TMDL Required, due to its status as a Department of Marine Resources (DMR) shellfish harvest (pollution) closure area.

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 keep 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 concentration 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 <http://www.maine.gov/dmr/shellfish-sanitation-management/closures/pollution.html> . The Department has made the determination that if the District's wastewater treatment facility maintains compliance with the fecal coliform bacteria limits established in this permitting action, the facility will not cause or contribute to the closure of the shellfish harvesting area.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Flow – Previous permitting action established a monthly average flow limitation of 0.64 MGD and a daily maximum reporting requirement that are being carried forward in this permitting action. The monthly average limit reflects the monthly average dry weather design capacity of the existing wastewater treatment facility.

The Department reviewed 59 Discharge Monitoring Reports (DMR) that were submitted for the period July 2016 – July 2021. A review of the data indicates the following:

Flow (DMR = 59)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly average	0.64	0.21 – 0.44	0.30
Daily maximum	Report	0.30 – 1.3	0.57

- b. Dilution Factors: Department Regulation 06-096 CMR Chapter 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.*”

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

Using plan and profile information provided by the permittee and the CORMIX model, the Department has determined the dilution factors for the discharge of 0.64 MGD from the wastewater treatment facility are as follows:

$$\text{Acute} = 15:1 \quad \text{Chronic} = 125:1 \quad \text{Harmonic Mean} = 375:1^{(1)}$$

- c. Biochemical Oxygen Demand (BOD₅) & Total Suspended Solids (TSS): - Previous permitting action established monthly and weekly average BOD₅ and TSS BPT concentration limits of 30 mg/L and 45 mg/L respectively, that are based on secondary treatment requirements as defined in Department rule 06-096 CMR Chapter 525(3)(III). The daily maximum BOD₅ and TSS concentration limits of 50 mg/L were based on a Department best professional judgment (BPJ) of BPT. All three concentration limits are being carried forward in this permitting action.

As for mass limitations, previous permitting action established monthly average, weekly average and daily maximum limitations based on a monthly average flow limitation of 0.64 MGD. These limitations are being carried forward in this permitting action. The limitations were derived as follows:

$$\begin{aligned} \text{Monthly average: } (0.64 \text{ MGD})(8.34 \frac{\text{lbs.} \cdot \text{L}}{\text{MG} \cdot \text{mg}})(30 \text{ mg/L}) &= 160 \text{ lbs./day} \\ \text{Weekly average: } (0.64 \text{ MGD})(8.34 \frac{\text{lbs.} \cdot \text{L}}{\text{MG} \cdot \text{mg}})(45 \text{ mg/L}) &= 240 \text{ lbs./day} \\ \text{Daily maximum: } (0.64 \text{ MGD})(8.34 \frac{\text{lbs.} \cdot \text{L}}{\text{MG} \cdot \text{mg}})(50 \text{ mg/L}) &= 267 \text{ lbs./day} \end{aligned}$$

This permitting action is carrying forward the reduced monitoring frequency for BOD and TSS of 2/Month. Monitoring required at a minimum frequency of 2/Month must be collected no less than 14 days between sampling events unless specifically authorized by the Department's compliance inspector. Additional sampling may be conducted at shorter intervals, however, 2 of the samples must be collected at least 14 days apart.

The Department reviewed 59 DMRs that were submitted for the period July 2016 – July 2021. A review of the data indicates the following:

BOD Mass (DMR = 59)

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	160	14 – 69	32
Weekly Average	240	18 – 151	47
Daily Maximum	267	18 – 151	47

¹ Pursuant to Department rule Chapter 530, "Surface Water Toxics Control Program", §4(2)(c), the harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by a factor of three (3).

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)**BOD Concentration (DMR = 59)**

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	5.0 – 24	13
Weekly Average	45	9.0 – 37	18
Daily Maximum	50	9.0 – 37	18

The Department reviewed 59 DMRs that were submitted for the period July 2016 – July 2021. It is noted that the daily maximum mass and concentration limits for TSS were exceeded in January 2017. A review of the data indicates the following:

TSS Mass (DMR = 59)

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	160	9 – 103	25.1
Weekly Average	240	11 – 185	43.8
Daily Maximum	267	11 – 372	48.2

TSS Concentration (DMR = 59)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	4 – 25	9.6
Weekly Average	45	5 – 33	14
Daily Maximum	50	5 – 91	15

This permitting action carries forward the requirement for 85% removal for BOD and TSS pursuant to Department rule Chapter 525(3)(III)(a&b)(3). The monitoring frequency for this requirement, once per month (1/Month), is also being carried forward.

The Department reviewed 59 DMRs that were submitted for the period July 2016 – July 2021. A review of the data indicates the following:

BOD % Removal (DMR = 59)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	85 – 99	95

TSS % Removal (DMR = 59)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	85 – 99	96

- d. Settleable Solids: Previous permitting action established a daily maximum technology-based concentration limit of 0.3 ml/L. This permit is carrying that action forward as it is considered by the Department to be BPT for secondary treated sanitary wastewater.

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

The Department reviewed 59 DMRs that were submitted for the period July 2016 – August 2021. A review of the data indicates the following:

Settleable Solids (DMR = 59)

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

This permitting action is carrying forward the reduced monitoring frequency for suspended solids of 2/Month. Monitoring required at a minimum frequency of 2/Month must be collected no less than 14 days between sampling events unless specifically authorized by the Department's compliance inspector. Additional sampling may be conducted at shorter intervals, however, 2 of the samples must be collected at least 14 days apart.

- e. Fecal Coliform Bacteria – Previous permitting action established seasonal monthly average and daily maximum concentration limits of 15 colonies/100 ml and 50 colonies/100 ml, respectively, for fecal coliform bacteria, which were consistent with the Maine Water Classification Program criteria and National Shellfish Sanitation Program at the time. Pursuant to 38 MRS § 465 (B)(2)(B), this permitting action is establishing year-round, monthly average and daily maximum limits of 14 CFU/100 ml and 31 CFU/100 ml, respectfully, for fecal coliform bacteria. These limits are consistent with the National Shellfish Sanitation Program, 2017.

This permitting action is carrying forward the reduced monitoring frequency for fecal coliform bacteria of 2/Month. Monitoring required at a minimum frequency of 2/Month must be collected no less than 14 days between sampling events unless specifically authorized by the Department's compliance inspector. Additional sampling may be conducted at shorter intervals, however, 2 of the samples must be collected at least 14 days apart.

The Department reviewed 23 DMRs that were submitted for the period November 2015 – August 2020. A review of the data indicates the following:

Fecal Coliform Bacteria (DMR = 23)

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	15	1.0 – 8.0	2.9
Daily Maximum	50	1.0 – 44	11

- f. Enterococcus Bacteria: Pursuant to 38 MRS § 465 (B)(2)(B) this permitting action is establishing a monitoring requirement and monthly average limit of 8 colony forming units (CFU)/100 ml and a daily maximum of 54 CFU/100 ml for 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 to protect the designated use of “recreation in and on the water.” The reporting period will be seasonal, April 15th through October 31st, and begins April 15, 2022.

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

The monitoring frequency requirement for Enterococcus bacteria is twice per month (2/month) and is a continuation of the bacteria monitoring regime already in place for this facility.

- g. Total Residual Chlorine – Previous permitting action established a water quality based daily maximum water quality-based concentration limit of 0.20 mg/L and a monthly average technology-based concentration limit of 0.10 mg/L. Limits on total residual chlorine (TRC) are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. The Department imposes the more stringent of the water quality or technology based limits in permitting actions. With dilution factors as determined above, end-of-pipe (EOP) water quality-based concentration limits for TRC may be calculated as follows:

$$\text{Acute Limit} = \text{Acute Criterion} \times \text{Acute Dilution Factor}$$

$$\text{Acute Limit} = 0.013 \text{ mg/L} \times 15 = 0.20 \text{ mg/L}$$

$$\text{Chronic Limit} = \text{Chronic Criterion} \times \text{Chronic Dilution Factor}$$

$$\text{Chronic Limit} = 0.0075 \times 125 = 0.94 \text{ mg/L}$$

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution	Acute Limit	Chronic Limit
Chlorine	0.013 mg/L	0.0075 mg/L	15:1	125:1	0.20 mg/L	0.94 mg/L

To meet the water quality-based limits calculated above, the permittee must dechlorinate the effluent prior to discharge. The Department has established a daily maximum BPT limitation of 0.30 mg/L for facilities that need to dechlorinate their effluent unless calculated water quality-based limits are lower than 0.30 mg/L. In the case of the Boothbay Harbor Sewer District, the calculated acute (daily maximum) water quality-based limit of 0.20 mg/L is lower than the BPT limit of 0.30 mg/L, thus the water quality based limit of 0.20 mg/L is imposed. For the monthly average, the calculated chronic water quality based limit of 0.94 mg/L is higher than the BPT limit of 0.10 mg/L, thus the BPT limit of 0.10 mg/L is imposed.

The Department reviewed 25 DMRs that were submitted for the period July 2016 – July 2021. A review of data indicates the following:

Total Residual Chlorine (DMR = 25)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	0.10	0.02 – 0.04	0.03
Daily Maximum	0.20	0.05 – 0.18	0.11

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

This permitting action is carrying forward the reduced monitoring frequency for total residual chlorine of five times per week (5/Week).

- h. pH Range- Previous permitting action established a BPT Ph range limit of 6.0 – 9.0 standard units pursuant to Chapter 525(3)(III)© and a monitoring frequency requirement of once per day (1/Day). This permit is carrying those actions forward.

The Department reviewed 59 DMRs that were submitted for the period July 2016- July 2021. A review of data indicates the following:

pH (DMR = 59)

Value	Limit (SU)	Minimum (SU)	Maximum (SU)
Range	6.0 – 9.0	6.00	7.30

- i. Nitrogen: The USEPA requested the Department evaluate the reasonable potential for the discharge of total nitrogen to cause or contribute to non-attainment of applicable water quality standards in marine waters, namely dissolved oxygen (DO) and marine life support. The permittee voluntarily participated in a Department-coordinated project using a Maine certified analytical lab to determine typical effluent nitrogen concentrations, and submitted monthly composite samples from June – October, 2015. Values ranged from 4.7 to 18.3 mg/L, with a mean total nitrogen value of 9.3 mg/L. For reasonable potential evaluations, the Department considers 9.3 mg/L to be representative of total nitrogen discharge levels from the Boothbay Harbor facility.

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

Two known surveys have been completed within Boothbay Harbor and the adjacent shoreline that specifically documented presence/absence of eelgrass. The surveys were conducted by the ME Department of Marine Resources, and mapped an approximately 0.3 ha eelgrass bed of intermediate cover 0.60 km from the outfall in both survey years. Other than this small bed, eelgrass was not mapped as present with Boothbay Harbor. Based on the absence of historically identified eelgrass in the near vicinity of the Boothbay Harbor municipal outfall, the use of 0.32 mg/L as a threshold value for protection of eelgrass is not appropriate for this receiving water, and the Department is using the total nitrogen threshold concentration of 0.45 mg/L for the protection of aquatic life using dissolved oxygen as the indicator.

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

With the exception of ammonia, nitrogen is not acutely toxic; thus, the Department is considering a far-field dilution to be more appropriate when evaluating impacts of total nitrogen to the marine environment. The permittee's facility has a chronic near-field dilution of 125:1. Far-field dilutions are generally significantly higher than the near-field dilutions, typically ranging from 10 – 100 times higher, depending on the location of the outfall pipe and nature of the receiving waterbody. The permittee's discharge is located in the innermost portion of Boothbay Harbor. Due to the relatively confined nature of this inner harbor, the Department has decided to use a relatively conservative estimate regarding the far-field dilution factor. The Department has estimated the far-field at 5-times the chronic nearfield; $5 \times 125 = 625$.

Using this far-field dilution factor, the increase in total nitrogen concentration in the relative vicinity of the Boothbay Harbor discharge is estimated to be approximately 0.015 mg/L.

$$\begin{aligned}\text{Total nitrogen concentrations in effluent} &= 9.3 \text{ mg/L} \\ \text{Far-field dilution factor} &= 625:1\end{aligned}$$

$$\text{In-stream concentration after dilution: } \frac{9.3 \text{ mg/L}}{625} = 0.015 \text{ mg/L}$$

The Department and external partners have been collecting ambient total nitrogen data along Maine's coast. For the 2015 permit revision and in the absence of known data from the Boothbay Harbor region, the Department assessed available ambient total nitrogen data from semi-protected, coastal embayments of Western Penobscot Bay and Downeast Maine. The data used for this assessment were collected during August and September of 2009 and 2010, and best represented the ambient conditions likely to occur in this nearshore marine environment during the summer months. For the 2021 permit revision, two additional data points were available from the same sites used for the 2015 permit revision, which did not affect the mean total nitrogen value used for this reasonable potential analysis. Therefore, the calculated mean +/- standard deviation for the background surface water total nitrogen concentration remains 0.22 ± 0.04 mg/L (n=10) in the current permit version.

Based on the calculated ambient value for this receiving water, the estimated increase in ambient total nitrogen after reasonable opportunity for mixing in the far-field is $0.22 \text{ mg/L} + 0.015 \text{ mg/L} = 0.24 \text{ mg/L}$. The in-stream concentration value of 0.24 mg/L is considerably less than the Department and USEPA's BPJ based total nitrogen threshold of 0.45 mg/L for the protection of aquatic life using dissolved oxygen as an indicator. Using the reasonable potential calculations above and in the absence of any information that the receiving water is not attaining standards, the Department is making a BPJ determination that the discharge of total nitrogen from the Boothbay Harbor municipal facility does not exhibit a reasonable potential to exceed applicable water quality standards for Class SB waters. This permitting action is not establishing limitations or monitoring requirements for total nitrogen.

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

- j. Whole Effluent Toxicity (WET) and Chemical-Specific Testing-The regulatory background for this requirement is as follows:

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 584 sets forth ambient water quality criteria for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

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, protected and narrative and numeric water quality criteria are met.

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.

WET, priority pollutant and analytical chemistry testing, as required by 06-096 CMR 530, is included in this permit to characterize the effluent. WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on the mysid shrimp (*Americamysis bahia*) and the sea urchin (*Arbacia punctulata*).

Chemical-specific monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria. Priority pollutant testing refers to the analysis for levels of priority pollutants listed under "Priority Pollutants" on the Whole Effluent Toxicity, Chemistry and Mercury form. This form can be found at https://www.maine.gov/dep/water/wd/municipal_industrial/index.html. Analytical chemistry refers to those pollutants listed under "Analytical Chemistry" on the same form.

Chapter 530 establishes four categories of testing requirements based predominately on the chronic dilution factor. The categories are as follows:

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

- 1) Level I – chronic dilution factor of $<20:1$.
- 2) Level II – chronic dilution factor of $\geq 20:1$ but $<100:1$.
- 3) Level III – chronic dilution factor $\geq 100:1$ but $<500:1$ or $>500:1$ and $Q \geq 1.0$ MGD
- 4) Level IV – chronic dilution $>500:1$ and $Q \leq 1.0$ MGD

Department rule Chapter 530 (2)(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the Chapter 530 criteria, the Boothbay Harbor facility falls into the Level III frequency category as the facility has a chronic dilution factor $\geq 100:1$ but $<500:1$. Chapter 530(2)(D)(1) specifies that surveillance and screening level testing requirements are as follows:

Screening Level Testing

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

Surveillance Level Testing

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

Each year of the five-year permit cycle is categorized as either a screening or a surveillance testing year. Surveillance testing years begin upon issuance of the permit and last through 24 months prior to permit expiration (years 1-3 of the permit) and commencing again 12 months prior to permit expiration (year 5 of the permit). Screening level testing begins 24 months prior to permit expiration and lasts through 12 months prior to permit expiration (year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement.

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

06-096 CMR 530(2)(D)(3)(b) states in part that for Level III facilities “... *may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3©.*”

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

k. Whole Effluent Toxicity Evaluation:

06-096 CMR 530(3)© states that for effluent monitoring data and the variability of the pollutant in the effluent, the Department shall apply the statistical approach in Section 3.3.2 and Table 3-2 of USEPA's "Technical Support Document for Water Quality-Based Toxics Control" (USEPA Publication 505/2-90-001, March, 1991, EPA, Office of Water, Washington, D.C.) to data to determine whether water-quality based effluent limits must be included in a waste discharge license. Where it is determined through this approach that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedance of water quality criteria, appropriate water quality-based limits must be established in any licensing action.

On July 16, 2021, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department for the Town in accordance with the statistical approach outlined above. The 7/16/21 statistical evaluation indicates the discharge from Boothbay Harbor Sewer District did not demonstrate a reasonable potential to exceed either the acute or chronic ambient water quality thresholds of 6.7% and 0.8%, respectively, for any of the WET species tested to date.

Based on the results of facility testing and pursuant to 06-096 CMR 530 (2)(D)(3), this permitting action is carrying forward the previously established screening level WET testing of once per year (1/Year). Surveillance level testing is not required pursuant to 06-096 CMR 530(2)(D)(3)(b).

An annual certification statement, as specified in Special Condition K of the permit, *06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing*, is required for reduced WET testing.

- l. Analytical Chemistry & Priority Pollutant Evaluation: On July 12, 2021, the Department conducted a statistical evaluation of the most recent 60 months of chemical-specific test results on file with the Department for Boothbay Harbor Sewer District in accordance with the statistical approach outlined above. The evaluation indicates the discharge did not exceed any of the acute, chronic or human health ambient water quality criteria. Therefore, no limits for analytical chemistry and priority pollutants will be established by this permitting action.

This permitting action maintains the established screening level testing for analytical chemistry of once per quarter in the screening year (1/Quarter). Surveillance level analytical chemistry is not required for Level III facilities pursuant 06-096 CMR 530(2)(D)(3)(b).

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

This permitting action also maintains the established screening level testing for priority pollutants of once per screening year (1/Screening Year) and does not establish water quality-based effluent limitations for priority pollutants. Surveillance level priority pollutant monitoring is not required for Level III facilities pursuant to 06-096 CMR 530(2)(D)(3)(b).

As with reduced WET testing, the permittee must file an annual certification with the Department pursuant to 06-096 CMR 530 2(D)(4) and Special Condition K of this permit.

- m. Mercury: Pursuant to Maine law, 38 M.R.S. § 420 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W002750-46-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 32.6 parts per trillion (ppt) and 48.8 ppt, respectively, and a minimum monitoring frequency requirement of four tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001, however, the Maine Legislature, enacted Maine law, 38 M.R.S. §413, sub-§11 (effective June 15, 2001), specifying that interim mercury limits and monitoring requirements remain in effect. Maine law 38 M.R.S., §420 1-B,(B)(1) states that a facility is not in violation of the ambient water quality criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to 38 M.R.S. §413, sub-§11.

Pursuant to 38 M.R.S. §420(1-B)(F), the Department issued a minor revision on February 6, 2012 to the August 5, 2010 permit thereby revising the minimum monitoring frequency requirement from four times per year to once per year given the permittee has maintained at least 5 years of mercury testing data. The District has been monitoring mercury since 1998 or 23 years. Pursuant to 38 M.R.S. §420(1-B)(F), this permitting action is carrying forward the once per year (1/Year) monitoring frequency established in the February 6, 2012 permit modification.

The Department reviewed Mercury monitoring results submitted during the period July 2016 – July 2021. A review of data indicates the following:

Mercury (DMR= 6)

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Monthly Average	32.6	1.30 – 5.02	2.55
Daily Maximum	48.8		

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

- n. Septage/Transported Wastes – Previous permitting action authorized the District to receive up to 6,400 gpd of septage. Department rule Chapter 555, *Standards For The Addition of Transported Wastes to Wastewater Treatment Facilities*, limits the quantity of septage received at a facility to 1% of the design capacity of treatment facility if the facility utilizes a side stream or storage method of introduction into the influent flow, or 0.5% of the design capacity of the facility if the facility does not utilize the side stream or storage method of introduction into the influent flow. A facility may receive more than 1% of the design capacity on a case-by-case basis. The District does utilize the side stream/storage method of metering wastes into the facility's influent flow. With a design capacity of 0.64 MGD, 6,400 gpd represents 1.0% of said capacity. The permittee has submitted an up-to-date Transported Management Plan as an attachment to their July 10, 2020 application for permit renewal.

The Department has reviewed and approved said plan and determined that under normal operating conditions, the receipt and treatment of 6,400 gpd of transported waste into the facility will not cause or contribute to upset conditions of the treatment process.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

8. PUBLIC COMMENTS

Public notice of this application was made in the *Boothbay Register* newspaper on July 27, 2020. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

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

Breanne Blaisdell
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone (207) 287-1298
e-mail: Breanne.Blaisdell@maine.gov

10. RESPONSE TO COMMENTS

During the period of July, 2021 through the effective date of this final agency action, the Department solicited comments on the draft MEPDES permit. The Department did not receive any substantive comment on the draft permit. It is noted that minor typographical and grammatical errors identified in comments were not summarized in this section, but were corrected, where necessary, in the final permit.

ATTACHMENT A

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES# _____ Facility Name _____

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

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

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

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

Scheduled Toxicity Testing for the next calendar year

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

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

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

ATTACHMENT B

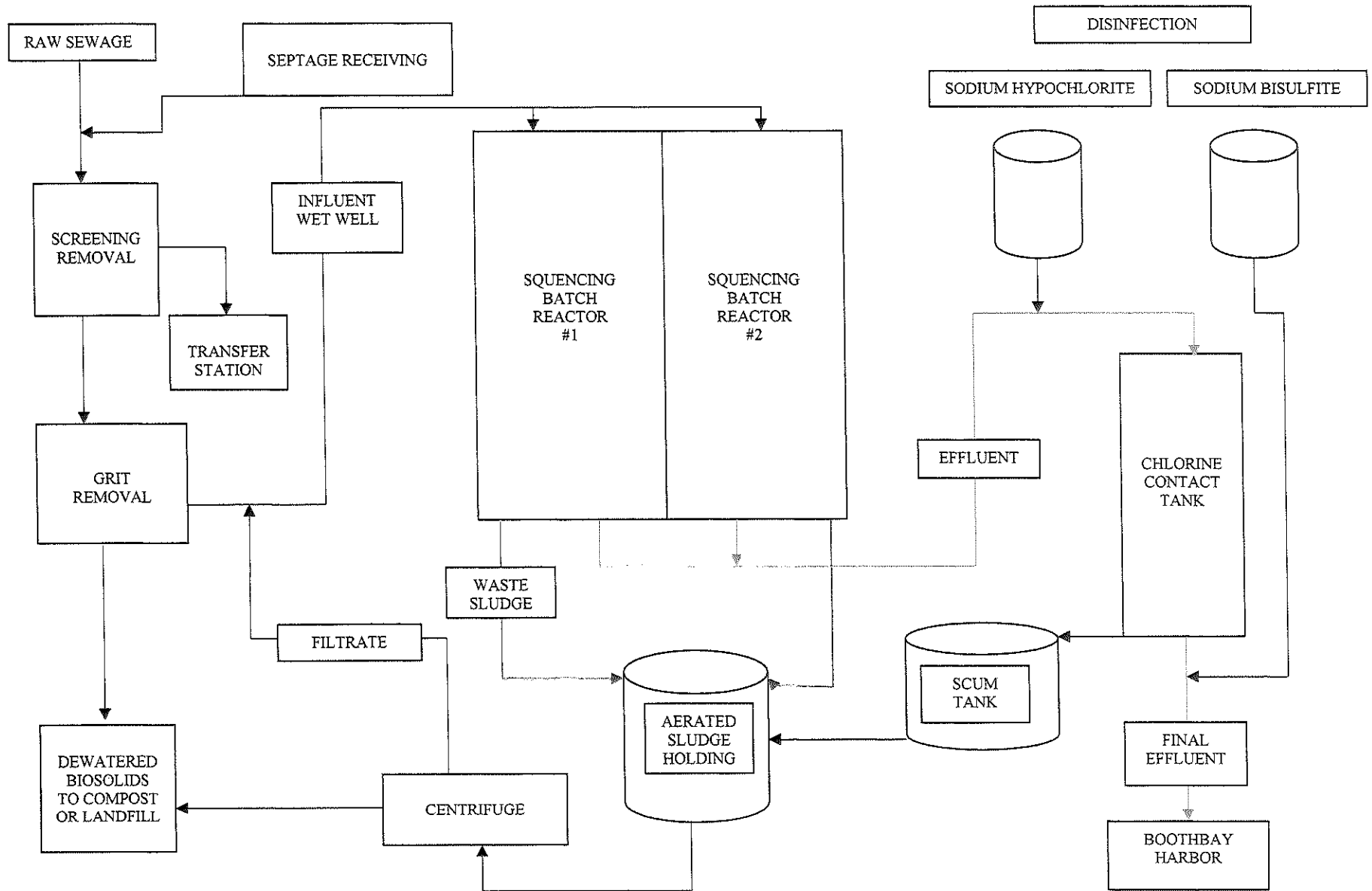
ge Locations
✕

ATTACHMENT 1

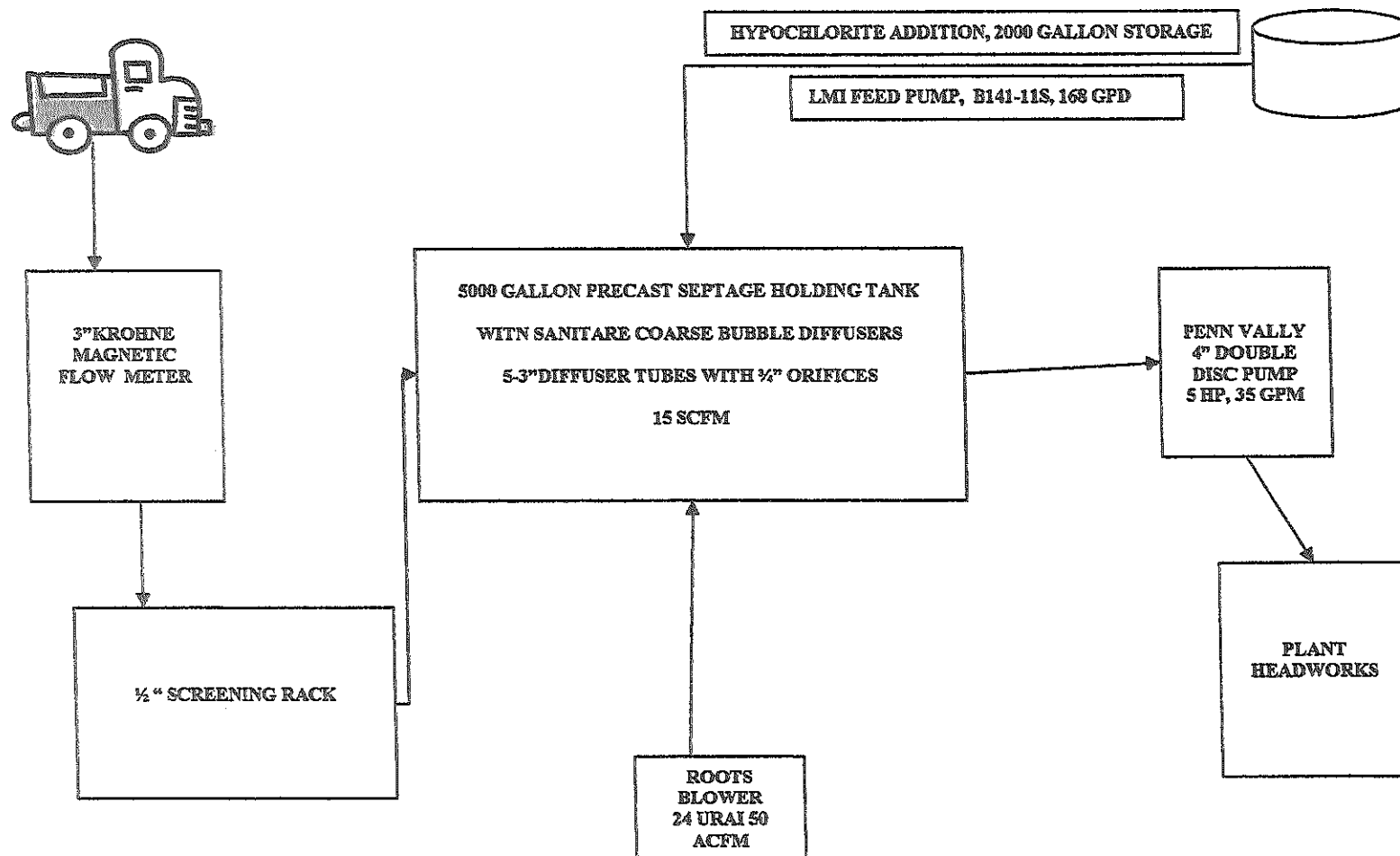


ATTACHMENT C

Attachment D
Boothbay Harbor Sewer District Process Control Schematic



**BOOTHBAY HARBOR SEWER DISTRICT
SEPTAGE PROCESSING
FLOW DIAGRAM**



ATTACHMENT G

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

A. GENERAL PROVISIONS

1. General compliance. All discharges shall be consistent with the terms and conditions of this permit; any changes in production capacity or process modifications which result in changes in the quantity or the characteristics of the discharge must be authorized by an additional license or by modifications of this permit; it shall be a violation of the terms and conditions of this permit to discharge any pollutant not identified and authorized herein or to discharge in excess of the rates or quantities authorized herein or to violate any other conditions of this permit.

2. Other materials. Other materials ordinarily produced or used in the operation of this facility, which have been specifically identified in the application, may be discharged at the maximum frequency and maximum level identified in the application, provided:

- (a) They are not
 - (i) Designated as toxic or hazardous under the provisions of Sections 307 and 311, respectively, of the Federal Water Pollution Control Act; Title 38, Section 420, Maine Revised Statutes; or other applicable State Law; or
 - (ii) Known to be hazardous or toxic by the licensee.
- (b) The discharge of such materials will not violate applicable water quality standards.

3. Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of State law and the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

- (a) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act, and 38 MRSA, §420 or Chapter 530.5 for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- (b) Any person who violates any provision of the laws administered by the Department, including without limitation, a violation of the terms of any order, rule license, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.

4. Duty to provide information. The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

5. Permit actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

6. Reopener clause. The Department reserves the right to make appropriate revisions to this permit in order to establish any appropriate effluent limitations, schedule of compliance or other provisions which may be authorized under 38 MRSA, §414-A(5).

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

B. OPERATION AND MAINTENANCE OF FACILITIES

1. General facility requirements.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- maximize removal of pollutants unless authorization to the contrary is obtained from the Department.
- (b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.
 - (c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.
 - (d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.
 - (e) The permittee shall install flow measuring facilities of a design approved by the Department.
 - (f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.

2. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

3. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Bypasses.

- (a) Definitions.
 - (i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
 - (ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.
- (c) Notice.
 - (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

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- (ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D(1)(f), below. (24-hour notice).
- (d) Prohibition of bypass.
 - (i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
 - (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (C) The permittee submitted notices as required under paragraph (c) of this section.
 - (ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (d)(i) of this section.

6. Upsets.

- (a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (ii) The permitted facility was at the time being properly operated; and
 - (iii) The permittee submitted notice of the upset as required in paragraph D(1)(f), below. (24 hour notice).
 - (iv) The permittee complied with any remedial measures required under paragraph B(4).
- (d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

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C. MONITORING AND RECORDS

1. General Requirements. This permit shall be subject to such monitoring requirements as may be reasonably required by the Department including the installation, use and maintenance of monitoring equipment or methods (including, where appropriate, biological monitoring methods). The permittee shall provide the Department with periodic reports on the proper Department reporting form of monitoring results obtained pursuant to the monitoring requirements contained herein.

2. Representative sampling. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. If effluent limitations are based wholly or partially on quantities of a product processed, the permittee shall ensure samples are representative of times when production is taking place. Where discharge monitoring is required when production is less than 50%, the resulting data shall be reported as a daily measurement but not included in computation of averages, unless specifically authorized by the Department.

3. Monitoring and records.

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (b) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.
- (c) Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed;
 - (iv) The individual(s) who performed the analyses;
 - (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.
- (d) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit.
- (e) State law provides that any person who tampers with or renders inaccurate any monitoring devices or method required by any provision of law, or any order, rule license, permit approval or decision is subject to the penalties set forth in 38 MRSA, §349.

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D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

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has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

- (ii) The following shall be included as information which must be reported within 24 hours under this paragraph.

- (A) Any unanticipated bypass which exceeds any effluent limitation in the permit.

- (B) Any upset which exceeds any effluent limitation in the permit.

- (C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

- (iii) The Department may waive the written report on a case-by-case basis for reports under paragraph (f)(ii) of this section if the oral report has been received within 24 hours.

- (g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this section.

- (h) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

2. Signatory requirement. All applications, reports, or information submitted to the Department shall be signed and certified as required by Chapter 521, Section 5 of the Department's rules. State law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan or other document filed or required to be maintained by any order, rule, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.

3. Availability of reports. Except for data determined to be confidential under A(9), above, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by State law, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal sanctions as provided by law.

4. Existing manufacturing, commercial, mining, and silvicultural dischargers. In addition to the reporting requirements under this Section, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Department as soon as they know or have reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- (i) One hundred micrograms per liter (100 ug/l);

- (ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

- (iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or

- (iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

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- (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (i) Five hundred micrograms per liter (500 ug/l);
 - (ii) One milligram per liter (1 mg/l) for antimony;
 - (iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
 - (iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

5. Publicly owned treatment works.

- (a) All POTWs must provide adequate notice to the Department of the following:
 - (i) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA or Chapter 528 if it were directly discharging those pollutants.
 - (ii) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (iii) For purposes of this paragraph, adequate notice shall include information on (A) the quality and quantity of effluent introduced into the POTW, and (B) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (b) When the effluent discharged by a POTW for a period of three consecutive months exceeds 80 percent of the permitted flow, the permittee shall submit to the Department a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

E. OTHER REQUIREMENTS

1. Emergency action - power failure. Within thirty days after the effective date of this permit, the permittee shall notify the Department of facilities and plans to be used in the event the primary source of power to its wastewater pumping and treatment facilities fails as follows.

- (a) For municipal sources. During power failure, all wastewaters which are normally treated shall receive a minimum of primary treatment and disinfection. Unless otherwise approved, alternate power supplies shall be provided for pumping stations and treatment facilities. Alternate power supplies shall be on-site generating units or an outside power source which is separate and independent from sources used for normal operation of the wastewater facilities.
- (b) For industrial and commercial sources. The permittee shall either maintain an alternative power source sufficient to operate the wastewater pumping and treatment facilities or halt, reduce or otherwise control production and or all discharges upon reduction or loss of power to the wastewater pumping or treatment facilities.

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2. Spill prevention. (applicable only to industrial sources) Within six months of the effective date of this permit, the permittee shall submit to the Department for review and approval, with or without conditions, a spill prevention plan. The plan shall delineate methods and measures to be taken to prevent and or contain any spills of pulp, chemicals, oils or other contaminants and shall specify means of disposal and or treatment to be used.

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

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

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

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

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

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

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

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

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

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

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Discharge Monitoring Report ("DMR") means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by approved States as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the State Agency name, address, logo, and other similar information, as appropriate, in place of EPA's.

Flow weighted composite sample means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.

Grab sample means an individual sample collected in a period of less than 15 minutes.

Interference means a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- (1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
- (2) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Maximum daily discharge limitation means the highest allowable daily discharge.

New source means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

- (a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or
- (b) After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.

Pass through means a discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

Permit means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of 40 CFR parts 122, 123 and 124. Permit includes an NPDES general permit (Chapter 529). Permit does not include any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit.

Person means an individual, firm, corporation, municipality, quasi-municipal corporation, state agency, federal agency or other legal entity.

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Point source means any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft, from which pollutants are or may be discharged.

Pollutant means dredged spoil, solid waste, junk, incinerator residue, sewage, refuse, effluent, garbage, sewage sludge, munitions, chemicals, biological or radiological materials, oil, petroleum products or byproducts, heat, wrecked or discarded equipment, rock, sand, dirt and industrial, municipal, domestic, commercial or agricultural wastes of any kind.

Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Publicly owned treatment works ("POTW") means any facility for the treatment of pollutants owned by the State or any political subdivision thereof, any municipality, district, quasi-municipal corporation or other public entity.

Septage means, for the purposes of this permit, any waste, refuse, effluent sludge or other material removed from a septic tank, cesspool, vault privy or similar source which concentrates wastes or to which chemicals have been added. Septage does not include wastes from a holding tank.

Time weighted composite means a composite sample consisting of a mixture of equal volume aliquots collected over a constant time interval.

Toxic pollutant includes any pollutant listed as toxic under section 307(a)(1) or, in the case of sludge use or disposal practices, any pollutant identified in regulations implementing section 405(d) of the CWA. Toxic pollutant also includes those substances or combination of substances, including disease causing agents, which after discharge or upon exposure, ingestion, inhalation or assimilation into any organism, including humans either directly through the environment or indirectly through ingestion through food chains, will, on the basis of information available to the board either alone or in combination with other substances already in the receiving waters or the discharge, cause death, disease, abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in such organism or their offspring.

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Whole effluent toxicity means the aggregate toxic effect of an effluent measured directly by a toxicity test.