STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

JANET L. MILLS
GOVERNOR

GERALD D. REID
COMMISSIONER

August 19, 2020

Mr. James Gillway
Searsport Town Manager
P.O. Box 499
Searsport, ME. 04974

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101996
Maine Waste Discharge License (WDL) #W006279-6C-K-R
Final Permit

Dear Mr. Gillway:

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 287-7693. 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,

Gregg Wood
Division of Water Quality Management
Bureau of Water Quality

Enc.

cc: Clarissa Trasko, MDEP/EMRO
Lori Mitchell, MDEP/CMRO
Sandy Mojica, USEPA
Shelley Puleo, USEPA
Anne Lieby, USEPA
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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

TOWN OF SEARSPORT	)	MAINE POLLUTANT DISCHARGE
SEARSPORT, PENOBSCOT COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
ME0101966	)	WASTE DISCHARGE LICENSE
W006279-6C-K-R **APPROVAL**	)	**RENEWAL**

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

APPLICATION SUMMARY

On May 6, 2013, the Department accepted as complete for processing an application from the Town for the renewal of combination Maine Waste Discharge License (WDL) # W006279-5L-H-R /National Pollutant Discharge Elimination System (NPDES) permit # ME0101966, which was issued jointly by the Department and the U.S. Environmental Protection (EPA) on November 18, 2008, for a five-year term. The November 18, 2008, permit authorized the monthly average discharge of 0.20 million gallons per day (MGD) of primary treated sanitary wastewater from Outfall #001 to Penobscot Bay, Class SB, in Searsport, Maine.

On September 3, 2019, the EPA issued a denial of its Tentative Decision to grant the Town of Searsport a Clean Water Act Section 301(h) Variance From Secondary Treatment. As a result, the Department is issuing a combination Maine WDL/Maine Pollutant Discharge Elimination System (MEPDES) permit for the discharge of 0.20 MGD secondary treated wastewater from Outfall #001 to Penobscot Bay, Class SB, in Searsport, Maine. This permit has been assigned permit identifiers of Maine WDL W006279-6C-K-R/MEPDES permit ME0101966.

2. PERMIT SUMMARY

a. Terms and conditions – This permit is different from the previous permit as this permit;

1. Establishes technology based monthly average, weekly average and daily maximum mass and concentrations for biochemical oxygen demand (BOD) and total suspended solids (TSS) and percent removal consistent with secondary treatment requirements established in 06-096 CMR Chapter 525, §3, sub-§III(a).

2. Establishes a technology based daily maximum concentration limitation for settleable solids consistent with secondary treatment requirements established in 06-096 CMR Chapter 525, §3, sub-§III(b).

3. Establishes a technology-based pH range limitation consistent with secondary treatment requirements established in 06-096 CMR Chapter 525, §3, sub-§III(c).

4. Establishes seasonal (May -October) monitoring and reporting requirements for total kjeldahl nitrogen, nitrate plus nitrite nitrogen and total nitrogen to assist the Department in quantifying point source loadings of nitrogen into Penobscot Bay.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated July 12, 2019, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.

2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with State law.

3. The provisions of the State's antidegradation policy, *Classification of Maine waters,* 38 M.R.S. § 464(4)(F), will be met, in that:

   (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;

   (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;

   (c) Where the standards of classification of the receiving waterbody are not met, the discharge will not cause or contribute to the failure of the waterbody to meet the standards of classification;

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

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

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

ACTION

THEREFORE, the Department APPROVES the application of the TOWN OF SEARSPORT to discharge a monthly average of 200,000 gallons per day of secondary treated sanitary wastewater from Outfall #001, Class SB, in Searsport, Maine, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

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

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

3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. *Maine Administrative Procedure Act*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matter*s, 06-096 CMR 2(21)(A) (last amended June 9, 2018).

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS 18 DAY OF August 2020.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
Gerald D. Reid, Commissioner

Date of initial receipt of application May 6, 2013

Date of application acceptance May 6, 2013

FILED

AUGUST 18, 2020

State of Maine
Board of Environmental Protection

Date filed with Board of Environmental Protection

This Order prepared by Gregg Wood, Bureau of Water Quality

ME0101966 2019 8/18/2020

SPECIAL CONDITIONS
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge secondary treated sanitary wastewater from **Outfall #001** to the Penobscot Bay in Searsport. Such discharges are limited and must be monitored by the permittee as specified below [(1)]:

	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	200,000 gpd *[07]*	---	Report gpd *[07]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
BOD_5 *[00310]*	50 lbs./day *[26]*	75 lbs./day *[26]*	83 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Month *[02/30]*	24-Hour Composite *[24]*
BOD_5 Percent Removal [(2)] *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
TSS *[00530]*	50 lbs./day *[26]*	75 lbs./day *[26]*	83 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Month *[02/30]*	24-Hour Composite *[24]*
TSS Percent Removal [(2)] *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	3/Week *[03/07]*	Grab *[GR]*
Fecal Coliform Bacteria[(3a)] *[31616]* ***(Year-round)***	---	---	---	14 cfu/100 ml[(4)] *[3Z]*	---	31 cfu/100 ml *[3Z]*	1/Week *[01/07]*	Grab *[GR]*
Enterococcus Bacteria[(3b)] *[61211]* ***(April 15– Oct 31 each year Beginning 2022)***	---	---	---	8 cfu/100 ml[(4)] *[3Z]*	---	54 cfu/100 ml *[3Z]*	1/Week *[01/07]*	Grab *[GR]*
Total Residual Chlorine[(5)] *[50060]*	---	---	---	---	---	0.7 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
pH *[00400]*	---	---	---	---	---	6.0 – 9.0 SU *[12]*	5/Week *[05/07]*	Grab *[GR]*
Mercury (Total) [(6)] *[71900]*	---	---	---	412 ng/L *[3M]*	---	618 ng/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports (DMRs). Footnotes: See Pages 8-12 of this permit for applicable footnotes

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

OUTFALL #001

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Total Kjeldahl Nitrogen (as N) *[00625]* ***(May – Oct) Beginning year 2020***	Report lbs/day *[26]*	Report lbs/day *[26]*	Report mg/L *[19]*	Report mg/L *[19]*	2/Month *[02/30]*	Composite *[24]*
Nitrate + Nitrate Nitrogen (as N)*[00630]* ***(May – Oct) Beginning year 2020***	Report lbs/day *[26]*	Report lbs/day *[26]*	Report mg/L *[19]*	Report mg/L *[19]*	2/Month *[02/30]*	Composite *[24]*
Total Nitrogen (as N) **(7)** *[00600]* ***(May – Oct) Beginning year 2020***	Report lbs/day *[26]*	Report lbs/day *[26]*	Report mg/L *[19]*	Report mg/L *[19]*	2/Month *[02/30]*	Composite *[24]*
Total Nitrogen (as N) **(8)** *[00600]* ***DMR for the month of October beginning calendar year 2020***	Report lbs/day *[26]*	---	---	---	1/Season *[01/SN]*	Calculate *[CA]*

Footnotes: See pages 8-12 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

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.

OUTFALL #001A – Secondary treatment

Effluent Characteristic	**Discharge Limitations**				**Minimum Monitoring Requirements**	
	Monthly Average	**Daily Maximum**	**Monthly Average**	**Daily Maximum**	**Measurement Frequency**	*Sample Type*
Whole Effluent Toxicity[9]						
Acute – NOEL						
Americamysis bahia [TDM3E] *(Mysid Shrimp)*	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Chronic – NOEL						
Arbacia punctulata [TBH3A] ~~*(Sea urchin)*~~	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Analytical chemistry[10,12] [51477]	---	---	---	Report ug/L [28]	1/Quarter [01/90]	Composite/Grab [24]
Priority pollutant[11,12] [50008]	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/Grab [24]

Footnotes: See pages 8-12 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

Footnotes

1. **Sampling** – The permittee must conduct all effluent sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. Samples that are analyzed by laboratories operated by waste discharge facilities licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended December 19, 2018). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of 10-144 CMR 263. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR.

2. **Percent Removal** – The permittee must achieve a minimum of 85 percent removal of both TSS and BOD_5 for all flows receiving secondary treatment. The percent removal is calculated based on influent and effluent concentration values.

3. **Bacteria** –

   a. **Fecal coliform bacteria** – Limitations and monitoring requirement are in effect on a year-round basis.

   b. **Enterococcus bacteria** – Limitations and monitoring requirements are seasonal (April 15 – October 31 of each year) beginning April 15, 2022. In accordance with 38 M.R.S. § 414-A(5), the Department may, at any time and with notice to the permittee, modify this permit to establish bacteria limitations on a year-round basis to protect the health and welfare of the public.

4. **Fecal coliform and enterococcus bacteria** – The monthly average limitations are geometric mean limitations and values must be calculated and reported as such.

5. **Total residual chlorine (TRC)** – Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine-based compounds are being used to disinfect the discharge. The permittee must utilize approved test methods that are capable of bracketing the limitations in this permit.

SPECIAL CONDITIONS

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

Footnotes

6. **Mercury** – The permittee must conduct all mercury monitoring required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the U.S. Environmental Protection Agency's (USEPA) "clean sampling techniques" found in USEPA Method 1669, *Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels*. All mercury analysis must be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry.* See **Attachment A** of this permit for a Department report form for mercury test results. Compliance with the monthly average limitation established in Special Condition A of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Method 1669 and analysis Method 1631E on file with the Department for this facility.

7. **Total nitrogen (as N) – Monthly** – The permittee is required to report the monthly average and daily maximum mass and concentrations for each month (May – October) of each year by adding the total kjeldahl nitrogen values to the nitrate + nitrite nitrogen values for each sampling event. See **Attachment B** of this permit for *Protocol for Nitrogen Sample Collection and Analysis for Waste Water Effluent.*

8. **Total Nitrogen (as N) – Seasonal daily average -** The permittee is required to report the seasonal daily average mass of total nitrogen discharged from the facility on the October DMR for each year beginning calendar year 2020. The seasonal daily average mass must be calculated by summing the mass results for each sampling event and dividing by the total number of samples.

9. **Whole Effluent Toxicity (WET) Testing** - Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions set at levels to bracket the critical acute and chronic water quality thresholds of 1.8% and 0.53% respectively – mathematical inverses of the acute and chronic dilution factors of 54:1 and 188:1 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 or growth as the end points.

SPECIAL CONDITIONS

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

Footnotes

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 WET testing at a frequency of 1/Year. Acute tests must be conducted on the mysid shrimp (*Americamysis bahia)* and chronic tests must be conducted on the sea urchin (*Arbacia punctulata*).

Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, the permittee may review the laboratory 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 1.8% and 0.53%, respectively.

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

a. U.S. Environmental Protection Agency, 2002. Short-term Methods for Estimating the chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third edition, October 2002, EPA 821-R002-014.

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.

SPECIAL CONDITIONS

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

Footnotes

Results of WET tests must be reported on the "Whole Effluent Toxicity Report Marine Waters" form included as **Attachment C** of this permit each time a WET test is performed. The permittee is required to analyze the effluent for the analytical chemistry parameters specified on the "WET and Chemical Specific Data Report Form" Toxsheet form included as **Attachment D** of this permit each time a WET test is performed.

10. **Analytical Chemistry** – Refers to those pollutants listed under "Analytical Chemistry" on the Toxsheet form included as **Attachment D** of this permit.

    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 analytical chemistry testing at a minimum frequency of four times per year (4/Year) in successive calendar quarters.

11. **Priority Pollutant Testing –** Refers to those pollutants listed under "Priority Pollutants" on the Toxsheet form included as **Attachment D** of this permit.

    a. **Surveillance level testing –** Not required pursuant 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 priority pollutant testing at a minimum frequency of once per year (1/Year) in any calendar quarter provided the sample is representative of the discharge.

SPECIAL CONDITIONS

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

Footnotes

12. **Priority Pollutant and Analytical Chemistry Testing** – This 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 Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the laboratory reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department, possible exceedances of the acute, chronic or human health AWQC as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (last amended July 29, 2012). For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "N9" monitoring not required this period.

B. NARRATIVE EFFLUENT LIMITATIONS

1. The permittee must not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the uses designated for the classification of the receiving waters.

2. The permittee must not discharge effluent that contains materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the uses designated for the classification of the receiving waters.

3. The discharge must not impart visible discoloration, taste, turbidity, toxicity, radioactivity or other properties in the receiving waters which would impair the usages designated for the classification of the receiving waters.

4. The permittee must not discharge effluent that lowers the quality of any classified body of water below such classification, or lowers the existing quality of any body of water if the existing quality is higher than the classification.

SPECIAL CONDITIONS

C. TREATMENT PLANT OPERATOR

The person who has management responsibility over the treatment facility must hold a Maine **Grade II,** Biological Treatment certificate (or higher) or must be a Maine Registered Professional Engineer pursuant to *Sewage Treatment Operators*, 32 M.R.S. § 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 CMR 531 (effective May 8, 2006). Upon completion of the facility upgrade to secondary treatment, the person that has direct responsibility for the operation of the secondary treatment facility must hold a minimum of a **Grade III,** Biological Treatment certificate (or higher) or be a Registered Maine Professional Engineer. 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. 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 May 6, 2013, 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.

E. 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 IWS any time a new industrial user proposes to discharge within its jurisdiction; an existing user proposes to make a significant change in its discharge; or at an alternative minimum, once every permit cycle, and submit the results to the Department. The IWS must identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the publicly owned treatment works (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).

SPECIAL CONDITIONS

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 (increase or decrease) in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants into the system at the time of permit issuance.

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

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

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

G. OPERATION & MAINTENANCE (O&M) PLAN

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

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

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

SPECIAL CONDITIONS

H. WET WEATHER FLOW MANAGEMENT PLAN

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

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

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

I. 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 F** of the Fact Sheet of this permit 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.

The Department may require that annual surveillance level WET, analytical chemistry 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.

SPECIAL CONDITIONS

J. MONITORING AND REPORTING

Electronic Reporting
NPDES Electronic Reporting, 40 CFR 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 DMRs submitted using the USEPA NetDMR system, must be:

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

Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Toxics reporting must be done using the DEP toxsheet reporting form. An electronic copy of the Toxsheet reporting document must be submitted to your Department compliance inspector as an attachment to an email. In addition, a hardcopy form of this sheet must be signed and submitted to your compliance inspector, or a copy attached to your NetDMR submittal will suffice. Documentation submitted electronically to the Department in support of the electronic DMR must be submitted no later than midnight on the 15th day of the month following the completed reporting period.

K. REOPENING OF PERMIT FOR MODIFICATIONS

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

L. 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.

ATTACHMENT A

Maine Department of Environmental Protection

Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____

Purpose of this test:
- ☐ Initial limit determination
- ☐ Compliance monitoring for: year _____ calendar quarter _____
- ☐ Supplemental or extra test

SAMPLE COLLECTION INFORMATION

Sampling Date: ___ ___ _____ (mm dd yy) Sampling time: _____ AM/PM

Sampling Location:

Weather Conditions: _____

Please describe any unusual conditions with the influent or at the facility during or preceding the time of sample collection:

Optional test - not required but recommended where possible to allow for the most meaningful evaluation of mercury results:

Suspended Solids _____ mg/L Sample type: _____ Grab (recommended) or _____ Composite

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

Date of analysis: _____ **Result:** _____ **ng/L (PPT)**

Please Enter Effluent Limits for your facility

Effluent Limits: **Average =** _____ ng/L **Maximum =** _____ ng/L

Please attach any remarks or comments from the laboratory that may have a bearing on the results or their interpretation. If duplicate samples were taken at the same time please report the average.

CERTIFICATION

I certifiy that to the best of my knowledge the foregoing information is correct and representative of conditions at the time of sample collection. The sample for mercury was collected and analyzed using EPA Methods 1669 (clean sampling) and 1631 (trace level analysis) in accordance with instructions from the DEP.

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT B

Protocol for Nitrogen Sample Collection and Analysis for Waste Water Effluent

Approved Analytical Methods (from Table 1 B of Part 136 per the 2012 Method Update Rule): (laboratory must be certified for any method performed)

Total Kjeldahl Nitrogen (TKN):

Manual digestion and distillation or gas diffusion followed by any of the following	SM4500-Norg B-97 or C-97 and SM4500-NH3 B-97.		ASTM D3590-02 (06) (A)	I-4515-9145
Titration	SM4500-NH3 C-97		ASTM D3590-89, 02 (A)	973.48.3
Nesslerization			ASTM D1426-08 (A)	
Electrode	SM4500-NH3 D-97 or E-97		ASTM D1426-08 (B)	
Semi-automated phenate	EPA 350.1 Rev. 2.0 (1993)		SM4500-NH3 G-97 or H-97	
Manual phenate, salicylate, or other substituted phenols in Berthelot reaction based methods	SM4500-NH3 F-1997			
Automated methods for TKN that do not require manual digestion				
Automated phenate, salicylate, or other substituted phenols in Berthelot reaction based methods colorimetric (auto digestion and distillation)	EPA 351.1 (1978)			I-4551-788
Semi-automated block digestor colorimetric (distillation not required)	EPA 351.2, Rev. 2.0 (1993)	SM4500-Norg D-97	ASTM D3590-02 (06) (B)	I-4515-9145

Nitrate + Nitrite (NO3 + NO2):

Cadmium reduction, Manual		SM4500-NO3 E-00e	ASTM D3867-04 (B)	
Cadmium reduction, Automated, or	EPA 353.2, Rev. 2.0 (1993)	SM4500-NO3 F-00	ASTM D3867-04(A)	I-4545-852e
Automated hydrazine		SM4500-NO3 H-00		
Ion chromatography	EPA 300.0, Rev. 2.1 (1993) and EPA 300.1, rev. 1.0 (1997)	SM4110 B-00 or C-00	ASTM D4327-03	993.303
CIE/UV		SM4140 B-97	ASTM D6508-00 (05)	ASTM D6508, Rev. 2

Sample Collection: The Maine DEP is requesting that nitrogen analysis be conducted on composite effluent samples, unless a facility's Permit specifically designates grab sampling for this parameter. Facilities can use individual collection bottles or a single jug made out of glass or polyethylene. Bottles and/or jugs should be cleaned prior to each use with dilute H_2SO_4. This cleaning should be followed by several rinses with distilled water. Commercially purchased, pre-cleaned sample containers are an acceptable alternative. The sampler hoses should be cleaned, as needed.

Sample Preservation: During compositing the sample must be at 0-6 degrees C (without freezing). If the sample is being sent to a commercial laboratory or analysis cannot be performed the day of collection then the sample must be preserved using H_2SO_4 to obtain a sample pH of <2 su and refrigerated at 0-6 degrees C (without freezing). The holding time for a preserved sample is 28 days.

Laboratory QA/QC: Laboratories must follow the appropriate QA/QC procedures that are described in each of the approved methods.

Sampling QA/QC: If a composite sample is being collected using an automated sampler, then once per month run a blank on the composite sampler. Automatically, draw distilled water into the sample jug using the sample collection line. Let this water set in the jug for 24 hours and then analyze for total nitrogen. Preserve this sample as described above.

ATTACHMENT C

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WHOLE EFFLUENT TOXICITY REPORT
MARINE WATERS

Facility Name _____ MEPDES Permit # _____

Pipe # _____

Facility Representative _____ Signature _____

By signing this form, I attest that to the best of my knowledge that the information provided is true, accurate, and complete.

Facility Telephone # _____ Date Collected _____ Date Tested _____

mm/dd/yy mm/dd/yy

Chlorinated? _____ Dechlorinated? _____

Results **% effluent**

	mysid shrimp	**sea urchin**
A-NOEL		
C-NOEL		

A-NOEL	
C-NOEL	

	% survival	**% fertilized**
QC standard	**>90**	**>70**
lab control		
receiving water control		
conc. 1 (%)		
conc. 2 (%)		
conc. 3 (%)		
conc. 4 (%)		
conc. 5 (%)		
conc. 6 (%)		
stat test used		

brine	
sea salt	
other	

place * next to values statistically different from controls

	A-NOEL	C-NOEL
toxicant/date		
limits (mg/L)		
results (mg/L)		

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

Report WET chemistry on DEP Form "ToxSheet (Marine Version), March 2007."

ATTACHMENT D

Maine Department of Environmental Protection
WET and Chem
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

Facility Name _____ **MEPDES #** _____ **Pipe #** _____ Facility Representative Signature _____
To the best of my knowledge this information is true, accurate and complete.

Licensed Flow (MGD)	
Acute dilution factor	
Chronic dilution factor	
Human health dilution factor	
Criteria type: M(arine) or F(resh)	m

Flow for Day (MGD)[1] _____ **Flow Avg. for Month (MGD)**[2] _____

Date Sample Collected _____ **Date Sample Analyzed** _____

Laboratory _____ Telephone _____
Address _____
Lab Contact _____ Lab ID # _____

Last Revision - July 1, 2015

ERROR WARNING ! Essential facility information is missing. Please check required entries in bold above.

MARINE AND ESTUARY VERSION

Please see the footnotes on the last page.

WHOLE EFFLUENT TOXICITY

			Effluent Limits, %			Receiving Water or Ambient	**Effluent Concentration (ug/L or as noted)** WET Result, % Do not enter % sign	Reporting Limit Check	**Possible Exceedence** [7]		
			Acute	Chronic					Acute	Chronic	
	Mysid Shrimp										
	Sea Urchin										

WET CHEMISTRY

	pH (S.U.) (9)										
	Total Organic Carbon (mg/L)					NA					
	Total Solids (mg/L)					NA					
	Total Suspended Solids (mg/L)					NA					
	Salinity (ppt.)										

ANALYTICAL CHEMISTRY [3]

	Also do these tests on the effluent with WET. Testing on the receiving water is optional	Reporting Limit	Effluent Limits, ug/L Acute[6]	Chronic[6]	Health[6]			Reporting Limit Check	**Possible Exceedence** [7] Acute	Chronic	Health
	TOTAL RESIDUAL CHLORINE (mg/L) (9)	0.05				NA					
	AMMONIA	NA				(8)					
M	ALUMINUM	NA				(8)					
M	ARSENIC	5				(8)					
M	CADMIUM	1				(8)					
M	CHROMIUM	10				(8)					
M	COPPER	3				(8)					
M	CYANIDE, TOTAL	5				(8)					
	CYANIDE, AVAILABLE [3a]	5				(8)					
M	LEAD	3				(8)					
M	NICKEL	5				(8)					
M	SILVER	1				(8)					
M	ZINC	5				(8)					

Maine Department of Environmental Protection
WET and Chem
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	PRIORITY POLLUTANTS [4]		Effluent Limits						**Possible Exceedence** [7]		
		Reporting Limit	Acute[6]	Chronic[6]	Health[6]			Reporting Limit Check	Acute	Chronic	Health
M	ANTIMONY	5									
M	BERYLLIUM	2									
M	MERCURY (5)	0.2									
M	SELENIUM	5									
M	THALLIUM	4									
A	2,4,6-TRICHLOROPHENOL	5									
A	2,4-DICHLOROPHENOL	5									
A	2,4-DIMETHYLPHENOL	5									
A	2,4-DINITROPHENOL	45									
A	2-CHLOROPHENOL	5									
A	2-NITROPHENOL	5									
A	4,6 DINITRO-O-CRESOL (2-Methyl-4,6-dinitrophenol)	25									
A	4-NITROPHENOL	20									
A	P-CHLORO-M-CRESOL (3-methyl-4-chlorophenol)+B80	5									
A	PENTACHLOROPHENOL	20									
A	PHENOL	5									
BN	1,2,4-TRICHLOROBENZENE	5									
BN	1,2-(O)DICHLOROBENZENE	5									
BN	1,2-DIPHENYLHYDRAZINE	20									
BN	1,3-(M)DICHLOROBENZENE	5									
BN	1,4-(P)DICHLOROBENZENE	5									
BN	2,4-DINITROTOLUENE	6									
BN	2,6-DINITROTOLUENE	5									
BN	2-CHLORONAPHTHALENE	5									
BN	3,3'-DICHLOROBENZIDINE	16.5									
BN	3,4-BENZO(B)FLUORANTHENE	5									
BN	4-BROMOPHENYLPHENYL ETHER	5									
BN	4-CHLOROPHENYL PHENYL ETHER	5									
BN	ACENAPHTHENE	5									
BN	ACENAPHTHYLENE	5									
BN	ANTHRACENE	5									
BN	BENZIDINE	45									
BN	BENZO(A)ANTHRACENE	8									
BN	BENZO(A)PYRENE	5									
BN	BENZO(G,H,I)PERYLENE	5									
BN	BENZO(K)FLUORANTHENE	5									
BN	BIS(2-CHLOROETHOXY)METHANE	5									
BN	BIS(2-CHLOROETHYL)ETHER	6									
BN	BIS(2-CHLOROISOPROPYL)ETHER	6									
BN	BIS(2-ETHYLHEXYL)PHTHALATE	10									
BN	BUTYLBENZYL PHTHALATE	5									
BN	CHRYSENE	5									
BN	DI-N-BUTYL PHTHALATE	5									
BN	DI-N-OCTYL PHTHALATE	5									
BN	DIBENZO(A,H)ANTHRACENE	5									
BN	DIETHYL PHTHALATE	5									
BN	DIMETHYL PHTHALATE	5									
BN	FLUORANTHENE	5									

Maine Department of Environmental Protection
WET and Chem
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BN	FLUORENE	5									
BN	HEXACHLOROBENZENE	5									
BN	HEXACHLOROBUTADIENE	5									
BN	HEXACHLOROCYCLOPENTADIENE	10									
BN	HEXACHLOROETHANE	5									
BN	INDENO(1,2,3-CD)PYRENE	5									
BN	ISOPHORONE	5									
BN	N-NITROSODI-N-PROPYLAMINE	10									
BN	N-NITROSODIMETHYLAMINE	5									
BN	N-NITROSODIPHENYLAMINE	5									
BN	NAPHTHALENE	5									
BN	NITROBENZENE	5									
BN	PHENANTHRENE	5									
BN	PYRENE	5									
P	4,4'-DDD	0.05									
P	4,4'-DDE	0.05									
P	4,4'-DDT	0.05									
P	A-BHC	0.2									
P	A-ENDOSULFAN	0.05									
P	ALDRIN	0.15									
P	B-BHC	0.05									
P	B-ENDOSULFAN	0.05									
P	CHLORDANE	0.1									
P	D-BHC	0.05									
P	DIELDRIN	0.05									
P	ENDOSULFAN SULFATE	0.1									
P	ENDRIN	0.05									
P	ENDRIN ALDEHYDE	0.05									
P	G-BHC	0.15									
P	HEPTACHLOR	0.15									
P	HEPTACHLOR EPOXIDE	0.1									
P	PCB-1016	0.3									
P	PCB-1221	0.3									
P	PCB-1232	0.3									
P	PCB-1242	0.3									
P	PCB-1248	0.3									
P	PCB-1254	0.3									
P	PCB-1260	0.2									
P	TOXAPHENE	1									
V	1,1,1-TRICHLOROETHANE	5									
V	1,1,2,2-TETRACHLOROETHANE	7									
V	1,1,2-TRICHLOROETHANE	5									
V	1,1-DICHLOROETHANE	5									
V	1,1-DICHLOROETHYLENE (1,1-dichloroethene)	3									
V	1,2-DICHLOROETHANE	3									
V	1,2-DICHLOROPROPANE	6									
V	1,2-TRANS-DICHLOROETHYLENE (1,2-trans-dichloroethene)	5									
V	1,3-DICHLOROPROPYLENE (1,3-dichloropropene)	5									
V	2-CHLOROETHYLVINYL ETHER	20									
V	ACROLEIN	NA									
V	ACRYLONITRILE	NA									
V	BENZENE	5									

Maine Department of Environmental Protection
WET and Chem
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

V	BROMOFORM	5									
V	CARBON TETRACHLORIDE	5									
V	CHLOROBENZENE	6									
V	CHLORODIBROMOMETHANE	3									
V	CHLOROETHANE	5									
V	CHLOROFORM	5									
V	DICHLOROBROMOMETHANE	3									
V	ETHYLBENZENE	10									
V	METHYL BROMIDE (Bromomethane)	5									
V	METHYL CHLORIDE (Chloromethane)	5									
V	METHYLENE CHLORIDE	5									
V	TETRACHLOROETHYLENE (Perchloroethylene or Tetrachloroethene)	5									
V	TOLUENE	5									
V	TRICHLOROETHYLENE (Trichloroethene)	3									
V	VINYL CHLORIDE	5									

Notes:

(1) Flow average for day pertains to WET/PP composite sample day.

(2) Flow average for month is for month in which WET/PP sample was taken.

(3) Analytical chemistry parameters must be done as part of the WET test chemistry.

(3a) Cyanide, Available (Cyanide Amenable to Chlorination) is not an analytical chemistry parameter, but may be required by certain discharge permits .

(4) Priority Pollutants should be reported in micrograms per liter (ug/L).

(5) Mercury is often reported in nanograms per liter (ng/L) by the contract laboratory, so be sure to convert to micrograms per liter on this spreadsheet.

(6) Effluent Limits are calculated based on dilution factor, background allocation (10%) and water quality reserves (15% - to allow for new or changed discharges or non-point sources).

(7) Possible Exceedence determinations are done for a single sample only on a mass basis using the actual pounds discharged. This analysis does not consider watershed wide allocations for fresh water discharges.

(8) These tests are optional for the receiving water. However, where possible samples of the receiving water should be preserved and saved for the duration of the WET test. In the event of questions about the receiving water's possible effect on the WET results, chemistry tests should then be conducted.

(9) pH and Total Residual Chlorine must be conducted at the time of sample collection. Tests for Total Residual Chlorine need be conducted only when an effluent has been chlorinated or residual chlorine is believed to be present for any other reason.

Comments:

CONTENTS

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).

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 if 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 MAINTENACE 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

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.

(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.

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.

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

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).

(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.

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 contaminates 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.

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.

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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE LICENSE

FINAL FACT SHEET

Date: **July 12, 2019**

MEPDES PERMIT: **ME0101966**
WASTE DISCHARGE LICENSE: **W006279-6C-K-R**

NAME AND ADDRESS OF APPLICANT:

TOWN OF SEARSPORT
P.O. Box 499
Searsport, ME 04974

COUNTY: **Waldo**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

45 Navy Street
Searsport, ME 04974

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

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. James Gillway**
Town Manager
Tel: 207-548-6372
e-mail: searsportmanager@roadrunner.com

1. APPLICATION SUMMARY

a. Application: On May 6, 2013, the Department accepted as complete for processing an application from the Town for renewal of combination Maine Waste Discharge License (WDL) # W006279-5L-H-R /National Pollutant Discharge Elimination System (NPDES) permit # ME0101966, which was issued jointly by the Department and the U.S. Environmental Protection (EPA) on November 18, 2008, for a five-year term. The November 18, 2008, permit authorized the monthly average discharge of 0.20 million gallons per day (MGD) of primary treated sanitary wastewater from Outfall #001 to Penobscot Bay, Class SB, in Searsport, Maine. See **Attachment A** of this Fact Sheet for a location map of the treatment facility.

1. APPLICATION SUMMARY (cont'd)

On September 3, 2019, the EPA issued a denial of its Tentative Decision to grant the Town of Searsport of Clean Water Act Section 301(h) Variance From Secondary Treatment. As a result, The Department issuing a combination Maine WDL/Maine Pollutant Discharge Elimination System (MEPDES) permit for the discharge of 0.20 MGD secondary treated wastewater from Outfall #001 to Penobscot Bay, Class SB, in Searsport, Maine. This permit has been assigned permit identifiers of Maine WDL W006279-6C-K-R/MEPDES permit ME0101966.

b. Source Description: Sanitary waste waters received at the treatment facility are generated by residential and commercial entities in the Town of Searsport. There are approximately 620 customers served by the treatment facility. The facility does not receive any flows from industrial sources. The sewer collection system is a separated system and is not known to contain any combined sewer overflows (CSOs).

c. Waste Water Treatment: The facility currently provides a primary level of treatment for dry weather flows via a bar screen, a comminutor, flow measurement, primary settling via two rectangular clarifier tanks, an aerobic sludge digester for composting solids, chlorination and dechlorination. See **Attachment B** of this Fact Sheet for a schematic of the waste water treatment process. Polymer is added to the waste water flow at the headworks to enhance flocculation and solids removal in the clarifier tanks. The polymer is added at the bar screen where downgradient agitation provides rapid and complete mixing. All wastewater treated at the facility is discharged to the Searsport Harbor by way of a ten (10) inch diameter PVC pipe. The outfall pipe extends out into the receiving waters approximately 1,200 feet from the edge of the shoreline. The outfall discharges at –20.0 feet mean low tide elevation according to a plan prepared by T.Y. Lin Hunter-Ballew International, dated July 29, 1988, entitled "Ocean Outfall Plan, Town of Searsport, Water Pollution Control Facility."

2. PERMIT SUMMARY

a. Terms and conditions – This permit is different from the previous permit as this permit;

1. Establishes technology based monthly average, weekly average and daily maximum mass and concentrations for biochemical oxygen demand (BOD) and total suspended solids (TSS) and percent removal consistent with secondary treatment requirements established in 06-096 CMR Chapter 525, §3, sub-§III(a).

2. Establishes a technology based daily maximum concentration limitation for settleable solids consistent with secondary treatment requirements established in 06-096 CMR Chapter 525, §3, sub-§III(b).

3. Establishes a technology based a pH range limitation for pH consistent with secondary treatment requirements established in 06-096 CMR Chapter 525, §3, sub-§III(c).

2. PERMIT SUMMARY (cont'd)

4. Establishes seasonal (May -October) monitoring and reporting requirements for total kjeldahl nitrogen, nitrate plus nitrite nitrogen and total nitrogen to assist the Department in quantifying point source loadings of nitrogen into Penobscot Bay

b. History: The most recent permitting/licensing actions include the following:

December 28, 1982 - The Town of Searsport submitted a final application to the EPA for a variance from secondary treatment requirements pursuant to Section 301(h) of the Clean Water Act (CWA).

May 14, 1985 - EPA tentatively approved the request for a variance from secondary treatment requirements.

January 22, 1986 - The Department issued a Water Quality Certification, pursuant to section 401, of the public notice draft National Pollutant Discharge Elimination System (NPDES) permit #ME0101966 granting the Section 301(h) waiver from secondary treatment requirements.

February 12, 1986 – The EPA issued NPDES permit #ME0101966 for the Searsport facility for a five-year term. At the time of permit issuance, the existing sewer system for Searsport consisted of a combined system that discharged untreated waste waters to the tidewaters of Searsport via six (6) combined sewer overflow points. Condition C(1)(a-e) of the permit outlined a schedule of compliance for the construction of a primary treatment facility and compliance with new limitations stipulated in the permit.

July 23, 1987 - The Department issued WDL #W006279-45-B-R that authorized the discharge of untreated municipal waste water from six combined sewer overflow points until a primary treatment facility was constructed. The WDL established a deadline of July 1, 1988 for the completion of the treatment facility. Upon commencement of operation of the waste water treatment facility, the WDL authorized the discharge of up to 0.2 million gallons per day (MGD) of primary treated waste water.

July 1, 1988 - The primary treatment facility for Searsport commenced operations.

September 22, 1989 - The Department issued WDL amendment #W006279-59-C-M that authorized the treatment facility to accept a maximum of 2,000 gallons per day and up to 30,000 gallons per year of septage into the plant's aerated digesters.

2. PERMIT SUMMARY (cont'd)

April 4, 1990 - The Department issued WDL amendment #W006279-59-D-M that authorized the treatment facility to accept a maximum of 2,000 gallons per day, 7,000 gallons per month and up to 70,000 gallons per year of septage.

September 22, 1995 – The Department issued WDL renewal #W006279-59-E-R that authorized the continued discharge of primary treated wastewater from the municipal facility in Searsport.

January 12, 2001 – The Department received authorization from the EPA to administer the NPDES program in Maine, however, the authority to grant a variance from secondary treatment requirements pursuant to Section 301(h) of the CWA was not granted to the State of Maine. Because this permit is being issued under a variance from secondary treatment requirements under the CWA, this modified 301(h) permit must be issued by EPA and, herein, the permit is being proposed for joint issuance with the Maine Department of Environmental Protection and EPA.

April 25, 2002 – The Department issued a Section 401 Water Quality Certification to EPA indicating that the proposed primary treatment discharge would not cause or contribute to failure of the water body to attain the standards of its assigned classification.

June 12, 2002 – The Department and EPA issued a combined WDL and NPDES permit (#W006279-5L-F-R and ME0101966) authorizing the discharge of primary treated waste water from the permittee's facility.

February 27, 2007 – The Town of Searsport submitted an application to the Department and EPA for renewal of the June 12, 2002 license/permit. The Department accepted the application for processing on February 28, 2007.

November 12, 2008 – The Department and the USEPA issued a combination Maine WDL and NPDES permit (#W006279-5L-H-R/ME0101966) authorizing the discharge of primary treated waste water from the permittee's facility.

May 6, 2013 – The Town of Searsport submitted a current 301(h) application to the USEPA.

September 11, 2013 – The USEPA sent the Town of Searsport a 301(h) application/questionnaire package.

3. CONDITIONS OF PERMIT

Conditions of licenses, 38 M.R.S. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require the application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, *Certain deposits and discharges prohibited,* 38 M.R.S. § 420 and Department rule *Surface Water Toxics Control Program,* 06-096 CMR 530 (effective March 21, 2012), require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants,* 06-096 CMR 584 (effective July 29, 2012), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classification of estuarine and marine waters, 38 M.R.S. § 469(6)(C) classifies the tidal waters in the vicinity of the discharge as Class SB waters. *Standards for classification of fresh surface waters*, 38 M.R.S. § 465-B(2) describes the standards for Class SB waters as follows:

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.

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.

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, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists Department of Marine Resources Pollution Area #33, *Searsport to Stockon Springs* **(Attachment C** of this Fact Sheet) in:

Category 5-B-1(a): Estuarine and Marine Waters Impaired for Bacteria Only – TMDL Required. The cause of the impairment is listed as elevated fecal indicators. Compliance with the year-round fecal coliform bacteria limits in this permitting action which are being carried forward from the previous permitting action ensures that the permittee will not cause or contribute to the shellfish harvesting closure.

Category 5-D: Estuarine and Marine Waters Impaired By Legacy Pollutants - The report indicates all estuarine and marine waters capable of supporting American lobster are listed in Category 5-D for shellfish consumption due to elevated levels of PCBs and other persistent bioaccumulating substances in tomalley. The Department has no information that the discharge from the Searsport facility is causing or contributing to this impairment.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Flow: Previous permitting action established a monthly average discharge flow limitation of 0.20 MGD, which is being carrying forward in this permit. This permit is modifying the units to report gallons per day rather than millions of gallons per day to more accurately report flow values.

The Department reviewed 47 DMRs that were submitted for the period of May 2015 through April 2018. A review of data indicates the following:

Flow

Value	Limit (gpd)	Range (gpd)	Mean (gpd)
Monthly Average	200,000	55,000-120,000	77,872

Once the facility is upgraded or a new wastewater treatment facility is constructed, the Department will establish a monthly average flow limit based on the dry weather design capacity of the upgraded or new facility.

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

b. Dilution Factors: Dilution factors associated with the permitted discharge flow of 0.20 MGD from the permittee's facility were derived in accordance with 06-096 CMR, Chapter 530 *Surface Water Toxics Control Program*, Section 4(A)(2) which states;

1. *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.*

2. *For discharges to estuaries, dilution must be calculated using a method such as MERGE, CORMIX or another predictive model determined by the Department to be appropriate for the site conditions.*

3. *In the case of discharges to estuaries where tidal flow is dominant and marine waters, the human health criteria must be analyzed using a dilution equal to three times the chronic dilution factor.*

Based on available information, the Department has made a best professional judgment that the CORMIX model is an appropriate predictive model to calculate dilution factors associated with the discharge. Using plan and profile information provided by the permittee and the CORMIX model, the Department has determined that the dilution factors for the discharge of 0.20 MGD from the wastewater treatment facility are as follows:

Acute = 54:1 Chronic = 188:1 Harmonic mean = 564:1[(1)]

(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).

c. Biochemical oxygen demand BOD_5 and total suspended solids (TSS): The previous permit established technology-based mass and concentration limitations. The limitations were calculated based on an assumed influent concentration of 290 mg/L for each parameter and a 30% removal for BOD and a 50% removal for TSS for primary treated effluent. This assumed value is based on the EPA Design Manual, Onsite Wastewater Treatment and Disposal Systems, dated October 1980, table 4-3 entitled "Characteristics of Typical Residential Wastewater" high range of values for BOD5 and TSS. Derivation of the limits is as follows:

BOD: 290 mg/L – [(290 mg/L)(0.30)] = 203 mg/L
(203 mg/L)(8.34)(0.20 MGD) = 338 lbs/day

TSS: 290 mg/L – [(290 mg/L)(0.50)] = 145 mg/L
(145 mg/L)(8.34)(0.20 MGD) = 242 lbs/day

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

A summary of BOD_5 and TSS data (primary treatment only) as reported on 47 DMRs submitted to the Department for the period of June 2015 – April 2019 is as follows:

BOD_5 Mass

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	338	69 - 163	93
Daily Maximum	Report	83 - 300	121

BOD_5 Concentration

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	203	87 - 199	151
Daily Maximum	Report	119 - 274	187

TSS Mass

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	242	31 - 76	46
Daily Maximum	Report	36 - 191	62

TSS Concentration

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	145	42 - 96	74
Daily Maximum	Report	47 - 121	87

This permitting action is establishing monthly average, weekly average and daily maximum technology-based mass and concentration limitations for BOD_5 and TSS to be consistent with secondary treatment requirements established in 06-096 CMR Chapter 525, §3, sub-§III(a). The calculations using the current design flow of 0.20 MGD and the applicable concentration limits as follows:

Monthly Average Mass Limit: (30 mg/L)(8.34 lbs./gal.)(0.2 MGD) = 50 lbs./day
Weekly Average Mass Limit: (45 mg/L)(8.34 lbs./gal)(0.2 MGD) = 75 lbs./day
Daily Maximum Mass Limit: (50 mg/L)(8.34 lbs./gal)(0.2 MGD) = 83 lbs./day

Once the facility is upgraded or a new wastewater treatment facility is constructed, the Department will establish revised limitations based on the dry weather design capacity of the upgraded or new facility and take into consideration the State Anitdegradation policy found at *Classification of Maine waters,* 38 M.R.S. § 464(4)(F).

This permitting action is also establishing a requirement for a minimum of 85% removal of BOD_5 and TSS based on secondary treatment requirements pursuant to 06-096 Chapter 525(3)(III) of the Department's rules.

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

d. Settleable Solids: The previous permitting action established a daily maximum reporting requirements for settleable solids. A summary of the settleable solids data (primary treatment only) as reported on 47 DMRs submitted to the Department for the period of June 2015 – April 2019 is as follows:

Settleable Solids

Value	Limit (ml/L)	Range (ml/L)	Mean (ml/L)
Daily Maximum	Report	0.1 – 1.0	0.33

This permitting action is establishing a technology-based concentration limit of 0.3 ml/L for settleable solids based on a Department best professional judgment of best practicable treatment.

e. Fecal coliform bacteria: The previous permitting action established monthly average and daily maximum water quality-based limits of 15 colonies/100 ml and 50 colonies/100 ml respectively, which are consistent with the 2008 National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish. The limits were in effect on a year-round basis.

A summary of the fecal coliform data (primary treatment only) as reported on 47 DMRs submitted to the Department for the period of June 2015 – April 2019 is as follows:

Fecal coliform bacteria

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	15	<4 - 11	3
Daily Maximum	50	4 - 40	<11

This permitting action is establishing monthly average and daily maximum water quality based fecal coliform bacteria limitations of 14 colonies/100 ml and 31 colonies/100 ml respectively, which are consistent with the 2013 National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish. The limits were in effect on a year-round basis to protect for the designated use of shellfish harvesting which occurs on a year-round basis.

f. Enterococcus bacteria – The previous permit did not establish limitations or monitoring requirements for enterococcus bacteria. Based on comments received from the USEPA, enterococcus bacteria limitations are necessary to protect the designation use of recreation in and on the water, a seasonal use. Pursuant to Maine law 38 M.R.S. §465(3)(B) effective August 2, 2018, monthly and daily maximum water quality-based limits of 8 CFU/100 ml and 54 CFU/100ml, respectively, are being established in this permit. The limitations are seasonal and apply from April 15th – October 31st of each year and the monitoring

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

frequency is being established at 1/Week to be consistent with the monitoring frequency for fecal coliform bacteria. The Department is granting the permittee a schedule of compliance until April 15, 2022, given the limited number of laboratories certified to conduct the enterococcus bacteria test upon issuance of this permit.

g. Total Residual Chlorine (TRC): The previous permitting action established a daily maximum water quality-based concentration limit of 0.7 mg/L for TRC. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department permitting actions impose the more stringent of either a water quality-based or BPT-based limit. With dilution factors as determined above, end-of-pipe (EOP) water quality-based concentration thresholds for TRC may be calculated as follows:

	Criterion	Dilution Factors	Calculated Threshold
Acute	0.013 mg/L	54:1	0.70 mg/L
Chronic	0.0075 mg/L	188:1	1.44 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that dechlorinate the discharge in order to meet water quality-based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. The permittee does not have to dechlorinate the effluent to achieve compliance with water quality-based limitation.

The daily maximum water quality-based effluent TRC concentration limitation of 0.7 mg/L is more stringent than the Department's BPT limit of 1.0 mg/L and is therefore being carried forward in this permitting action. This permitting action is carrying forward the monitoring frequency of 1/Day whenever elemental chlorine or chlorine based compounds are being utilized to disinfect the discharge.

A summary of the TRC data (primary treatment only) as reported on 47 DMRs submitted to the Department for the period of June 2015 – April 2019 is as follows:

Total residual chlorine

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	0.7	0.00 – 0.7	0.41

h. pH: The previous permitting action established, and this permitting action is carrying forward, a technology-based pH range limitation of 6.0 – 9.0 standard units pursuant to 06-096 CMR 525(3)(III)(c) along with a monitoring frequency of 1/Week. A review of the pH values from June 2015 to April 2019 (n=47) indicates that the results ranged from 6.3 to 7.5 standard units.

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

i. Mercury: Pursuant to 38 M.R.S. § 420 and 38 M.R.S. § 413 and 06-096 CMR 519, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W006279 by establishing interim monthly average and daily maximum effluent concentration limits of 412 parts per trillion (ppt.) and 618 ppt, respectively, and a minimum monitoring frequency requirement of 1 test per year for mercury.

38 M.R.S. § 420(1-B)(B)(1) provides that a facility is not in violation of the ambient water quality criteria (AWQC) for mercury if the facility is in compliance with an interim discharge limit established by the Department. A review of the Department's database for the period May 2016 through January 2018 is as follows:

Mercury (n = 4)

Value	Limit (ppt.)	Range (ppt.)	Mean (ppt)
Monthly Average	412	7.67 – 24.4	12
Daily Maximum	618		

On February 6, 2012, the Department issued a minor revision to amend the minimum monitoring frequency requirement from four times per year to once per year pursuant to 38 M.R.S. § 420(1-B)(F). This minimum monitoring frequency is being carried forward in this permitting action.

j. Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing: Maine law, 38 M.R.S.§ 414-A and 38 M.R.S. § 420 prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. 06-096 CMR 530 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met.

> 06-096 CMR 530(2)(A) states, *"…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."*

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

Dischargers are categorized based on the dilution of the receiving water and the potential risk of toxic contamination. The four categories for dischargers are as follows:

Level I	Chronic dilution factor of <20:1
Level II	Chronic dilution factor of ≥20:1 but <100:1.
Level III	Chronic dilution factor ≥100:1 but <500:1 or >500:1 and Q ≥1.0 MGD
Level IV	Chronic dilution >500:1 and Q ≤1.0 MGD

Based on the criteria, the permittee's facility is considered a Level III discharger as the chronic dilution of the receiving water is 188:1 and the permitted flow is equal to or less than 1.0 MGD. Routine testing required by 06-096 CMR Chapter 530 is as follows:

Screening level testing – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration and every five years thereafter.

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

Surveillance level testing – Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit).

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

See Attachment D of this Fact Sheet for a summary of the WET test results and **Attachment E** of this Fact Sheet for a summary of the chemical-specific test results submitted to the Department to date.

Chapter 530(2)(D)(3)(d) states in part that for Level I facilities "… *may reduce surveillance testing to one WET or specific chemical series per year provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3(E)".*

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

Chapter 530 §(3)(E) states "*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.*"

WET test evaluation

Chapter 530 §3 states, "*In determining if effluent limits are required, the Department shall consider all information on file and effluent testing conducted during the preceding 60 months. However, testing done in the performance of a Toxicity Reduction Evaluation (TRE) approved by the Department may be excluded from such evaluations."*

On June 19, 2019, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department in accordance with the statistical approach in Chapter 530. The statistical evaluation indicates the discharge from the permittee's waste water treatment facility does exceed or have a reasonable potential to exceed critical acute or chronic no observed effect levels (NOEL) for the mysid shrimp or the sea urchin. 06-096 CMR Chapter 530(2)(D)(3)(b) states " Dischargers in Levels III and IV 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 3E above." Given the results of the June 19, 2019, statistical evaluation, this permit is waiving surveillance level WET testing. Therefore, WET testing is limited to screening level testing as follows:

Department rule Chapter 530 (2)(D)(1) specifies that screening level testing is to be established as follows:

Beginning 24 months prior to and lasting through 12 months prior to permit expiration (year 4 of the permit) and every five years thereafter.

Level	WET Testing
III	1 per year for the mysid shrimp 1 per year for the sea urchin

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

06-096 CMR Chapter 530 §(2)(D) states:

(4) All dischargers having waived or reduced testing must file statements with the Department on or before December 31 of each year describing the following.

(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.

Special Condition I, 06-096 CMR 530 (2)(D)(4) *Statement For Reduced/Waiver Toxics Testing,* of this permitting action requires the permittee to file an annual certification with the Department.

Analytical chemistry & priority pollutant testing evaluation

As with WET test results, on June 19, 2019, the Department conducted a statistical evaluation on the most recent 60 months of analytical chemistry and priority pollutant test results on file with the Department in accordance with the statistical approach outlined in Chapter 530. The statistical evaluation indicates that there are no pollutants tested to date that exceed or have a reasonable potential to exceed applicable acute, chronic or human health AWQC. Therefore, as with WET testing, the permittee qualifies for a waiver pursuant to 06-096 CMR Chapter 530(2)(D)(3)(b). Department rule Chapter 530 (2)(D)(1) specifies that screening level testing is to be established as follows:

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 screening level testing is as follows:

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

As with WET testing, Chapter 530 (2)(D) requires an annual certification to qualify for reduced testing. Special Condition I, 06-096 CMR 530 (2)(D)(4) *Statement for Reduced/Waived Toxics Testing*, of this permitting action requires the permittee to file an annual certification with the Department.

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

k. Nitrogen: The USEPA requested the Department evaluate the reasonable potential for the discharge of total nitrogen to cause or contribute to non-attainment of applicable water quality standards in marine waters, namely dissolved oxygen (DO) and marine life support. To date, the permittee has not conducted total nitrogen testing on its discharge. The Department has effluent total nitrogen concentration data from two municipal facilities that either historically or are currently discharging primary treated wastewater to the waters of the Penobscot River. In the absence of data specific to the Searsport POTW and for the duration of the current permit, the Department considers the mean total nitrogen value of 39.5 mg/L (n=20) from these nearby facilities to be representative of total nitrogen discharge levels for the Searsport facility. Given the need for facility-specific total nitrogen concentrations for the next permitting cycle, the Department has established a seasonal effluent monitoring requirement for total nitrogen (TKN and NO3+NO2) so that it may accurately characterize the permittee's contribution to the receiving water. Prior to the next permit renewal, the Department will review effluent monitoring data and re-assess the relative influence of Searsport's discharge. The Department reserves the right to reopen the permit to establish necessary limits as stated in permit Special Condition K, *Reopening of Permit for Modifications*, "the Department may, at any time and with notice to the permittee, modify this permit to: include effluent limitations necessary to control specific pollutants…".

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

Two known surveys have been completed along the Searsport shoreline to document presence/absence of eelgrass. The 1970's Timson (Maine Geological Survey) Coastal Marine Geological Environments information referenced in other Maine marine discharge permits is not being utilized for this permit due to deficiencies in the aerial imagery and ground truthing methods used for eelgrass delineation. The eelgrass surveys considered in this permit were conducted in 1992 and 2003 by the Maine Department of Marine Resources, and documented a small eelgrass bed (0.14 ha) immediately landward of the

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

Searsport outfall during 1992 but not in 2003. Fringing eelgrass beds were mapped along the Sears Island shoreline, approximately 1.8 km to the southeast in both survey years, and 1.1 km to the west of the discharge point in both survey years. Based on this mapping history of eelgrass presence in the vicinity of the Searsport outfall, the use of 0.32 mg/L as a total nitrogen threshold value for protection of eelgrass is appropriate for this receiving water.

The Department and external partners have been collecting ambient total nitrogen data along Maine's coast. Few data points are known to exist within the nearshore areas of northwestern Penobscot Bay that are not directly influenced by the Penobscot River outflow. For a calculation of a background total nitrogen value, the Department selected five sites located between Sears Island and the north end of Islesboro Island, which were sampled one to four times each during 2003, 2006, 2010, 2015 or 2019 when salinity data do not indicate a strong river influence. The use of these five sites for the background total nitrogen calculation best approximates the ambient conditions likely to occur along the Searsport shoreline in the absence of the wastewater discharge. From these sites, the Department has calculated a mean background concentration of 0.22 ± 0.03 mg/L (n=9).

Because nitrogen is not acutely toxic, the Department is considering a far-field dilution to be more appropriate when evaluating the relative impacts of total nitrogen to the ambient environment. Nutrient enrichment can result in excessive algal growth, which can cause a variety of related negative environmental impacts. Due to the very dynamic nature of marine environments, these impacts generally manifest in a broader, more systemic scope. Environmental concerns associated with the discharge of non-toxic pollutants (i.e., nitrogen and BOD) in marine environments are significantly different than those associated with toxics. As such, near-field dilution factors in marine waters are not relevant to the evaluation of these types of effects, and should be evaluated based on a significantly more generalized region of influence. The Department uses the term far-field to refer to this broader region of influence. The far-field area is intended to provide for a reasonable opportunity for dilution of non-toxic pollutants to occur, and should be more reflective of the systemic scope and scale of ambient receiving water.

The permittee's facility has a chronic near field dilution factor of 188:1. In marine waters, far field dilutions are significantly higher than the respective near-field dilution factor. Due to the relatively small magnitude of this discharge in relation to the receiving water (northwest Penobscot Bay), the Department is using a conservatively estimating a near

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

field dilution multiplier of ten, which yields a far field dilution factor of 1,880:1. Based on this analysis, the increase in the ambient total nitrogen due to the permittee's effluent discharge is as follows:

Estimated total nitrogen concentration in effluent = 39.5 mg/L

Chronic, far field dilution factor: 1,880:1

In-stream concentration after far field dilution: (39.5 mg/L)/1,880 = 0.021 mg/L

Therefore, the Department is making a best professional judgment determination that the discharge of total nitrogen from the permittee's facility does not exhibit a reasonable potential to exceed applicable water quality standards for Class SB waters. With 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 mg/L + 0.021 mg/L = 0.24 mg/L. The in-stream concentration value of 0.24 mg/L is considerably less than the Department and USEPA's best professional judgment based total nitrogen threshold of 0.32 mg/L for the protection of aquatic life using eelgrass as an indicator. 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 best professional judgment determination that the discharge of total nitrogen from the Searsport facility does not exhibit a reasonable potential to exceed applicable water quality standards for Class SB waters. This permitting action is not establishing any discharge limitations for total nitrogen.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has determined the designated uses assigned to the receiving water classification and the existing water uses will be maintained and protected. The Department is not aware of any information that the discharge from the permittee's facility contains measurable quantities of dioxin, PCBs or any other legacy pollutant(s) that cause or contribute to non-attainment of the Penobscot Bay. In addition, given the permittee has maintained compliance with the monthly average and daily maximum fecal coliform bacteria limitations established in the previous permitting action, the permittee's discharge is not causing or contributing to the non-attainment of the designated use of fishing or the closure of shellfish harvesting in Penobscot Bay. While the permittee's facility is not considered to be adversely impacting the receiving waters, its primary treatment plant will not likely meet secondary permit standards and as a result, the plant will likely need to be upgraded or replaced to meet secondary treatment standards.

8. PUBLIC COMMENTS

Public notice of this application was made in the *Bangor Daily News* newspaper on April 15, 2013. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses,* 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

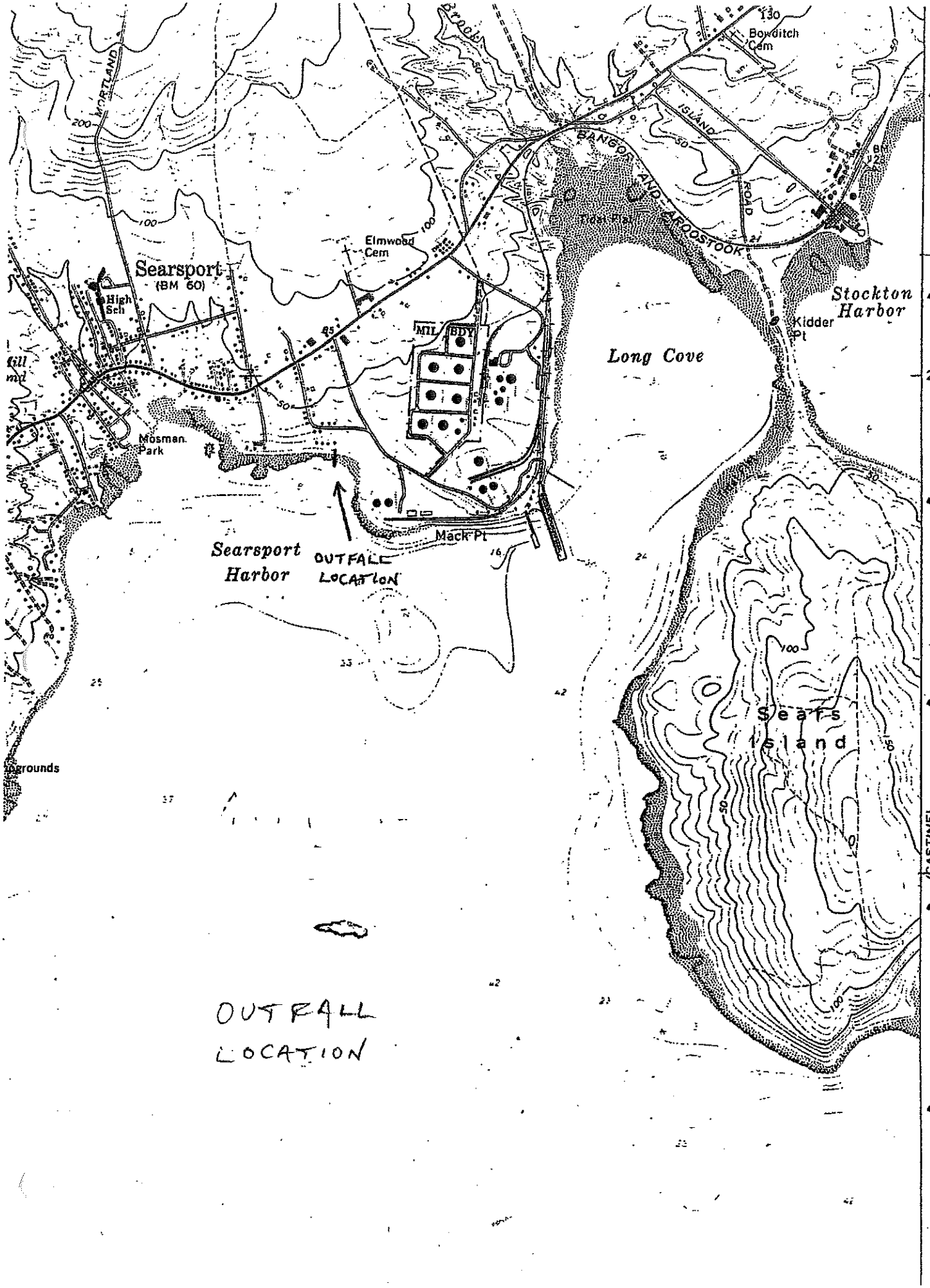
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Gregg Wood
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 287-7693
e-mail: gregg.wood@maine.gov

10. RESPONSE TO COMMENTS

During the period of July 12, 2019, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department did not receive comments from the permittee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the permit. Therefore, the Department has not prepared a Response to Comments.

ATTACHMENT A

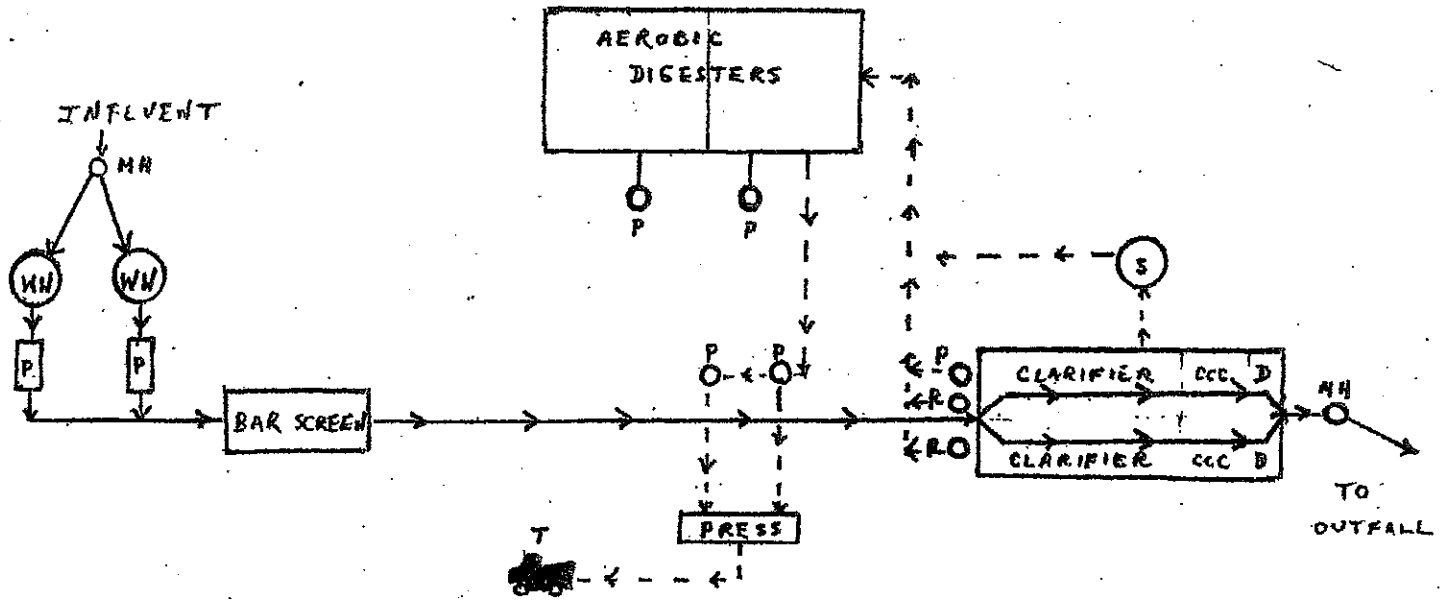


OUTFALL
LOCATION

ATTACHMENT B

FORM

2. A) PLEASE SHOW BELOW OR ATTACH A LINE DRAWING SHOWING ALL TREATMENT UNITS AND IMPORTANT ASSOCIATED OR SUPPORTING UNITS.



P	PUMP
WW	WETWELL
CCC	CHLORINE CONTACT CHAMBER
D	DECHLORINATION
—	INFLUENT FLOW
— —	SLUDGE FLOW
S	SCUM PIT

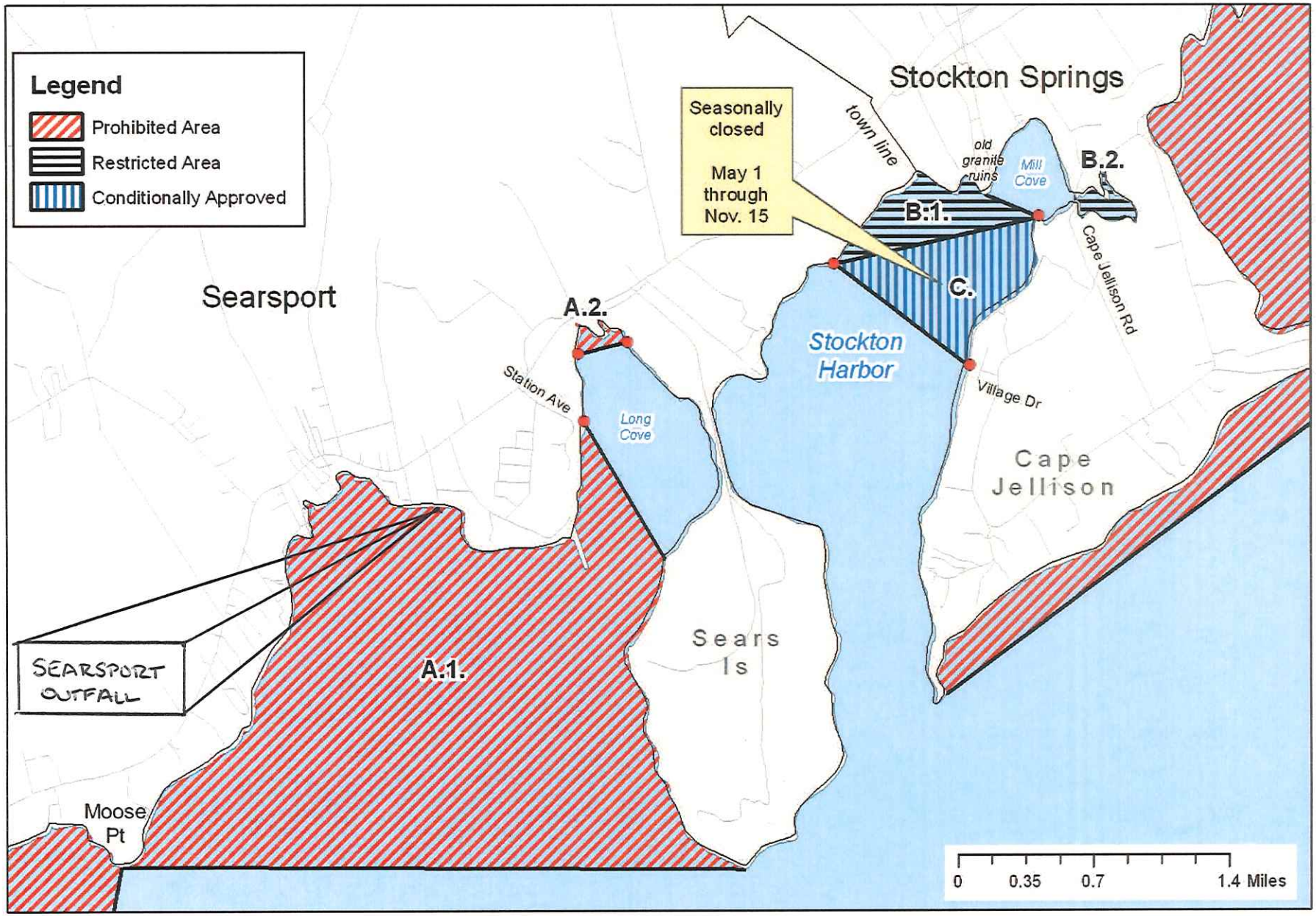
ATTACHMENT C

Maine Department of Marine Resources

Pollution Area No. 33

Searsport to Stockton Springs

9/26/12



ATTACHMENT D

WET TEST REPORT

Data for tests conducted for the period

25/Jun/2014 -25/Jun/2019

SEARSPORT WWTP NPDES= ME010196 Effluent Limit: Acute (%) = 1.852 Chronic (%) = 0.532

Species	Test	Percent	Sample date	Critical %	Exception	RP
MYSID SHRIMP	A_NOEL	12.5	05/12/2015	1.852		
MYSID SHRIMP	A_NOEL	12.50	08/09/2016	1.852		
MYSID SHRIMP	A_NOEL	12.5	10/02/2017	1.852		
MYSID SHRIMP	A_NOEL	12.50	01/29/2018	1.852		
SEA URCHIN	C_NOEL	3.1	05/12/2015	0.532		
SEA URCHIN	C_NOEL	3.10	08/09/2016	0.532		
SEA URCHIN	C_NOEL	3.1	10/02/2017	0.532		
SEA URCHIN	C_NOEL	3.10	01/29/2018	0.532		

ATTACHMENT E

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 25/Jun/2014-25/Jun/2019

Facility Name: **SEARSPORT WWTP** NPDES: **ME0101966**

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
05/12/2015	0.06	0.06	17	10	0	0	0	7	0	F	0
08/09/2016	0.07	0.06	15	9	0	0	0	6	0	F	0
10/02/2017	0.07	0.06	15	9	0	0	0	6	0	F	0
01/29/2018	0.09	0.07	129	13	28	46	25	6	11	F	0
05/01/2018	0.07	0.08	10	9	0	0	0	1	0	F	0
08/14/2018	0.07	0.06	10	9	0	0	0	1	0	F	0
10/16/2018	0.08	0.09	10	9	0	0	0	1	0	F	0

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

ATTACHMENT F

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?	☐	☐
2	Changes in the condition or operations of the facility that may increase the toxicity of the discharge?	☐	☐
3	Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge?	☐	☐
4	Increases in the type or volume of hauled wastes accepted by the facility?	☐	☐

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	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
WET Testing	□	□	□	□
Priority Pollutant Testing	□	□	□	□
Analytical Chemistry	□	□	□	□
Other toxic parameters [1]	□	□	□	□

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.