



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

May 24, 2016

Ms. LeeAnna Libby
Great Salt Bay Sanitary District
P.O. Box 23
Damariscotta, ME. 04534
leeanna@gsbsd.org

*Sent via electronic mail
Delivery confirmation requested*

**RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101516
Maine Waste Discharge License (WDL) Application #W006048-6C-H-R
Proposed Draft MEPDES Permit - Renewal**

Dear Ms. Libby:

Attached is a proposed draft MEPDES permit and Maine WDL which the Department proposes to issue for your facility as a final document after opportunity for your review and comment. By transmittal of this letter, you are provided with an opportunity to comment on the proposed draft permit and its special and standard conditions. If it contains errors or does not accurately reflect present or proposed conditions, please respond to this Department so that changes can be considered.

By copy of this letter, the Department is requesting comments on the proposed draft permit from various state and federal agencies and from any other parties who have notified the Department of their interest in this matter.

The comment period begins on May 24, 2016 and ends on June 27, 2016. All comments on the proposed draft permit must be received in the Department of Environmental Protection office on or before the close of business Monday, June 27, 2016. Failure to submit comments in a timely fashion will result in the proposed draft/license permit document being issued as drafted.

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

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

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

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

Great Salt Bay Sanitary District
May 24, 2016
Page 2 of 2

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

Maine Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, ME 04333-0017
Cindy.L.Dionne@maine.gov

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

Sincerely,



Cindy L. Dionne
Division of Water Quality Management
Bureau of Water Quality
ph: 207-557-5950

Enc.

cc: Barry Mower, DEP
Pamela Parker, DEP
Beth DeHaas, DEP
Lori Mitchell, DEP
Sean Mahoney, CLF
Kathleen Leyden, DACF
Environmental Review, DMR
David Webster, USEPA
David Pincumbe, USEPA
Alex Rosenberg, USEPA
Olga Vergara, USEPA
Marelyn Vega, USEPA
Richard Carvalho, USEPA



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

DEPARTMENT ORDER

IN THE MATTER OF

GREAT SALT BAY SANITARY DISTRICT)	MAINE POLLUTANT DISCHARGE
PUBLICLY OWNED TREATMENT WORKS)	ELIMINATION SYSTEM PERMIT
DAMARISCOTTA, LINCOLN COUNTY, MAINE)	AND
MAIN TREATMENT PLANT)	WASTE DISCHARGE LICENSE
ME0101516)	
W006048-6C-H-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 Great Salt Bay Sanitary District (GSBSD/permittee), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On January 25, 2016, the Department received and accepted as complete for processing an application from the GSBSD for renewal of combination Waste Discharge License (WDL) #W006048-6C-F-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0101516, which was issued by the Department on April 21, 2011 for a five-year term. The April 21, 2011 permit authorized the monthly average discharge of 0.268 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to the Damariscotta River, Class SB, in Damariscotta, Maine.

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PERMIT SUMMARY

a. Terms and conditions

This permitting action is different from the April 21, 2011 permit in that it:

1. Eliminates the waiver for percent removal requirements for biochemical oxygen demand (BOD₅) and total suspended solids (TSS) when influent strength is less than 200 milligrams per liter (mg/L);
2. Incorporates monitoring and reporting requirements for the interim mercury limitations established by the Department for this facility pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and *Waste discharge licenses*, 38 M.R.S. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 C.M.R. 519 (last amended October 6, 2001);
3. Incorporates Special Condition K. *Reporting Discharges Not Receiving Secondary Treatment* for reporting to the Department of Marine Resources in the event of a facility bypass/failure;
4. Reduces the monitoring and reporting requirement from 1/Week to 2/Month for BOD₅ and TSS;
5. Eliminates limitations and monitoring requirements for settleable solids; and
6. Updates Special Condition F. *Limitations for Industrial Users* from the previous permit to include an Industrial Waste Survey once per permit cycle.

CONCLUSIONS

BASED on the findings in the attached and incorporated Fact Sheet dated May 24, 2016, 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.

CONCLUSIONS (cont'd)

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).

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ACTION

THEREFORE, the Department APPROVES the application of the GREAT SALT BAY SANITARY DISTRICT to discharge a monthly average of 0.268 million gallons per day of secondary treated sanitary wastewater from the permittee's facility to the Damariscotta River, Class SB, in Damariscotta, Maine, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

1. *"Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable to All Permits,"* revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. *Maine Administrative Procedure Act*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 C.M.R. 2(21)(A) (amended October 19, 2015).

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS __ DAY OF ____2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
PAUL MERCER, Commissioner

Date of initial receipt of application January 25, 2016

Date of application acceptance January 25, 2016

Date filed with Board of Environmental Protection _____

This Order prepared by Cindy L. Dionne, Bureau of Water Quality

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- The permittee is authorized to discharge secondary treated sanitary wastewater from **Outfall #001A** to the Damariscotta River in Damariscotta. Such discharges are limited and must be monitored by the permittee as specified below⁽¹⁾:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow [50050]	0.268 MGD [03]	---	Report MGD [03]	---	---	---	Continuous [99/99]	Meter [MT]
BOD₅ [00310]	67 lbs./day [26]	100 lbs./day [26]	112 lbs./day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Month [01/30]	Composite [24]
BOD₅ Percent Removal ⁽²⁾ [81010]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]
TSS [00530]	67 lbs./day [26]	100 lbs./day [26]	112 lbs./day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Month [02/30]	Composite [24]
TSS Percent Removal ⁽²⁾ [81011]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]
Fecal Coliform Bacteria ⁽³⁾ [31616] (<i>Year round basis</i>)	---	---	---	15/100 ml ⁽⁴⁾ [13]	---	50/100 ml [13]	1/Week [01/07]	Grab [GR]
Total Residual Chlorine ^(5,6) [50060]	---	---	---	---	---	1.0 mg/L [19]	5/Week [05/07]	Grab [GR]
pH [00400]	---	---	---	---	---	6.0 – 9.0 SU [12]	1/Week [01/07]	Grab [GR]
Mercury (Total) ⁽⁷⁾ [71900]	---	---	---	20.9 ng/L [3M]	---	31.3 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 7-8 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

2. GROUND WATER MONITORING WELL CMW1

The permittee is required to conduct sampling on the ground water monitoring well **CMW1** as specified below:

Effluent Characteristic		Minimum Monitoring Requirements	
<u>Parameter</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Conductivity [00094]	Report (µmhos/cm) [11]	1/Year ⁽⁸⁾ [01/YR]	Grab [GR]
Temperature, °C [00010]	Report (°C) [04]	1/Year ⁽⁸⁾ [01/YR]	Grab [GR]
pH [00400]	Report (SU) [12]	1/Year ⁽⁸⁾ [01/YR]	Grab [GR]
Chlorides [00940]	Report mg/L [19]	1/Year ⁽⁸⁾ [01/YR]	Grab [GR]
Total Sodium [00929]	Report mg/L [19]	1/Year ⁽⁸⁾ [01/YR]	Grab [GR]
Total Nitrate Nitrogen (as N) [00620]	Report mg/L [19]	1/Year ⁽⁸⁾ [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 7-8 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

Footnotes

1. Sampling

Influent Sampling

All influent samples for BOD₅ and TSS must be conducted from the influent flow channel prior to the bar screens.

Effluent Sampling

Samples for pH, fecal coliform bacteria, and total residual chloride (TRC) must be collected at the treatment plant's effluent pump station. Samples for BOD and TSS must be collected at the outlet structure of the final treatment lagoon (currently Lagoon #3).

Any change in sampling location must be approved by the Department in writing. 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 sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 C.M.R. 263 (last amended April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR.

2. **Percent Removal** – The treatment facility must maintain a minimum of 85 percent removal of both biochemical oxygen demand and total suspended solids for all flows receiving secondary treatment. Compliance with the limitation is based on a twelve-month rolling average. Calendar monthly average percent removal values must be calculated based on influent and effluent concentrations. The twelve-month rolling average calculation is based on the most recent twelve-month period.
3. **Fecal coliform bacteria** - Limits and monitoring requirements are in effect on a year round basis.
4. **Fecal coliform bacteria** - To be calculated and reported as a geometric mean.
5. **TRC** – Limitation applies at the treatment plant's effluent pump station. 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)

6. **TRC** – Limits and monitoring requirements are in effect on a year round basis, excepting holidays and other non-working days.
7. **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 C.M.R. 519 in accordance with the USEPA's "clean sampling techniques" found in U.S. Environmental Policy Agency (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.
8. **Ground water monitoring well** - Must be monitored **during the month of April** of each year. Ground water monitoring results that exceed 250 mg/L for chlorides, 120 mg/L for sodium, or 10 mg/L for total nitrate nitrogen must be reported to the Department within five (5) working days.

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 permittee must not discharge effluent that causes visible discoloration or turbidity in the receiving waters or otherwise impairs the uses 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 III**, 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 C.M.R. 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

D. 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.

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SPECIAL CONDITIONS

E. MONITORING AND REPORTING

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

Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
State House State #17
Augusta, Maine 04333

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

F. LIMITATIONS FOR INDUSTRIAL USERS

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

SPECIAL CONDITIONS

G. 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 January 25, 2016; 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of wastewater from any other point source are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit.

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. 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

J. 06-096 C.M.R. 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 C** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

- (a) Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;
- (b) Changes in the operation of the treatment works that may increase the toxicity of the discharge;
- (c) Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge;

In addition, in the comments section of the certification form, the permittee must provide the Department with statements describing;

- (d) Changes in stormwater collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge; and
- (e) Increases in the type or volume of transported (hailed) wastes accepted by the facility.

The Department may require that annual testing be re-instated if it determines that there have been changes in the character of the discharge or if annual certifications described above are not submitted.

K. REPORTING DISCHARGES NOT RECEIVING SECONDARY TREATMENT

Pursuant to *Classification of Maine waters*, 38 M.R.S. § 464(1)(C) and *Standards for classification of estuarine and marine waters*, 38 M.R.S. § 465-B, which contain standards to achieve Maine's water quality goals for the designated uses of fishing, aquaculture, and propagation and harvesting of shellfish, the permittee must report all occurrences of secondary wastewater treatment system bypasses, upsets, disinfection system malfunctions, combined sewer overflows, and discharges resulting from sanitary sewer overflows, pump stations or broken sewer pipes immediately upon becoming aware of such a condition. Reporting must be provided through the Maine Department of Marine Resources' website at http://www.maine.gov/dmr/rm/public_health/rain/rptevent.htm or by calling the Maine Department of Marine Resources' Pollution Event Reporting Hotline at 207-633-9564.

SPECIAL CONDITIONS

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

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

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

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

L. 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.

M. SEVERABILITY

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

A. GENERAL PROVISIONS

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

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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

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

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

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

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

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

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

B. OPERATION AND MAINTENANCE OF FACILITIES

1. General facility requirements.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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

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

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

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

5. Bypasses.

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

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

6. Upsets.

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

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C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

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D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

5. Publicly owned treatment works.

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

E. OTHER REQUIREMENTS

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ATTACHMENT A

1/26/2016

MERCURY REPORT - Clean Test Only

Data Date Range: 26/Jan/2001 - 26/Jan/2016



Facility: GREAT SALT BAY SANITARY DISTRICT

Permit Number: ME0101516

Max (ug/l): 0.0159

Average (ug/l): 0.0084

Sample Date	Result (ng/l)	Lsthan	Clean
05/29/2009	15.20	N	T
10/27/2009	5.20	N	T
05/17/2010	10.80	N	T
08/23/2010	8.80	N	T
08/23/2010	3.72	N	T
06/09/2011	6.80	N	T
11/29/2011	10.50	N	T
07/11/2012	15.90	N	T
10/17/2013	7.40	N	T
04/29/2014	4.45	N	T
04/29/2015	3.98	N	T

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

PROPOSED DRAFT FACT SHEET

Date: May 24, 2016

MEPDES PERMIT: **ME0101516**
WASTE DISCHARGE LICENSE: **W006048-6C-H-R**

NAME AND ADDRESS OF APPLICANT:

**GREAT SALT BAY SANITARY DISTRICT
P.O. BOX 23
DAMARISCOTTA, ME 04543**

COUNTY: **LINCOLN**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**GREAT SALT BAY SANITARY DISTRICT
121 PIPER MILL ROAD
DAMARISCOTTA, ME. 04543**

RECEIVING WATER / CLASSIFICATION: **DAMARISCOTTA RIVER/CLASS SB**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

**MS. LEEANNA LIBBY
WASTEWATER DIVISION MANAGER
(207) 563-5105
leeanna@gsbsd.org**

1. APPLICATION SUMMARY

- a. Application: On January 25, 2016, the Department of Environmental Protection (Department) received and accepted as complete for processing an application from the Great Salt Bay Sanitary District (GSBSD/permittee) for renewal of combination Waste Discharge License (WDL) #W006048-6C-F-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0101516, which was issued by the Department on April 21, 2011 for a five-year term. The April 21, 2011 permit authorized the monthly average discharge of 0.268 million gallons per day (MGD) of secondarily treated sanitary wastewater from a publicly owned treatment works (POTW) to the Damariscotta River, Class SB, in Damariscotta, Maine.

2. PERMIT SUMMARY

- a. Terms and conditions

This permitting action is different from the April 21, 2011 permit in that it:

1. Eliminates the waiver for percent removal requirements for biochemical oxygen demand (BOD₅) and total suspended solids (TSS) when influent strength is less than 200 milligrams per liter (mg/L);
 2. Incorporates monitoring and reporting requirements for the interim mercury limitations established by the Department for this facility pursuant to *Certain Deposits and Discharges Prohibited*, 38 M.R.S. § 420 and *Waste Discharge Licenses*, 38 M.R.S. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 C.M.R. 519 (last amended October 6, 2001);
 3. Incorporates Special Condition K. *Reporting Discharges Not Receiving Secondary Treatment* for reporting to the Department of Marine Resources in the event of a facility bypass/failure;
 4. Reduces the monitoring and reporting requirement from 1/Week to 2/Month for BOD₅ and TSS;
 5. Eliminates limitations and monitoring requirements for settleable solids; and
 6. Updates Special Condition F. *Limitations for Industrial Users* from the previous permit to include an Industrial Waste Survey once per permit cycle.
- b. History: The most recent relevant regulatory actions pertaining to the GSBSD facility include, but are not limited to, the following:

September 24, 1986 - The Department issued WDL #W006048-45-A-N for a five-year term. This action was the initial WDL issued by the Department for the new facility.

2. PERMIT SUMMARY (cont'd)

December 30, 1991 - The U.S. Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0101516. The permit covered both the main plant discharge in Damariscotta (outfall 001) and the sand filter discharge in Damariscotta Mills (Outfall #002). It is noted the Department has always regulated these two facilities via independent licenses/permits.

June 5, 1996 - The Department issued WDL renewal #W006048-58-C-R for a five-year term.

December 13, 1996 - The USEPA modified NPDES permit #ME0101516 in accordance with the 6/5/96 WDL and State of Maine Section 401 water quality certification requirements.

May 23, 2000 –Pursuant to Maine law, 38 M.R.S. §420 and §413 and Department rule, 06-096 C.M.R. Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL #W006048-58-C-R by establishing interim monthly average and daily maximum effluent concentration limits of 20.9 parts per trillion (ppt) and 31.3 ppt, respectively, and a minimum monitoring frequency requirement of 2 tests per year for mercury.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permit program in Maine. From that date forward, the permit program has been referred to as the MEPDES permit program and ME0101516 (same as the NPDES permit) will be the primary reference number for the facility.

August 31, 2001 – The Department issued combination MEPDES permit #ME0101516/ WDL #W006048-5L-D-R for the GSBSD's main plant for a five-year term.

June 17, 2003 – The Department issued an Administrative Modification to amend the monitoring well sampling regime.

February 17, 2005 – The Department issued an Administrative Modification to specify sampling locations in the permit.

April 10, 2006 - The Department issued a modification of WDL #W006048-5L-D-R by making a determination that whole effluent toxicity (WET) and chemical specific testing requirements do not need to be included pursuant to 06-096 C.M.R. 530.

June 26, 2006 - The Department issued combination MEPDES permit #ME0101516/ WDL #W006048-5L-E-R for the GSBSD's main plant for a five year term.

April 21, 2011 - The Department issued combination MEPDES permit #ME0101516/ WDL #W006048-6C-F-R for the GSBSD's main plant for a five year term.

2. PERMIT SUMMARY (cont'd)

January 8, 2013 – The Department issued a modification of the 4/21/11 permit to reduce the monitoring frequency for mercury to once per year.

January 25, 2016 – The permittee submitted a timely and complete General Application to the Department for renewal of the April 21, 2011 permit (including subsequent minor permit revisions and permit modifications). The application was accepted on the same day and was assigned WDL #W006048-6C-H-R / MEPDES #ME0101516.

- c. Source Description: The GSBSD's wastewater treatment facility receives and treats sanitary wastewaters generated by residential and commercial entities, including the Miles Memorial Hospital, located in the downtown areas of the towns of Damariscotta and Newcastle. The wastewater treatment facility is located approximately one mile outside the center of the Town of Damariscotta and is referred to as the District's main plant. It is noted the GSBSD owns and operates another much smaller sand filter treatment system referred to as the Damariscotta Mills facility located in Nobleboro. The applicant anticipates modest growth within the District in the next five years. The collection system consists of approximately 5.0 miles of collection lines and six pump stations. One of the pump stations and the main plant have on-site generators to provide back-up power in the event of a power failure and the remaining five have emergency generator receptacles and manual transfer switches such that back-up power via a portable generator can be supplied to the stations in the event of a power failure. There are no known combined sewer overflow (CSO) points on the system. The GSBSD does not receive and/or treat septage waste at the wastewater treatment facility.

A map showing the location of the facility and the receiving water is included as Fact Sheet **Attachment A**.

- d. Wastewater Treatment: All wastewater received at the treatment plant enters via a force main. The GSBSD provides a secondary level of treatment via a grit chamber, three (3) aerated (diffused air system) lagoons operating in series and a chlorine contact chamber for disinfection. The total capacity of the lagoon system is 11.1 million gallons. Dechlorination was abandoned in October of 1996 after a Department study showed that the detention time in the effluent discharge system is over two hours at the current permitted flow.

The GSBSD staff performs annual surveys of sludge depths within the three lagoons. The permittee also reports that sludge is periodically removed from the lagoons in accordance with the most current Operations and Maintenance Plan for the facility. It is noted that in calendar year 2013, approximately 239 dry tons (915 wet tons) of sludge was removed from the three lagoons. The GSBSD maintains a sludge reserve account to fund this activity.

2. PERMIT SUMMARY (cont'd)

The final effluent from the treatment facility is piped approximately 7,500 feet back downtown and discharged to the Damariscotta River near the town landing which is off of Main Street. The outfall pipe is a 10-inch diameter polyethylene pipe with two 3" diffusers on the end.

A layout of process flow and lagoon setup is included as Fact Sheet **Attachment B**.

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 C.M.R. 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 C.M.R. 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(3-A) classifies the Damariscotta River at the point of discharge as Class SB water. *Standards for classification of estuarine and marine waters*, 38 M.R.S. § 465-B(2) describes the standards for Class SB waters.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report - Appendices, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the marine waters at the permittee's outfall (Waterbody ID 729-2) as "Category 4-A: Estuarine and Marine Waters with Impaired Use, TMDL Completed" for elevated fecal counts only.

Although the Department does not have specific information on lobster distribution in the area of this discharge, the salinity and benthic habitat in the upper estuary is typical of one that may support lobsters. Therefore, Category 5-D: *Estuarine and Marine Waters Impaired by Legacy Pollutants* also applies. All estuarine and marine waters capable of supporting American lobster are listed in Category 5-D, partially supporting fishing ("shellfish" consumption) due to elevated levels of PCBs and other persistent, bioaccumulating substances in lobster tomalley.

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

Compliance with the fecal coliform bacteria limits in this permitting action and year-round disinfection ensure that the discharge from the permittee maintains the safety zone established by the Department of Marine Resources (MEDMR) for shellfish harvesting areas. Shellfish closure areas are identified on the map included as **Attachment D** of this Fact Sheet.

In addition, this permit is establishing a new reporting requirement in Special Condition L, *Reporting Discharges Not Receiving Secondary Treatment*. This requirement is necessary to protect the health and welfare of the public, as the Damariscotta River in the vicinity of the outfall pipe, is a high value shellfish harvesting area identified by the MEDMR. Failure to notify the MEDMR of a failure in the disinfection system at the treatment facility, discharges classified as sanitary sewer overflows (SSOs) or CSOs may result in the harvesting and marketing of shellfish that is not fit for human consumption.

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

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Flow: The previous permitting action established a monthly average discharge flow limitation of 0.268 MGD and continuous flow monitoring requirement which is being carried forward in this permitting action. This permitting action is carrying forward the previously established flow limit of 0.268 MGD, as well as carrying forward all mass-based effluent limits based on the previously established flow limit of 0.268 MGD.

The Department reviewed 54 Discharge Monitoring Reports (DMRs) that were submitted for the period of May 31, 2011 through November 30, 2015. A review of data indicates the following:

Flow

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	0.268	0.01 – 0.23	0.141
Daily Maximum	Report	0.15 – 0.71	0.305

- b. Dilution Factors: Department Regulation Chapter 530 *Surface Water Toxics Control Program*, §4(A)(2) states:

(2) *For estuaries where tidal flow is dominant and marine discharges, dilution factors are calculated as follows. These methods may be supplemented with additional information such as current studies or dye studies.*

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

- (a) *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.*
- (b) *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.*
- (c) *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.*

In September 1995, the USEPA conducted a dye study to determine the dilution associated with the effluent from the Damariscotta main plant and the receiving water. After reviewing their February 1996 report entitled Great Salt Bay Sanitary District, Effluent Dye Study, in the Damariscotta River and its dilution factor isograms, the Department concluded that the discharge would be diluted by a factor of greater than 1000:1 at both low and high tide.

A review by the Department Water Quality staff at the time noted certain deficiencies in the study and recommended establishing new dilution factors. The recommended dilution factors were chronic dilution = 500:1 ($1000 \div 2$ to account for the fact that the study was made at an effluent flow less than 50 percent of licensed flow) and an acute dilution = 200:1 (judgment based on dye study and experience with modeling other sites). However, it may be possible to increase these dilution estimates, but additional data and analysis are required.

For the purposes of this permitting action the Department is carrying forward the dilution factors from the previous permitting actions as follows:

Acute: 200:1 Chronic: 500:1 Harmonic mean ⁽¹⁾: 1,500:1

¹ The harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3). This multiplying factor is based on guidelines for estimation of human health dilution presented in the USEPA publication, "Technical Support Document for Water Quality-Based Toxics Control" (Office of Water; EPA/505/2-90-001, page 88), and represents an estimation of harmonic mean flow on which human health dilutions are based in a riverine 7Q10 flow situation.

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

- c. **BOD₅ and TSS:** The previous permitting action established monthly average and weekly average BOD₅ & TSS concentration limits of 30 milligrams per liter (mg/L) and 45 mg/L, respectively, based on treatment equivalent to secondary treatment requirements in *Effluent Guidelines and Standards*, 06-096 C.M.R. 525(3)(VI) and the 45 mg/L is based on secondary treatment requirements of 06-096 C.M.R., Chapter 525(3)(III). The daily maximum BOD₅ & TSS concentration limits of 50 mg/L is based on a Department best professional judgment (BPJ) of BPT.

This permitting action is carrying forward all three concentration limitations.

Previous permitting action established monthly average, weekly average and daily maximum mass limits of 67 pounds per day (lbs./day), 100 lbs./day and 112 lbs./day, respectively, based on a monthly average flow limit of 0.268 MGD. BOD₅ & TSS mass limits were derived as follows:

Monthly Average Mass Limit: $(30 \text{ mg/L})(8.34 \text{ lbs./gallon})(0.268 \text{ MGD}) = 67 \text{ lbs./day}$
Weekly Average Mass Limit: $(45 \text{ mg/L})(8.34 \text{ lbs./day})(0.268 \text{ MGD}) = 100 \text{ lbs./day}$
Daily Maximum Mass Limit: $(50 \text{ mg/L})(8.34 \text{ lbs./day})(0.268 \text{ MGD}) = 112 \text{ lbs./day}$

This permitting action is also carrying forward the requirement for a minimum of 85% removal of BOD₅ & TSS pursuant to 06-096 C.M.R. 525(3)(III)(a)(3) and (b)(3). The permittee has not demonstrated that it qualifies for special considerations pursuant to 06-096 C.M.R. 525(3)(IV) to maintain a waiver from the 85% removal requirement when influent concentration is less than 200 mg/L, which was established in the previous permit. Therefore, this permitting action is eliminating the waiver from the 85% removal requirement provided in the previous permitting action when influent concentration is less than 200 mg/L.

A summary of BOD₅ data as reported on the DMRs submitted to the Department for the period of May 31, 2011 – November 30, 2015 is as follows:

BOD₅ Mass

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	67	2 – 65	19
Weekly Average	100	3 – 108	30
Daily Maximum	112	2 – 108	31

BOD₅ Concentration

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	2 – 44	15
Weekly Average	45	3 – 55	20
Daily Maximum	50	2 – 55	20

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

A summary of TSS data as reported on the DMRs submitted to the Department for the period of May 31, 2011 – November 30, 2015 is as follows:

TSS Mass

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	67	0 – 33	12
Weekly Average	100	2 – 77	21
Daily Maximum	112	2 – 77	21

TSS Concentration

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	2 – 31	10
Weekly Average	45	2 – 73	15
Daily Maximum	50	2 – 73	15

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

Although USEPA's 1996 Guidance recommends evaluation of the most current two years of effluent data for a parameter, the Department is considering 53 months of data (May 31, 2011 – November 30, 2015.). A review of the mass monitoring data for BOD₅ & TSS indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as 28% for BOD₅ and 18% for TSS. According to Table I of the USEPA Guidance and Department Guidance, the monitoring requirement can be reduced from 1/Week to 2/Month for BOD₅ and 1/Week to 1 per 2 months for TSS. Taking into consideration both the USEPA and Department Guidance, this permitting action is reducing the monitoring frequency for BOD₅ and TSS from 1/Week to 2/Month.

This permitting action carries forward the requirement for 85% removal for BOD and TSS pursuant to Department rule Chapter 525(3)(III)(a&b)(3). A review of the monthly DMR data for the period May 31, 2011 through November 30, 2015 indicates values have been reported as follows:

BOD % Removal (DMRs=54)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	86 - 99	96

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)**TSS % Removal (DMRs=12)**

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	87 - 99	93

Monitoring frequencies for BOD and TSS percent removal of 1/Month are being carried forward from the previous permitting action and are based on long standing Department guidance for facilities with a monthly average flow limitation between 0.10 MGD and 0.5 MGD.

- d. Settleable Solids: The previous permit established a daily maximum technology based concentration limitation of 0.3 milliliter per liter (ml/L) for settleable solids based on a Department best professional judgment of best practicable treatment. The Department has since reconsidered the need to monitor and limit settleable solids at lagoon facilities and has made a best professional judgment decision to eliminate both the numeric limitation and monitoring requirements for this parameter.

It is noted for the record, however, that a summary of settleable solids data as reported on the monthly DMRs for the period of May 30, 2011 through November 30, 2015 (n=54) indicates the daily maximum settleable solids concentration discharge has been in compliance with the 0.3 ml/L limit 100% of the time.

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

At the request of the MEDMR, fecal coliform bacteria and total residual chlorine (TRC) limits and monitoring requirements are in effect year-round in order to protect local shellfish resources near the outfall and to protect the health, safety and welfare of the public.

A summary of effluent fecal coliform bacteria data as reported on the DMRs for the period May 31, 2011 through November 30, 2015 is as follows:

Fecal coliform bacteria (n = 60)

Value	Limit (col/100 mL)	Range (col/100 mL)	Mean (col/100 mL)
Monthly Average	15	0 – 3	1
Daily Maximum	50	1 – 60	6

During this time period, the permittee reported a total of 2 excursions from the numeric bacteria limits.

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

- f. **TRC:** The previous permitting action established a daily maximum BPT-based concentration limit of 1.0 mg/L as well as a minimum monitoring frequency requirement of 5/week. The Department specifies TRC limitations in order to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. The Department imposes the more stringent of either water quality-based or BPT-based limits. End-of-pipe acute and chronic water quality-based concentration thresholds may be calculated as follows:

Criterion		Dilution Factors	Calculated Threshold
Acute	0.013 mg/L	200:1	2.6 mg/L
Chronic	0.0075 mg/L	500:1	3.75 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 must dechlorinate the effluent in order to consistently achieve compliance with 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's wastewater treatment process does not include effluent dechlorination following disinfection. This permitting action is carrying forward the daily maximum BPT-based concentration limit of 1.0 mg/L as it is more stringent than the water quality-based thresholds of 2.6 mg/L (acute) and 3.75 mg/L (chronic) as calculated above. It is noted that TRC is currently measured at the effluent pump station and it is anticipated that substantial reduction in TRC values occurs prior to the actual discharge at the end of the outfall pipe.

A summary of TRC data as reported on the monthly DMRs for the period of May 31, 2011 – November 30, 2015 is as follows:

Total residual chlorine (DMRs=54)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.3 – 0.99	0.6

- g. **pH:** The previous permitting action established a technology based pH range limitation of 6.0 – 9.0 standard units (SU) pursuant to 06-096 C.M.R. 525(3)(III)(c) along with a monitoring frequency of 1/Week, both of which are being carried forward in this permitting action. In the period of May 30, 2011 to November 30, 2015, the pH ranged from 5.44 SU to 7.4 SU.
- h. **Mercury:** Pursuant to 38 M.R.S. § 420 and 38 M.R.S. § 413 and 06-096 C.M.R. 519, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W006048-58-C-R by establishing interim monthly average and daily maximum effluent concentration limits of 20.9 ppt and 31.3 ppt, respectively, and a minimum monitoring frequency requirement of 2 tests per year for mercury.

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

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 2009 through April 2015 is as follows:

Mercury (n = 11)

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Monthly Average	20.9	3.72 – 15.90	8.4
Daily Maximum	31.3		

On February 6, 2012, the Department issued a minor revision to the April 21, 2011 permit thereby revising the minimum monitoring frequency requirement from twice 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.

- i. Total Nitrogen: The USEPA requested the Department evaluate the reasonable potential for the discharge of total nitrogen to cause or contribute to non-attainment of applicable water quality standards in marine waters, namely dissolved oxygen (DO) and marine life support. To date, the permittee has not conducted total nitrogen testing on its discharge. The Department has 140 total nitrogen effluent values with an arithmetic mean of 17.2 mg/L collected from various municipally-owned treatment works that discharge to marine waters of the State. None of the facilities whose effluent data were used are specifically designed to remove total nitrogen. For the MEPDES permitting program, the Department considers 17.2 mg/L to be representative of total nitrogen discharge levels for all facilities providing secondary treatment that discharge to marine waters in the absence of facility specific data.

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.

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

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. Three known surveys have been completed within the Damariscotta River estuary to document presence/absence of eelgrass. The first occurred in the 1970's by Timson of the Maine Geological Survey, and the second (1994) and third (2005) by the MEDMR. The Timson survey noted only the presence of intertidal and subtidal bedrock ledge and unvegetated mudflat, albeit at a coarse mapping scale. In 1994, approximately 2.4 acres of sparse to moderate eelgrass were mapped 0.3 km up estuary from the outfall, with a larger eelgrass resource 3 km to the north in Great Salt Bay. In 2005, eelgrass was mapped similarly as in 1994 in terms of proximity to the outfall and distribution. Since the shallow subtidal environment within the Damariscotta River has previously been documented as hosting eelgrass, the use of 0.32 mg/L as a threshold value is appropriate for this estuary.

With the exception of ammonia, nitrogen is not acutely toxic; thus, the Department is considering a far-field dilution to be more appropriate when evaluating impacts of total nitrogen to the marine environment. The permittee's facility discharges via a 10-inch diameter polyethylene pipe with two 3" diffusers on the end. The discharge is located approximately 5 feet below mean low water to the Damariscotta River. A far field dilution model was developed for the Upper Damariscotta Estuary that incorporated four segments, with a focus on a mixing segment around the Damariscotta Public Landing. This segment has a 30.2-acre surface area at mean higher high water (MHHW), a 14.9-acre surface area at mean lower low water (MLLW), and is bounded by the "reversing falls" at its north end and a narrowing of the estuary channel between Jacks Point and Norris Point at its south end. Due to the reversing fall's narrow width and funnel shape, this area has fairly efficient mixing. For these conditions, the 7-Day Moving Average dilution is estimated to be 4,926:1. Using the far-field dilution factor discussed above, the increase in total nitrogen concentration within the Upper Damariscotta Estuary as a result of the discharge is estimated to be 0.003 mg/L.

Total nitrogen concentrations in effluent = 17.2 mg/L
Far-field dilution factor = 4,926:1

In-stream concentration after dilution: $\frac{17.2 \text{ mg/L}}{4,926} = 0.003 \text{ mg/L}$

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

The Department and external partners have been collecting ambient total nitrogen data along Maine's coast. For the Damariscotta River, the Department calculated a mean background concentration of 0.23 mg/L (n=14) based on surface water data collected in the upper Damariscotta River between the reversing falls and Hog Island, approximately 2 km down estuary. Background data used in this calculation are from 1996, 2003, 2014 and 2015, and did not include sites located within the mixing segment that includes the Public Landing. The estimated increase in ambient total nitrogen after reasonable opportunity for mixing in the far-field is $0.23 \text{ mg/L} + 0.003 \text{ mg/L} = 0.233 \text{ mg/L}$. The in-stream concentration value of 0.233 mg/L is less than the Department and USEPA's best professional judgment based total nitrogen threshold of 0.32 mg/L for the protection of aquatic life using eelgrass as an indicator.

Based on the reasonable potential calculations above using average concentrations for effluent and ambient data, 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 Great Salt Bay Sanitary District's outfall does not exhibit a reasonable potential to exceed applicable water quality standards for Class SB waters. This permitting action is not establishing limitations or monitoring requirements for total nitrogen.

- j. WET, Priority Pollutant, and Analytical Chemistry Testing: 38 M.R.S. § 414-A and 38 M.R.S. § 420 prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. 06-096 C.M.R. 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 C.M.R. 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 exceedences of narrative or numerical water quality criteria."

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 $\geq 20:1$ but <100:1.
Level III	Chronic dilution factor $\geq 100:1$ but <500:1 or >500:1 and $Q \geq 1.0$ MGD
Level IV	Chronic dilution >500:1 and $Q \leq 1.0$ MGD

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

Based on the criteria, the permittee's facility is considered a Level IV discharger as the chronic dilution of the receiving water is > 500:1 and the permitted flow is equal to or less than 1.0 MGD.

Using the categorization criteria as stated above, and pursuant to 06-096 C.M.R. 530 (2)(D)(1), dischargers are required to characterize their effluent via WET, priority pollutant and analytical chemistry testing. Although this facility has never conducted WET or chemical specific testing, the Department has made the determination that the permittee's facility is not a new discharge nor has it substantially changed since issuance of the previous permit/license.

Therefore, the Department is waiving the Level IV routine testing requirements except that the Department is requiring the facility to conduct testing under the following conditions.

- (a) The discharger's permit application or information available to the Department indicate that toxic compounds may be present in toxic amounts; or
- (b) Previous testing conducted by the discharger or similar dischargers indicates that toxic compounds may be present in toxic amounts.

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

However, should there be may reopen this permit pursuant to Special Condition L, *Reopening of Permit For Modification*, to incorporate the applicable WET, priority pollutant, or analytical testing requirements cited above.

- k. Ground Water Monitoring Well CMW1: The previous permitting action established monitoring of ground water monitoring well CMW1. A review of the DMR data for the period April 2011 through April 2015 is as follows;

Parameter	Units	Range
Temperature	°C	7.0 - 12
Conductivity	(umhos/cm)	99 - 260
pH	Standard units	5.8 – 6.58
Nitrate Nitrogen (as N)	mg/L	<1.0 - <1.0
Sodium (as Na)	mg/L	3.63 – 14.7
Chloride (as Cl)	mg/L	<5 – 6.2

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

8. PUBLIC COMMENTS

Public notice of this application was made in the *Lincoln County News* newspapers on or about January 7, 2016. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 C.M.R. 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

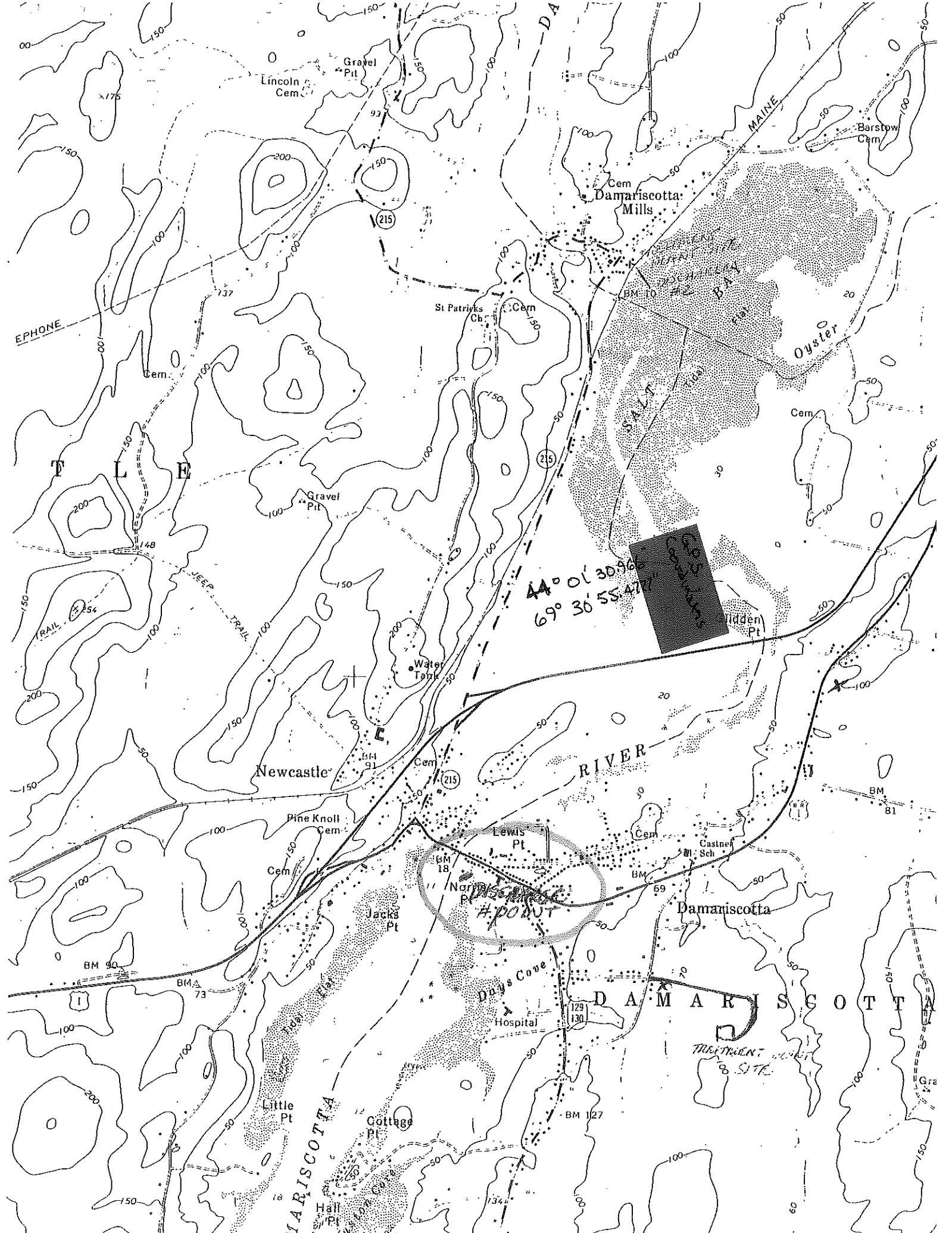
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Cindy L. Dionne
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 557-5950
e-mail: Cindy.L.Dionne@maine.gov

10. RESPONSE TO COMMENTS

Reserved until the end of the formal 30-day public comment period.

ATTACHMENT A



44° 01' 30.96"
69° 36' 55.47"

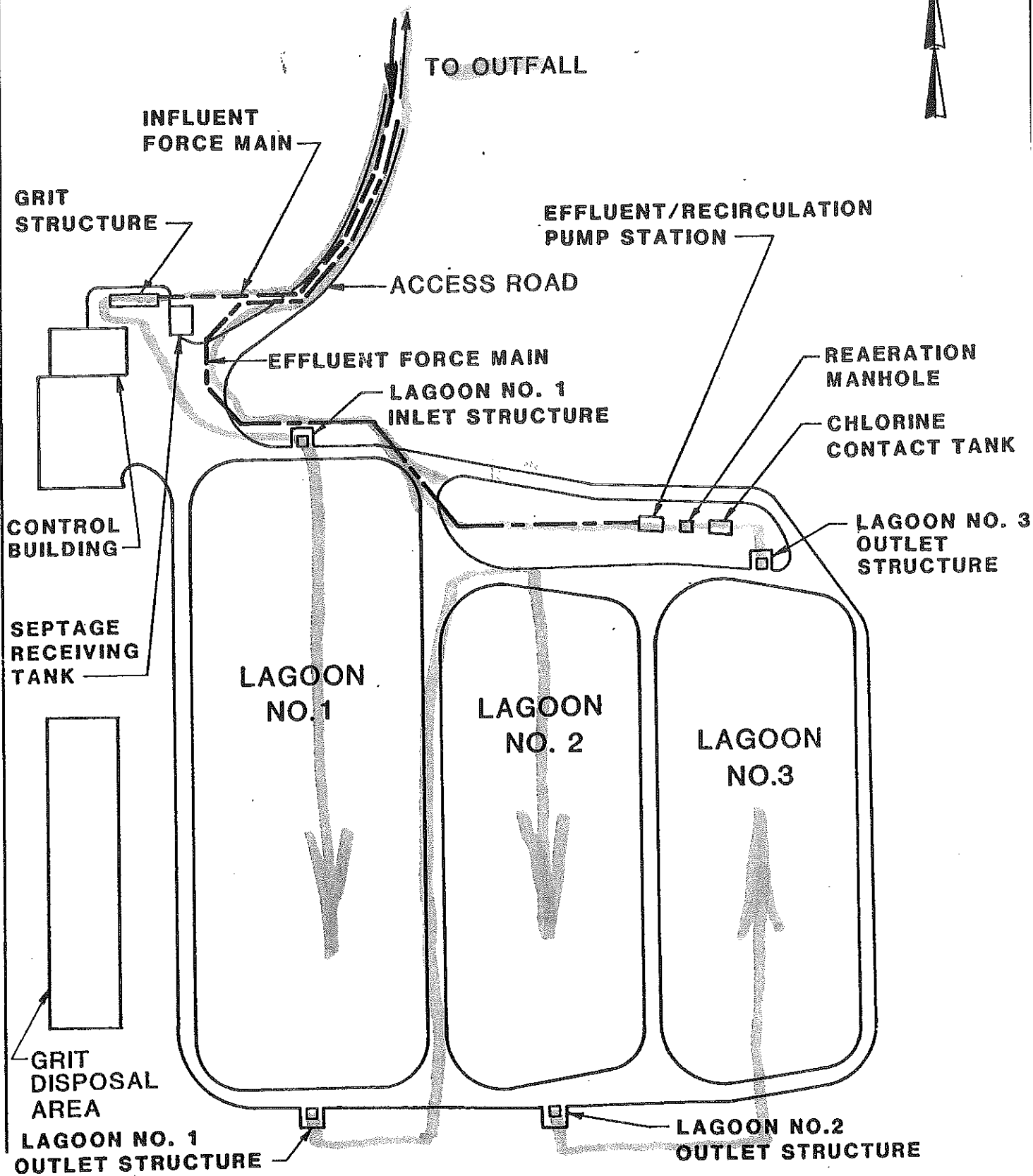


DAMARISCOTTA

DAMARISCOTTA

TRAILHEAD SITE

ATTACHMENT B



**TREATMENT PLANT LAYOUT
DAMARISCOTTA - NEWCASTLE
FIGURE 3-2**

ATTACHMENT C

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES# _____ Facility Name _____

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

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

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

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

Scheduled Toxicity Testing for the next calendar year

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

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

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

ATTACHMENT D



PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
21 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0021

PATRICK C. KELIHER
COMMISSIONER

Shellfish Harvesting Area Classification-Notification of Changes

April 29, 2015

Ladies and Gentlemen:

Under the authority of Maine statute 12 M.R.S.A., Chapter 607, Section 6172; the Commissioner has made the following classification change to Area No. 23-A, Upper Damariscotta River (Newcastle, Nobleboro, Damariscotta): This notice reclassifies Days Cove from Restricted to Prohibited due to water quality no longer meeting Restricted standards. All existing pollution and red tide/psp closures remain in effect.

The boundary descriptions of the area are as follows (struck text is being removed and underlined text is being added):

- A. Effective immediately, because of pollution, it shall be unlawful to dig, take or possess any clams, quahogs, oysters or mussels taken from the shores, flats and waters of the following Prohibited areas:
1. Great Salt Bay (Newcastle, Nobleboro, Damariscotta), north of a line running west to east between two unnamed points of land, locally known as The Narrows, located approximately 600 yards north of the Route 1 bridge.
 2. Damariscotta River (Newcastle, Damariscotta): south of the Route 1 bridge; AND north and east of a line beginning at a red painted post located on the southwest tip of Jacks Point (Newcastle), then running south to Green Can buoy #23, then running southwest to 300 feet approximately 91 yards west of the southwest tip of Hall Point (Damariscotta), then running east to the southwest tip of Hall Pt. ; AND west of a line beginning due north of the end of Chase Point Lane (Damariscotta), then running northeast to the western tip of Norris Point (Damariscotta).
- B. Effective immediately because of pollution, it shall be unlawful to dig, take or possess any clams, quahogs, oysters or mussels taken from the shores, flats and waters of the following Restricted area without a special MDMR permit: Huston Cove (Damariscotta): north and east of a line beginning at the southwestern tip of Hall Point running southeast to the opposite shore. inside and shoreward of a line drawn across the mouth of Huston Cove, beginning at the southwest tip of Halls Point and running southeast to the next point of land. This area is classified Restricted and harvest requires a special MDMR permit:
1. ~~Days Cove (Damariscotta): east of a line beginning due north of the end of Chase Point Lane (Damariscotta), then running northeast to the western tip of Norris Point (Damariscotta).~~
 2. ~~Huston Cove (Damariscotta): east of a line beginning at the southwestern tip of Halls Point and running southeast to the opposite shore.~~
- C. Effective immediately, because of proximity to a Sewage Treatment Plant (STP) outfall, it shall be unlawful to dig, take or possess any clams, quahogs, oysters or mussels from the shores, flats and waters of the following Conditionally Approved area: the upper Damariscotta River south of a line running west to east between two unnamed points of land, locally known as The Narrows, located approximately 600 yards north of the Route 1 bridge; AND north of the Route 1 bridge during any malfunction of the Great Salt Bay STP (Mills Facility).
- G. ~~Effective immediately, because of pollution, the shores, flats and waters of the): south of a line running between two unnamed points of land, locally known as The Narrows, located approximately 600 yards north of the Route 1 bridge; AND north of the Route 1 bridge; have been classified as "Conditionally Approved," and~~

~~shall be closed to the harvest of clams, quahogs, oysters and mussels during any failure event at the Great Salt Bay STP (Mills Facility).~~

If you have questions, please contact Angel Ripley or Kohl Kanwit, Department of Marine Resources, 194 McKown Point Road, West Boothbay Harbor, Maine 04575-0008, Tel: (207) 633-9515 or (207) 633-9535, Email: angel.ripley@maine.gov or Kohl.Kanwit@maine.gov. During **weekends/holidays**, contact the appropriate State Police barracks: from New Hampshire border to Brunswick, barracks 1-800-228-0857; from Cushing/Boothbay to Lincolnville/Belfast area, barracks 1-800-452-4664; from Belfast to Canadian border, barracks 1-800-432-7381. This notice can be viewed on the Department's website at: http://www.maine.gov/dmr/rm/public_health/closures/closedarea.htm. This information is also recorded on our HOTLINE (207-624-7727 OR 1-800-232-4733).

Sincerely,



Alison Sirois
Commissioner's Designee – Shellfish Growing Area Program Supervisor

10:51 AM
(Effective Time)

April 29, 2015



Maine Department of Marine Resources

Pollution Area No. 23-A

Upper Damariscotta River (Newcastle, Nobleboro, Damariscotta)

