

#### STATE OF MAINE DEPARTMENT OF **ENVIRONMENTAL PROTECTION**



PAUL R. LEPAGE **GOVERNOR** 

**PAUL MERCER** COMMISSIONER

September 4, 2018

Mr. John Fancy Thomaston Pollution Control Facility 33 Clark Street Thomaston, ME. 04861 e-mail: thompcd@midcoast.com

RE:

Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100668

Maine Waste Discharge License (WDL) #W002643-6C-I-R

**Final Permit** 

Dear Mr. Fancy:

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

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

If you have any questions regarding the matter, please feel free to call me at 287-7693. Your Department compliance inspector copied below is also a resource that can assist you with compliance. Please do not hesitate to contact them with any questions.

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

Sincerely.

Gregg Wood

Division of Water Quality Management

Bureau of Water Quality

Enc.

cc: Denise Behr, DEP/CMRO

Sandy Mojica, USEPA

Lori Mitchell, DEP/CMRO

Olga Vergara, USEPA

Marelyn Vega, USEPA



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

#### DEPARTMENT ORDER

#### IN THE MATTER OF

W002643-6C-I-R APPROVAL	)	RENEWAL
ME0100668	)	WASTE DISCHARGE LICENSE
PUBLICLY OWNED TREATMENT WORKS	)	AND
THOMASTON, KNOX COUNTY, MAINE	) .	ELIMINATION SYSTEM PERMIT
TOWN OF THOMASTON	)	MAINE POLLUTANT DISCHARGE

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, et. seq. and Conditions of Licenses, 38 M.R.S., Section 414-A et seq., and applicable regulations, the Department of Environmental Protection (Department hereinafter) has considered the application of the TOWN OF THOMASTON (Town/Thomaston/permittee) with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

#### APPLICATION SUMMARY

The permittee has submitted a timely and complete application to the Department for the renewal of combination Maine Waste Discharge License (WDL) #W-002643-6C-G-R and Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100668, (permit hereinafter) that was issued by the Department on April 10, 2013, for a five-year term. The MEPDES Permit / WDL authorized the operation of an aerated facultative sanitary wastewater treatment lagoon system with two wastewater disposal options. From January 1 through March 31 each year, the permittee was authorized to discharge up to a monthly average flow of 0.9 million gallons per day (MGD) of treated sanitary wastewater to the St. George River, a Class SB water in Thomaston, Maine. From April 1 through November 30 each year, the permittee was authorized to spray irrigate treated waste via a surface wastewater disposal system onto land in Thomaston, Maine.

On June 6, 2017, the permit was modified authorizing the permittee to operate the surface waste water disposal system to dispose of 30 million gallons of treated effluent via creating ice piles between December 1 and March 31.

#### MODIFICATION(S) REQUESTED

The permittee is requesting to discharge a portion of the secondary treated effluent to a seven-acre wetland to the north of the existing storage lagoon at the waste water treatment facility.

#### MODIFICATIONS GRANTED/DENIED

The Department is denying the permittee's request at this time to discharge a portion of the secondary treated effluent to a seven-acre wetland to the north of the existing storage lagoon at the waste water treatment facility. The Department will request additional investigative studies/information before granting approval for such a discharge.

#### PERMIT SUMMARY

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

1. Establishing a requirement to report to the Maine Department of Marine Resources (DMR) as well as the Department, all occurrences of secondary treatment bypasses, disinfection malfunctions, combined sewer overflows (CSOs), sanitary sewer overflows (SSOs) etc. that may impact conditionally approved shellfish harvesting areas

#### **CONCLUSIONS**

BASED on the findings in the attached Fact Sheet dated July 13, 2018, 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 that the Department expects to adopt in accordance with state law.
- 3. The provisions of the State's antidegradation policy, Maine law 38 M.R.S. Section 464(4)(F), will be met, in that:
  - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
  - (b) Where high quality waters of the State constitute an outstanding natural resource, that water quality will be maintained and protected;
  - (c) Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

#### CONCLUSIONS (cont'd)

- (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and
- (e) Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
- 4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

#### **ACTION**

THEREFORE, the Department APPROVES the above noted application of the TOWN OF THOMASTON for the seasonal surface water discharge (January 1 through March 31) of up to a monthly average flow of 0.9 million gallons per day (MGD) of treated sanitary wastewater to the St. George River, a Class SB water in Thomaston, Maine, and for the operation of two surface wastewater disposal systems; 1) seasonal disposal (April 1 through November 30) via spray irrigation and; 2) seasonal disposal (December 1 – March 31) via ice piles of treated wastewater onto land in Thomaston, Maine, SUBJECT TO THE FOLLOWING CONDITIONS, and all applicable standards and regulations including:

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

#### ACTION

DONE AND DATED AT AUGUSTA, MAINE, THIS 4 DAY OF Septem be 2018.

**PERMIT** 

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Paul Mercer, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application:

January 9, 2018

Date of application acceptance:

January 12, 2018

Filed

SEP 0 5 2018

State of Maine Board of Environmental Protection

Date filed with Board of Environmental Protection \_

This Order prepared by Gregg Wood, BUREAU OF WATER QUALITY

ME0100668 2018

8/31/18

ME0100668 W002643-6C-I-R

#### SPECIAL CONDITIONS

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

#### (SURFACE WATER DISCHARGE)

The permittee is authorized to discharge secondary treated sanitary wastewater from OUTFALL # 001A to the St. George River from January 1 through March 31 each year. Such discharge are limited and must be monitored by the permittee as specified below. The italicized numeric values bracketed in the table below and on the following pages are code numbers that Department personnel utilize to code Discharge Monitoring Reports (DMRs).

Effluent Characteristic			Discharge I	imitations			Minimum Monitor	ing Requirements
	Monthly	Weekly	Daily	Monthly	Weekly	Daily	Measurement	Sample Type
	<u>Average</u>	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Average</u>	<u>Maximum</u>	<u>Frequency</u>	
Flow	0.9 MGD		Report MGD				Continuous [99/99]	Recorder [RC]
[50050]	[03]		[03]					
Biochemical Oxygen	225 lbs/day	338 lbs/day	375 lbs/day	30 mg/L	45 mg/L	50 mg/L	1/Week [01/07]	24 Hr. Composite
Demand (BOD <sub>5</sub> ) [00310]	[26]	[26]	[26]	[19]	[19]	[19]		[24]
BOD5 % Removal (1) [81010]				85% <sub>[23]</sub>			1/Month [01/30]	Calculate [CA]
Total Suspended Solids	225 lbs/day	338 lbs/day	375 lbs/day	30 mg/L	45 mg/L	50 mg/L	1/Week [01/07]	24 Hr. Composite
(TSS) [00545]	/26]	[26]	[26]	[19]	[19]	[19]		[24]
TSS % Removal (1) [81011]				85% <sub>[23]</sub>			1/Month [01/30]	Calculate [CA]
Settleable Solids [00545]	<b></b>					0.3 ml/L <sub>[25]</sub>	1/Week [01/07]	Grab <sub>[GR]</sub>
Fecal Coliform Bacteria (2)				15/100 ml <sup>(3)</sup>		50/100 ml [13]	2/Week [02/07]	Grab [GR]
[74055]				[13]				
Total Residual Chlorine <sup>(2)</sup>						1.0 mg/L [19]	1/Day [0]/0]	Grab [GR]
[50060]								
Mercury (Total) (16) [71900]				16.8 ng/L [3M]	one had been	25.2 ng/L [3M]	1/Year [01/YR]	Grab <sub>[GR]</sub>
pH (Std. Units)								
[00400]		<del></del>				6.0-9.0 <sub>[12]</sub>	1/Day [01/01]	Grab [GR]

#### A. LIMITATIONS AND MONITORING REQUIREMENTS - (ICE PILES)

#### December 1 – March 31 each year

The application of wastewater to the land via a surface waste water disposal system to create ice piles shall be limited to the time period **December 1 to March 31 of each calendar year**. The **ICE PILE FIELD (FLD#6)** ARE limited and must be monitored as specified below.

#### ICE PILE FIELD (FLD#6)

MONITORING CHARACTE REQUIREMENTS	ERISTIC LI	MITATIONS	MINIMUM MONITORING			
	Monthly Average	Daily <u>Maximum</u>	Measurement <u>Frequency</u>	Sample Type		
Flow (Total for the Month) [51128]	Report millions of gallons	ent contra	1/Month [01/30]	Measure [MS]		
Flow (Cumulative Total for the Season) [51128]	Report millions of gallons		1/Month [01/30]	Calculate [CA]		
Flow (Total for the Season)	30 million of gallons		1/Season	Calculate [CA]		

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (SURFACE WATER DISCHARGE)

#### January 1 through March 31 each year - OUTFALL #001A (cont'd)

**SCREENING LEVEL** - During the period beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the discharge are limited and must be monitored by the permittee as specified below.

Effluent Characteristic		Discharge l	Limitations			nimum g Requirements
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity <sup>(4)</sup> Acute – NOEL  Americamysis bahia [TDM3E] (Mysid Shrimp)				Report % [23]	1/Year [01/YR]	Composite [24]
Chronic – NOEL  Arbacia punctulata [TBH3A] (Sea urchin)				Report % [23]	1/Year [01/YR]	Composite [24]
Analytical Chemistry <sup>(5,6)</sup> [51168]		dis set see		Report ug/L	1/Year [01/YR]	Composite/Grab [24]
Priority Pollutant <sup>(6)</sup> [50008]				Report ug/L	1/Year [01/YR]	Composite/Grab [24]

#### A. LIMITATIONS AND MONITORING REQUIREMENTS – (SPRAY IRRIGATION)

The permittee is authorized to operate a surface wastewater treatment and disposal system. The STORAGE LAGOON EFFLUENT (OUTFALL #002A) are limited and must be monitored as specified below.

April 1 – November 30 each year

EFFLUENT CHARACTERISTIC REQUIREMENTS	DISCHAR	GE LIMITATIONS	MINIMUM	MONITORING
REQUIREMENTS	Daily Minimum	Daily Maximum	Measurement Frequency	Sample <u>Type</u>
Biochemical Oxygen Demand		100 mg/L	1/Month <sup>(7)</sup>	Grab
[00310]		[19]	[01/30]	[GR]
Total Suspended Solids	ma 456 NP	Report mg/L	1/Month <sup>(7)</sup>	Grab
[00530]		[19]	[01/30]	[GR]
Nitrate-Nitrogen		Report mg/L	1/Month <sup>(7)</sup>	Grab
[00620]	İ	[19]	[01/30]	[GR]
PH (Standard Units)		Report S.U.	1/Month <sup>(7)</sup>	Grab
<i>{00400}</i>		[12]	[01/30]	[GR]
Lagoon Freeboard (8)	3 feet		1/Week	Measure
[82564]	[27]		[01/07]	[MS]
Metals (Total): Arsenic, Cadmium, Chr Nickel and Zinc	romium, Copper, Lead,	Report ug/L	1/5 Years <sup>(9)</sup>	Grab
[01002, 01027, 01034, 01042, 01051, 01067, 01092]		[28]	[01/5Y]	[GR]

#### A. LIMITATIONS AND MONITORING REQUIREMENTS - (SPRAY IRRIGATION) (cont'd)

The application of wastewater to the land via a spray irrigation system shall be limited to the time period April 1 to November 30 of each calendar year. The SPRAY IRRIGATION FIELDS (FLD#1, FLD #2, FLD #3, FLD #4 and FLD #5) (Outfalls of same designation) are limited and must be monitored as specified below.

EFFLUENT CHARACTER REQUIREMENTS	USTIC	DISCHARGE LIMITATE	IONS	MINIMUM M	ONITORING
	Monthly <u>Total</u>	Weekly <u>Maximum<sup>(10)</sup></u>	Daily <u>Maximum</u>	Measurement Frequency	Sample <u>Type</u>
Application Rate					
FLD#1 FLD#2 FLD#3 FLD#4 FLD#5	  	857,650gallons 758,700 gallons 857,650 gallons 923,650 gallons 957,050 gallons	  	1/Week 1/Week 1/Week 1/Week 1/Week	Calculate Calculate Calculate Calculate Calculate Calculate
Flow - Total Gallons FLD#1 FLD#2 FLD#3 FLD#4 FLD#5	Report Millions of gallons	  		1/Month 1/Month 1/Month 1/Month 1/Month [01/30]	Calculate Calculate Calculate Calculate Calculate Calculate

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#### **SPECIAL CONDITIONS**

#### A. LIMITATIONS AND MONITORING REQUIREMENTS - (SPRAY IRRIGATION) (cont'd)

GROUNDWATER MONITORING WELLS #002BD, #002BS, #002DD, #002DS, #002GD, #002GS, #002HS, and #002ID (Outfalls #02BD, #02BS, #02DD, #02DS, #02GD, #02GS, #02HS, and #02ID), ARE limited and must be monitored as specified below.

MONITORING CHARACTERISTIC REQUIREMENTS	LIMITATIONS	MINIMUM MONITORING		
	Daily <u>Maximum</u>	Measurement Frequency	Sample <u>Type</u>	
Depth to Water Level Below Land Surface	Report (feet)(11)	2/Year <sup>(12)</sup>	Measure	
[72019]	[27]	[02/YR]	[MS]	
Nitrate-Nitrogen	10 mg/L	2/Year <sup>(12)</sup>	Grab	
[00620]	[19]	[02/YR]	[GR]	
Specific Conductance <sup>(13,14)</sup>	Report (umhos/cm)	2/Year <sup>(12)</sup>	Grab	
[00095]	[11]	[02/YR]	[GR]	
Temperature <sup>(13)</sup>	Report (°C)	2/Year <sup>(12)</sup>	Grab	
[00011]	[04]	[02/YR]	[GR]	
PH (Standard Units) (13)	Report (S.U.)	2/Year <sup>(12)</sup>	Grab	
[00400]	[12]	[02/YR]	[GR]	
Total Suspended Solids	Report (mg/L)	2/Year <sup>(12)</sup>	Grab	
[00530]	[19]	[02/YR]	[GR]	
Metals (Total): Arsenic, Cadmium, Chromium, Copper, Lead, Nickel and Zinc	Report ug/L	1/5 Years <sup>(9)</sup>	Grab	
[01002, 01027, 01034, 01042, 01051, 01067, 01092]	[28]	[01/5Y]	[GR]	

#### A. LIMITATIONS AND MONITORING REQUIREMENTS – (SPRAY IRRIGATION) (cont'd)

Sampling of the LAGOON UNDERDRAIN (OUTFALL #UD-1) must be conducted as specified below.

MONITORING CHARACTERISTIC REQUIREMENTS	C	LIMITATIONS	MINIMUM MONITORING			
	Weekly <u>Average</u>	Daily Maximum	Measurement Frequency	Sample <u>Type</u>		
Flow Rate		Report GPM	3/Year <sup>(15)</sup>	Estimate		
[00058]		[78]	[03/YR]	[ES]		
Specific Conductance <sup>(13,14)</sup>		Report (umhos/cm)	3/Year <sup>(15)</sup>	Grab		
[00095]		[11]	[03/YR]	[GR]		
Temperature <sup>(13)</sup>		Report (°C)	3/Year <sup>(15)</sup>	Grab		
[00011]		[04]	[03/YR]	[GR]		

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

#### Sampling Locations (Surface Water Discharge and Spray Irrigation):

Effluent sampling for all parameters must be conducted after the last component of the treatment process to ensure that representative samples are collected. Sampling for BODs, TSS, settleable solids and pH must be conducted at a sample port in the pump room. Sampling for TRC and fecal coliform bacteria must be conducted at a sample port at the river bank when the facility is chlorinating the effluent. When the facility is not chlorinating the effluent, sampling for fecal coliform bacteria may be conducted either at the sample port in the pump room or the sample point at the river bank. Storage lagoon effluent sampling must be conducted at the sample port in the pump room and must be representative of what is actually sprayed on the spray-irrigation fields. Any change in sampling location must be reviewed and approved by the Department in writing.

Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for waste water. Samples that are analyzed by laboratories operated by waste discharge facilities licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended 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, all results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

#### Surface Water Discharge:

1. Percent removal - The treatment facility must maintain a minimum of 85 percent removal of both BOD<sub>5</sub> and TSS for all flows receiving secondary treatment during all months that the facility discharges. Compliance with the limitation will be based on a twelve-month rolling influent and twelve-month rolling effluent averages. Calendar monthly percent removal values, as reported in the monthly Discharge Monitoring Report, must be calculated using the current twelve-month rolling average influent and

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

#### **Surface Water Discharge:**

twelve-month rolling average effluent concentrations. For the purposes of this permitting action, the twelve-month rolling average calculation is based on the most recent twelve-month period. The permittee is required to report the percent removal values on the monthly Discharge Monitoring Report and on the Department's "49" form. During periods of freezing weather, the percent removal may be calculated based on assumed BOD<sub>5</sub> and TSS influent values of 286 mg/L and actual effluent concentration values.

- 2. Fecal coliform bacteria Fecal coliform bacteria limits and monitoring requirements are in effect whenever the permittee discharges to surface waters. TRC limits and monitoring requirements apply whenever elemental chlorine or chlorine based compounds are utilized to disinfect the discharge during the period of surface water discharge to the St. George River. The permittee must utilize approved test methods that are capable of bracketing the TRC limitation in this permit.
- 3. Fecal coliform bacteria The monthly average limitation is a geometric mean and must be calculated and reported as such.
- 4. Whole Effluent Toxicity (WET) Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the acute and chronic critical thresholds of 0.92% and 0.46% respectively), which provides an estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points. The critical acute and chronic thresholds were derived as the mathematic inverse of the applicable acute and chronic dilution factors of 109:1 and 219:1 respectively.
  - a. Surveillance level testing Pursuant to 06-096 CMR Chapter 530, Surface Water Toxics Control Program [Section 2.D(3)(b)], surveillance level WET testing is being waived for the term of the permit.
  - b. Screening level testing Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level WET testing at a minimum

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

#### Footnotes:

#### Surface Water Discharge:

frequency of once per year (1/Year). Acute tests must be conducted on the mysid shrimp (Americamysis bahia) and chronic tests must be conducted on the sea urchin (Arbacia punctulata).

WET test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedances of the critical acute and chronic water quality thresholds of 0.92% and 0.46%, respectively.

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

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

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

- 5. Analytical chemistry Refers to a suite of parameters in Attachment A of this permit.
  - a. Surveillance level testing Pursuant to 06-096 CMR Chapter 530, Surface Water Toxics Control Program [Section 2.D(3)(b)], surveillance level WET testing is being waived for the term of the permit.

#### A. LIMITATIONS AND MONITORING REQUIREMENTS

#### **Footnotes**

#### Surface Water Discharge:

- b. Screening level testing Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level analytical chemistry testing at a minimum frequency of once per year (1/year).
- 6. Priority pollutant testing Refers to a suite of parameters in Attachment A of this permit.
  - a. Surveillance level testing 06-096 CMR Chapter 530 does not require routine surveillance level priority pollutant testing in the first three years of the term of this permit or the fifth year of the term of the permit.
  - b. Screening level testing Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year).

Priority pollutant and analytical chemistry testing must be conducted on samples collected at the same time as those collected for whole effluent toxicity tests when applicable. Priority pollutant and analytical chemistry testing must be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve minimum reporting levels of detection as specified by the Department. See **Attachment A** of this permit for a list of the Department's reporting levels (RLs) of detection.

Test results must be submitted to the Department not later than the next DMR required by the permit provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department, possible exceedances of the acute, chronic or human health AWQC as established in Department rule Chapter 584. For the purposes of Discharge Monitoring Report (DMR) reporting, enter a "1" for yes, testing done this monitoring period or "NODI-9" (N9 if using electronic DMR) monitoring not required this period.

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

#### **Footnotes**

#### **Spray Irrigation:**

- 7. Storage Lagoon Effluent Sampling Frequency Storage lagoon effluent sampling must be conducted at a minimum frequency of once per month during the months of April, May, August, and October of each year, unless otherwise specified by the Department. In the event that no wastewater is disposed of via the spray irrigation system for an entire month leading up to the sample period, the permittee is not required to conduct effluent monitoring for the parameters indicated.
- 8. Lagoon Freeboard Storage lagoon freeboard must be reported as the mathematical difference between the water level in the lagoon and the lowest elevation point in the top of the lagoon berm. It must be measured weekly to the nearest one tenth (1/10<sup>th</sup>) of a foot, with the minimum monthly value reported on the DMR. If site conditions prevent safe or accurate measurements, the permittee must estimate this value and indicate this to the Department.
- 9. Storage Lagoon Effluent and Ground Water Monitoring, Screening Level Metals Testing The permittee must conduct one round of testing for the specified metals during the fourth calendar quarter of the fourth year of the permit, unless otherwise specified by the Department.
- 10. Weekly Maximum for Spray Irrigation "Weekly" is defined as Sunday through Saturday. The permittee must measure the flow of wastewater to the irrigation area by the use of a flow measuring device that is checked for calibration at least once per calendar year. For Discharge Monitoring Report (DMR) reporting purposes, the permittee must report the highest weekly application for the month in the applicable box on the form. Compliance with weekly reporting requirements must be reported for the month in which the calendar week ends.
- 11. **Depth to Water Level** Depth to water level must be measured to the nearest one-tenth (1/10<sup>th</sup>) of a foot as referenced from the surface of the ground at the base of the monitoring well.
- 12. **Groundwater Monitoring Period** Groundwater monitoring wells must be sampled during the months of **May and October** of each year, unless otherwise specified by the Department.

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

#### **Footnotes**

#### **Spray Irrigation:**

- 13. Field Measurements Specific conductance (calibrated to 25.0° C), temperature, and pH are considered to be "field" parameters, and are to be measured in the field via instrumentation. The permittee is required to test for these parameters whether wastewater was disposed of via the spray-irrigation system or not.
- 14. Specific Conductance Temperature must be calibrated to 25.0°C. Specific conductance values indicating a statistically significant trend upwards or sudden spikes from previous levels may necessitate the need for additional groundwater testing requirements to determine causes and effects as related to spray irrigation activities.
- 15. Lagoon Underdrain Monitoring Lagoon underdrain sampling must be conducted in the months of July, August and September of each year, unless otherwise specified by the Department.
- 16. Mercury All mercury sampling required to determine compliance with interim limitations established pursuant to Department rule Chapter 519, shall be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis shall be conducted in accordance with EPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See Attachment C of this Permit for the Department's report form for mercury results. Compliance with the monthly average limitation established in Special Condition A.1 of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility. Tests must be conducted in a different calendar quarter of each year such that tests are conducted in all four quarters during the term of the permit.

#### C. NARRATIVE EFFLUENT LIMITATIONS

- 1. The permittee must not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the usages 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 usages 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 that impairs the usages designated for the classification of the receiving waters.
- 4. Notwithstanding specific conditions of this permit, the permittee must not discharge effluent that lowers the quality of any classified body of water below such classification, or lowers the existing quality of any body of water if the existing quality is higher than the classification.

#### D. TREATMENT PLANT OPERATOR

The person who has the management responsibility over the treatment facility must hold a **Grade III** Waste Water Treatment Operator certificate (or higher) or must be a Maine Registered Professional Engineer pursuant to *Sewerage Treatment Operators*, Title 32 M.R.S., Sections 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 CMR 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

#### E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge treated sanitary wastewater only in accordance with 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on January 9, 2018; 2) the terms and conditions of this permit; and 3) through Outfall #001A to the St. George River from January 1 through March 31 or to the spray irrigation disposal fields identified in the Waste Discharge License application from April 1 through November 30 or to ice fluent field from December 1 – March 30. Discharges of wastewater from any other point source are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), Twenty-four hour reporting, of this permit.

#### F. WET WEATHER FLOW MANAGEMENT PLAN

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

The permittee must review their plan annually and record any necessary changes to keep the plan up-to-date.

#### G. 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.
- 2. Any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system.
- 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 change in the quality and quantity of the wastewater to be discharged from the treatment system.

Further, the permittee must immediately notify the Department of Environmental Protection (MEDEP) and the Department of Marine Resources (MEDMR) of any discharges of improperly treated wastewater to the estuarine or marine environment. When required to disinfect the wastewater, the permittee must immediately notify the MEDEP and the MEDMR of any disinfection equipment malfunction and of the discharge of any wastewater to the estuarine or marine environment that is not properly disinfected. Also see Special Condition U, Reporting Discharges Not Receiving Secondary Treatment, of this permit for more specifics.

#### H. OPERATIONS AND MAINTENANCE (O & M) PLAN AND SITE PLAN(S)

This facility must have a current written comprehensive Operation & Maintenance (O & M) Plan. The plan must provide a systematic approach by which the permittee must at all times, properly operate and maintain all facilities and the 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 the Department personnel upon request. Within 90 days of completion of new and substantial upgrades of the wastewater treatment facility, the permittee must submit the updated O&M Plan to their Department inspector for review and comment.

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

By December 31 of each calendar year, the permittee must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit *[ICIS Code 96299]*. See Attachment F of the <u>Fact Sheet</u> for an acceptable certification form to satisfy this Special Condition.

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

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

- (d) Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge.
- (e) Increases in the type or volume of hauled wastes accepted by the facility.

The Department reserves the right to establish annual surveillance level testing or other toxicity testing if new information becomes available that indicates the discharge may cause or have a reasonable potential to cause exceedances of ambient water quality criteria/thresholds.

#### J. SPRAY IRRIGATION GENERAL OPERATIONAL CONSTRAINTS

- 1. All wastewaters must receive biological treatment through a properly designed, operated and maintained lagoon system prior to disposal via spray irrigation.
- 2. The spray irrigation facilities must be effectively maintained and operated at all times so that there is no discharge to surface waters, nor any contamination of groundwater which will render it unsatisfactory for usage as a public drinking water supply.
- 3. The surface wastewater disposal system must not cause the lowering of the quality of the groundwater, as measured in the groundwater monitoring wells specified by this permit, below the State Primary and Secondary Drinking Water Standards specified in the Maine State Drinking Water Regulations pursuant to Maine Law 22 M.R.S. § 2601.
  - In the event the groundwater monitoring results indicate adverse effects, the permittee may be required to take immediate remedial action(s), which may include but not be limited to, adjustment of the irrigation schedule or application rates, a reduction of the pollutant loading, or ceasing operation of the system until the groundwater attains applicable standards.
- 4. The Department must be notified as soon as the permittee becomes aware of any threat to public health, unlicensed discharge of wastewater, sanitary system overflows (SSOs) or any malfunction that threatens the proper operation of the system. Notification must be made in accordance with the attached Standard Condition #4 of this permit. A sanitary sewer overflow (SSO) is the release of raw sewage from a sanitary collection system prior to reaching the treatment plant or facility. Spills out of manholes, into basements, onto municipal or private property, etc, and into the waters of the State are all considered to be SSOs.
- 5. The permittee must maintain a file on the location of all system components and relevant features. Each component must be mapped and field located sufficiently to allow adequate inspections and monitoring by both the permittee and the Department.
- 6. System components including collection pipes, tanks, manholes, pumps, pumping stations, spray disposal fields, and monitoring wells must be identified and referenced by a unique system identifier in all logs and reports.

#### J. SPRAY IRRIGATION GENERAL OPERATIONAL CONSTRAINTS (cont'd)

- 7. The permittee must at all times maintain in good working order and operate at maximum efficiency all wastewater collection, treatment and/or control facilities. Within one hour after start-up of the spray-irrigation system, the permittee must inspect the sprayirrigation site or have other means to check the system for leakage in the piping system and determine if individual spray heads and pump(s) are functioning as designed, and verify that application rates are appropriate for the existing site conditions. The procedures used to determine that the system is functioning as designed must be described in the facility's O&M manual. Should significant malfunctions or leaks be detected, the permittee must shut down the malfunctioning/leaking sections of the spray system and make necessary repairs before resuming operation. The permittee must cease irrigation if runoff is observed outside the designated boundaries of the spray field(s). The permittee must field calibrate equipment to ensure proper and uniform spray applications when operating. Calibration involves collecting and measuring application rate at different locations within the application area. A description of the calibration procedures and a log sheet that have been used for recording calibration results must be included as part of the Operations & Maintenance manual.
- 8. The licensee must maintain a daily log of all spray irrigation which records the date, weather, rainfall, areas irrigated, volume sprayed (gallons), application rates (daily and weekly), and other relevant observations/comments from daily inspections. The log must be in accordance with the general format of the "Monthly Operations Log" provided as Attachment D of this permit, or other similar format approved by the Department. Weekly application rates shall be reported in accordance with the general format of the "Spray Application Report by Week" provided as Attachment E of this permit or other format as approved by the Department. The Monthly Operations Log, and Spray Application Report by Week, for each month must be submitted to the Department as an attachment to the monthly Discharge Monitoring Reports (DMRs) in a format approved by the Department. Copies will also be maintained on site for Department review and for license operation maintenance purposes.

#### K. SPRAY IRRIGATION OPERATIONAL CONSTRAINTS, LOGS, AND REPORTS

- Suitable vegetative cover must be maintained. Wastewater must not be applied to areas
  without sufficient vegetation or ground cover as to prevent erosion or surface water
  runoff outside the designated boundaries of the spray fields. The permittee must have an
  updated facilities management plan that includes provisions for maintaining the spray
  irrigation area in optimum condition for the uptake of nutrients and moisture holding
  capacity.
- 2. At least 10 inches of separation from the ground surface to the ground water table must be present prior to spray irrigating.

#### K. SPRAY IRRIGATION OPERATIONAL CONSTRAINTS, LOGS, AND REPORTS

- 3. No wastewater shall be spray irrigated following a rainfall accumulation exceeding 1.0 inches within the previous 24-hour period. A rain gauge must be located on site to monitor daily precipitation. The permittee must also manage application rates by taking into consideration the forecast for rain events in the 48-hour period in the future.
- 4. No wastewater shall be spray irrigated where there is snow present on the surface of the ground or there is any evidence of frost or frozen ground within the upper 10 inches of the soil profile.
- 5. No traffic or equipment shall be allowed in the spray-irrigation field(s) except where installation occurs or where normal operations and maintenance are performed (this shall include forest management operations).
- 6. Prior to the commencement of spray irrigation for the season, the permittee must notify the Department's compliance inspector in writing that they have verified that soil conditions are appropriate (absence of frozen ground, soil conditions, moisture, etc.) for spray irrigation.
- 7. The permittee must install and maintain the equivalent of one ground water level inspection well per spray field to verify that 10 inches of separation from the ground surface to the observed ground water level is present prior to spraying. Depths to ground water shall be reported in accordance with the general format of "Monthly Operations Log" report form provided as Attachment D of this permit or other format as approved by the Department.

#### L. VEGETATION MANAGEMENT

- 1. The permittee must remove grasses and other vegetation such as shrubs and trees if necessary so as not to impair the operation of the spray-irrigation system, ensure uniform distribution of wastewater over the desired application area and to optimize nutrient uptake and removal.
- 2. The vegetative buffer zones along the perimeter of the site must be maintained to maximize vegetation and forest canopy density in order to minimize off-site drift of spray.

#### M. LAGOON MAINTENANCE

- 1. The banks of the lagoon must be inspected periodically during the operating season (at least two times per year) and properly maintained at all times. There must be no overflow through or over the banks. Any signs of leaks, damage to the lagoon liner, destructive animal activity or soil erosion of the banks shall be repaired immediately.
- 2. The banks of the lagoon must be maintained to keep them free of woody vegetation and other vegetation that may be detrimental to the integrity of the bank and/or lagoon liner. The waters within the lagoons must be kept free of all vegetation (i.e. grasses, reeds, cattails, etc) that hinders the operation of the lagoon.
- 3. The permittee must maintain the lagoon freeboard at a level no lower than 3.0 feet.
- 4. The treatment and storage lagoons must be dredged as necessary to maintain the proper operating depths in both lagoons that will provide best practicable treatment of the wastewater. All material removed from the lagoon(s) must be properly disposed of in accordance with all applicable State and Federal rules and regulations.

#### N. INSPECTIONS AND MAINTENANCE

The permittee must periodically inspect all system components to ensure the facility is being operated and maintained in accordance with the design of the system. Maintenance logs must be maintained for each major system component including pumps, pump stations, septic tanks, lagoons, spray apparatus, and pipes. At a minimum, the logs must include the unique identifier [see Special Condition J(6)], the date of maintenance performed, name(s) of person(s) performing the maintenance, and other relevant system observations.

### O. GROUNDWATER MONITORING WELLS AND WATER QUALITY MONITORING PLAN DETAILS

- 1. The permittee must maintain an approved groundwater quality monitoring plan prepared by a professional qualified in water chemistry. The plan must include historical and current monitoring data for each monitoring point, represented in tabular and graphical form.
- 2. All monitoring wells must be equipped with a cap and lock to limit access and must be maintained in a secured state at all times. The integrity of the monitoring wells must also be verified annually in order to ensure representative samples of groundwater quality.
- 3. The Department reserves the right to require increasing the depth and or relocating any of the groundwater monitoring wells if the well is perennially dry or is determined not to be representative of groundwater conditions.

#### P. PUBLIC ACCESS TO LAND APPLICATION SITES AND SIGNAGE

Access to the land application sites must be limited during the season of active site use. The permittee must install signs measuring at least 8 ½" x 11", in areas of concern around the perimeter of the lagoon and spray irrigation sites that inform the general public that the area is being used to dispose of sanitary wastewaters. The signs must be constructed of materials that are weather resistant. The permittee must annually inspect and make any necessary repairs to the signage to comply with this condition.

### Q. DISPOSAL OF TRANSPORTED WASTES INTO THE WASTEWATER TREATMENT FACILITY

The licensee is prohibited from accepting transported wastes for disposal into any part or parts of the wastewater disposal system. Transported wastes means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.

#### R. 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. The IWS must identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of the federal Clean Water Act, 40 CFR Part 403 (general pretreatment regulations) or *Pretreatment Program*, 06-096 CMR 528 (last amended March 17, 2008).

#### S. REOPENING OF PERMIT FOR MODIFICATIONS

Upon evaluation of the tests results or monitoring requirements specified in Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at anytime and with notice to the permittee, modify this permit to: (1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded: (2) require additional effluent or ambient water quality monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

#### T. MONITORING AND REPORTING

#### **Electronic Reporting**

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

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

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

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

#### U. 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/shellfish-sanitatiomanagement/programs/reportevents/index.html or by calling the Maine Department of Marine Resources' Pollution Event Reporting Hotline at 207-633-9564. 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 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 state that the event is on-going;
- 8. Additional comments;
- 9. First and last name of person reporting event; and
- 10. Authorization code.

The immediate 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.

#### V. SEVERABILITY

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

### ATTACHMENT A

## MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION WHOLE EFFLUENT TOXICITY REPORT MARINE WATERS

Facility Name		MEPDES Permi	
			Pipe #
Facility Representative		Signature	
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Ly argume time to the carrier to			•
Facility Telephone:#		Date Collected	Date Tested
		mm/dd/yy	mm/dd/yy
Chlorinated?	Dechlorinated?		
Results	% effluent		Effluent Limitations
	mysid shrimp sea urchin	_	A-NOEL
A-NOEL			C-NOEL
C-NOEL			
Data summary	mysid shrimp	sea urchin	
Wata Summary	% survival	% fertilized	
QC standard	>90	>70	Salinity Adjustment
lab control			brine
receiving water control			sea salt
conc. 1 ( %)			other
conc. 2 ( %)			_
conc. 3 (%)			4
conc. 4 ( %)			4
conc. 5 (%)			_
conc. 6 (%)			-
stat test used	xt to values statistically different f	rom controls	_1
pinee ne	at to values statistically different i		
Reference toxicant	mysid shrimp	sea urchin	
	A-NOEL	C-NOEL	
toxicant / date			
limits (mg/L)			<del></del>
results (mg/L)			_
~			
Comments			
Laboratory conducting to	est	Company Rep. Name (Printed)	
Company Name		Company rep. Name (Frinted)	
Mailing Address		Company Rep. Signature	
	N		
City, State, ZIP		Company Telephone #	

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

### ATTACHMENT B

### Maine Department of Environmental Protection WET and Chem

This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

	Facility Name		<del></del>	# MEPDES .		Facility R	oprosontativo Signaturo To the best of my kn		ormation is true	, accurate a	na campleta,
	Licensed Flow (MGD)			Flow for	D <sub>ву</sub> (MGD) <sup>(1)</sup>		Flow Avg. for M	lonth (MGD) <sup>(2)</sup>			
	Acute dilution factor Chronic dilution factor			Data Samp	le Collected	·	Date Sam	ple Analyzed		ĺ	
	Human health difution factor Criteria type; M(arine) or F(resh)	m							Tolophono		
	Leas Revision - July 1, 2015								- - - Lab ID#		
	ERROR WARNING! Essential recility	MARINE AND	<b>ESTUARY</b>	VERSION				_			
	intormation is missing. Please check required entries in bald above.	Ploase see the fo	otnotes on	tho last page.		Receiving Water or Ambient	Effluent Concentration (ug/L or				
	WHOLE EFFLUENT TOXICITY										
********			Effluen	t Limits, %			WET Result, %	Roporting	Possible	e Exceed	ence <sup>(7)</sup>
			Acute	Chronic	1		Do not enter % sign	Limit Check	Acuto	Chronic	
	Mysid Shrimp										
	Sea Uronin										
	WET CHEMISTRY										
	<sub>P</sub> H (S.U.) (9)										
	Total Organic Carbon (mg/L)					NA					
	Total Solids (mg/L)					NA					
	Total Suspanded Sollds (mg/L)					NA			ļ	<b></b>	
	Salinity (ppt.)									┞──	
			***					<u> </u>	+	<del> </del>	
										<del> </del>	
											<u> </u>
	ANALYTICAL CHEMISTRY (3)			1	1	I				1	l
	2	1	1			I			1		(7)
	Also do these tests on the effluent with WET. Testing on the receiving water is			fluent Limits,	ug/L			Reporting	Possibl	e Exceed	ence (/)
	optional	Reporting Limit	Acute <sup>(6)</sup>	Chronic <sup>(6)</sup>	Health <sup>(6)</sup>				Acuta	Chronic	Health
	TOTAL RESIDUAL CHLORINE (mg/L) (9)					NA					
	AMMONIA	NA				(8)					
Л	ALUMINUM	NA		1		(8)					
Л	ARSENIC	5				(8)					
Λ	CADMIUM	1				(8)					
Λ	CHROMIUM	10				(8)					
1	COPPER	3				(8)				<u> </u>	<u> </u>
Λ	CYANIDE, TOTAL	5				(8)					
	CYANIDE, AVAILABLE (3.)	5		1		(8)					
Λ	LEAD	3				(8)					
Л	NICKEL	5				(8)					
Λ	SILVER	1				(8)					
Л	ZINC	5			1	(8)					

### Maine Department of Environmental Protection WET and Chem

This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

	PRIORITY POLLUTANTS (4)										
				Effluent Limi	ts			Reporting	Possible	e Exceed	ence <sup>(7)</sup>
		Roporting Limit	Acute <sup>(6)</sup>	Chronic <sup>(6)</sup>	Health <sup>(6)</sup>			Keporting Limit Check	Acute	Chronic	Health
M	ANTIMONY	5				-					
М	BERYLLIUM	2			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
	MERCURY (6)	0.2									
M	SELENIUM	5									
	THALLIUM	4									
Α	2,4,6-TRICHLOROPHENOL	5									
A	2,4-DICHLOROPHENOL	5									
Α	2,4-DIMETHYLPHENOL	5									<u> </u>
A	2,4-DINITROPHENOL	45								<u> </u>	
A	2-CHLOROPHENOL	5									
Ą	2-NITROPHENOL	5		ļ							<u> </u>
	4,6 DINITRO-O-CRESOL (2-Methyl-4,6-										
A	dinitrophenoi)	25		ļ						ļ	<del> </del>
Α	4-NITROPHENOL	20				_					
١.	P-CHLORO-M-CRESOL (3-methyl-4-	_			1						
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A	PHENOL 1 A TRION IN A PROPERTY OF THE PROPERTY	5			ļ					<del> </del>	
BN	1,2,4-TRICHLOROBENZENE	5							1		<del> </del>
BN	1,2-(O)DICHLOROBENZENE	5							<u> </u>	<u> </u>	
	1,2-DIPHENYLHYDRAZINE	20								<b> </b>	
BN	1,3-(M)DICHLOROBENZENE	5		ļ						<del> </del>	<u> </u>
BIA	1,4-(P)DICHLOROBENZENE 2,4-DINITROTOLUENE	5 6								<del> </del>	<u> </u>
BIN	2,4-DINITROTOLUENE	5	<u> </u>	<del> </del>						<u> </u>	
DN	2-CHLORONAPHTHALENE	5	<del> </del>	<u> </u>							<del> </del>
DN	3,3'-DICHLOROBENZIDINE	16.5	1	ļ.							
DIA	3,4-BENZO(B)FLUORANTHENE	5					***************************************			<u> </u>	<del> </del>
DN	4-BROMOPHENYLPHENYL ETHER	5				ļ				<del> </del>	<del>                                     </del>
BN	4-CHLOROPHENYL PHENYL ETHER	5						<u> </u>			<del>                                     </del>
BN	ACENAPHTHENE	5	<del> </del>	<del> </del>	<del></del>	<del></del>		<b>!</b>		<del>                                     </del>	<del> </del>
BN	ACENAPHTHYLENE	5	†					1			
	ANTHRACENE	5				<del>                                     </del>				<u> </u>	<u> </u>
	BENZIDINE	45	<del>\</del>	<del></del>						<b>†</b>	<del>                                     </del>
BN	BENZO(A)ANTHRACENE	8									<b>!</b>
BN	BENZO(A)PYRENE	5								1	<b>†</b>
BN	BENZO(G.H.I)PERYLENE	5			1				<del>}</del>	1	
BN	BENZO(K)FLUORANTHENE	5	<u> </u>	1							····
BN	BIS(2-CHLOROETHOXY)METHANE	5		1						·	
BN	BIS(2-CHLOROETHYL)ETHER	Ğ	† · · · · · · · · · · · · · · · · · · ·	·	1						
BN	BIS(2-CHLOROISOPROPYL)ETHER	6	<u> </u>							<del> </del>	T
	BIS(2-ETHYLHEXYL)PHTHALATE	10									
	BUTYLBENZYL PHTHALATE	5	<b>†</b>		<b>I</b>			1			
BN	CHRYSENE	5		ļ	l .						
BN	DI-N-BUTYL PHTHALATE	5				1		1			1
BN	DI-N-OCTYL PHTHALATE	5			1			1			
BN	DIBENZO(A,H)ANTHRACENE	5	1	<u> </u>	1			1	1	1	
BN	DIETHYL PHTHALATE	5		1	<u> </u>				]	1	
	DIMETHYL PHTHALATE	5	<b>†</b>							1	
	FLUORANTHENE	5	1								

### Maine Department of Environmental Protection WET and Chem

This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

BN	FLUORENE	5								
BN	HEXACHLOROBENZENE	5								
BN	HEXACHLOROBUTADIENE	5								
BN	HEXACHLOROCYCLOPENTADIENE	10								
BN	HEXACHLOROETHANE	5		 						
BN	INDENO(1,2,3-CD)PYRENE	5								
BN	ISOPHORONE	5		 <u> </u>						
DIV	N-NITROSODI-N-PROPYLAMINE	10		-						
	N-NITROSODIMETHYLAMINE	5								
BN	N-NITROSODIPHENYLAMINE	5	<b></b>							
BN	NAPHTHALENE	5		 						
BN	NITROBENZENE	5								
	PHENANTHRENE	5								
BN	PYRENE	5								
Р	4,4'-DDD	0.05								
Ρ	4,4'-DDE	0.05								
P	4,4'-DDT	0.05								
P	A-BHC	0.2					***************************************			
P	A-ENDOSULFAN	0.05								
P	ALDRIN	0.15								
P	B-BHC	0.05		 l						
	B-ENDOSULFAN	0.05		 						
þ	CHLORDANE	0.1		 		•	<b>-</b>			
F-	D-BHC	0.05		 					<del>                                     </del>	
F	DIELDRIN	0.05								
P	ENDOSULFAN SULFATE	0,1		 						
P	ENDRIN	0.05	ļ	 		<b>.</b>				
P	ENDRIN ALDEHYDE	0.05								
Р	G-BHC	0.15		 						
Ρ	HEPTACHLOR	0.15		 						
Р	HEPTACHLOR EPOXIDE	0.1								
Ρ.	PCB-1016	0.3								
Ρ	PCB-1221	0.3								
P	PCB-1232	0.3								
P	PCB-1242	0.3								
P	PCB-1248	0.3								
P	PCB-1254	0,3					:			
Р	PCB-1260	0,2	r	 1					İ	
P	TOXAPHENE	1		1						
V	1,1,1-TRICHLOROETHANE	5	<b> </b>	 <b>†</b>	1			<u> </u>	<b></b>	
	1.1.2,2-TETRACHLOROETHANE	7			<u> </u>		<u> </u>		<del> </del>	
V	1,1,2-TRICHLOROETHANE	5		<del>                                     </del>		****			<del> </del>	l
V		5 5		 1						
<u> </u>	1,1-DICHLOROETHANE	5		<del>                                     </del>	<u> </u>				ļ	
l.,	1,1-DICHLOROETHYLENE (1,1-									
<u>V</u>	dichloroethono)	3								
V	1,2-DICHLOROETHANE	3		ļ	ļ				<u> </u>	<u> </u>
V	1,2-DICHLOROPROPANE	6		 <u> </u>					<u> </u>	
	1,2-TRANS-DICHLOROETHYLENE (1,2-	,	I T	1				ł		
V	trans-dichloroethone)	5					L			<u> </u>
	1,3-DICHLOROPROPYLENE (1,3-									
lv	dichloropropeno)	5		1						
İν –	2-CHLOROETHYLVINYL ETHER	20	<del>                                     </del>						<del> </del>	
V	ACROLEIN	NA	<del>                                     </del>		<b>i</b>					
l <del>∨</del>	ACRYLONITRILE	NA NA	<del> </del>	 <del>                                     </del>	<del> </del>		· · · · · · · · · · · · · · · · · · ·		<del> </del>	<del> </del>
	BENZENE	5 5	<del> </del>	 1	<del> </del>	<b>-</b>			<del>                                     </del>	<u> </u>
V	DENZENE	5		1	l	I	I	L	1	

### Maine Department of Environmental Protection WET and Chem

#### This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

W	BROMOFORM	5				
\ <u>\</u>	CARBON TETRACHLORIDE	5				 
\ <u>\</u>	CHLOROBENZENE	6		 	 	•
<del>\</del>	CHLORODIBROMOMETHANE	3				
V V	CHLOROETHANE	5				
<del>V</del>	CHLOROFORM	5				
Ϊ́	DICHLOROBROMOMETHANE	3				
	ETHYLBENZENE	10				 
	METHYL BROMIDE (Bromomothano)	5			 	
Ϊ́	METHYL CHLORIDE (Chloromothano)	5	 			
	METHYLENE CHLORIDE	5				
	TETRACHLOROETHYLENE					]
lv	(Perchierenthylone or Tetrachierenthene)	5				
V	TOLUENE	5				
	TRICHLOROETHYLENE					
lv	(Trichioroathana)	3				
V	VINYL CHLORIDE	5				

#### Notes:

- (1) Flow average for day pertains to WET/PP composite sample day.
- (2) Flow average for month is for month in which WET/PP sample was taken.
- (3) Analytical chemistry parameters must be done as part of the WET test chemistry.
- (3a) Cyanide, Available (Cyanide Amenable to Chlorination) is not an analytical chemistry parameter, but may be required by certain discharge permits.
- (4) Priority Pollutants should be reported in micrograms per liter (ug/L).
- (5) Mercury is often reported in nanograms per liter (ng/L) by the contract laboratory, so be sure to convert to micrograms per liter on this spreadsheet.
- (6) Effluent Limits are calculated based on dilution factor, background allocation (10%) and water quality reserves (15% to allow for new or changed discharges or non-point sources).
- (7) Possible Exceedence determinations are done for a single sample only on a mass basis using the actual pounds discharged. This analysis does not consider watershed wide allocations for fresh water discharges.
- (8) These tests are optional for the receiving water. However, where possible samples of the receiving water should be preserved and saved for the duration of the WET test. In the event of questions about the receiving water's possible effect on the WET results, chemistry tests should then be conducted.
- (9) pH and Total Residual Chlorine must be conducted at the time of sample collection. Tests for Total Residual Chlorine need be conducted only when an effluent has been chlorinated or residual chlorine is believed to be present for any other reason.

Comments:

### ATTACHMENT C

# Maine Department of Environmental Protection

# **Effluent Mercury Test Report**

Name of Facility:	Federal Permit # ME
Purpose of this test:	Initial limit determination Compliance monitoring for: year calendar quarter Supplemental or extra test
	SAMPLE COLLECTION INFORMATION
Sampling Date:	Sampling time:AM/PM
Sampling Location:	mm dd yy
Weather Conditions	3:
Please describe any time of sample colle	unusual conditions with the influent or at the facility during or preceding the ection:
Optional test - not r evaluation of mercu	required but recommended where possible to allow for the most meaningful ary results:
Suspended Solids	mg/L Sample type: Grab (recommended) or Composite
	ANALYTICAL RESULT FOR EFFLUENT MERCURY
Name of Laborator	y:
Date of analysis:	Result:ng/L (PPT)
Effluent Limits:	Please Enter Effluent Limits for your facility  Average =ng/L
	emarks or comments from the laboratory that may have a bearing on the results or If duplicate samples were taken at the same time please report the average.
	CERTIFICATION
conditions at the tir	best of my knowledge the foregoing information is correct and representative of me of sample collection. The sample for mercury was collected and analyzed s 1669 (clean sampling) and 1631 (trace level analysis) in accordance with me DEP.
Ву:	Date:
Title:	

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

# ATTACHMENT D

# Attachment D

# **Monthly Operations Log**

oray F	Field #			Weekly A	pplication Rate:	gallons/week
Α	В	С	D	E	F	G
Date F	Precipitation Previous 24 hours (inches)	Air Temp (°F)	Weather	Wind- Direction Speed (mph)	Depth To GW in Observation well (inches)	Total Gallons Pumped (gallons)
1						
2						
3						
4		:				
5						
6						
7	1					
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24	-					
25						
26			- "			
27	1					
28						
29						
30						
31						

# ATTACHMENT E

# Attachment E

# **Spray Application Report by Week**

<b>Town of Thomaston</b>	(WDL #W002643)	(Month/Year)	
	( )		

Spray Field #	Weekly Limit (Gallons/Week)		Spray Application Rates (Gallons/Week)			Monthly Total	
		Week 1	Week 2	Week 3 Week 4	Week 5	desperance of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the	
				<del></del>			***************************************
			1.17				

Signature of Responsible Official:	Date
Signature of Responsible Official.	Date

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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## 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).

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- 7. Oil and hazardous substances. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under section 311 of the Federal Clean Water Act; section 106 of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980; or 38 MRSA §§ 1301, et. seq.
- 8. Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.
- 9. Confidentiality of records. 38 MRSA §414(6) reads as follows. "Any records, reports or information obtained under this subchapter is available to the public, except that upon a showing satisfactory to the department by any person that any records, reports or information, or particular part or any record, report or information, other than the names and addresses of applicants, license applications, licenses, and effluent data, to which the department has access under this subchapter would, if made public, divulge methods or processes that are entitled to protection as trade secrets, these records, reports or information must be confidential and not available for public inspection or examination. Any records, reports or information may be disclosed to employees or authorized representatives of the State or the United States concerned with carrying out this subchapter or any applicable federal law, and to any party to a hearing held under this section on terms the commissioner may prescribe in order to protect these confidential records, reports and information, as long as this disclosure is material and relevant to any issue under consideration by the department."
- 10. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- 11. Other laws. The issuance of this permit does not authorize any injury to persons or property or invasion of other property rights, nor does it relieve the permittee if its obligation to comply with other applicable Federal, State or local laws and regulations.
- 12. Inspection and entry. The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), upon presentation of credentials and other documents as may be required by law, to:
  - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
  - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
  - (d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

#### B. OPERATION AND MAINTENACE OF FACILITIES

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

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- maximize removal of pollutants unless authorization to the contrary is obtained from the Department.
- (b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.
- (c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.
- (d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.
- (e) The permittee shall install flow measuring facilities of a design approved by the Department.
- (f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.
- 2. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- 3. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- 4. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

#### 5. Bypasses.

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

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

(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.

## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

#### 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.

# STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

#### 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

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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).

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- (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.

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- 2. Spill prevention. (applicable only to industrial sources) Within six months of the effective date of this permit, the permittee shall submit to the Department for review and approval, with or without conditions, a spill prevention plan. The plan shall delineate methods and measures to be taken to prevent and or contain any spills of pulp, chemicals, oils or other contaminates and shall specify means of disposal and or treatment to be used.
- 3. **Removed substances.** Solids, sludges trash rack cleanings, filter backwash, or other pollutants removed from or resulting from the treatment or control of waste waters shall be disposed of in a manner approved by the Department.
- 4. Connection to municipal sewer. (applicable only to industrial and commercial sources) All wastewaters designated by the Department as treatable in a municipal treatment system will be cosigned to that system when it is available. This permit will expire 90 days after the municipal treatment facility becomes available, unless this time is extended by the Department in writing.
- **F. DEFINITIONS.** For the purposes of this permit, the following definitions shall apply. Other definitions applicable to this permit may be found in Chapters 520 through 529 of the Department's rules

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

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

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

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

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

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

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

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

**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.

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

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

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

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

#### FACT SHEET

Date: July 13, 2018

MEPDES PERMIT NUMBER:

ME0100668

MAINE WDL NUMBER:

W-002643-6C-I-R

NAME AND ADDRESS OF APPLICANT:

TOWN OF THOMASTON P. O. Box 299 Thomaston, Maine 04861

COUNTY:

**Knox County** 

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

# THOMASTON POLLUTION CONTROL FACILITY 33 Clark Street Thomaston, Maine 04861

RECEIVING WATER/CLASSIFICATION:

Ground Water/Class GW-A St. George River/Class SB

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: Mr. John Fancy

(207) 354-2136

thomped@midcoast.com

#### 1. APPLICATION SUMMARY

a. Application The Town of Thomaston (Town/permittee hereinafter) has submitted a timely and complete application to the Department for renewal of combination Maine Waste Discharge License (WDL) #W-002643-6C-G-R and Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100668, (permit hereinafter) which was issued on April 10, 2013, for a five-year term. The MEPDES Permit / WDL authorized the operation of an aerated facultative sanitary wastewater treatment lagoon system with two wastewater disposal options. From January 1 through March 31 each year, the permittee was authorized to discharge up to a monthly average of 0.9 million gallons per day (MGD) of treated sanitary wastewater to the St. George River, a Class SB water in Thomaston, Maine. From April 15 through November 15 each year, the permittee was authorized to spray irrigate treated waste water via a surface wastewater disposal system onto land in Thomaston, Maine. See Fact Sheet Attachment A for a location map.

### 1. APPLICATION SUMMARY (cont'd)

On June 6, 2017, the permit was modified authorizing the permittee to operate the surface waste water disposal system to dispose of 30 million gallons via creating ice piles between December 1 and March 31.

b. Source Description: The Town of Thomaston's Wastewater Treatment Facility receives approximately 123,000 gallons per day and 45 million gallons per year of sanitary wastewater from approximately 2,700 residential and commercial customers. The majority of its customers are single and multi-family housing units. Thomaston has one industrial customer, Lyman-Morse Boatyard, which contributes sanitary wastewater flow, but not industrial wastewater flows. Another industrial entity, Dragon Products Company does not contribute sanitary nor industrial wastewater flows to Thomaston but it does contribute between 10-15 million gallons per years of leachate from limestone storage piles to the Thomaston facility. As of the summer of 2008, Thomaston will has 9 pump stations, which route wastewater through 14.7 miles of gravity sewers.

Thomaston has no combined sewer overflows (CSOs) and does not receive transported wastes from local septage haulers. As noted in the previous permitting action, Thomaston no longer receives leachate from the St. George transfer station as was provided for in the previous permitting action. Thomaston has undertaken significant work on its collection system, with approximately 76% of its sewer lines less than 20 years old and 93% less than 40 years old. A large part of the sewer collection system was rebuilt as part of the treatment plant replacement project in the 1990s. Wastewater treatment is provided as described below.

c. Wastewater Treatment: The municipal sewer collection system delivers sanitary wastewater flows by gravity to the Ship Street pump station, located on the west side of Thomaston village. Wastewater is screened at the Ship Street pump station, then pumped to the wastewater treatment facility. The Thomaston wastewater treatment facility consists of three aerated facultative treatment lagoons with a total capacity of 21 million gallons, a treated wastewater storage lagoon with a capacity of 36 million gallons, an outfall to the St. George River for winter wastewater disposal, five 10.2-acre spray irrigation fields for summer wastewater disposal, and related infrastructure, located on an approximately 550-acre site and an ice fluent field located on a 1.5-acre site adjacent to the lagoons.

Thomaston's treatment lagoons are of two different sizes. At maximum depth, treatment lagoon #1 contains a volume of 10.22 million gallons with a surface area of 2.85 acres. Treatment lagoons #2 and #3 each contain a volume of 5.48 million gallons with surface areas of 1.62 acres. Each of the lagoons' depths range from a minimum of 12 feet to a maximum of 15 feet, with 3-feet of freeboard at maximum depth. Each lagoon is underlain by a 60-mil high density polyethylene liner. During the summer, the treatment lagoons' average daily flow is 0.328 MGD, with a total detention time of 51 days, while during the winter the average daily flow is 0.487 MGD, with a total detention time of 36

# 1. APPLICATION SUMMARY (cont'd)

W002643-6C-I-R

days. Treatment lagoon #1 contains 70 fine-bubble aerators, while treatment lagoons #2 and #3 contain 16 and 12 aerators respectively. Following treatment, the wastewater passes from treatment lagoon #3 to the storage lagoon. At maximum depth, the storage lagoon contains a volume of 36 million gallons with a surface area of approximately 6acres. The storage lagoon depth ranges from a minimum of 4-feet to a maximum of 20feet, with 3-feet of freeboard at maximum depth. From the storage lagoon, wastewater either flows by gravity and is discharged to the St. George River from January through March, or is pumped and land applied through spray irrigation from April through November. The surface water discharge flow is controlled by a pinch valve, with sodium hypochlorite added as disinfectant as needed to meet bacteria limits and the discharge pipe serving as the contact chamber. The discharge pipe is 14-inches in diameter, 7,100 feet long, and discharges at the former treatment plant at a minimum depth of 6-feet at mean low water. The surface water discharge is limited by this permitting action to between January 1 and March 31 each year. Thomaston has five 10.2-acre spray irrigation fields, designated as FLD #1-5, upon which it is permitted to discharge its wastewater from April 1 through November 30 at a maximum rate of 830,900 gallons per week which averages out to 3 inches per acre per week (81,456 gal/acre/week). Wastewater is discharged through spray irrigation via approximately 26,000 linear feet of distribution piping, and approximately 130 spray nozzles. All spray fields are sprayed each day.

The Thomaston site contains two background groundwater monitoring wells and six downgradient monitoring wells that are currently monitored to determine any wastewater discharge related groundwater problems and provide for remedial action (see Section 2e below). Thomaston also has a lagoon underdrain system that is designed to intercept groundwater to prevent it from impacting lagoon liners and which is monitored to detect any problems with the facility treatment and storage lagoons. The underdrain system outlets beside the road to the spray irrigation fields. Although the individual lagoon underdrains can be segregated by closing a valve in the event of a problem, Thomaston's normal operating procedure is to keep all valves open. Thus, the underdrain continuously discharges.

A high intensity soil survey of Thomaston's spray irrigation sites was conducted by Albert Frick Associates, Inc. in May 1995. Soil types found in various extents in the spray fields consisted of Colonel, Dixfield, Lyman-Turnbridge-Rock Outcrop Complex, Skerry, and Turnbridge, with slopes ranging from 3-20%. The soil survey indicated the soils in the spray areas are suitable for attenuating pollutant loading based on spray irrigation application rates in this licensing action. See Fact Sheet **Attachment B** for site plans. As for the ice fluent site, the State of Maine's Soil Scientist also conducted a site visit and stated in a July 16, 2015 memo to the waste water treatment plant superintendent "The site is forested with an organic duff layer and the surface is irregular due to pit and mound topography, forest debris, vegetation and butt swell of trees. This will offer resistance to overland flow of melting snowfluent allowing for it to infiltrate into the soil where it should be polished before reaching a wetland, stream or property line. In summary, I believe the proposed snowfluent stockpile site is an excellent location and should work well for the intended purpose."

# 2. MODIFICATION(S) RREQUESTED

The permittee is requesting to discharge a portion of the secondary treated waste water to a seven-acre wetland to the north of the existing storage lagoon at the waste water treatment facility. The Department is denying the permittee's request at this time as the Department will request additional investigative studies/ information before granting approval for such a discharge.

#### 3. LICENSE SUMMARY

- a. <u>Terms and conditions</u> This licensing action is carrying forward all the terms and conditions of the previous licensing action except that this license is;
  - 1. Establishing a requirement to report to the Maine Department of Marine Resources (DMR) as well as the department, all occurrences of secondary treatment bypasses, disinfection malfunctions, combined sewer overflows (CSOs), sanitary sewer overflows (SSOs) etc. that may impact conditionally approved shellfish harvesting areas
  - 2. The Department is denying the permittee's request at this time to discharge a portion of the secondary treated effluent to a seven-acre wetland to the north of the existing storage lagoon at the waste water treatment facility. The Department will request additional investigative studies/ information before granting approval for such a discharge.
- b. <u>History</u>: The most recent relevant regulatory actions and/or significant events include the following:

June 8, 1983 – The Department issued a WDL to Thomaston for the discharge of 0.46 MGD of treated sanitary wastewater to the St. George River, Class SA. The WDL was issued for a five-year period.

December 28, 1987 – The Department issued a water quality certification under Section 401 of the Federal Water Pollution Control Act (WPCA) for a pending US Environmental Protection Agency (USEPA) National Pollutant Discharge Elimination System (NPDES) permit.

December 30, 1987 – The USEPA issued NPDES Permit # ME010066 to Thomaston for a wastewater discharge of unspecified flow to the St. George River. The NPDES Permit was issued for a five-year period, superseding a NPDES Permit issued on January 7, 1983.

April 25, 1988 – Thomaston submitted an application for renewal of its 0.46 MGD wastewater discharge to the St. George River. The application was assigned WDL #W-002643-59-A-R, but was withdrawn by Thomaston on November 13, 1995 and replaced by an application for new wastewater treatment facility and discharge.

# 3. LICENSE SUMMARY (cont'd)

W002643-6C-I-R

August 26, 1996 – The Department issued Maine WDL #W-002643-46-B-R to Thomaston for the discharge of its treated sanitary wastewater to the St. George River. The WDL authorized the discharge of 0.46 MGD until either completion of a new lagoon wastewater treatment system or March 31, 1998, whichever occurred sooner. As a second subsequent phase, the WDL authorized the discharge of 0.9 MGD to the St. George River from January through March and the discharge via spray irrigation from mid-April through mid-November. The WDL was issued for a five-year term.

November 21, 1996 – The Department issued WDL #W-002643-68-C-R, a water quality certification under Section 401 of the Federal WPCA for a pending USEPA NPDES permit.

March 12, 1997 – the USEPA issued a renewal of NPDES Permit # ME010066 to Thomaston for surface water discharges to the St. George River from its old and new wastewater treatment facilities, mirroring the flows and timelines in Maine WDL #W-002643-46-B-R. The NPDES Permit was valid until August 26, 2001.

December 17, 1997 – Thomaston's new wastewater treatment facility went on line, replacing the former treatment system that had been operating since prior to 1970.

January 12, 2001 – The Department received authorization from USEPA to administer the NPDES Permit program in Maine, to be referred to as the Maine Pollutant Discharge Elimination System (MEPDES) Program, administered in concert with Maine's WDL program. Pursuant to an August 8, 2007 ruling by a panel of the US First Circuit Court of Appeals, Maine's regulatory jurisdiction applies uniformly throughout the State.

April 11, 2003 – The Department issued MEPDES Permit #ME0100668 / Maine WDL #W-002643-5L-D-R to Thomaston for the operation of an aerated facultative sanitary wastewater treatment lagoon system and seasonal discharges of treated wastewater to the St. George River and via spray irrigation. The MEPDES Permit / WDL was issued for a five-year term.

July 12, 2004 – The Department issued an Administrative Modification of MEPDES Permit #ME0100668 / WDL #W-002643-5L-D-R, eliminating requirements for development of a soil sampling plan, collection of soil samples, and reporting of sample results to the Department. All other terms and conditions of the WDL remained in place.

#### ME0100668 W002643-6C-I-R

# 3. LICENSE SUMMARY (cont'd)

February 29, 2006 – The Department denied a February 22, 2006 request from Thomaston for modification of the required sampling methodology for BODs and TSS for its surface water discharge from 24-hour composite to grab sampling, citing insufficient statistically valid data to conclude there is no difference in the methodologies' results over time.

June 21, 2008 – The Department issued MEPDES Permit #ME0100668 / Maine WDL #W-002643-5L-E-R to Thomaston for the operation of an aerated facultative sanitary wastewater treatment lagoon system and seasonal discharges of treated wastewater to the St. George River and via spray irrigation. The MEPDES Permit / WDL was issued for a five year term.

February 6, 2012 – The Department modified MEPDES Permit #ME0100668 / Maine WDL #W-002643-5L-E-R by reduced the monitoring frequency for total mercury from 4/Year to 1/Year based on a Maine law 38, M.R.S.A. §420, sub-§1-B, ¶F.

June 6, 2017 – The Department issued a modification of the permit authorizing the permittee to operate the surface waste water disposal system to dispose of 30 millions gallons via creating ice piles between December 1 and March 31.

January 12, 2018 – The permittee submitted a timely and complete application to the Department to renew MEPDES Permit #ME0100668 / Maine WDL #W-002643-6C-G-R.

#### 4. CONDITIONS OF PERMITS/LICENSES

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

#### ME0100668 W002643-6C-I-R

### 5. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S., Section 469 indicates that the St. George River at the point of discharge is classified as a Class SB waterway. Maine Law, 38 M.R.S., Section 465-B(2) describes the standards for classification of Class SB waters as follows;

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

The dissolved oxygen content of Class SB waters must be not less than 85% of saturation. Between May 15th and September 30th, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 8 per 100 milliliters or an instantaneous level of 54 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures. The numbers of total coliform bacteria or other specified indicator organisms in samples representative of the waters in shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish Sanitation Program, United States Food and Drug Administration.

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

Maine law, 38 M.R.S. § 470 states, "All ground water (including that at the point of discharge) shall be classified as not less than Class GW-A, except as otherwise provided in this section." Maine law, 38 M.R.S. § 465-C(1) states, "Class GW-A ... shall be of such quality that it can be used for public drinking water supplies. These waters shall be free of radioactive matter or any matter that imparts color, turbidity, taste or odor which would impair usages of these waters, other than that occurring from natural phenomena."

# 5. RECEIVING WATER QUALITY CONDITIONS (SURFACE WATER)

The State of Maine 2016 Integrated Water Quality Monitoring and Assessment Report (DEPLW0817), prepared pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act (often referred to as the 305(b) report) includes the St. George River (DEP Waterbody ID 724-13, DMR Area 27), Category 4-B-1, Estuarine and Marine Waters Impaired by Pollutants — Pollution Control Requirements Reasonably Expected to Result in Attainment. The listing in Category 4-B-1 identifies a 1,920-acre segment of Class SB water last sampled in 2012 indicating marine life use support is impaired due to low dissolved oxygen levels. The report states more data and source determinations are needed.

The 305b report also lists 1,866 acres of the Upper St. George River and tributaries (Cushing, Warren, Thomaston, South Thomaston and St. George) (DEP Waterbody ID 724, DMR Area 27), in Category 5-B-1(b): Estuarine and Marine Waters Impaired for Bacteria Only (Formerly Category 2) – TMDL Required, as impaired for the harvesting of shellfish due to elevated fecal coliform bacteria indicators. See Attachment C of this Fact Sheet for the various closure levels.

The Maine Department of Marine Resources (MeDMR) assesses information on shellfish growing areas to ensure that shellfish harvested are safe for consumption. The MeDMR has authority to close shellfish harvesting areas wherever there is a pollution source, a potential pollution threat, or poor water quality. The MeDMR traditionally closes shellfish harvesting areas if there are known sources of discharges with unacceptable bacteria levels (in-stream thresholds established in the National Shellfish Sanitation Program) or maintains shellfish harvesting closure areas due to lack of updated information regarding ambient water quality conditions. In addition, the MeDMR prohibits shellfish harvesting in the immediate vicinity of all wastewater treatment outfall pipes as a precautionary measure in the event of a failure in the treatment plant's disinfection system.

The 305(b) report lists all estuarine and marine waters capable of supporting American lobster in *Category 5-D: Estuarine and Marine Waters Impaired by Legacy Pollutants*. These waters are listed in Category 5-D for impairment to shellfish consumption due to elevated levels of PCB's and other persistent, bioaccumulating substances in tomalley. Also included in a statewide marine consumption advisory is a variety of saltwater finfish and shellfish based on elevated mercury, PCB and dioxin levels.

The Department has no information that the Thomaston facility, as permitted herein, causes or contributes to non-attainment or impairment conditions listed above. If it is determined in the future that the Thomaston facility causes or contributes to non-attainment conditions in the receiving water, this permitting action may be reopened pursuant to Special Condition S and effluent limitations, monitoring and operational requirements, and/or wastewater treatment requirements adjusted accordingly.

## (SURFACE WATER DISCHARGE)

a. Flow: The previous permitting action contained a seasonal (January 1 – March 31) monthly average flow limitation of 0.9 MGD for the surface water discharge to the St. George River. This flow limit was and is considered representative of the design capacity of the treatment facility and is therefore being carried forward in this permitting action along with the continuous monitoring requirement. This permitting action establishes a daily maximum flow reporting requirement, as is common with Department permits for publicly operated treatment works (POTWs).

The Department reviewed Discharge Monitoring Report (DMR) data for the period of January 2015 through January 2018 which indicated that the permittee has reported values as follows;

Flow (DMRs = 8)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	0.90	0.66 - 0.83	0.77
Daily maximum	Report	0.79 – 0.94	0.87

- b. <u>Dilution Factors</u>: Department Regulation Chapter 530 <u>Surface Water Toxics Control</u> <u>Program</u>, §4(a)(2) states:
  - (1) 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.
    - (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.

# (SURFACE WATER DISCHARGE) (cont'd)

Using outfall/diffuser configuration (8 inch outfall pipe with diffusers) information, the facility design flow of 0.90 MGD (monthly average) and in-stream mixing characteristics determined from modeling and/or field investigation, dilution factors are calculated as follows and are carried forward in this permitting action.

Acute = 109:1

Chronic = 219:1

Harmonic mean  $^{(1)} = 657:1$ 

#### Footnote:

- (1) Pursuant to Department rule Chapter 530, "Surface Water Toxics Control Program", §4(a)(2)(c), the harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by a factor of three (3).
- c. <u>Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS)</u>: The previous permitting action carried forward BODs and TSS monthly average, weekly average, and daily maximum concentration limits of 30 mg/L, 45 mg/L, and 50 mg/L respectively. The monthly and weekly average limits were based on secondary treatment requirements in 06-096 CMR Department rule Chapter 525(3)(III). The daily maximum limits were based on a Department best professional judgment (BPJ) of best practicable treatment (BPT) requirements. All three concentration limits are being carried forward in this permitting action, common to all permits for POTWs permitted by the Department. The monthly average, weekly average, and daily maximum technology based mass limits were based on the monthly average flow limitation of 0.9 MGD and the applicable concentration limits and are also being carried forward in this permitting action. The mass limits are calculated as follows.

```
Monthly average = (30 mg/L) (0.90 MGD) (8.34) = 225 lbs/day
Weekly average = (45 mg/L) (0.90 MGD) (8.34) = 338 lbs/day
Daily Maximum = (50 mg/L) (0.90 MGD) (8.34) = 375 lbs/day
```

The previous permitting action established a calendar year average percent removal of 85% for BOD<sub>5</sub> and TSS pursuant to Department rule Chapter 525(3)(III)(a&b)(3), which is being carried forward in this permit.

# (SURFACE WATER DISCHARGE) (cont'd)

The Department reviewed DMR data for Thomaston for the period of January 2015 through January 2018 and found the following information:

BOD Mass (DMR=8)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	225	22 - 45	35
Weekly Average	338	33 - 65	46
Daily Maximum	375	33 - 112	53

**BOD Concentration (DMR=8)** 

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	2 - 6	5
Weekly Average	45	5 - 9	7
Daily Maximum	50	5 - 15	8

BOD % Removal (DMR=8)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	94 - 97	96

TSS mass (DMR=8)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	225	18 - 36	26
Weekly Average	338	19 - 61	32
Daily Maximum	375	19 - 61	33

TSS concentration (DMR=8)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	2.5 - 5	4
Weekly Average	45	2.5 – 9	5
Daily Maximum	50	2.5 – 9	5

TSS % Removal (DMR=8)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	. 85	. 95 - 97	. 96

# (SURFACE WATER DISCHARGE) (cont'd)

d. <u>Settleable Solids</u>: The previous permitting action contained a daily maximum concentration limit of 0.3 ml/L that is being carried forward in this permitting action and is considered a BPJ of BPT for secondary treated wastewaters.

A review of the monthly DMR data for the period January 2015 – January 2018 indicates settleable solids have been reported as follows:

Settleable solids concentration (DMRs 8)

Detica	Settleadle Sounds contents and (21122 5)				
Value		Limit (ml/L)	Range (ml/L)	Average	
				(ml/L)	
Daily	Maximum	0.3	0.1- 0.1	0.1	

e. Fecal Coliform Bacteria: The previous permitting action contained monthly average and daily maximum limits of 15 colony forming units (cfu)/100 ml and 50 cfu/100 ml respectively, based on a Department best professional judgment of limitations that are necessary to protect for the designated use of harvesting of shellfish. The twice per week minimum monitoring requirement is based on Department guidelines for facilities discharging between 0.5 and 1.5 MGD. Fecal coliform effluent limits and monitoring requirements are in effect during the January 1 through March 31 period when Thomaston is authorized to discharge to the St. George River. The MeDMR has determined that the January 1 through March 31 discharge period may be maintained but can not be expanded based on concerns for potential impacts to shellfish resources in the area.

The Department reviewed DMR data for Thomaston for the period of January 2015 through January 2018 and found the following information:

Fecal coliform bacteria (DMRs = 8)

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	15	1 – 3.2	1.5
Daily Maximum	50	1 - 72	15

# (SURFACE WATER DISCHARGE) (cont'd)

f. Total Residual Chlorine (TRC): Limits on total residual chlorine (TRC) are specified to ensure attainment of ambient water quality standards and that BPT technology is applied to the discharge. Permits issued by this Department impose the more stringent of the calculated water quality based or BPT (technology) based limits. The previous permitting action established a daily maximum technology based limit of 1.0 mg/L during the period between January 1 and March 31 and established a once/day minimum monitoring frequency requirement. The once per day minimum monitoring requirement is consistent with Department monitoring guidance for POTWS discharging 0.5 to 1.5 MGD, and is being carried forward in this permitting action. With dilution factors as determined on page 10 of this Fact Sheet, end-of-pipe water quality based thresholds for TRC may be calculated as follows:

Criterion	(mg/L)	Dilution	n Factors	Calculated L	Limit (mg/L)
Acute (A)	Chronic C	Acute	Chronic	Acute	Chronic
0.013	0.0075	109:1	219:1	1.42	1.64

Because the Department's technology based limit is more stringent than the calculated water quality based limit, the BPT limit of 1.0 mg/L is being carried forward from the previous permitting action. Limitations and monitoring requirements for TRC are applicable any time elemental chlorine or chlorine-based compounds are being utilized to disinfect the discharge during the period of surface water discharge to the St. George River.

The Department reviewed DMR data for Thomaston for the period of January 2015 through January 2018.

Total residual chlorine (DMRs=8)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.35-0.83	0.55

g. <u>pH</u>: The previous permitting action established a BPT pH range limitation of 6.0 –9.0 standard units pursuant to Department rule found at Chapter 525(3)(III)(c) and a once per day minimum monitoring requirement. This permitting action is carrying forward the pH effluent limit range and minimum monitoring frequency requirements from the previous permit.

A review of the DMR data for Thomaston for the period of January 2015 through January 2018 indicates values have been reported as follows:

pH (DMRs = 8) Lagoon Effluent

Value	Limit (su)	Range (su)	Average (su)
Daily Maximum	6.0 - 9.0	7.0 - 8.05	n/a

#### FACT SHEET

### 6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

# (SURFACE WATER DISCHARGE) (cont'd)

h. Mercury: Pursuant to Maine law, 38 M.R.S. §420 and Department rule, 06-096 CMR Chapter 519, Interim Effluent Limitations and Controls for the Discharge of Mercury, the Department issued a Notice of Interim Limits for the Discharge of Mercury to the permittee thereby administratively modifying WDL # W-002643 by establishing interim monthly average and daily maximum effluent concentration limits of 16.8 parts per trillion (ppt) and 25.2 ppt, respectively, and a minimum monitoring frequency requirement of four tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001. However, effective June 15, 2001, the Maine Legislature enacted Maine law, 38 M.R.S. §413, sub-§11 specifying that interim mercury limits and monitoring requirements were to remain in effect.

The limitations are being incorporated into Special Condition A, Effluent Limitations And Monitoring Requirements, of this permit. Maine law 38 M.R.S., §420 1-B,(B)(1) states that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413, subsection 11. A review of the Department's data base for the period October 1998 through the present indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows:

Mercury (n = 24)

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average	16.8	1.6 - 27	8.9
Maximum	25.2	1.6 - 27	n/a

Pursuant to Maine law 38, M.R.S. §420, sub-§1-B, ¶F, this permitting action is carrying forward the 1/Year monitoring frequency established in the February 6, 2012, permit modification.

Whole Effluent Toxicity (WET) & Chemical-Specific Testing: Maine law, 38 M.R.S., Sections 414-A and 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. Department Rules, 06-096 CMR Chapter 530, Surface Water Toxics Control Program, and Chapter 584, Surface Water Quality Criteria for Toxic Pollutants set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

WET, priority pollutant and analytical chemistry testing, as required by Chapter 530, is included in this permit in order to fully characterize the effluent. This permit also provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment and receiving water characteristics.

## (SURFACE WATER DISCHARGE) (cont'd)

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on invertebrate and vertebrate species. Priority pollutant and analytical chemistry testing is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health AWQC as established in Chapter 584.

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

Level I – chronic dilution factor of <20:1.

Level II – chronic dilution factor of >20:1 but <100:1.

Level III – chronic dilution factor  $\geq$ 100:1 but  $\leq$ 500:1 or  $\geq$ 500:1 and Q  $\geq$ 1.0 MGD

Level IV - chronic dilution >500:1 and Q <1.0 MGD

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

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

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

Screening level testing - During the period beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement.

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

# (SURFACE WATER DISCHARGE) (cont'd)

A review of the data on file with the Department for the Thomaston facility indicates that to date, the permittee has fulfilled the WET and chemical-specific testing requirements of Chapter 530 as established in the previous permitting action. See **Attachment D** of this Fact Sheet for a summary of the WET test results and **Attachment E** of this Fact Sheet for a summary of the chemical-specific test dates and results.

#### WET test evaluation

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

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

On February 28, 2018, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department in accordance with the statistical approach cited above. The statistical evaluation indicates the discharge from the permittee's wastewater treatment facility does not exceed or have a reasonable potential to exceed the critical acute (0.92%) or chronic (0.46%) water quality thresholds for any of the WET species tested to date. Therefore, no numeric limitations for any WET species tested to date are being established in this permitting action. It is noted, the critical water quality thresholds expressed in percent (%) were derived as the mathematical inverse of the acute (109:1) and chronic (219:1) dilution factors.

As for testing frequencies, Chapter 530(2)(D)(3)(b) states in part that Level III facilities "... may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3(E)". Based on the results of the 2/28/18 statistical evaluation, the permittee qualifies for the testing waiver. Therefore, this permit action establishes a screening level WET testing requirements as follows:

# (SURFACE WATER DISCHARGE) (cont'd)

During the period beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement.

Level	WET Testing
III	1 per year

Special Condition H, Chapter 530 (2)(D)(4) Certification, of this permitting action requires the permittee to file an annual certification with the Department.

It is noted however that if future WET testing results indicates the discharge exceeds critical water quality thresholds this permit will be reopened pursuant to Special Condition S, *Reopening of Permit For Modification*, of this permit to establish applicable limitations and monitoring requirements.

## Chemical specific testing evaluation

As with WET test results, on February 28, 2018, the Department conducted a statistical evaluation on the most recent 60 months of chemical specific test results on file with the Department in accordance with the statistical approach outlined in Chapter 530. The statistical evaluation indicates there are no parameters that exceed or have a reasonable potential to exceed the acute, chronic or human health AWQC. The evaluation utilized 10% of applicable AWQC to account for background and 0% for reserve given the discharge is to a marine waterbody.

As for testing frequencies, Chapter 530(2)(D)(3)(b) states in part that Level III facilities "... may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3(E)". Based on the results of the 2/28/18 statistical evaluation, the permittee qualifies for the testing waiver. Further, Chapter 530(2)(D)(3)(a) states that testing requirements may be reduced for facilities "that discharge less than 12 months per year in proportion to the actual number of months discharged, but to not less than one test per year where testing would otherwise be required". Therefore, this permitting action establishes a screening level analytical chemistry and priority pollutant testing requirements as follows:

# (SURFACE WATER DISCHARGE) (cont'd)

During the period beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement.

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

As with WET testing, Special Condition I, Chapter 530 (2)(D)(4) Certification, of this permitting action requires the permittee to file an annual certification with the Department.

#### (SPRAY IRRIGATION)

- j. <u>Explanation of Monitoring Parameters</u>: The following parameters are required to be monitored and/or limited in this permitting action. A summary of monitoring data for each parameter for Thomaston for spray seasons 2013 through 2017 is included on subsequent pages.
  - 1. <u>Biochemical Oxygen Demand (BODs)</u> BODs monitoring is required in the storage lagoon effluent and is being carried forward from the previous permitting action. Monitoring for BODs yields an indication of the condition of the wastewater being applied from the lagoon, of the degree of loading of organic material, and the effectiveness of the spray-irrigation treatment process. The limit of 100 mg/L established in the previous permit as a best practicable treatment (BPT) standard is being carried forward in this permitting action.
  - 2. Total Suspended Solids (TSS) TSS monitoring is required in the storage lagoon effluent and in the monitoring wells and is being carried forward from the previous permitting action. TSS lagoon effluent monitoring yields an indication of the condition of the wastewater being applied from the lagoon. TSS in the groundwater yields an indication of the integrity of the monitoring wells and of treatment efficiency. The Report only requirement established in the previous permit is being carried forward in this permit. Other like lagoon facilities have experienced algal blooms that are outside of their control which contribute to excursions of the 100 mg/L limit. Higher concentrations of TSS being sprayed on the fields does not pose an adverse environmental impact but the license should be aware that operational problems such as fouling of sprayheads may result.

# (SPRAY IRRIGATION) (cont'd)

- 3. Nitrate-nitrogen Nitrate-nitrogen monitoring is required in the storage lagoon effluent (monitor only) and in the monitoring wells (limit established) and are carried forward from the previous permitting action. Nitrate-nitrogen compounds are byproducts of the biological breakdown of ammonia and are inherent in domestic like sanitary wastewater. Because nitrate-nitrogen is weakly absorbed by soil, it functions as a reliable indicator of contamination from waste-disposal sites. Elevated levels of nitrate-nitrogen in the drinking water supply are of human health concern. The limit of 10 mg/L established in the previous permit is a National Primary Drinking Water standard and is being carried forward in this permitting action.
- 4. Specific Conductance, Temperature and PH Specific conductance, temperature and PH monitoring are required in the monitoring wells and specific conductance and temperature monitoring are required in the under-drains, carried forward from the previous permitting action. These parameters are considered to be "field" parameters meaning that they are measured directly in the field via instrumentation and do not require laboratory analysis. These parameters are considered as surveillance level monitoring parameters and are used as early-warning indicators of potential groundwater contamination when there exists a statistically significant trend upwards in the data or sudden spikes from previous levels. Temperature data is important in calibrating the conductance measurements.
- 5. Metals (arsenic, cadmium, chromium, copper, lead, nickel, and zinc): Metals monitoring is required in the storage lagoon effluent and in the monitoring wells, carried forward from the previous permitting action. This permitting action is carrying forward the metals testing requirements to be conducted in the fourth calendar quarter of each year. The Department reserves the right to reopen this permit in accordance with Special Condition S, Reopening of Permit For Modifications, based on new information provided by the permittee.

Additional operation related parameters for the spray irrigation fields, groundwater monitoring wells, and lagoon under-drains are addressed within the text and tables below.

k. Storage Lagoon Effluent Monitoring Requirements: As described above, the previous permitting action established storage lagoon effluent (Outfall #002A) monitoring requirements for: 1) biochemical oxygen demand (BOD<sub>5</sub>); 2) total suspended solids (TSS); 3) nitrate-nitrogen, 4) pH; and 5) certain metals (arsenic, cadmium, chromium, copper, lead, nickel, and zinc), as well as a limitation for BOD that are being carried forward in this permitting action.

### (SPRAY IRRIGATION) (cont'd)

All parameters except the metals, were to be conducted during the months of April, May, August, and October of each year. Lagoon effluent monitoring for metals was required to be performed during the fourth calendar quarter of the fourth year of the license. This licensing action is carrying forward the requirement to measure and report the storage lagoon freeboard as a demonstration of best management practices.

A review of the monthly DMR data for spray seasons 2015 through 2017 indicates monitoring results have been reported as follows:

BOD Concentration (DMRs = 12) Lagoon Effluent

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Daily Maximum	100	4 - 22	9

TSS Concentration (DMRs = 12) Lagoon Effluent

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Daily Maximum	100	2 - 110	20

Nitrate-nitrogen Concentration (DMRs = 12) Lagoon Effluent

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Daily Maximum	Report	0.3 - 3.0	0.97

pH (DMRs = 12) Lagoon Effluent

Value	Limit (su)	Range (su)	Average (su)
Daily Maximum	Report	7.35 – 10.25	n/a

Freeboard (DMRs = 24) Lagoon

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Value	Limit (feet)	Range (feet)	Average (feet)
Daily Maximum	Report	3.5 - 18.4	10.1

Metals (n=1)

Parameter	Limit	Range	Mean
Arsenic (total)	Report	n/a	19
Cadmium (total)	Report	n/a	5.7
Chromium (total)	Report	n/a	14
Copper (total)	Report	n/a	43
Lead (total)	Report	n/a	1
Nickel (total)	Report	n/a	5
Zinc (total)	Report	n/a	91

### (SPRAY IRRIGATION) (cont'd)

1. Spray Field Wastewater Application Rate: The previous permitting action established weekly maximum application rates for spray irrigation fields FLD#1, FLD#2, FLD#3, FLD#4, and FLD#5 as follows:

Spray Field	Weekly license Limit	Equivalent Inches	Weekly limit for Field
FLD #1 (8.10 acres)	81,450 gallons/acre	3.0 inches	725,720 gallons/week
FLD #2 (9.72 acres)	81,450 gallons/acre	3.0 inches	758,700 gallons/week
FLD #3 (12.96 acres)	81,450 gallons/acre	3.0 inches	857,650 gallons/week
FLD #4 (11.34 acres)	81,450 gallons/acre	3.0 inches	923,650 gallons/week
FLD #5 (11.75 acres)	81,450 gallons/acre	3.0 inches	957,050 gallons/week

The system operator must monitor each waste application to verify adequate infiltration of the waste into the soil and an irrigation cycle must be stopped if runoff occurs outside the boundary of the designated spray areas. The previous permitting action also contained a monthly total flow reporting requirement for each spray field, which is being carried forward in this permitting action.

The Department reviewed DMR data for spray seasons 2015 through 2017 and found the following spray application rate information.

Application rate (gal/week)(DMRs = 24)

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11	Range - Rate	Mean - Rate	Range - Total	Mean - Total
Fields	(gal./week)	(gal./week)	(MG/month)	(MG/month)
FLD #1	127,293-721,000	587,796	0.50 - 3.14	1.842
FLD #2	282,544-710,534	541,482	0.48 - 2.57	1.569
FLD #3	298,089-822,000	681,694	0.71 - 3.56	2.124
FLD #4	299,706-854,000	633,129	0.74 - 3.37	1.930
FLD #5	293,258-871,000	649,002	0.40 - 3.48	2.017

The permittee should field-calibrate their equipment on a regular basis to ensure proper application and uniformity, and when operating conditions are changed from the assumed design. Calibration involves collecting and measuring flow at several locations in the application area (typically a grid pattern of containers with uniform diameters).

### (SPRAY IRRIGATION) (cont'd)

m. <u>Groundwater Monitoring Wells:</u> Thomaston monitors the following groundwater monitoring wells for compliance with this permit/license.

Monitoring Wells	Position	Location
#MW 002BD	Downgradient	southwest of southern most end of FLD #1
#MW 002BS	Downgradient	southwest of southern most end of FLD#1
#MW 002DD	Downgradient	west of FLD #3, northwest of FLD #2
#MW 002DS	Downgradient	west of FLD #3, northwest of FLD #2
#MW 002GD	Downgradient	west of FLD #5, north of FLD #4
#MW 002GS	Downgradient	west of FLD #5, north of FLD #4
#MW 002HS	Background	east of FLD #3
#MW 002ID	Background	east of FLD #5

n. Groundwater Monitoring Well Monitoring Requirements: As indicated above, the previous permitting action carried forward Ground Water Monitoring Well (Outfalls #02BD, #02BS, #02DD, #02DS, #02GD, #02GS, #02HS, and #02ID) monitoring requirements of: 1) depth to water level below surface; 2) nitrate-nitrogen (daily maximum concentration limit of 10 mg/L based on the National Primary Drinking Water standard); 3) specific conductance; 4) temperature (°C); 5) pH; 6) total suspended solids (TSS); and 7) certain metals (arsenic, cadmium, chromium, copper, lead, nickel, and zinc), which are being carried forward in this permitting action based on Department BPJ. Groundwater well monitoring for all parameters except the metals must be conducted during the months of May and October of each year. Groundwater well monitoring for the specified metals is only required to be performed during the fourth calendar quarter of the fourth year of the permit.

All lagoon monitoring wells and all groundwater monitoring wells that do not have monitoring requirements in this permit must be maintained in operable condition for possible future monitoring.

MW 002BD (n=6)

Parameter	Limit	Range	Mean
Temperature (°C)	Report	8.1 – 12.5	10.3
Specific conductance (umhos/cm)	Report	340 – 1,053	710
pH (standard units)	Report	5.0 – 9.5	n/a
Total suspended solids (mg/L)	Report	7.0 - 79	26
Nitrate nitrogen (mg/L)	Report	<0.3 – 3.0	0.9
Depth to ground water (feet)	Report	1.6 – 4.4	2.6

### (SPRAY IRRIGATION) (cont'd)

MW 002BD (n=1)

Parameter	Limit	Range	Mean
Arsenic (total) (ug/L)	Report	n/a	<5
Cadmium (total)(ug/L)	Report	n/a	< 0.6
Chromium (total)(ug/L)	Report	n/a	<5
Copper (total)(ug/L)	Report	n/a	<3
Lead (total)(ug/L)	Report	n/a	<3
Nickel (total)(ug/L)	Report	n/a	<2
Zinc (total)(ug/L)	Report	n/a	22

MW 002BS (n=6)

Parameter	Limit	Range	Mean
Temperature (°C)	Report	7.5 – 13.6	10.8
Specific conductance (umhos/cm)	Report	105 – 395	292
pH (standard units)	Report	4.8 – 9.1	n/a
Total suspended solids (mg/L)	Report	32 - 230	94
Nitrate nitrogen (mg/L)	Report	<0.3 – 1.2	0.6
Depth to ground water (feet)	Report	0.9 – 4.6	2.2

MW 002BS (n=1)

Parameter	Limit	Range	Mean
Arsenic (total) (ug/L)	Report	n/a	<5
Cadmium (total)(ug/L)	Report	n/a	0.7
Chromium (total)(ug/L)	Report	n/a	<5
Copper (total)(ug/L)	Report	n/a	<3
Lead (total)(ug/L)	Report	n/a	3
Nickel (total)(ug/L)	Report	n/a	<2
Zinc (total)(ug/L)	Report	n/a	17

MW 002DD (n=6)

Parameter	Limit	Range	Mean
Temperature (°C)	Report	7.7 – 13.1	10.5
Specific conductance (umhos/cm)	Report	347 – 682	539
pH (standard units)	Report	5.6 – 8.3	n/a
Total suspended solids (mg/L)	Report	2.5 - 8.0	4.8
Nitrate nitrogen (mg/L)	Report	<0.1 – 0.3	0.27
Depth to ground water (feet)	Report	0.2 - 0.5	0.3

### (SPRAY IRRIGATION) (cont'd)

MW 002DD (n=1)

Parameter	Limit	Range	Mean
Arsenic (total) (ug/L)	Report	n/a	<5
Cadmium (total)(ug/L)	Report	n/a	< 0.6
Chromium (total)(ug/L)	Report	n/a	<5
Copper (total)(ug/L)	Report	n/a	<3
Lead (total)(ug/L)	Report	n/a	<3
Nickel (total)(ug/L)	Report	n/a	<5
Zinc (total)(ug/L)	Report	n/a	22

MW 002DS (n=6)

Parameter	Limit	Range	Mean
Temperature (°C)	Report	8.6 – 12.6	10.0
Specific conductance (umhos/cm)	Report	378 - 622	510
pH (standard units)	Report	5.6 – 7.6	n/a
Total suspended solids (mg/L)	Report	23 - 106	61
Nitrate nitrogen (mg/L)	Report	0.1 - 0.3	0.27
Depth to ground water (feet)	Report	0 – 2.7	1.1

MW 002DS (n=1)

Parameter	Limit	Range	Mean
Arsenic (total) (ug/L)	Report	n/a	100
Cadmium (total)(ug/L)	Report	n/a	< 0.6
Chromium (total)(ug/L)	Report	n/a	<5
Copper (total)(ug/L)	Report	n/a	<3
Lead (total)(ug/L)	Report	n/a	<1
Nickel (total)(ug/L)	Report	n/a	<2
Zinc (total)(ug/L)	Report	n/a	19

MW 002GD (n=6)

Parameter	Limit	Range	Mean
Temperature (°C)	Report	7.7 – 12.2	10.3
Specific conductance (umhos/cm)	Report	580 - 738	668
pH (standard units)	Report	5.6 – 7.5	n/a
Total suspended solids (mg/L)	Report	2.5 - 4.0	3.5
Nitrate nitrogen (mg/L)	Report	0.1 - 0.3	0.27
Depth to ground water (feet)	Report	0 – 0.1	0.03

### (SPRAY IRRIGATION) (cont'd)

MW 002GD (n=1)

Parameter	Limit	Range	Mean
Arsenic (total) (ug/L)	Report	n/a	8
Cadmium (total)(ug/L)	Report	n/a	< 0.6
Chromium (total)(ug/L)	Report	n/a	<5
Copper (total)(ug/L)	Report	n/a	7
Lead (total)(ug/L)	Report	n/a	<3
Nickel (total)(ug/L)	Report	n/a	30
Zinc (total)(ug/L)	Report	n/a	62

MW 002GS (n=6)

Parameter	Limit	Range	Mean
Temperature (°C)	Report	7.9 – 12.9	10.6
Specific conductance (umhos/cm)	Report	454 – 777	642
pH (standard units)	Report	5.5 – 7.1	n/a
Total suspended solids (mg/L)	Report	2.5 - 4.0	3.5
Nitrate nitrogen (mg/L)	Report	<0.3 – 0.4	0.32
Depth to ground water (feet)	Report	0-0.4	0.18

MW 002GS (n=1)

Parameter	Limit	Range	Mean
Arsenic (total) (ug/L)	Report	n/a	<5
Cadmium (total)(ug/L)	Report	n/a	0.6
Chromium (total)(ug/L)	Report	n/a	<5
Copper (total)(ug/L)	Report	n/a	<3
Lead (total)(ug/L)	Report	n/a	3.6
Nickel (total)(ug/L)	Report	n/a	<5
Zinc (total)(ug/L)	Report	n/a	45

MW 002HS (n=6) (background)

Parameter	Limit	Range	Mean
Temperature (°C)	Report	8.7 – 13.0	10.9
Specific conductance (umhos/cm)	Report	473 – 696	593
pH (standard units)	Report	5.4 - 7.2	n/a
Total suspended solids (mg/L)	Report	<2.5 - 49	21
Nitrate nitrogen (mg/L)	Report	<0.3 – 0.32	0.30
Depth to ground water (feet)	Report	0.9 - 1.5	1.1

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### 6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

### (SPRAY IRRIGATION) (cont'd)

MW 002HS (n=1)(background)

Parameter	Limit	Range	Mean
Arsenic (total) (ug/L)	Report	n/a	<2
Cadmium (total)(ug/L)	Report	n/a	< 0.6
Chromium (total)(ug/L)	Report	n/a	<5
Copper (total)(ug/L)	Report	n/a	<3
Lead (total)(ug/L)	Report	n/a	<3
Nickel (total)(ug/L)	Report	n/a	<5
Zinc (total)(ug/L)	Report	n/a	21

MW 002ID (n=6) (background)

Parameter	Limit	Range	Mean
Temperature (°C)	Report	8.1 – 12.1	10.4
Specific conductance (umhos/cm)	Report	81 – 133	98
pH (standard units)	Report	5.8 – 7.8	n/a
Total suspended solids (mg/L)	Report	2.5 - 6.8	4.2
Nitrate nitrogen (mg/L)	Report	0.1 - 0.3	0.27
Depth to ground water (feet)	Report	0.5 – 4.5	1.9

MW 002ID (n=1) (background)

Parameter	Limit	Range	Mean	
Arsenic (total) (ug/L)	Report	n/a	6	
Cadmium (total)(ug/L)	Report	n/a	< 0.6	
Chromium (total)(ug/L)	Report	n/a	<5	
Copper (total)(ug/L)	Report	n/a	<3	
Lead (total)(ug/L)	Report	n/a	<1	
Nickel (total)(ug/L)	Report	n/a	<5	
Zinc (total)(ug/L)	Report	n/a	15	

o. <u>Lagoon Under-Drain Monitoring Requirements</u>: The previous permitting action established lagoon under-drain monitoring requirements for: 1) flow rate; 2) specific conductance; and 3) temperature, at a minimum monitoring frequency of three times per year in July August, and September. These monitoring requirements are being carried forward in this permitting action based on Department BPJ and consistent with other regulated spray irrigation facilities.

### (SPRAY IRRIGATION) (cont'd)

A review of the DMR data for the spray seasons 2015 through 2017 indicate the following values have been reported.

Flow (DMRs=9)

Value Limit (gpm)		Range (gpm)	Mean(gpm)	
Daily maximum	Report	0.03 - 3.5	0.93	

Specific conductance (DMRs=9)

Value	Limit	Range	Mean	
	(umhos/cm)	(umhos/cm)	(umhos/cm)	
Daily maximum	Report	760 – 1,470	1,062	

Temperature (DMRs=9)

Value	Limit (°C)	Range (°C)	Mean (°C)
Daily maximum	Report	14.7 – 19.8	17.9

### 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 St. George River to meet the standards for Class SB classification.

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

#### 8. PUBLIC COMMENTS

Public notice of this application was made in the Courier - Gazette newspaper on or about January 4, 2018. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

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#### 9. DEPARTMENT CONTACT

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

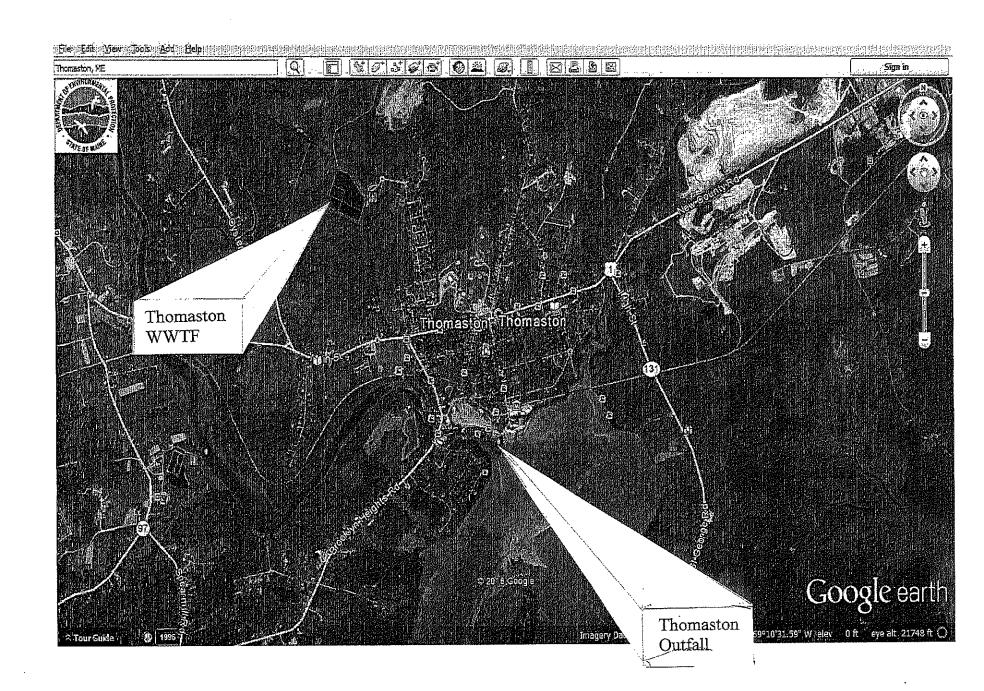
Gregg Wood
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017

Telephone (207) 287-7693 Fax (207) 287-3435 email: gregg.wood@maine.gov

### 10. RESPONSE TO COMMENTS

During the period of July 13, 2018, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department did not receive comments from the permittee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the permit. Therefore, the Department has not prepared a Response to Comments.

# **ATTACHMENT A**



# ATTACHMENT B

GENERAL LAYOUT

1/16/2008



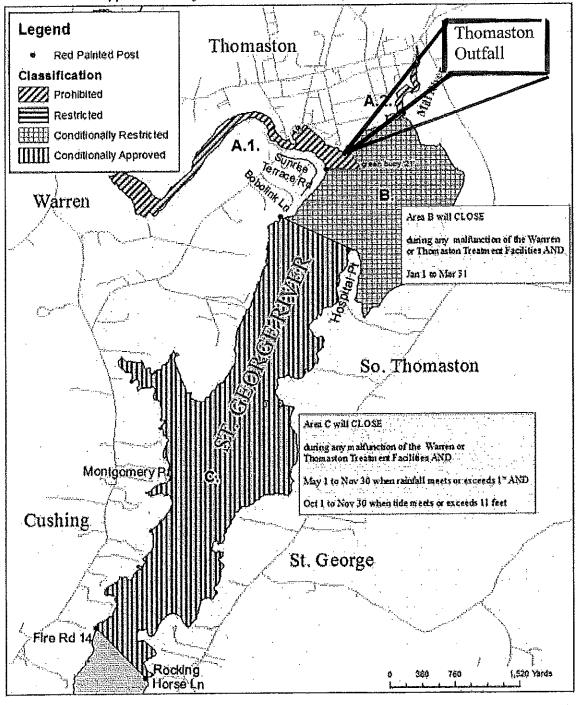
# ATTACHMENT C



# Maine Department of Marine Resources Pollution Area No. 27



Upper St. George River and Tributaries (Warren to St. George)



# ATTACHMENT D

2/28/2018

### WETTEST REPORT



### Data for tests conducted for the period

28/Feb/2013 -28/Feb/2018

THOMASTON WATER POLL CNTRL AUTH	NPDES= ME010066 Effluent Limit:		t Limit: Acute (%) =	0.917	Chronic (%) = $0.457$		
Species	Test	Percent	Sample date	Critical %	Exception	RP	
MYSID SHRIMP	A_NOEL	100	02/06/2017	0.917			
SEA URCHIN	C NOEL	25	02/06/2017	0.457			

# ATTACHMENT E

2/28/2018

### PRIORITY POLLUTANT DATA SUMMARY



Date Range: 28/Feb/2013-28/Feb/2018

Facility Name:	THOMASTON WATER POLL CNTRL AUTI				NPDES: ME0100668						
	Monthly	Daily	Total Test		Test # By Group	oup					
Test Date	(Flow	MGD)	Number	М	V	BN	P	0	Α	Clean	Hg
02/06/2017	0.78	0.59	128	13	28	46	25	5	11	F	0

Key:

A = Acid

O = Others P = Pesticides

8N = Base Neutral M = Metals

V. ⇒ Volatiles

State of Maine - Department of Environmental Protection

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# ATTACHMENT F

# STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

### CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES#	Facility Name_	******	· · · · · · · · · · · · · · · · · · ·	
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		Describe in comments section
1	Increases in the number, types, and flows of industrial, commercial, or domestic discharges to the facility that in the judgment of the Department may cause the receiving water to become toxic?	
2	Changes in the condition or operations of the facility that may increase the toxicity of the discharge?	
3	Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge?	
4	Increases in the type or volume of hauled wastes accepted by the facility?	
COI	MMENTS:	

### 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 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
WET Testing				
Priority Pollutant Testing				
Analytical Chemistry				
Other toxic parameters <sup>1</sup>	. 🔾			

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.

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



# **DEP INFORMATION SHEET**

# **Appealing a Department Licensing Decision**

Dated: March 2012 Contact: (207) 287-2811

#### **SUMMARY**

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

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

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

#### I. ADMINISTRATIVE APPEALS TO THE BOARD

#### **LEGAL REFERENCES**

The laws concerning the DEP's Organization and Powers, 38 M.R.S.A. §§ 341-D(4) & 346, the Maine Administrative Procedure Act, 5 M.R.S.A. § 11001, and the DEP's Rules Concerning the Processing of Applications and Other Administrative Matters ("Chapter 2"), 06-096 CMR 2 (April 1, 2003).

#### HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days of the date on which the Commissioner's decision was filed with the Board will be rejected.

### HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by the Board's receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner a copy of the appeal documents and if the person appealing is not the applicant in the license proceeding at issue the applicant must also be sent a copy of the appeal documents. All of the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

#### WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

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

- 1. Aggrieved Status. The appeal must explain how the person filing the appeal has standing to maintain an appeal. This requires an explanation of how the person filing the appeal may suffer a particularized injury as a result of the Commissioner's decision.
- 2. The findings, conclusions or conditions objected to or believed to be in error. Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
- 3. The basis of the objections or challenge. If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
- 4. The remedy sought. This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
- 5. All the matters to be contested. The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
- 6. Request for hearing. The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing on the appeal is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
- 7. New or additional evidence to be offered. The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered by the Board in an appeal only when the evidence is relevant and material and that the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2.

#### OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

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

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

The Board will formally acknowledge receipt of an appeal, including the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, and any materials submitted in response to the appeal will be sent to Board members with a recommendation from DEP staff. Persons filing appeals and interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, a license holder, and interested persons of its decision.

#### II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2; 5 M.R.S.A. § 11001; & M.R. Civ. P 80C. A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. Failure to file a timely appeal will result in the Board's or the Commissioner's decision becoming final.

An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S.A. § 346(4).

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

### ADDITIONAL INFORMATION

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

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