



STATE OF MAINE
Department of Environmental Protection

Paul R. Lepage
GOVERNOR

Patricia W. Aho
COMMISSIONER

April 10, 2013

Mr. John Fancy
Town of Thomaston
P.O. Box 299
Thomaston, Maine 04861

RE: Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100668
Maine Waste Discharge License (WDL) Application #W002643-6C-G-R
Final Permit

Dear Mr. Fancy:

Enclosed please find a copy of your **final** MEPDES permit/WDL which was approved by the Department of Environmental Protection. Please read the permit and its attached conditions carefully. You must follow the conditions in the order to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State Law and is subject to enforcement action.

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 (207) 287-7693 or contact me via email at gregg.wood@maine.gov.

Sincerely,

Gregg Wood
Division of Water Quality Management
Bureau of Land and Water Quality

Enc.

cc: Denise Behr, DEP/CMRO
Lori Mitchell, DEP/CMRO

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

DEPARTMENT ORDER

IN THE MATTER OF

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

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.A., Section 414-A *et seq.*, and applicable regulations, the Department of Environmental Protection (Department hereinafter) has considered the application of the TOWN OF THOMASTON (Thomaston/permittee) with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The Town of Thomaston has submitted a timely and complete application to the Department for the renewal of combination Maine Waste Discharge License (WDL) #W-002643-5L-E-R and Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100668, that was issued by the Department on June 21, 2008, 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 up to a maximum of 81,457 gallons/acre/week via a surface wastewater disposal system onto land in Thomaston, Maine.

PERMIT SUMMARY

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

1. Expressing the application rates as a total number of gallons permitted to be applied to each sprayfield as a whole (gal/week) rather than expressed as gal/acre/day. This gives the permittee the flexibility to more efficiently manage sub-areas within each sprayfield by applying more waste water to areas with better quality soils and restrict the applications to areas with lesser quality soils.
2. Eliminating the technology based concentration limit of 100 mg/L for total suspended solids for the storage lagoon effluent based on new Department policy for regulating lagoon systems.
3. Incorporating the cumulative average and maximum total mercury limits (originally established in a May, 23, 2000, permit modification) into the permit for the discharge to the St. George River.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated February 20, 2013, 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, 38 MRSA 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) The standards of classification of the receiving water body are met or, 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 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 a surface wastewater disposal system and the seasonal disposal (April 1 through November 30) via spray irrigation of up to of 81,457 gallons/acre/week 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) 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.A. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (effective April 1, 2003)].

ACTION

DONE AND DATED AT AUGUSTA, MAINE, THIS 10th DAY OF April 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

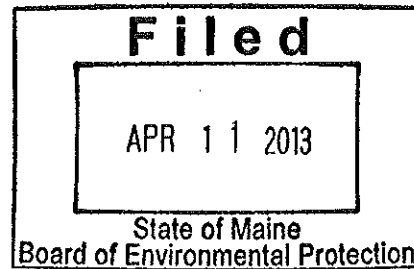
BY:

Michael Kuhns
for Patricia W. Aho, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: January 25, 2013

Date of application acceptance: January 25, 2013



Date filed with Board of Environmental Protection _____

This Order prepared by Gregg Wood, BUREAU OF LAND & WATER QUALITY

ME0100668 2013

4/10/13

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 discharges shall be limited and 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 Limitations | | | | | Minimum Monitoring Requirements | | |
|---|-----------------------|---------------------|---------------------|----------------------------------|-----------------|---------------------------------|-----------------------|--------------------------|
| | Monthly Average | Weekly Average | Daily Maximum | Monthly Average | Weekly Average | Daily Maximum | Measurement Frequency | Sample Type |
| Flow [50050] | 0.9 MGD [03] | --- | Report MGD [03] | --- | --- | --- | Continuous [99/99] | Recorder [RC] |
| Biochemical Oxygen Demand (BOD ₅) [00310] | 225 lbs/day [26] | 338 lbs/day [26] | 375 lbs/day [26] | 30 mg/L [19] | 45 mg/L [19] | 50 mg/L [19] | 1/Week [01/07] | 24 Hr. Composite [24] |
| BOD5 % Removal ⁽¹⁾ [81010] | --- | --- | --- | 85% [23] | --- | --- | 1/Month [01/30] | Calculate [CA] |
| Total Suspended Solids (TSS) [00545] | 225 lbs/day [26] | 338 lbs/day [26] | 375 lbs/day [26] | 30 mg/L [19] | 45 mg/L [19] | 50 mg/L [19] | 1/Week [01/07] | 24 Hr. Composite [24] |
| TSS % Removal ⁽¹⁾ [81011] | --- | --- | --- | 85% [23] | --- | --- | 1/Month [01/30] | Calculate [CA] |
| Settleable Solids [00545] | --- | --- | --- | --- | --- | 0.3 ml/L [25] | 1/Week [01/07] | Grab [GR] |
| Fecal Coliform Bacteria ⁽²⁾ [74053] | --- | --- | --- | 15/100 ml ⁽³⁾ [13] | --- | 50/100 ml [13] | 2/Week [02/07] | Grab [GR] |
| Total Residual Chlorine ⁽²⁾ [50060] | --- | --- | --- | --- | --- | 1.0 mg/L [19] | 1/Day [01/01] | Grab [GR] |
| Mercury (Total) ⁽¹⁶⁾ [71000] | --- | --- | --- | 16.8 ng/L [3M] | --- | 25.2 ng/L [3M] | 1/Year [01/YR] | Grab [GR] |
| pH (Std. Units) [00100] | --- | --- | --- | --- | --- | 6.0-9.0 [12] | 1/Day [01/01] | Grab [GR] |

Footnotes are included on Pages 11-16.

SPECIAL CONDITIONS

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 shall be limited and monitored by the permittee as specified below.

| Effluent Characteristic | Discharge Limitations | | | | Minimum | |
|--|-----------------------|---------------|-----------------|------------------|-----------------------|---------------------|
| | Monthly Average | Daily Maximum | Monthly Average | Daily Maximum | Measurement Frequency | Sample Type |
| Whole Effluent Toxicity⁽⁴⁾ <u>Acute – NOEL</u> | | | | | | |
| <i>Mysidopsis bahia</i> [TDMBE] (Mysid Shrimp) | --- | --- | --- | Report % [23] | 1/Year [01/YY] | Composite [24] |
| <u>Chronic – NOEL</u> | | | | | | |
| <i>Arbacia punctulata</i> [TBH34] (Sea urchin) | --- | --- | --- | Report % [23] | 1/Year [01/YY] | Composite [24] |
| Analytical Chemistry ^(5,6) [51168] | --- | --- | --- | Report ug/L [28] | 1/Year [01/YY] | Composite/Grab [24] |
| Priority Pollutant ⁽⁶⁾ [50008] | --- | --- | --- | Report ug/L [28] | 1/Year [01/YY] | Composite/Grab [24] |

Footnotes are included on Pages 11-16.

SPECIAL CONDITIONS

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) shall be limited and monitored as specified below.

April 1 – November 30 each year

| EFFLUENT CHARACTERISTIC REQUIREMENTS | | DISCHARGE LIMITATIONS | | MINIMUM MONITORING | |
|--|----------------------------|----------------------------|-------------------------------------|--------------------------|--|
| | Daily Minimum as specified | Daily Maximum as specified | Measurement Frequency as specified | Sample Type as specified | |
| Biochemical Oxygen Demand [00310] | --- | 100 mg/L [19] | 1/Month ⁽⁷⁾ [01/30] | Grab [GR] | |
| Total Suspended Solids [00530] | --- | Report mg/L [19] | 1/Month ⁽⁷⁾ [01/30] | Grab [GR] | |
| Nitrate-Nitrogen [00620] | --- | Report mg/L [19] | 1/Month ⁽⁷⁾ [01/30] | Grab [GR] | |
| pH (Standard Units) [00400] | --- | Report S.U. [12] | 1/Month ⁽⁷⁾ [01/30] | Grab [GR] | |
| Lagoon Freeboard ⁽⁸⁾ [82564] | 3 feet [27] | --- | 1/Week [01/07] | Measure [MS] | |
| Metals (Total): Arsenic, Cadmium, Chromium, Copper, Lead, Nickel and Zinc [01002, 01027, 01034, 01042, 01051, 01067, 01092] | Report ug/L [28] | | 1/5 Years ⁽⁹⁾ [01/5Y] | Grab [GR] | |

Footnotes are included on Pages 11-16.

SPECIAL CONDITIONS

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

April 1 – November 30 each year

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 designations) shall be limited and monitored as specified below.

| EFFLUENT CHARACTERISTIC REQUIREMENTS | | | DISCHARGE LIMITATIONS | | | MINIMUM MONITORING | |
|--------------------------------------|----------------------------------|---|----------------------------------|--|--------------------------------|--------------------|--|
| | Monthly Total as specified | Weekly Maximum ⁽¹⁰⁾ as specified | Daily Maximum as specified | Measurement Frequency as specified | Sample Type as specified | | |
| <u>Application Rate</u> | | | | | | | |
| FLD#1 | --- | 725,720 gallons | --- | 1/Week | Calculate | | |
| FLD#2 | --- | 758,700 gallons | --- | 1/Week | Calculate | | |
| FLD#3 | --- | 857,650 gallons | --- | 1/Week | Calculate | | |
| FLD#4 | --- | 923,650 gallons | --- | 1/Week | Calculate | | |
| FLD#5 | --- | 957,050 gallons | --- | 1/Week | Calculate | | |
| [51125] | | [88] | | [01/07] | [CA] | | |
| <u>Flow - Total Gallons</u> | Report | | | | | | |
| FLD#1 | Millions of gallons | --- | --- | 1/Month | Calculate | | |
| FLD#2 | Millions of gallons | --- | --- | 1/Month | Calculate | | |
| FLD#3 | Millions of gallons | --- | --- | 1/Month | Calculate | | |
| FLD#4 | Millions of gallons | --- | --- | 1/Month | Calculate | | |
| FLD#5 | Millions of gallons | --- | --- | 1/Month | Calculate | | |
| [82220] | [80] | | | [01/30] | [CA] | | |

SPECIAL CONDITIONS

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

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

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

SPECIAL CONDITIONS

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

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

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

The italicized numeric values bracketed in the table above and on the following pages are code numbers that Department personnel utilize to code the monthly DMRs. Footnotes are included on Pages 12-16.

SPECIAL CONDITIONS

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

Footnotes:

Sampling Locations (Surface Water Discharge and Spray Irrigation):

Effluent sampling for all parameters shall be conducted after the last component of the treatment process to ensure that representative samples are collected. Sampling for BOD₅, TSS, settleable solids and pH shall be conducted at a sample port in the pump room. Sampling for TRC and fecal coliform bacteria shall 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 shall be conducted at the sample port in the pump room and shall 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 shall be analyzed by a laboratory certified in waste water by the State of Maine's Department of Health and Human Services. Samples that are sent to a POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000).

All analytical test results shall be reported to the Department including results which are detected below the respective reporting limits (RLs) specified by the Department or as specified by other approved test methods. See **Attachment A** of this permit for a list of the Department's most current RLs. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the RL achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL or reporting an estimated value ("J" flagged) is not acceptable and will be rejected by the Department. Reporting analytical data and its use in calculations must follow established Department guidelines specified in this permit or in available Department guidance documents.

Surface Water Discharge:

1. **Percent removal** - The treatment facility shall maintain a minimum of 85 percent removal of both BOD₅ and TSS for all flows receiving secondary treatment during all months that the facility discharges. Compliance with the limitation shall 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, shall be calculated using the current twelve-month rolling average influent and

SPECIAL CONDITIONS

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. For months when the rolling average influent concentration is less than 200 mg/L, the percent removal shall not be calculated. Instead, the applicant shall record a NODI-9 code on the DMR. 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 BOD₅ 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 shall 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 shall 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 shall conduct screening level WET testing at a minimum

SPECIAL CONDITIONS

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

Footnotes:

Surface Water Discharge:

frequency of once per year (1/Year). Acute tests shall be conducted on the mysid shrimp (*Mysidopsis bahia*) and chronic tests shall 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 shall evaluate test results being submitted and identify to the Department possible exceedences 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 shall 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.

SPECIAL CONDITIONS

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 shall 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 shall conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year).

Priority pollutant and analytical chemistry testing shall 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 shall 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 shall evaluate test results being submitted and identify to the Department, possible exceedences 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.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Footnotes

Spray Irrigation:

7. **Storage Lagoon Effluent Sampling Frequency** – Storage lagoon effluent sampling shall 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 shall 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 shall be measured weekly to the nearest one tenth (1/10th) of a foot, with the minimum monthly value reported on the DMR. If site conditions prevent safe or accurate measurements, the permittee shall estimate this value and indicate this to the Department.
9. **Storage Lagoon Effluent and Ground Water Monitoring, Screening Level Metals Testing** – The permittee shall 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 shall 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 shall 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 shall be measured to the nearest one-tenth (1/10th) 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 shall be sampled during the months of **May and October** of each year, unless otherwise specified by the Department.

SPECIAL CONDITIONS

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 shall 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 of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.

SPECIAL CONDITIONS

C. NARRATIVE EFFLUENT LIMITATIONS

1. The permittee shall 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 shall 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 shall 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 shall 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** certificate (or higher) or must be a Maine Registered Professional Engineer pursuant to *Sewerage Treatment Operators*, Title 32 M.R.S.A., 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 25, 2013; 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. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5)(*Bypass*) of this permit.

SPECIAL CONDITIONS

F. WET WEATHER FLOW MANAGEMENT PLAN

The permittee shall 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 shall 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 shall 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 shall 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 shall 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 shall 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 shall 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.

SPECIAL CONDITIONS

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

This facility shall have a current written comprehensive Operation & Maintenance (O & M) Plan. The plan shall provide a systematic approach by which the permittee shall 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 shall 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 shall 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 shall 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 shall provide the Department with a certification describing any of the following that have occurred since the effective date of this permit [PCS Code 95799]: See Attachment E of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

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

In addition, in the comments section of the certification form, the permittee shall 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 reinstate 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 exceedences of ambient water quality criteria/thresholds.

SPECIAL CONDITIONS

J. SPRAY IRRIGATION GENERAL OPERATIONAL CONSTRAINTS

1. All wastewaters shall receive biological treatment through a properly designed, operated and maintained lagoon system prior to disposal via spray irrigation.
2. The spray irrigation facilities shall 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 shall 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.A. § 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 shall 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 shall 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 shall maintain a file on the location of all system components and relevant features. Each component shall 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 shall be identified and referenced by a unique system identifier in all logs and reports.

SPECIAL CONDITIONS

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

7. The permittee shall 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 shall inspect the spray-irrigation site or have other means to check the system for leakage in the piping system and determine if individual sprayheads 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 shall 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 shall cease irrigation if runoff is observed outside the designated boundaries of the spray field(s). The permittee shall 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 shall be included as part of the Operations & Maintenance manual.
8. **The licensee shall 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 shall be in accordance with the general format of the "*Monthly Operations Log*" provided as **Attachment D** of this license, 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 license or other format as approved by the Department. The *Monthly Operations Log*, and *Spray Application Report by Week*, for each month shall 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

1. Suitable vegetative cover shall be maintained. Wastewater shall 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 shall 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 shall be present prior to spray irrigating.

SPECIAL CONDITIONS

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 shall be located on site to monitor daily precipitation. The permittee shall 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 shall 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 shall install 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 E** of this permit or other format as approved by the Department.

L. VEGETATION MANAGEMENT

1. The permittee shall 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 shall be maintained to maximize vegetation and forest canopy density in order to minimize off-site drift of spray.

SPECIAL CONDITIONS

M. LAGOON MAINTENANCE

1. The banks of the lagoon shall be inspected periodically during the operating season (at least two times per year) and properly maintained at all times. There shall 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 shall 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 shall be kept free of all vegetation (i.e. grasses, reeds, cattails, etc) that hinders the operation of the lagoon.
3. The permittee shall maintain the lagoon freeboard at a level no higher than design levels.
4. The treatment and storage lagoons shall 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) shall be properly disposed of in accordance with all applicable State and Federal rules and regulations.

N. INSPECTIONS AND MAINTENANCE

The permittee shall periodically inspect all system components to ensure the facility is being operated and maintained in accordance with the design of the system. Maintenance logs shall be maintained for each major system component including pumps, pump stations, septic tanks, lagoons, spray apparatus, and pipes. At a minimum, the logs shall 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 shall maintain an approved groundwater quality monitoring plan prepared by a professional qualified in water chemistry. The plan shall include historical and current monitoring data for each monitoring point, represented in tabular and graphical form.
2. All monitoring wells shall be equipped with a cap and lock to limit access and shall be maintained in a secured state at all times. The integrity of the monitoring wells shall 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.

SPECIAL CONDITIONS

P. PUBLIC ACCESS TO LAND APPLICATION SITES AND SIGNAGE

Access to the land application sites shall be limited during the season of active site use. The permittee shall 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 waste water collection and treatment system by a non-domestic source (user) shall not pass through or interfere with the operation of the treatment system. The licensee shall conduct an Industrial Waste Survey (IWS) at any time a new industrial user proposes to discharge within its jurisdiction, an existing user proposes to make a significant change in its discharge, or, at an alternative minimum, once every permit cycle, and submit the results to the Department. The IWS shall 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. MONITORING AND REPORTING

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

SPECIAL CONDITIONS

S. MONITORING AND REPORTING (cont'd))

Maine Department of Environmental Protection
Bureau of Land and Water Quality
Department of Environmental Protection
17 State House Station
Augusta, ME 04333

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

T. 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.

U. 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
WET and Chemical Specific Data Report Form**

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

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

| | |
|------------------------------------|--|
| Licensed Flow (MGD) | Flow Avg. for Month (MGD) ⁽²⁾ |
| Acute dilution factor | |
| Chronic dilution factor | |
| Human health dilution factor | |
| Criteria type: M(arine) or F(resh) | |

Last Revision - April 25, 2012

Flow for Day (MGD)⁽¹⁾ _____ Date Sample Collected _____ Date Sample Analyzed _____
 Laboratory Address _____ Telephone _____
 Lab Contact _____ Lab ID # _____

MARINE AND ESTUARY VERSION

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

Please see the footnotes on the last page.

| WHOLE EFFLUENT TOXICITY | | Receiving Water or Ambient | Effluent Concentration (ug/L or as noted) | Reporting Limit Check | Possible Exceedance ⁽⁷⁾ |
|--|-----------------|----------------------------|---|-----------------------|------------------------------------|
| | | | WET Result, % Do not enter % sign | Acute | Chronic |
| Mysid Shrimp | | | | | |
| Sea Urchin | | | | | |
| WET CHEMISTRY | | | | | |
| pH (S.U.) ⁽⁹⁾ | | (8) | | | |
| Total Organic Carbon (mg/L) | | NA | | | |
| Total Solids (mg/L) | | NA | | | |
| Total Suspended Solids (mg/L) | | NA | | | |
| Salinity (ppt) | | | | | |
| ANALYTICAL CHEMISTRY ⁽³⁾ | | | | | |
| Also do these tests on the effluent with WET. Testing on the receiving water is optional | | | | | |
| TOTAL RESIDUAL CHLORINE (mg/L) ⁽⁹⁾ | Reporting Limit | Effluent Limits, ug/L | Health ⁽⁶⁾ | Acute ⁽⁶⁾ | Chronic ⁽⁶⁾ |
| AMMONIA | 0.05 | | NA | | |
| ALUMINUM | NA | | (8) | | |
| ARSENIC | 5 | | (8) | | |
| CADMIUM | 1 | | (8) | | |
| CHROMIUM | 10 | | (8) | | |
| COPPER | 3 | | (8) | | |
| CYANIDE | 5 | | (8) | | |
| LEAD | 3 | | (8) | | |
| NICKEL | 5 | | (8) | | |
| SILVER | 1 | | (8) | | |
| ZINC | 5 | | (8) | | |

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form

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

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

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

[illegible]

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form

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

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

Notes:

- (1) Flow average for day pertains to WET/PP composite sample day.
- (2) Flow average for month is for month in which WET/PP sample was taken.
- (3) Analytical chemistry parameters must be done as part of the WET test chemistry.
- (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 B

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

Facility Name _____ MEPDES Permit # _____
Pipe # _____

Facility Representative _____ Signature _____

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

Facility Telephone # _____ Date Collected _____ Date Tested _____
mm/dd/yy mm/dd/yy

Chlorinated? _____ Dechlorinated? _____

| Results | % effluent | | Effluent Limitations |
|---------|---------------|------------|----------------------|
| | mysisd shrimp | sea urchin | |
| A-NOEL | | | A-NOEL |
| C-NOEL | | | C-NOEL |

| Data summary | mysisd shrimp | sea urchin | Salinity Adjustment |
|-------------------------|---------------|--------------|---------------------|
| | % survival | % fertilized | |
| QC standard | >90 | >70 | brine |
| lab control | | | sea salt |
| receiving water control | | | other |
| conc. 1 (%) | | | |
| conc. 2 (%) | | | |
| conc. 3 (%) | | | |
| conc. 4 (%) | | | |
| conc. 5 (%) | | | |
| conc. 6 (%) | | | |
| stat test used | | | |

place * next to values statistically different from controls

| Reference toxicant | mysisd shrimp | sea urchin |
|--------------------|---------------|------------|
| | A-NOEL | C-NOEL |
| toxicant / date | | |
| limits (mg/L) | | |
| results (mg/L) | | |

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

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

ATTACHMENT C

Maine Department of Environmental Protection

Effluent Mercury Test Report

Name of Facility: _____

Federal Permit # ME _____

Pipe # _____

Purpose of this test:

☐

Initial limit determination

☐

Compliance monitoring for: year _____ calendar quarter _____

☐

Supplemental or extra test

SAMPLE COLLECTION INFORMATION

Sampling Date:

| | | |
|----|----|----|
| mm | dd | yy |
|----|----|----|

Sampling time: _____ AM/PM

Sampling Location:

Weather Conditions: _____

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

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

Suspended Solids _____ mg/L

Sample type: _____ Grab (recommended) or
_____ Composite

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

Date of analysis: _____

Result: _____ ng/L (PPT)

Please Enter Effluent Limits for your facility

Effluent Limits:

Average = _____ ng/L

Maximum = _____ ng/L

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

CERTIFICATION

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

By: _____

Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT D

Attachment D

Monthly Operations Log

Town of Thomaston (WDL #W002643)

(Month/Year) _____

Spray Field # _____

Weekly Application Rate: _____ gallons/week

| A | B | C | D | E | F | G |
|------|---|------------------|---------|--------------------------------------|--|-----------------------------------|
| Date | 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 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |
| 31 | | | | | | |

Signature of Responsible Official: _____ Date _____

ATTACHMENT E

Spray Application Report by Week

[illegible]

Signature of Responsible Official: _____ Date _____

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

FACT SHEET

Date: February 25, 2013

MEPDES PERMIT NUMBER: **ME0100668**
MAINE WDL NUMBER: **W-002643-6C-G-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
thompcd@midcoast.com**

1. APPLICATION SUMMARY

- a. Application The Town of Thomaston has submitted a timely and complete application to the Department for renewal of combination Maine Waste Discharge License (WDL) #W-002643-5L-E-R and Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100668, which was issued on June 21, 2008, 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 up to a maximum of 81,457 gallons/acre/week 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)

- 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, is not connected to the collection system and therefore contributes neither sanitary nor industrial wastewater flows. As of the summer of 2008, Thomaston will have 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 300-acre site.

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 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 6-acres. The storage lagoon depth ranges from a minimum of 4-feet to a maximum of 20-feet, with 3-feet of

1. APPLICATION SUMMARY (cont'd)

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. One to two spray fields are sprayed per day and each field is typically sprayed twice per week.

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.

2. LICENSE SUMMARY

- a. Terms and conditions - This licensing action is carrying forward all the terms and conditions of the previous licensing action except that this license is;
 1. Expressing the application rates as a total number of gallons permitted to be applied to each sprayfield as a whole (gal/week) rather than expressed as gal/acre/day. This gives the licensee the flexibility to more efficiently manage sub-areas within each sprayfield by applying more waste water to areas with better quality soils and restrict the applications to areas with lesser quality soils.

2. LICENSE SUMMARY (cont'd)

2. Eliminating the technology based concentration limit of 100 mg/L for total suspended solids for the storage lagoon effluent based on new Department policy for lagoon systems.
 3. Incorporating the cumulative average and maximum total mercury limits (originally established in a May, 23, 2000, permit modification) into the permit for the discharge to the St. George River.
- b. History: 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.

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.

2. PERMIT SUMMARY (cont'd)

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.

February 29, 2006 – The Department denied a February 22, 2006 request from Thomaston for modification of the required sampling methodology for BOD₅ 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.

January 25, 2013 – The permittee submitted a timely and complete application to the Department to renew MEPDES Permit #ME0100668 / Maine WDL #W-002643-5L-E-R.

3. CONDITIONS OF PERMITS/LICENSES

Maine law, 38 M.R.S.A. 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.A., 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.

4. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S.A., 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.A., 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

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

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.A. § 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.A. § 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 2010 *Integrated Water Quality Monitoring and Assessment Report* (DEPLW0817), prepared pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act includes the receiving water in the designation *St. George River* (Waterbody ID 724-10, DMR Area 27), *St. George River (DMR Area 27)* in Category 2, Estuarine and Marine Waters Attaining Some Designated Uses – Insufficient Information for Other Uses, Category 4-B-1, Estuarine and Marine Waters Impaired by Pollutants – Pollution Control Requirements Reasonably Expected to Result in Attainment. The listing in Category 2 identifies a 1,046.4 acre (1.635 sq.mi.) segment of Class SB water, with "STP; seasonal closure" and the last year sampled listed as "current". The listing in Category 4-B-1 references sampling conducted in 1999, with impairments of "Marine Life Use Support; Bacteria" for dissolved oxygen previously caused by "Municipal Point Source" and more recently "Nonpoint source".

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.

5. RECEIVING WATER QUALITY CONDITIONS (SURFACE WATER)

The Department has no information that the Thomaston facility, as permitted herein, causes or contributes to non-attainment conditions in the receiving water. 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 Permit Special Condition R and effluent limitations, monitoring and operational requirements, and/or wastewater treatment requirements adjusted accordingly.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SURFACE WATER DISCHARGE)

- a. Flow: The previous permitting action established a 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 2009 through March 2012 which indicated that the permittee has reported values as follows;

Flow (DMRs = 11)

| Value | Limit (MGD) | Range (MGD) | Mean (MGD) |
|-----------------|-------------|--------------|------------|
| Monthly Average | 0.90 | 0.30 – 0.86 | 0.72 |
| Daily maximum | Report | 0.496 – 0.90 | 0.80 |

- b. Dilution Factors: Department Regulation Chapter 530 Surface Water Toxics Control Program, §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.*

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SURFACE WATER DISCHARGE) (cont'd)

- (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.*

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. Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS): The previous permitting action carried forward BOD₅ 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 BOD₅ and TSS pursuant to Department rule Chapter 525(3)(III)(a&b)(3), which is being carried forward as well, except in the circumstances where the monthly average influent concentration is less than 200 mg/L.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SURFACE WATER DISCHARGE) (cont'd)

The Department reviewed DMR data for Thomaston for the period of January 2009 through March 2012 and found the following information:

BOD Mass (DMR=11)

| Value | Limit (lbs/day) | Range (lbs/day) | Average (lbs/day) |
|-----------------|-----------------|-----------------|-------------------|
| Monthly Average | 225 | 16 - 66 | 38 |
| Daily Maximum | 375 | 21 - 102 | 50 |

BOD Concentration (DMR=11)

| Value | Limit (mg/L) | Range (mg/L) | Average (mg/L) |
|-----------------|--------------|--------------|----------------|
| Monthly Average | 30 | 2 - 9 | 6 |
| Daily Maximum | 50 | 3 - 14 | 7 |

BOD % Removal (DMR=3)

| Value | Limit (%) | Range (%) | Average (%) |
|-----------------|-----------|-----------|-------------|
| Monthly Average | 85 | 95-98 | 97 |

TSS mass (DMR=11)

| Value | Limit (lbs/day) | Range (lbs/day) | Average (lbs/day) |
|-----------------|-----------------|-----------------|-------------------|
| Monthly Average | 225 | 7 - 45 | 19 |
| Daily Maximum | 375 | 7 - 101 | 27 |

TSS concentration (DMR=11)

| Value | Limit (mg/L) | Range (mg/L) | Average (mg/L) |
|-----------------|--------------|--------------|----------------|
| Monthly Average | 30 | 1 - 7 | 3 |
| Daily Maximum | 50 | 1 - 15 | 4 |

TSS % Removal (DMR=3)

| Value | Limit (%) | Range (%) | Average (%) |
|-----------------|-----------|-----------|-------------|
| Monthly Average | 85 | 98-99 | 99 |

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SURFACE WATER DISCHARGE) (cont'd)

- d. Settleable Solids: The previous permitting action established 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 2009 – March 2012 indicates settleable solids have been reported as follows:

Settleable solids concentration (DMRs 11)

| Value | Limit (ml/L) | Range (ml/L) | Average (ml/L) |
|---------------|--------------|--------------|----------------|
| Daily Maximum | 0.3 | 0.0 - 0.1 | 0.05 |

- e. Fecal Coliform Bacteria: The previous permitting action carried forward monthly average and daily maximum fecal coliform bacteria limits of 15 colonies/100 ml and 50 colonies/100 ml respectively, from previous permitting and licensing actions. These limits are consistent with the National Shellfish Sanitation Program and are being carried forward in this permitting action. 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 2009 through March 2012 and found the following information:

Fecal coliform bacteria (DMRs = 11)

| Value | Limit (col/100 ml) | Range (col/100 ml) | Mean (col/100 ml) |
|-----------------|--------------------|--------------------|-------------------|
| Monthly Average | 15 | 0 – 1.5 | 0.75 |
| Daily Maximum | 50 | 1 – 10 | 2 |

- 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 9 of this Fact Sheet, end-of-pipe water quality based thresholds for TRC may be calculated as follows:

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SURFACE WATER DISCHARGE) (cont'd)

| Criterion (mg/L) | | Dilution Factors | | Calculated 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 2009 through March 2012.

Total residual chlorine (DMRs=11)

| Value | Limit (mg/L) | Range (mg/L) | Mean (mg/L) |
|---------------|--------------|--------------|-------------|
| Daily Maximum | 1.0 | 0.38 – 0.98 | 0.68 |

- g. pH: 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 2009 through March 2012 indicates values have been reported as follows:

pH (DMRs = 11) Lagoon Effluent

| Value | Limit (su) | Range (su) | Average (su) |
|---------------|------------|-------------|--------------|
| Daily Maximum | 6.0 – 9.0 | 6.62 – 8.71 | n/a |

- h. Mercury: Pursuant to Maine law, 38 M.R.S.A. §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.A. §413, sub-§11 specifying that interim mercury limits and monitoring requirements were to remain in effect.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SURFACE WATER DISCHARGE) (cont'd)

The limitations are being incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit. Maine law 38 M.R.S.A., §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 January 2004 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 = 11)

| Value | Limit (ng/L) | Range (ng/L) | Mean (ng/L) |
|---------|--------------|--------------|-------------|
| Average | 16.8 | 1.6 – 9.4 | 5.8 |
| Maximum | 25.2 | 1.6 – 9.4 | 5.8 |

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

- i. Whole Effluent Toxicity (WET) & Chemical-Specific Testing: Maine law, 38 M.R.S.A., 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.

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.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SURFACE WATER DISCHARGE) (cont'd)

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 $\geq 20:1$ but $<100:1$.

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

Level IV – chronic dilution $>500:1$ and $Q \leq 1.0$ MGD

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 $\geq 100:1$ but $<500:1$. Chapter 530(2)(D)(1) specifies that routine 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 | 1 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 |
|-------|-------------|----------------------------|----------------------|
| III | 1 per year | 1 per year | 4 per year |

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.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SURFACE WATER DISCHARGE) (cont'd)

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 exceedence 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 25, 2013, 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 exceedence as calculated pursuant to section 3(E)"*. Based on the results of the 2/25/13 statistical evaluation, the permittee qualifies for the testing waiver. Therefore, this permit action establishes a screening level WET testing requirements as follows:

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 |

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SURFACE WATER DISCHARGE) (cont'd)

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 R, *Reopening of Permit For Modification*, of this permit to establish applicable limitations and monitoring requirements.

Chemical specific testing evaluation

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

Chapter 530 §4(C), states *"The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions."* The Department shall use the same general methods as those in section 4(D) to determine background concentrations. For pollutants not listed by the Department, an assumed concentration of 10% of the applicable water quality criteria must be used in calculations. The Department has very limited information on the background levels of metals in the water column of St. George River. Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

Chapter 530 4(E), states *"In allocating assimilative capacity for toxic pollutants, the Department shall hold a portion of the total capacity in an unallocated reserve to allow for new or changed discharges and non-point source contributions. The unallocated reserve must be reviewed and restored as necessary at intervals of not more than five years. The water quality reserve must be not less than 15% of the total assimilative quantity"*. Therefore, the Department is reserving 15% of the applicable water quality criteria in the calculations of this permitting action.

Chapter 530 §(3)(E) states *"... that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedence of water quality criteria, appropriate water quality-based limits must be established in any licensing action."*

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SURFACE WATER DISCHARGE) (cont'd)

As with WET test results, on February 25, 2013, 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.

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 exceedence as calculated pursuant to section 3(E)*". Based on the results of the 2/25/13 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:

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

(SPRAY IRRIGATION)

- j. Explanation of Monitoring Parameters: 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 2009 through 2012 is included on subsequent pages.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SPRAY IRRIGATION) (cont'd)

1. Biochemical Oxygen Demand (BOD₅) - BOD₅ monitoring is required in the storage lagoon effluent (limit established), carried forward from the previous permitting action. Monitoring for BOD₅ 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 (limit established) and in the monitoring wells (monitoring only), 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 limit of 100 mg/L established in the previous license as a BPT standard is being changed to a “Report” only requirement in this license due to a policy change by the Department. 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.
3. Nitrate-nitrogen – Nitrate-nitrogen monitoring is required in the storage lagoon effluent (monitoring only) and in the monitoring wells (limit established), carried forward from the previous permitting action. Nitrate-nitrogen compounds are by-products 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.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SPRAY IRRIGATION) (cont'd)

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. The previous permitting action established metals monitoring and reporting requirements at a screening level frequency (one round of testing during the 12-month period prior to permit expiration). This permitting action is revising the metals testing requirements to the fourth calendar quarter of the fourth year of the permit to provide for earlier availability of data. The Department reserves the right to reopen this permit in accordance with Special Condition R, *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 (BOD₅); 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.
- 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 Discharge Monitoring Report (DMR) data for the WUD for spray seasons 2009 through 2012 indicates monitoring results have been reported as follows:

BOD Concentration (DMRs = 15) Lagoon Effluent

| Value | Limit (mg/L) | Range (mg/L) | Average (mg/L) |
|---------------|--------------|--------------|----------------|
| Daily Maximum | 100 | 4 - 26 | 9 |

TSS Concentration (DMRs = 15) Lagoon Effluent

| Value | Limit (mg/L) | Range (mg/L) | Average (mg/L) |
|---------------|--------------|--------------|----------------|
| Daily Maximum | 100 | <4 - 66 | 23 |

Nitrate-nitrogen Concentration (DMRs = 15) Lagoon Effluent

| Value | Limit (mg/L) | Range (mg/L) | Average (mg/L) |
|---------------|--------------|--------------|----------------|
| Daily Maximum | Report | <0.3 - 1.9 | 0.4 |

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

pH (DMRs = 15) Lagoon Effluent

| Value | Limit (su) | Range (su) | Average (su) |
|---------------|------------|-------------|--------------|
| Daily Maximum | Report | 7.32 – 9.59 | n/a |

Freeboard (DMRs = 48) Lagoon

| Value | Limit (feet) | Range (feet) | Average (feet) |
|---------------|--------------|--------------|----------------|
| Daily Maximum | Report | 3.0 – 18 | 11.0 |

Metals (n=1)

| Parameter | Limit | Range | Mean |
|------------------|--------|-------|------|
| Arsenic (total) | Report | n/a | 7 |
| Cadmium (total) | Report | n/a | 2.4 |
| Chromium (total) | Report | n/a | <5 |
| Copper (total) | Report | n/a | 36 |
| Lead (total) | Report | n/a | 9 |
| Nickel (total) | Report | n/a | 8 |
| Zinc (total) | Report | n/a | 60 |

1. **Spray Field Wastewater Application Rate:** The previous permitting action established weekly maximum application rates of 81,450 gal/acre/week (3 inches / acre) for spray irrigation fields FLD#1, FLD#2, FLD#3, FLD#4, and FLD#5.

This permitting action is expressing the application rates as a total number of gallons permitted to be applied to each sprayfield as whole rather than expressed as gal/acre/day. This gives the licensee the flexibility to more efficiently manage sub-areas within each sprayfield by applying more waste water to areas with better quality soils and restrict the applications to areas with lesser quality soils. Overall, the application rate for each field will be limited to the same total quantity of waste water as authorized in the previous licensing action but the weekly limits have been modified based on past operational experience within each sprayfield. The total field application rates can be calculated 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 |

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SPRAY IRRIGATION) (cont'd)

The weekly application limits are established as a margin of safety against hydraulically overloading a spray field and are based on the treatment capabilities of the in-situ soils. Regardless of the calculated rate, the system operator shall 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 established 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 2009 through 2012 and found the following spray application rate information.

Application rate (81,450 gal/acre/week)(DMRs = 29)

| Fields | Range - Rate (gal./acre/week) | Mean - Rate (gal./acre/week) | Range - Total (MG/month) | Mean - Total (MG/month) |
|--------|----------------------------------|---------------------------------|-----------------------------|----------------------------|
| FLD #1 | 19,943 – 81,197 | 67,502 | 0.407 – 3.257 | 2.026 |
| FLD #2 | 37,037 – 81,086 | 76,516 | 0.388 – 3.919 | 2.565 |
| FLD #3 | 36,182 – 78,538 | 76,111 | 0.811 – 4.099 | 2.695 |
| FLD #4 | 67,108 – 79,365 | 71,021 | 0.761 – 4.321 | 2.397 |
| FLD #5 | 35,897 – 78,647 | 69,968 | 0.424 – 4.212 | 2.4562 |

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).

- m. Groundwater Monitoring Wells: Thomaston monitors the following groundwater monitoring wells for compliance with this WDL.

| 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 |

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SPRAY IRRIGATION) (cont'd)

- 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 shall 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 shall be maintained in operable condition for possible future monitoring.

MW 002BD (n=8)

| Parameter | Limit | Range | Mean |
|---------------------------------|--------|-------------|------|
| Temperature (°C) | Report | 9.3 – 13.7 | 11.0 |
| Specific conductance (umhos/cm) | Report | 161 - 377 | 297 |
| pH (standard units) | Report | 5.52 – 7.83 | n/a |
| Total suspended solids (mg/L) | Report | 22 - 212 | 83 |
| Nitrate nitrogen (mg/L) | Report | <0.3 – 0.6 | 0.2 |
| Depth to ground water (feet) | Report | 0.9 – 3.0 | 1.9 |

MW 002BD (n=1)

| Parameter | Limit | Range | Mean |
|------------------|--------|-------|------|
| Arsenic (total) | Report | n/a | <5 |
| Cadmium (total) | Report | n/a | <0.6 |
| Chromium (total) | Report | n/a | <5 |
| Copper (total) | Report | n/a | <3 |
| Lead (total) | Report | n/a | 4 |
| Nickel (total) | Report | n/a | <5 |
| Zinc (total) | Report | n/a | 11 |

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SPRAY IRRIGATION) (cont'd)

MW 002BS (n=8)

| Parameter | Limit | Range | Mean |
|---------------------------------|--------|-------------|------|
| Temperature (°C) | Report | 8.0 – 13.6 | 10.8 |
| Specific conductance (umhos/cm) | Report | 140 - 527 | 296 |
| pH (standard units) | Report | 5.43 – 7.71 | n/a |
| Total suspended solids (mg/L) | Report | 12 - 100 | 36 |
| Nitrate nitrogen (mg/L) | Report | 0 – 0.7 | 0.2 |
| Depth to ground water (feet) | Report | 1.0 – 2.9 | 2.1 |

MW 002BS (n=1)

| Parameter | Limit | Range | Mean |
|------------------|--------|-------|------|
| Arsenic (total) | Report | n/a | <5 |
| Cadmium (total) | Report | n/a | <0.6 |
| Chromium (total) | Report | n/a | <5 |
| Copper (total) | Report | n/a | <3 |
| Lead (total) | Report | n/a | 3 |
| Nickel (total) | Report | n/a | <5 |
| Zinc (total) | Report | n/a | 12 |

MW 002DD (n=8)

| Parameter | Limit | Range | Mean |
|---------------------------------|--------|-------------|------|
| Temperature (°C) | Report | 8.7 – 13.9 | 11.0 |
| Specific conductance (umhos/cm) | Report | 157 - 311 | 238 |
| pH (standard units) | Report | 5.74 – 7.40 | n/a |
| Total suspended solids (mg/L) | Report | <4 - 22 | 8 |
| Nitrate nitrogen (mg/L) | Report | 0 – 0.1 | 0.1 |
| Depth to ground water (feet) | Report | 0.1 – 2.5 | 0.9 |

MW 002DD (n=1)

| Parameter | Limit | Range | Mean |
|------------------|--------|-------|------|
| Arsenic (total) | Report | n/a | <5 |
| Cadmium (total) | Report | n/a | 0.7 |
| Chromium (total) | Report | n/a | <5 |
| Copper (total) | Report | n/a | <3 |
| Lead (total) | Report | n/a | <3 |
| Nickel (total) | Report | n/a | <5 |
| Zinc (total) | Report | n/a | 9 |

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SPRAY IRRIGATION) (cont'd)

MW 002DS (n=8)

| Parameter | Limit | Range | Mean |
|---------------------------------|--------|-------------|------|
| Temperature (°C) | Report | 8.8 – 13.5 | 11.4 |
| Specific conductance (umhos/cm) | Report | 157 - 341 | 257 |
| pH (standard units) | Report | 5.90 – 7.17 | n/a |
| Total suspended solids (mg/L) | Report | <4 - 160 | 40 |
| Nitrate nitrogen (mg/L) | Report | 0.0 - <2.0 | 0.50 |
| Depth to ground water (feet) | Report | 0.3 – 1.9 | 1.0 |

MW 002DS (n=2)

| Parameter | Limit | Range | Mean |
|------------------|--------|-------|------|
| Arsenic (total) | Report | n/a | 91 |
| Cadmium (total) | Report | n/a | 1.8 |
| Chromium (total) | Report | n/a | <5 |
| Copper (total) | Report | n/a | <3 |
| Lead (total) | Report | n/a | 3 |
| Nickel (total) | Report | n/a | <5 |
| Zinc (total) | Report | n/a | 12 |

MW 002GD (n=8)

| Parameter | Limit | Range | Mean |
|---------------------------------|--------|------------|------|
| Temperature (°C) | Report | 8.3 – 12.6 | 10.9 |
| Specific conductance (umhos/cm) | Report | 189 - 488 | 317 |
| pH (standard units) | Report | 5.9 – 6.8 | n/a |
| Total suspended solids (mg/L) | Report | <4 – 6 | 3 |
| Nitrate nitrogen (mg/L) | Report | 0 – 0.2 | 0.1 |
| Depth to ground water (feet) | Report | 0 – 0.6 | 0.2 |

MW 002GD (n=1)

| Parameter | Limit | Range | Mean |
|------------------|--------|-------|------|
| Arsenic (total) | Report | n/a | 10 |
| Cadmium (total) | Report | n/a | <0.6 |
| Chromium (total) | Report | n/a | <5 |
| Copper (total) | Report | n/a | <3 |
| Lead (total) | Report | n/a | <3 |
| Nickel (total) | Report | n/a | 19 |
| Zinc (total) | Report | n/a | 17 |

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SPRAY IRRIGATION) (cont'd)

MW 002GS (n=8)

| Parameter | Limit | Range | Mean |
|---------------------------------|--------|------------|------|
| Temperature (°C) | Report | 8.1 – 14.0 | 12.1 |
| Specific conductance (umhos/cm) | Report | 89 - 469 | 277 |
| pH (standard units) | Report | 6.15 – 7.0 | n/a |
| Total suspended solids (mg/L) | Report | <4 - 15 | 5 |
| Nitrate nitrogen (mg/L) | Report | <0.1 – 0.1 | 0.1 |
| Depth to ground water (feet) | Report | 0 – 0.8 | 0.4 |

MW 002GS (n=1)

| Parameter | Limit | Range | Mean |
|------------------|--------|-------|------|
| Arsenic (total) | Report | n/a | <5 |
| Cadmium (total) | Report | n/a | 0.8 |
| Chromium (total) | Report | n/a | <5 |
| Copper (total) | Report | n/a | <3 |
| Lead (total) | Report | n/a | <3 |
| Nickel (total) | Report | n/a | <5 |
| Zinc (total) | Report | n/a | 12 |

MW 002HS (n=8) (background)

| Parameter | Limit | Range | Mean |
|---------------------------------|--------|-------------|------|
| Temperature (°C) | Report | 8.9 – 14.1 | 11.7 |
| Specific conductance (umhos/cm) | Report | 179 - 389 | 276 |
| pH (standard units) | Report | 5.78 – 7.11 | n/a |
| Total suspended solids (mg/L) | Report | <4 - 20 | |
| Nitrate nitrogen (mg/L) | Report | <0.1 – 0.1 | 0.1 |
| Depth to ground water (feet) | Report | 0.1 – 1.6 | 0.8 |

MW 002HS (n=1)(background)

| Parameter | Limit | Range | Mean |
|------------------|--------|-------|------|
| Arsenic (total) | Report | n/a | 13 |
| Cadmium (total) | Report | n/a | 0.6 |
| Chromium (total) | Report | n/a | <5 |
| Copper (total) | Report | n/a | <3 |
| Lead (total) | Report | n/a | 5.0 |
| Nickel (total) | Report | n/a | <5 |
| Zinc (total) | Report | n/a | 9.0 |

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(SPRAY IRRIGATION) (cont'd)

MW 002ID (n=8) (background)

| Parameter | Limit | Range | Mean |
|---------------------------------|--------|------------|------|
| Temperature (°C) | Report | 9.2 – 13.7 | 11.7 |
| Specific conductance (umhos/cm) | Report | 56 - 295 | 130 |
| pH (standard units) | Report | 5.8 – 6.5 | n/a |
| Total suspended solids (mg/L) | Report | <4 - 15 | 6 |
| Nitrate nitrogen (mg/L) | Report | <0.1 – 0.1 | 0.1 |
| Depth to ground water (feet) | Report | 0.3 – 1.2 | 0.8 |

MW 002ID (n=1) (background)

| Parameter | Limit | Range | Mean |
|------------------|--------|-------|------|
| Arsenic (total) | Report | n/a | <5 |
| Cadmium (total) | Report | n/a | <0.6 |
| Chromium (total) | Report | n/a | <5 |
| Copper (total) | Report | n/a | <3 |
| Lead (total) | Report | n/a | 3 |
| Nickel (total) | Report | n/a | <5 |
| Zinc (total) | Report | n/a | 8 |

- o. Lagoon Under-Drain Monitoring Requirements: 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.

A review of the DMR data for the spray seasons 2009 through 2012 indicate the following values have been reported.

Flow (DMRs=12)

| Value | Limit (gpm) | Range (gpm) | Mean(gpm) |
|---------------|-------------|-------------|-----------|
| Daily maximum | Report | 0.2 – 6.9 | 5 |

Specific conductance (DMRs=12)

| Value | Limit (umhos/cm) | Range (umhos/cm) | Mean (umhos/cm) |
|---------------|------------------|------------------|-----------------|
| Daily maximum | Report | 320 – 1,700 | 322 |

Temperature (DMRs=12)

| Value | Limit (°C) | Range (°C) | Mean (°C) |
|---------------|------------|------------|-----------|
| Daily maximum | Report | 17 - 212 | 16 |

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 17, 2013. 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).

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 Land and 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

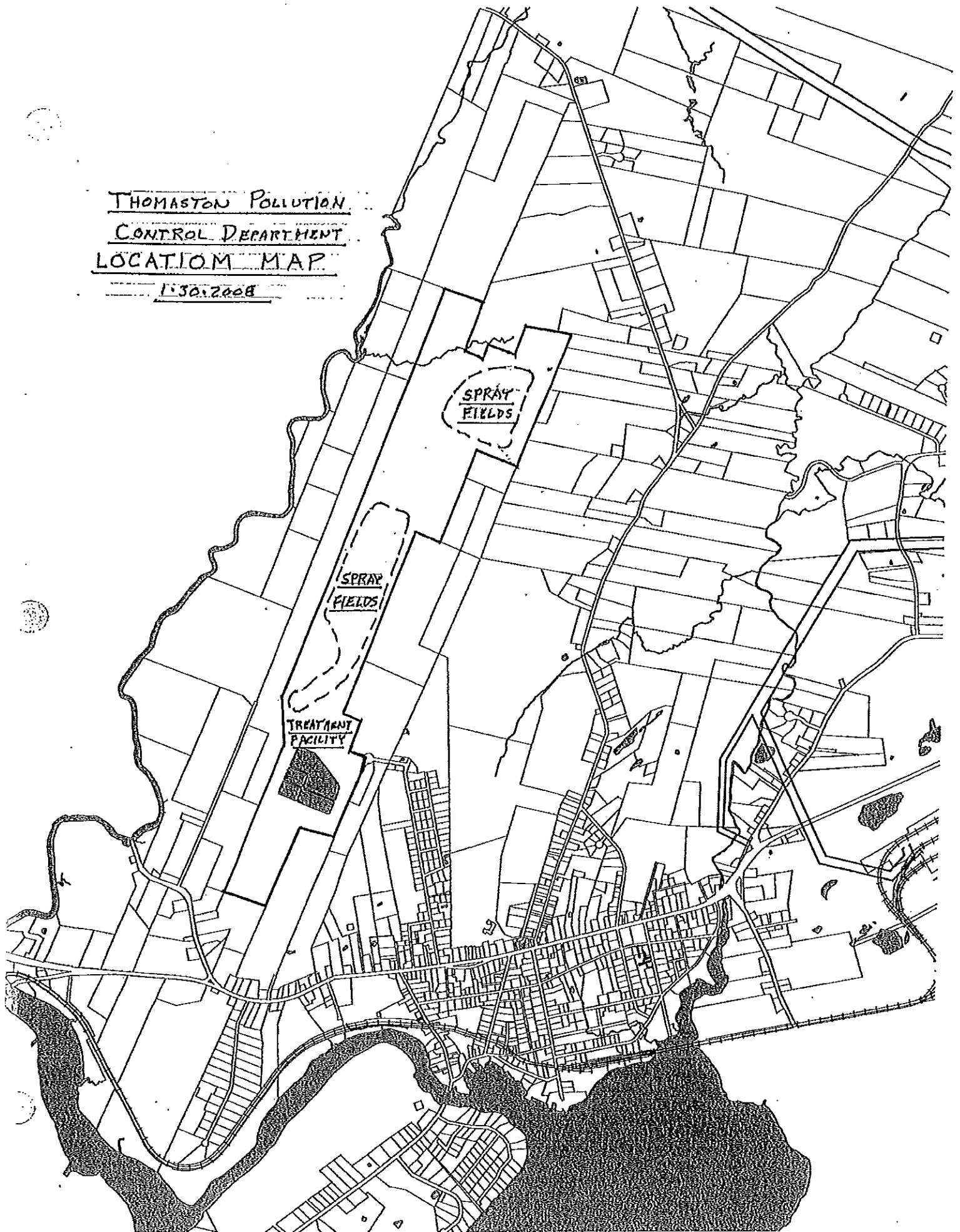
10. RESPONSE TO COMMENTS

During the period of February 25, 2013, through the issuance date of the license, the Department solicited comments on the proposed draft license to be issued for the licensee's facility. The Department did not receive comments from the licensee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the license. Therefore, the Department has not prepared a Response to Comments.

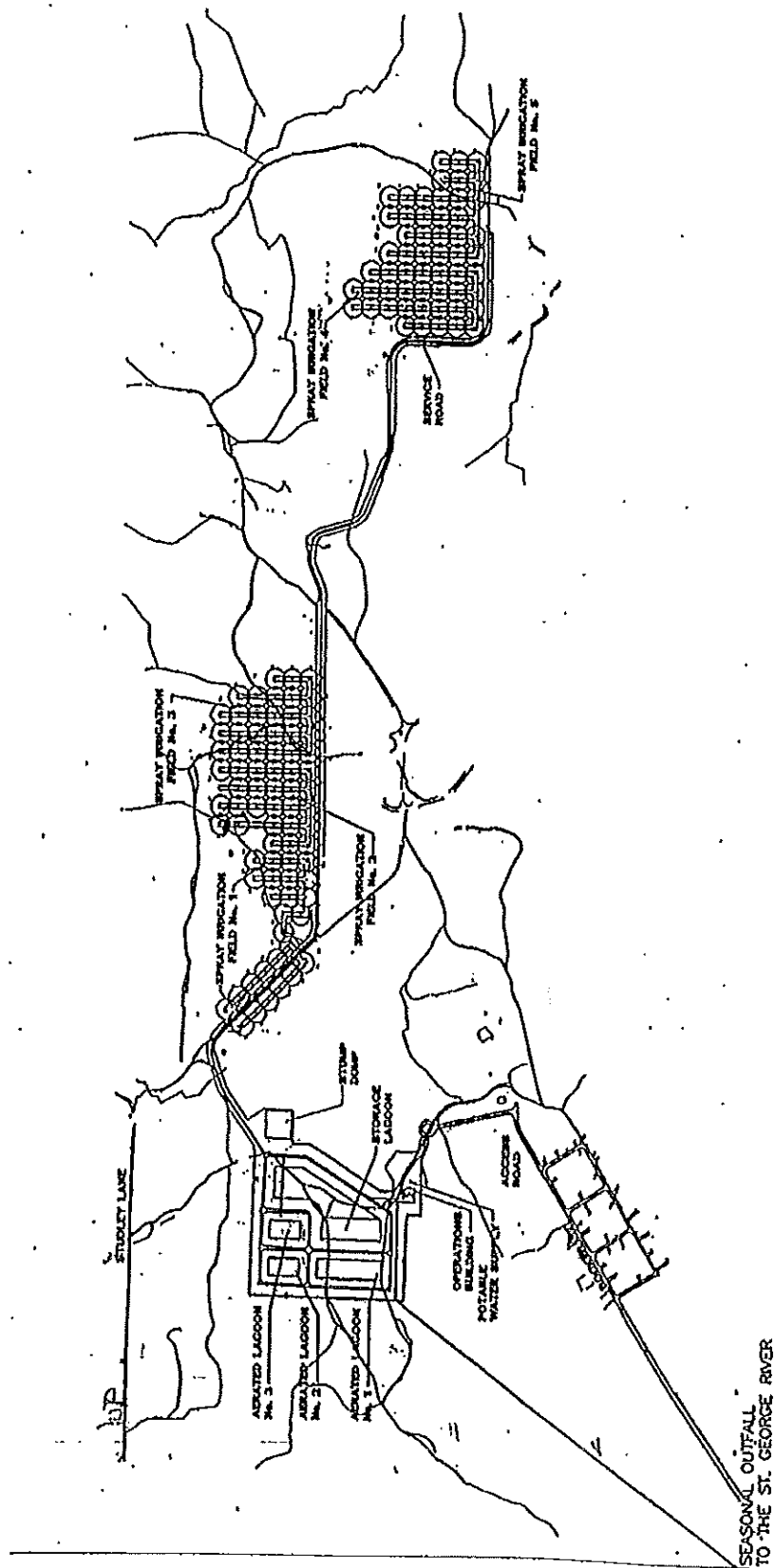
ATTACHMENT A

THOMASTON POLLUTION
CONTROL DEPARTMENT
LOCATION MAP

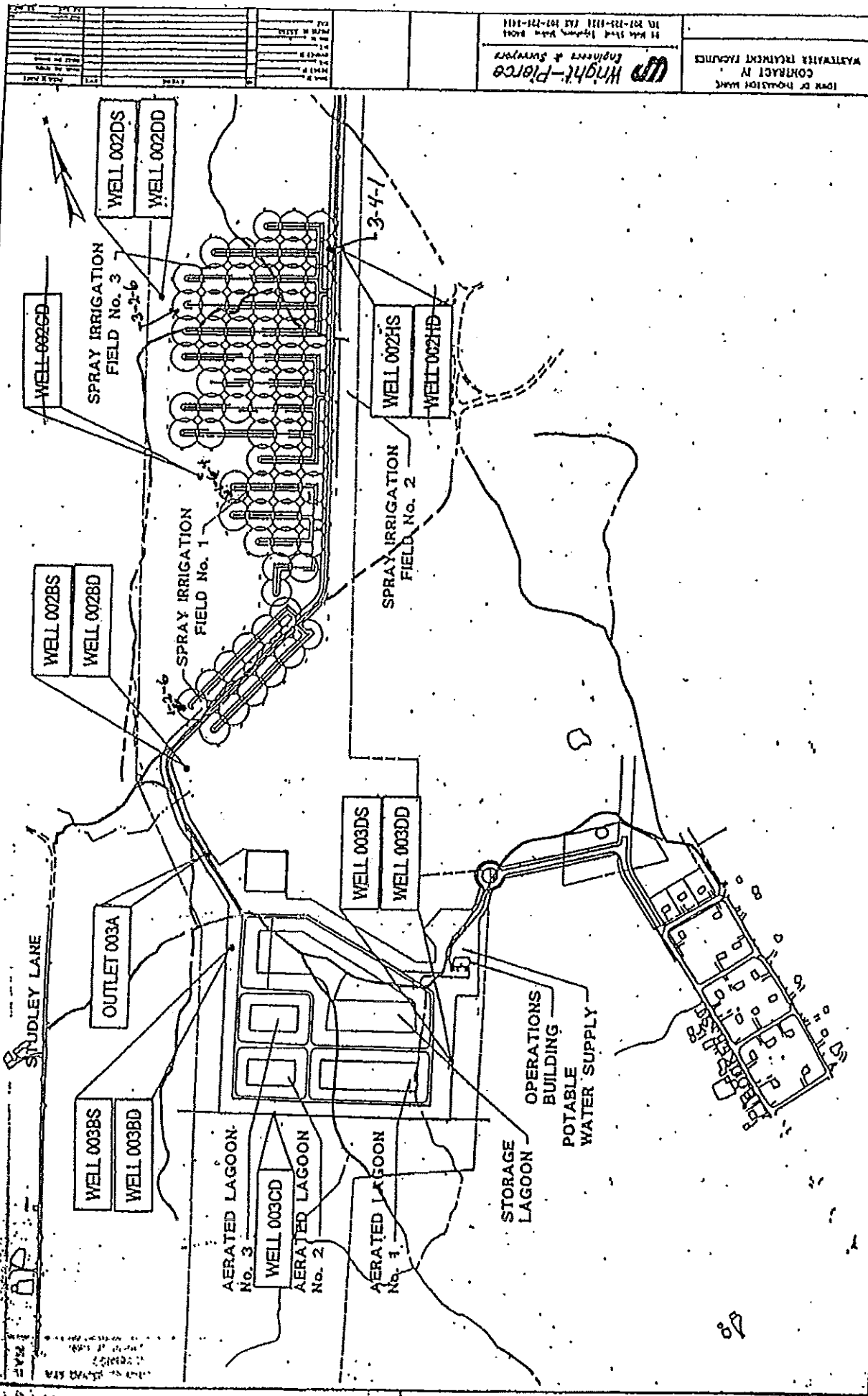
1.30.2008



ATTACHMENT B



GENERAL LAYOUT



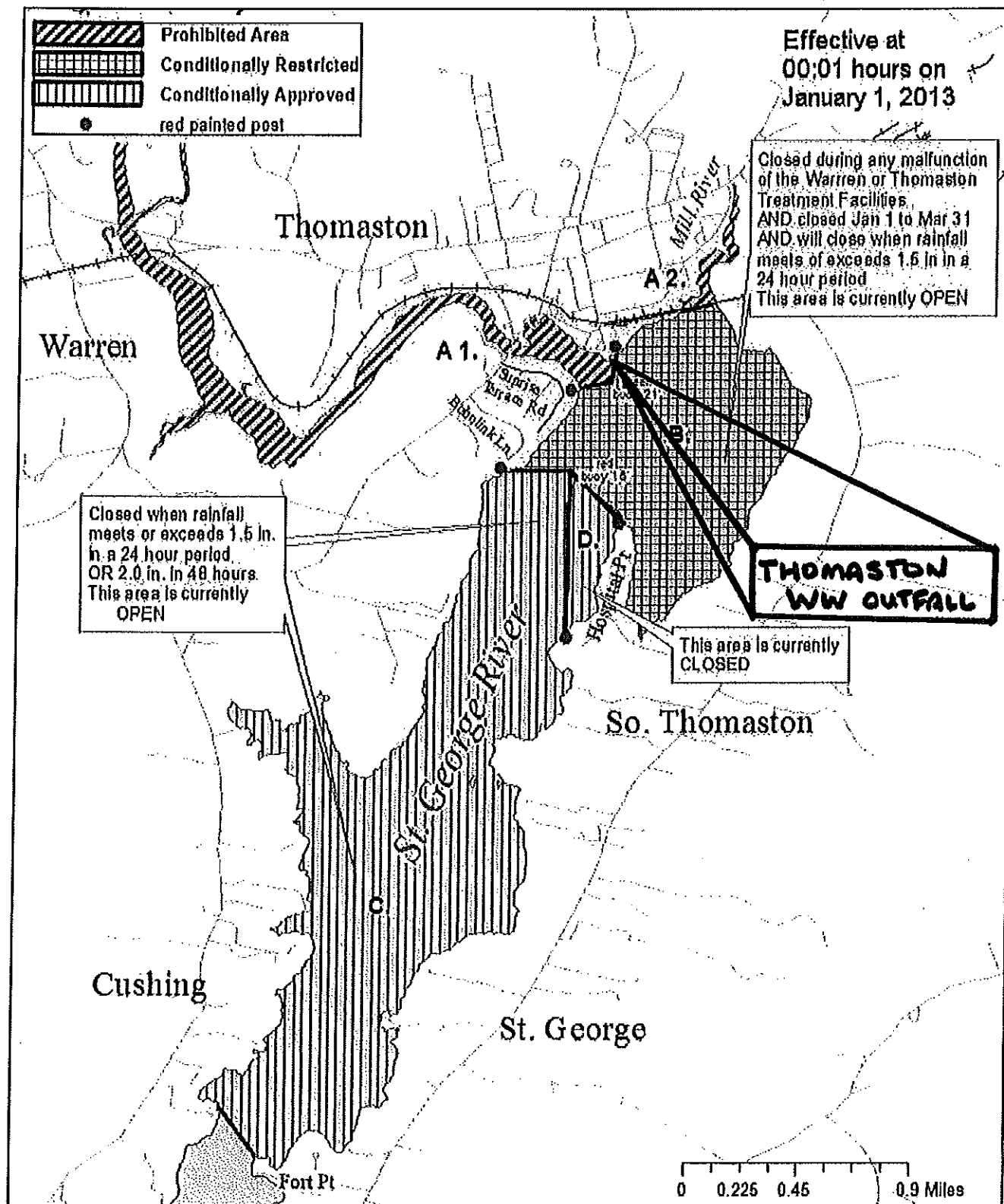
ATTACHMENT C



Maine Department of Marine Resources Pollution Area No. 27



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



ATTACHMENT D

ATTACHMENT E



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
Commissioner

MEPDES# _____ Facility Name _____

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

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

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

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

Scheduled Toxicity Testing for the next calendar year

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

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

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

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

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

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

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 760-3143

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

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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).

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

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

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

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

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

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

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

B. OPERATION AND MAINTENANCE OF FACILITIES

1. General facility requirements.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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maximize removal of pollutants unless authorization to the contrary is obtained from the Department.

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

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

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

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

5. Bypasses.

(a) Definitions.

- (i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
- (ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

- (b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.

(c) Notice.

- (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

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- (ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D(1)(f), below. (24-hour notice).

- (d) Prohibition of bypass.

- (i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:

- (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

- (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

- (C) The permittee submitted notices as required under paragraph (c) of this section.

- (ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (d)(i) of this section.

6. Upsets.

- (a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

- (b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

- (c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (i) An upset occurred and that the permittee can identify the cause(s) of the upset;

- (ii) The permitted facility was at the time being properly operated; and

- (iii) The permittee submitted notice of the upset as required in paragraph D(1)(f), below. (24 hour notice).

- (iv) The permittee complied with any remedial measures required under paragraph B(4).

- (d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

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C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

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D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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

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

- (A) Any unanticipated bypass which exceeds any effluent limitation in the permit.
- (B) Any upset which exceeds any effluent limitation in the permit.
- (C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

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

- (g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this section.
- (h) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

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

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

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

- (a) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (i) One hundred micrograms per liter (100 ug/l);
 - (ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
 - (iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

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

5. Publicly owned treatment works.

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

E. OTHER REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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.
