STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

January 20, 2015

Mr. William Rines
Town of Wiscasset
51 Bath Road
Wiscasset, Maine 04578
wwtp@wiscasset.org

Transmitted via electronic mail
Delivery confirmation requested

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100757
Maine Waste Discharge License (WDL) Application #W000370-6C-H-R
Proposed Draft Permit

Dear Mr. Rines:

Enclosed is a **proposed draft** MEPDES permit and Maine WDL (permit hereinafter) which the Department proposes to issue as a final document after opportunity for your review and comment. By transmittal of this letter you are provided with an opportunity to comment on the proposed draft permit and its conditions (special conditions specific to this permit are enclosed; standard conditions applicable to all permits are available upon request). If it contains errors or does not accurately reflect present or proposed conditions, please respond to this Department so that changes can be considered.

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

All comments must be received in the Department of Environmental Protection office on or before the close of business **Thursday, February 16, 2015.** Failure to submit comments in a timely fashion will result in the final document being issued as drafted. Comments in writing should be submitted to my attention at the following address:

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

If you have any questions regarding the matter, please feel free to call me at 215-1579.

Sincerely,

Yvette Meunier

Yvette M. Meunier
Division of Water Quality Management
Bureau of Land and Water Quality

Enc.

cc: Denise Behr, DEP/CMRO
David Webster, EPA
Alex Rosenberg, EPA
David Pincumbe, EPA
Barry Mower, DEP/CMRO
Lori Mitchell, DEP/CMRO
Pam Parker, DEP/CRMO
Environmental Reviewer, MeIFW
Olga Vergara, USEPA
Environmental Reviewer, MeDMR
Susanne Meidel, DEP/CMRO
Ivy Frignoca, Conservation Law Foundation

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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF WISCASSET	)	MAINE POLLUTANT DISCHARGE
WISCASSET, YORK COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
#ME0100757	)	WASTE DISCHARGE LICENSE
#W000370-6C-H-R **APPROVAL**	)	**RENEWAL**

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

APPLICATION SUMMARY

On August 15, 2014, the Department accepted as complete for processing, a renewal application for Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100757/Waste Discharge License (WDL) #W000370-6C-F-R, which was issued on October 26, 2009 for a five-year term. The 10/26/09 MEPDES permit authorized the monthly average discharge of 0.62 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the Sheepscot River, Class SB, in Wiscasset, Maine.

PERMIT SUMMARY

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

1. Revising the minimum monitoring frequency requirements for Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS) based on the results of facility testing;

2. Incorporating the interim mercury limits established by the Department for this facility pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001);

3. Eliminating the waiver from the requirement to achieve 85 percent removal for BOD_5 and TSS;

4. Revising the timing of the screening Whole Effluent Toxicity (WET), priority pollutant, analytical chemistry and surveillance level WET, analytical chemistry testing during permit cycle; and

5. Eliminating the effluent limitations and monitoring requirements for cyanide amendable to chlorination based on results of facility testing; and

6. Establishing monitoring requirements for nitrate, nitrite and total kjehldahl nitrogen.

CONCLUSIONS

Based on the findings summarized in the attached Fact Sheet dated JANUARY 20, 2015, and subject to the special and standard conditions that follow, the Department makes the following CONCLUSIONS:

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

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

3. The provisions of the State's antidegradation policy, *Classification of Maine waters*, 38 M.R.S.A. § 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;

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

   (e) Where a discharge will result in lowering the existing water quality of any 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 discharges will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of licenses*, 38 M.R.S.A. § 414-A(1)(D).

ACTION

Based on the findings and conclusions as stated above, the Department APPROVES the above noted application of the TOWN OF WISCASSET to discharge a monthly average of 0.62 MGD of secondary treated municipal wastewater to the Sheepscot River via Outfall #001A in Wiscasset, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

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

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

3. This permit and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all 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) (amended August 25, 2013)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS _____ DAY OF _____ 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____
PATRICIA W. AHO, Commissioner

Date filed with Board of Environmental Protection _____

Date of initial receipt of application: August 12, 2014
Date of application acceptance: August 15, 2014
This Order prepared by Yvette Meunier, BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **secondary treated municipal sanitary wastewater from Outfall #001A** to the Sheepscot River at Wiscasset. Such discharges are limited and must be monitored by the permittee as specified below[1]:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	0.62 MGD *[03]*	---	Report MGD *[03]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
Biochemical Oxygen Demand (BOD_5) *[00310]*	155 lbs/day *[26]*	233 lbs/day *[26]*	258 lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
BOD_5 % Removal[2] *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Total Suspended Solids (TSS) *[00530]*	155 lbs/day *[26]*	233 lbs/day *[26]*	258 lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
TSS % Removal[2] *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	3/Week *[03/07]*	Grab *[GR]*
Total Residual Chlorine (TRC)[3] *[50060]*	---	---	---	0.1 mg/L *[19]*	---	0.3 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
Fecal Coliform Bacteria[4] *[31616]*	---	---	---	15/100 ml[4] *[13]*	---	50/100 ml *[13]*	2/Week *[02/07]*	Grab *[GR]*
pH (Std. Units) *[00400]*	---	---	---	---	---	6.0 – 9.0 SU *[12]*	1/Day *[01/01]*	Grab *[GR]*

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

FOOTNOTES: See Pages 8 through 11 of this permit for applicable footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **secondary treated municipal sanitary wastewater from Outfall #001A** to the Sheepscot River at Wiscasset. Such discharges are limited and must be monitored by the permittee as specified below[(1)]:

Effluent Characteristic	**Discharge Limitations**				**Minimum Monitoring Requirements**	
	Average	**Daily Maximum**	**Monthly Average**	**Daily Maximum**	**Measurement Frequency**	**Sample Type**
Nitrate *[00620]* *May 1 – Oct. 31, 2015*	Report lbs/day *[26]*	Report lbs/day *[26]*	Report µg/L *[28]*	Report µg/L *[28]*	2/Month *[02/30]*	Grab *[GR]*
Nitrite *[00615]* *May 1 – Oct. 31, 2015*	Report lbs/day *[26]*	Report lbs/day *[26]*	Report µg/L *[28]*	Report µg/L *[28]*	2/Month *[02/30]*	Grab *[GR]*
Total Kjehldahl Nitrogen *[00625]* *May 1 – Oct. 31, 2015*	Report lbs/day *[26]*	Report lbs/day *[26]*	Report µg/L *[28]*	Report µg/L *[28]*	2/Month *[02/30]*	Grab *[GR]*
Mercury (Total)[(5)] *[71900]*	---	---	10.1 ng/L *[3M]*	15.1 ng/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*

FOOTNOTES: See Pages 8 through 11 of this permit for applicable footnotes.

Monthly

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. ***SURVEILLANCE LEVEL*** **-** Beginning upon 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). Such discharges are limited and must be monitored by the permittee as specified below[1]:

Effluent Characteristic	Discharge Limitations		Minimum Monitoring Requirements	
	Average	**Daily Maximum**	**Measurement Frequency**	**Sample Type**
Whole Effluent Toxicity[6] **Acute – NOEL** *Mysidopsis bahia* (Mysid shrimp) *[TDM3E]*	---	Report % *[23]*	1/ 2 Year *[01/2YR]*	Composite *[24]*
Chronic – NOEL *Arbacia punctulata* (Sea Urchin) *[TBH3A]* **Monthly**	---	Report % *[23]*	1/ 2Year *[01/2YR]*	Composite *[24]*
Analytical chemistry[7,8] *[51477]*	---	Report ug/L *[28]*	1/ 2Year *[01/2YR]*	Composite/Grab *[24]*

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

FOOTNOTES: See Pages 8 through 11 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

3. ***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. Such discharges are limited and must be monitored by the permittee as specified below[(1)]:

Effluent Characteristic	Daily Maximum	Minimum Frequency	Sample Type
Whole Effluent Toxicity[(6)] **Acute – NOEL** *Mysidopsis bahia* (Mysid shrimp) *[TDM3E]*	Report % *[23]*	2/ Year *[02/YR]*	Composite *[24]*
Chronic – NOEL *Arbacia punctulata* (Sea Urchin) *[TBH3A]*	Report % *[23]*	2/ Year *[02/YR]*	Composite *[24]*
Analytical Chemistry[(7,8)] *[51477]*	Report µg/L *[28]*	1/Quarter *[01/90]*	Composite/Grab *[24]*
Priority pollutant [(8,9)] *[50008]*	Report µg/L *[28]*	1/ Year *[01/YR]*	Composite/Grab *[24]*

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

FOOTNOTES: See Pages 8 through 11 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES

1. **Sampling** –All effluent monitoring must be conducted at a location following the last treatment unit in the treatment process, including dechlorination, as to be representative of end-of-pipe effluent characteristics. Any change in sampling location must be approved by the Department in writing. The permittee must conduct sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for wastewater. 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 (effective April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

2. **Percent Removal** - The permittee must achieve a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand for all flows receiving secondary treatment. The percent removal is calculated based on influent and effluent concentration values.

3. **TRC Monitoring** – Limitations and monitoring requirements are in effect any time elemental chlorine or chlorine-based compounds are utilized to disinfect the discharge(s). The permittee must utilize a U.S. Environmental Protection Agency (USEPA)-approved test method capable of bracketing the TRC limitations specified in this permitting action. Monitoring for TRC is only required when elemental chlorine or chlorine-based compounds are in use for effluent disinfection. For instances when a facility has not disinfected with chlorine-based compounds for an entire reporting period, the facility must report "NODI-9" for this parameter on the monthly discharge monitoring report (DMR) or "N9" if the submittal is an electronic DMR.

4. **Bacteria –** Fecal coliform bacteria limits and monitoring requirements (for secondary and primary treated waste waters) are seasonal and apply between May 15 and September 30 of each year. The Department reserves the right to require bacteria limits to be in effect on a year-round basis to protect the health, safety and welfare of the public. The monthly average fecal coliform bacteria limitation is a geometric mean limitation and sample results must be reported as such.

SPECIAL CONDITIONS

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

5. **Mercury** – The permittee must conduct all mercury sampling required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the USEPA's "clean sampling techniques" found in USEPA Method 1669, *Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels*. All mercury analysis must be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry.* See **Attachment B** for a Department report form for mercury test results. Compliance with the monthly average limitation established in Special Condition A.1 of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.

6. **Whole effluent toxicity (WET) testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 3.7% and 2.2% 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 mathematical inverse of the applicable acute and chronic dilution factors of 27:1 and 45:1, respectively.

   a. **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), the permittee must initiate surveillance level acute and chronic WET testing at a minimum frequency of once every two years (1/2 Year) on the mysid shrimp (*Mysidopsis bahia*) and once every two years (1/2Year) on the sea urchin (*Arbacia punctulata*). Testing must be conducted in a different calendar quarter each sampling event.

   b. **Screening level testing -** Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level acute and chronic WET testing at a minimum frequency of two times per year (2/ Year) for both species.

   WET test results must be submitted to the Department not later than the next DMR required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 3.7% and 2.2%, respectively.

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

SPECIAL CONDITIONS

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

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

b. U.S. Environmental Protection Agency, 2002. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth edition, October 2002, USEPA 821-R-02-012.

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

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

   a. **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), the permittee must conduct analytical chemistry testing at a minimum frequency of once every two years. Testing must be conducted in a different calendar quarter of each year.

   b. **Screening level testing -** Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level analytical chemistry testing at a minimum frequency of four times per year (4/Year) in successive calendar quarters.

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

   Test results must be submitted to the Department not later than the next DMR required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department, possible exceedences of the acute, chronic or human health AWQC as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (last amended July 29, 2012). For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "NODI-9" monitoring not required this period.

SPECIAL CONDITIONS

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

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

   a. **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year) in any calendar quarter provided the sample is representative of the discharge and any seasonal or other variations in effluent quality.

B. NARRATIVE EFFLUENT LIMITATIONS

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

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

3. The permittee must not discharge wastewater that causes visible discoloration or turbidity in the receiving waters that causes those waters to be unsuitable for the designated uses and characteristics ascribed to their class.

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

C. TREATMENT PLANT OPERATOR

The treatment facility must be operated by a person holding a minimum of a **Grade III** certificate (or Registered Maine Professional Engineer) pursuant to *Sewerage Treatment Operators*, 32 M.R.S.A. §§ 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 CMR 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

D. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the wastewater collection and treatment system by a non-domestic source (user) must not pass through or interfere with the operation of the treatment system. The permittee must conduct an Industrial Waste Survey (IWS) any time a new industrial user proposes to discharge within its jurisdiction; an existing user proposes to make a significant change in its discharge; or at an alternative minimum, once every permit cycle and submit the results to the Department. The IWS must identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of the federal

SPECIAL CONDITIONS

D. LIMITATIONS FOR INDUSTRIAL USERS (cont'd)

Clean Water Act, 40 CFR Part 403 (general pretreatment regulations) or *Pretreatment Program*, 06-096 CMR 528 (last amended March 17, 2008).

E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on August 15, 2014; 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of wastewater from any other point source(s) are not authorized under this permit, and must be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

F. NOTIFICATION REQUIREMENT

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

1. Any introduction of pollutants into the wastewater collection and treatment system from an indirect discharger in a primary industrial category discharging process wastewater; and

2. Any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants to the system at the time of permit issuance. For the purposes of this section, notice regarding substantial change must include information on:

    a. the quality and quantity of wastewater introduced to the wastewater collection and treatment system; and

    b. any anticipated impact caused by the change in the quantity or quality of the wastewater to be discharged from the treatment system.

G. WET WEATHER MANAGEMENT PLAN

The permittee must maintain an approved Wet Weather 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. A specific objective of the plan must be to maximize the volume of wastewater receiving secondary treatment under all operating conditions. The revised plan must include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events.

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

SPECIAL CONDITIONS

H. OPERATIONS AND MAINTENANCE (O&M) PLAN

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

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

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

I. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

Pursuant to this permit and *Standards for the Addition of Transported Wastes to Wastewater Treatment Facilities,* 06-096 CMR 555 (effective March 9, 2009), during the effective period of this permit, the permittee is authorized to receive into the treatment process or solids handling stream up to **a daily maximum of 10,770 gallons per day (gpd)** of transported wastes, subject to the following terms and conditions.

1. **"**Transported wastes" means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.

2. The 10,770 gpd of transported wastes authorized to be received at the treatment facility by this permit is characterized as septage waste, the permittee may introduce into the treatment process no more than a daily maximum of 6,200 gpd of septage.

3. The character and handling of all transported wastes received must be consistent with the information and management plans provided in application materials submitted to the Department.

4. At no time must the addition of transported wastes cause or contribute to effluent quality violations. Transported wastes may not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility. Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. Odors and traffic from the handling of transported wastes may not result in adverse impacts to the surrounding community. If any adverse effects exist, the receipt or introduction of transported wastes into the treatment process or solids handling stream must be suspended until there is no further risk of adverse effects.

SPEICIAL CONDITIONS

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

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

6. The addition of transported wastes into the treatment process or solids handling stream must not cause the treatment facility's design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of transported wastes into the treatment process or solids handling stream must be reduced or terminated in order to eliminate the overload condition.

7. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added must not be recorded as transported wastes but should be reported in the treatment facility's influent flow.

8. During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current high flow management plan approved by the Department that provides for full treatment of transported wastes without adverse impacts.

9. In consultation with the Department, chemical analysis is required prior to receiving transported wastes from new sources that are not of the same nature as wastes previously received. The analysis must be specific to the type of source and designed to identify concentrations of pollutants that may pass through, upset or otherwise interfere with the facility's operation.

10. Access to transported waste receiving facilities may be permitted only during the times specified in the application materials and under the control and supervision of the person responsible for the wastewater treatment facility or his/her designated representative.

11. The authorization in this Special Condition is subject to annual review and, with notice to the permittee and other interested parties of record, may be suspended or reduced by the Department as necessary to ensure full compliance with 06-096 CMR 555 and the terms and conditions of this permit.

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

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

SPECIAL CONDITIONS

J. 06-096 CMR 530(2)(D)(4) STATEMENT FOR REDUCED/WAIVED TOXICS TESTING (cont'd)

a. Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;

b. Changes in the operation of the treatment works that may increase the toxicity of the discharge;

c. Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge;

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

d. Changes in stormwater collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge; and

e. Increases in the type or volume of transported (hauled) wastes accepted by the facility.

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

K. MONITORING AND REPORTING

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

Department of Environmental Protection
Central Maine Regional Office
Bureau of Land and Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333

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

SPECIAL CONDITIONS

L. REOPENING OF PERMIT FOR MODIFICATION

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

M. SEVERABILITY

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
MAINE WASTE DISCHARGE LICENSE

PROPOSED
FACT SHEET

DATE: **JANUARY 20, 2015**

PERMIT NUMBER: **#ME0100757**

WASTE DISCHARGE LICENSE: **#W000370-6C-H-R**

NAME AND ADDRESS OF APPLICANT:
TOWN OF WISCASSET
51 BATH ROAD
WISCASSET, MAINE 04578

COUNTY: **LINCOLN**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):
TOWN OF WISCASSET
69 WATER STREET
WISCASSET, MAINE 04578

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

COGNIZANT OFFICIAL CONTACT INFORMATION:
MR. WILLIAM RINES
(207) 882-8222
wwtp@wiscasset.org

1. APPLICATION SUMMARY

Application: On August 15, 2014, the Department accepted as complete for processing, a renewal application from the Town of Wiscasset for Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100757/Waste Discharge License (WDL) #W000370-6C-F-R, which was issued on October 26, 2009 for a five-year term. The 10/26/09 MEPDES permit authorized the monthly average discharge of 0.62 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the Sheepscot River, Class SB, in Wiscasset, Maine.

2. PERMIT SUMMARY

a. Terms and Conditions: This permitting action is carrying forward all the terms and conditions of the previous permitting actions except it is:

1. Revising the minimum monitoring frequency requirements for Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS) based on the results of facility testing;

2. PERMIT SUMMARY (cont'd)

2. Incorporating the interim mercury limits established by the Department for this facility pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001);

3. Eliminating the waiver from the requirement to achieve 85 percent removal for BOD_5 and TSS;

4. Revising the timing of the screening Whole Effluent Toxicity (WET), priority pollutant, analytical chemistry and surveillance level WET, analytical chemistry testing during permit cycle; and

5. Eliminating the effluent limitations and monitoring requirements for cyanide amendable to chlorination based on results of facility testing; and

6. Establishing monitoring requirements for nitrate, nitrite and total kjehldahl nitrogen.

b. History: The most current relevant regulatory actions include:

March 31, 1998 – The Department issued WDL #W000370-46-C-R for a five-year term.

April 1, 1998 – The U.S. Environmental Protection Agency (USEPA) issued a renewal of the National Pollution Discharge Elimination System (NPDES) permit #ME0100757 for a five-year term.

February 26, 1999 – The Department issued WDL Modification #W000370–5L–D-M that reduced copper monitoring from once per month to once per year and eliminated the toxics reduction evaluation (TRE) requirement for copper.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permitting program in Maine, excluding areas of special interest to Maine Indian Tribes. From this point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program, and MEPDES permit #ME0100757 has been utilized for this facility.

August 11, 2004 – The Department issued combination MEPDES permit #ME0100757/WDL #W000370-5L-E-R for a five-year term.

October 26, 2009 – The Department issued combination MEPDES permit #ME0100757/WDL #W000370-6C-F-R for a five-year term.

February 6, 2012 – The Department issued permit modification #ME0100757/WDL#W000370-6C-G-M to incorporate the average and maximum concentration limits for total mercury.

August 12, 2014 – The Town submitted a timely and complete General Application to the Department for renewal of the October 26, 2009 MEPDES permit. The application was accepted for processing on August 15, 2014, and was assigned WDL #W000370-6C-H-R / MEPDES #ME0100757.

2. PERMIT SUMMARY (cont'd)

c. Source Description: The permittee maintains a separated sewer system that is approximately 15 miles in length with 17 pump stations serving 725 users with no industrial input. The collection system does not have combined sewer overflows. There is one portable generator for auxiliary electrical power for all 17 pump stations when the commercial source of electrical power is interrupted, and a pump truck and a portable pump to serve the pump station under emergency conditions. The permittee is authorized to receive up to 10,770 gallons per day and introduce up to 6,200 gallons per day of transported wastes into the wastewater treatment process or solids handling stream. The permittee submitted a copy of their revised Septage Management Plan (revised July 2008) that has been reviewed and approved by the Department. A map showing the location of the treatment facility is included as Fact Sheet **Attachment A**.

d. Wastewater Treatment: The facility consists of a bar rack and four aeration basins, each with a capacity of 55,000 gallons, two clarifiers, two chlorine contact tanks, a dechlorination tank and two effluent pumps. Seasonal disinfection is achieved with the use of sodium hypochlorite and dechlorination is achieved with the use of sodium bisulfite. Treated wastewater is discharged to the Sheepscot River from a 14-inch diameter pipe that is submerged in 3.5 feet of water over the crown of the pipe at mean low water.

The facility has a 10,770-gallon aerated receiving tank by which the transported wastes (up to 6,200 gallons per day) can be pumped into the treatment process system or to a digester. Biosolids are dewatered using a belt filter press and transported to a composting facility in Maine.

A process flow diagram submitted by the permittee is included as Fact Sheet **Attachment B**.

3. CONDITIONS OF PERMIT

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

4. RECEIVING WATER QUALITY STANDARDS

Classification of estuarine and marine waters, 38 M.R.S.A. § 469(3-A) classifies the tidewaters of the Sheepscot River as a Class SB water. *Standards for classification of estuarine and marine waters,* 38 M.R.S.A. § 465-B(2) describes the standards for classification of Class SB waterways.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report (Report), prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists a 3.79 square mile segment associated with Indian Point, Georgetown, to Fowle Pt., Westport, (Waterbody ID #730-3) as "Category 2: Estuarine and Marine Waters Attaining Some Designated Uses, Insufficient Information for Other Uses." Attainment in this context is in regard to the designated use of

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

harvesting of shellfish. Currently, the Maine Department of Marine Resources (MeDMR) lists Area #21-B Sheepscot River (Wiscasset, Westport Island, Edgecomb) of the receiving water as prohibited to the harvesting of shellfish due the presence of overboard discharges and insufficient (limited) ambient water quality data to meet the standards in the National Shellfish Sanitation Program. The Department reserves the right to require disinfection on a year-round basis to protect the health and welfare of the public. The shellfish closure area is identified on the map included as Fact Sheet **Attachment C.**

In addition, all estuarine and marine waters are listed in Category 5-D, "Estuarine and Marine Waters Impaired by Legacy Pollutants." The Category 5-D waters partially support fishing ("shellfish consumption") due to elevated levels of PCBs and other persistent, bioaccumulating substances in lobster tomalley.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

a. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limit of 0.62 MGD based on the design capacity for the treatment facility, and a daily maximum discharge flow reporting requirement.

The Department reviewed 56 Discharge Monitoring Reports (DMRs) that were submitted for the period November 2009– June 2014. A review of data indicates the following:

Flow

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	0.62	0.17 – 0.49	0.25
Daily Maximum	Report	0.19 – 1.76	0.613

b. Dilution Factors:

06-096 CMR 530(4)(A)(2)(a) states that, *"For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model."* With a permitted flow limitation of 0.62 MGD and the location and configuration of the outfall structure, the Department has established dilution factors as follow:

Acute = 27:1 Chronic = 45:1 Harmonic mean = 90:1

c. BOD_5 and TSS: The previous permitting action established, and this permitting action is carrying forward, monthly average and weekly average technology-based concentration limits of 30 mg/L and 45 mg/L, respectively, for BOD_5 and TSS based on the secondary treatment requirements specified at *Effluent Guidelines and Standards*, 06-096 CMR 525(3)(III) (effective January 12, 2001), and a daily maximum concentration limit of 50 mg/L, which is based on a Department best professional judgment of best practicable treatment for secondary treated wastewater. The technology-based monthly average, weekly average and daily maximum mass limits of 155 lbs./day, 233 lbs./day and 258 lbs./day, respectively, established in the previous permitting action for BOD_5 and TSS are based on the

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

monthly average flow design criterion of 0.62 MGD and the applicable concentration limits, and are also being carried forward in this permitting action.

This permitting action is carrying forward a requirement for a minimum of 85% removal of BOD_5 & TSS pursuant to 06-096 CMR 525(3)(III)(a&b)(3). The permittee has not demonstrated that it qualifies for special considerations pursuant to 06-096 CMR 525(3)(IV) to maintain a waiver from the 85% removal requirement when influent concentration is less than 200 mg/L, which was established in the previous permit. Therefore, this permitting action is eliminating the waiver from the 85% removal requirement provided in the previous permitting action when influent concentration is less than 200 mg/L.

The Department reviewed 56 DMRs that were submitted for the period November 2009– June 2014 for BOD_5. It is noted that the daily maximum BOD_5 mass limit of 258 lbs./day was exceeded in March 2010 with a result of 304 lbs./day. The monthly, weekly and daily concentration limits of 30 mg/L, 45 mg/L and 50 mg/L, respectively were exceeded during the month of August 2013 with respective results of 49 mg/L, 60 mg/L and 69 mg/L. A review of data indicates the following:

BOD_5 mass

Value	Limit (lbs./day)	Range (lbs./day)
Monthly Average	155	7 – 73
Daily Maximum	258	10 – 304

BOD_5 concentration

Value	Limit (mg/L)	Range (mg/L)
Monthly Average	30	4 - 49
Daily Maximum	50	5 - 69

The Department reviewed 56 DMRs that were submitted for the period November 2009– June 2014 for TSS. It is noted that the daily maximum TSS concentration limit of 50 mg/L was exceeded in March 2010 (353 mg/L). A review of data indicates the following:

TSS mass

Value	Limit (lbs./day)	Range (lbs./day)
Monthly Average	155	15 – 75
Daily Maximum	258	22 – 353

TSS concentration

Value	Limit (mg/L)	Range (mg/L)
Monthly Average	30	8 – 28
Daily Maximum	50	13 – 43

On April 19, 1996, the USEPA issued a guidance document entitled, "*Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies"* (USEPA 1996) as the basis for determining reduced monitoring frequencies. The guidance document was issued to reduce unnecessary reporting while at the same time maintaining a high level of environmental protection for facilities that have a good compliance record and pollutant discharges at levels below permit requirements. Monitoring requirements are not considered effluent limitations under section 402(o) of

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

the Clean Water Act and therefore, anti-backsliding prohibitions would not be triggered by reductions in monitoring frequencies.

The USEPA guidance indicates "…*the basic premise underlying a performance-based reduction approach is that maintaining a low average discharge relative to the permit limits results in a low probability of the occurrence of a violation for a wide range of sampling frequencies*." The monitoring frequency reductions in USEPA's guidance were designed to maintain approximately the same level of reported violations as that experienced with the existing baseline sampling frequency in the permit. To establish baseline performance the long term average (LTA) discharge rate for each parameter is calculated using the most recent two-year data set of monthly average effluent data representative of current operating conditions. The LTA/permit limit ratio is calculated and then compared to the matrix in Table I of USEPA's guidance to determine the potential monitoring frequency reduction. It is noted Table I of USEPA's guidance was derived from a probability table that used an 80% effluent variability or coefficient of variation (cv). The permitting authority can take into consideration further reductions in the monitoring frequencies if the actual cv for the facility is significantly lower than the default 80% utilized by the USEPA in Table I.

In addition to the parameter-by-parameter performance history via the statistical evaluation cited above, the USEPA recommends the permitting authority take into consideration the facility enforcement history and the parameter-by-parameter compliance history and factors specific to the State or facility. If the facility has already been given monitoring reductions due to superior performance, the baseline may be a previous permit.

The USEPA's 1996 guidance recommends evaluation of the most current two-years of effluent data for a parameter. A review of the monitoring data for BOD_5 and TSS indicate the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

<u>BOD_5</u>

Long term average = 155 lbs./day
Monthly average limit = 19 lbs./day
Current monitoring frequency = 2/Week

$$\text{Ratio} = \frac{155 \text{ lbs./day}}{19 \text{ lbs./day}} = 8\%$$

According to Table I of the USEPA guidance, a 2/Week monitoring requirement can be reduced to 1/Month. However, the Department has determined based on results of facility testing a reduction to 1/Month testing for BOD_5 is not consistent with our analysis of the data and best professional judgment. Therefore, this permitting action is establishing a 1/Week monitoring frequency requirement.

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

TSS

Long term average = 155 lbs./day
Monthly average limit = 33 lbs./day
Current monitoring frequency = 2/Week

$$\text{Ratio} = \frac{155 \text{ lbs./day}}{33 \text{ lbs./day}} = 5\%$$

According to Table I of the USEPA guidance, a 2/Week monitoring requirement can be reduced to 1/Month. However, the Department has determined based on results of facility testing a reduction to 1/Month testing for TSS is not consistent with our analysis of the data and best professional judgment. Therefore, this permitting action is establishing a 1/Week monitoring frequency requirement.

d. Settleable Solids: The previous permitting action established, and this permitting action is carrying forward, a technology-based daily maximum concentration limit of 0.3 ml/L for settleable solids, which is considered a best practicable treatment limitation for secondary treated wastewater.

The Department reviewed 56 DMRs that were submitted for the period November 2009– June 2014 for settleable solids. It is noted that the daily maximum settleable solids concentration limit of 0.3 ml/L was exceeded in March 2011 (40 ml/L). A review of data indicates the following:

Settleable solids concentration

Value	Limit (ml/L)	Range (ml/L)	Average (ml/L)
Daily Maximum	0.3	<0.01 – 40	0.13

It is noted that the average calculated in the table above excluded the anomalous datum of 40 ml/L in March of 2011.

Given that the exceedance in March of 2011 has caused their daily maximum average to exceed the daily maximum limit the Department is not considering any further monitoring reductions. Therefore, the Department is carrying forward the previously established the monitoring frequency for settleable solids of 3/Week in this permitting action.

e. Fecal Coliform Bacteria – The previous permitting action established, and this permitting action is carrying forward, seasonal monthly average and daily maximum concentration limits of 15 colonies/100 ml and 50 colonies/100 ml, respectively, for fecal coliform bacteria, which are consistent with the National Shellfish Sanitation Program. Bacteria limits are seasonal and apply between May 15 and September 30 of each year; however, the Department reserves the right to require year-round disinfection to protect the health, safety and welfare of the public.

The Department reviewed 22 DMRs that were submitted for the period November 2009– June 2014 for fecal coliform bacteria. It is noted that the daily maximum concentration limit of 50 colonies/100 ml was exceeded in August 2010, May 2011 and June 2012 during this time frame. The monthly average concentration limit of 15 colonies/100 ml was exceeded in May 2013 A review of data indicates the following:

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

Fecal coliform bacteria

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	15	1 – 21	6
Daily Maximum	50	2 – 178	31

A review of the monitoring data for fecal coliform bacteria indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 6 col/100 ml
Monthly average limit = 15 col/100 ml
Current monitoring frequency = 2/Week

$$\text{Ratio} \quad \frac{6 \text{ col/100 ml}}{15 \text{ col/100 ml}} = 40\%$$

According to Table I of the USEPA Guidance, a 2/Week monitoring requirement can be reduced to 2/Month. However, the Department has determined based on the frequency of fecal coliform violations that a reduction to 2/Month testing for fecal coliform bacteria is not consistent with our analysis of the data and best professional judgment. Therefore, the Department is carrying forward the monitoring frequency for fecal coliform bacteria of 2/Week.

f. Total Residual Chlorine (TRC): The previous permitting action established technology-based monthly average and water quality-based daily maximum concentration limits of 0.1 mg/L and 0.3 mg/L, respectively, for TRC. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department permitting actions impose the more stringent of either a water quality-based or BPT-based limit. With dilution factors as determined above, end-of-pipe (EOP) water quality-based concentration thresholds for TRC may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	A & C Dilution Factors	Calculated Acute Threshold	Chronic Threshold
0.013 mg/L	0.0075 mg/L	27:1(A) 45:1 (C)	0.35 mg/L	0.34 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that need to dechlorinate the discharge in order to meet water quality-based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. The Town dechlorinates the effluent prior to discharge in order to achieve compliance with the water quality-based thresholds. The calculated acute water quality-based threshold of 0.35 mg/L is less stringent than the daily maximum technology-based standard of 0.3 mg/L and therefore the previously established daily maximum technology-based standard of 0.3 mg/L is being carried forward in this permitting action. The monthly average technology-based standard of 0.1 mg/L is more stringent than the calculated chronic water quality-based threshold of 0.34 mg/L and is therefore being carried forward in this permitting action.

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

The Department reviewed 34 DMRs that were submitted for the period November 2009 – June 2014. A review of data indicates the following:

Total residual chlorine

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	0.1	0.00 – 0.04	0.01
Daily Maximum	0.3	0.01 - 0.25	0.08

A review of the monitoring data for TRC indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 0.1 mg/L
Monthly average limit = 0.01 mg/L
Current monitoring frequency = 1/Day

$$\text{Ratio} = \frac{0.01 \text{ mg/L}}{0.1 \text{ mg/L}} = 10\%$$

According to Table I of the EPA Guidance, a 1/Day monitoring requirement can be reduced to 1/Week. However, the Department has determined based on the violations for fecal coliform bacteria that a reduction to 1/Week testing for TRC is not consistent with our analysis of the data and best professional judgment. Therefore, this permitting action is carrying forward the 1/Day monitoring frequency requirement.

g. pH: The previous permitting action established, and this permitting action is carrying forward, a technology-based pH limit of 6.0 – 9.0 standard units (SU), which is based on 06-096 CMR 525(3)(III), and a minimum monitoring frequency requirement of once per day.

The Department reviewed 56 DMRs that were submitted for the period November 2009 – June 2014. A review of data indicates the following:

pH

Value	Limit (SU)	Minimum (SU)	Maximum (SU)
Range	6.0 – 9.0	6.0	7.3

In consideration of the compliance history with pH, this permitting action is carrying forward the minimum monitoring frequency requirement of once per day.

h. Mercury: Pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001), the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL W000370-6C-F-R by establishing interim monthly average and daily maximum effluent concentration limits of 10.1 nanograms/liter (ng/L) and 15.1 ng/L, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury. It is noted the limitations have been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit.

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

38 M.R.S.A. § 420(1-B)(B)(1) provides 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. A review of the Department's data base for the period February 2009 through December 2013 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows:

Mercury

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average	10.1	1.70 – 5.30	2.5
Daily Maximum	15.1		

Pursuant to 38 M.R.S.A. §420(1-B)(F), the Department issued a minor revision on February 6, 2012 to the May 25, 2009 permit thereby revising the minimum monitoring frequency requirement from four times per year to once per year given the permittee has maintained at least 5 years of mercury testing data.

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

i. Nitrogen: The permittee has not been conducting total nitrogen testing on its discharge to date. However, the USEPA requested the Department evaluate the reasonable potential for the discharge of total nitrogen to cause or contribute to non-attainment of applicable water quality standards, namely algal blooms, in marine waters. As of the date of this permitting action, the State of Maine has not promulgated numeric ambient water quality criteria for any of the nitrogen compounds. The Department has 50 total nitrogen data results collected on effluent from municipally-owned treatment works that discharge to marine waters in Maine. With an arithmetic mean total nitrogen discharge concentration of 14.3 mg/L and a near field dilution factor of 45:1 for the Wiscasset facility, an in-stream concentration can be calculated as follows:

Total nitrogen concentrations in effluent = 14.3 mg/L
Chronic dilution factor = 45:1

In-stream concentration after dilution: $\frac{14.3 \text{ mg/L}}{45} = 0.32 \text{ mg/L}$

Because nitrogen is not acutely toxic, the Department is considering a far-field dilution to be more appropriate when evaluating impacts of total nitrogen to a marine environment. Far field dilutions are significantly higher than the near-field dilution, ranging from 100 – 10,000 times higher depending on the location of the outfall pipe. With outfalls located in protected coves or small embayments without significant flushing, the far field dilutions factors would tend to be on the order of 100 – 1,000 times higher. With open ocean discharges, far field dilutions would tend to be 1,000 – 10,000 times higher.

The discharge from the permittee's facility to the Sheepscot River would be consider a discharge to an estuary thus, the far field dilution would likely be on the lower end of the 100 – 1,000 range. As a result, the far-field dilution may be as high as 4,500:1, thereby limiting the increase in the ambient total nitrogen by 0.003 mg/L based on the following calculation:

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

Total nitrogen concentrations in effluent = 14.3 mg/L
Chronic dilution factor = 4,500:1

In-stream concentration after dilution: $\frac{14.3 \text{ mg/L}}{4{,}500} = 0.003 \text{ mg/L}$

The Department has assessed available ambient total nitrogen data from the Midcoast Maine estuary to support an effort to develop statewide nutrient criteria for marine waters. For the Wiscasset facility, the Department calculated a mean background concentration of 0.33 mg/L. As a result, after reasonable opportunity for far field mixing, the concentration of total nitrogen in the receiving water will be 0.33 mg/L + 0.003 mg/L = 0.3303 mg/L. Given the dynamic nature of the small amount of mapped eelgrass in this location (loss of the same patch between 1994 and 2005 with reappearance by 2008, and sparse distribution in 2012), and the predominant lack of suitable substrate (Maine DOT), the Department has determined that a total nitrogen threshold value protective of eelgrass such as 0.30 mg/L used for Great Bay is not appropriate. The Department's best professional judgment is that for an estuary like the Sheepscot, 0.30 mg/L is too conservative, and that an analysis of most Maine and northeastern estuaries similar to the Sheepscot River (in the absence of considerable point and non-point source nitrogen) would have, on average, ambient total nitrogen concentrations greater than 0.30 mg/L. In the absence of a better threshold value the Department is utilizing a total nitrogen threshold of 0.45 mg/L for protection of aquatic life using dissolved oxygen as the response variable (Great Bay criteria). Therefore, the in-stream concentration is less than the Department and USEPA's best professional judgment based total nitrogen threshold of 0.45 mg/L considered necessary to protect aquatic life in the receiving water. Therefore, the Department is making a best professional judgment determination that the discharge of total nitrogen from the permittee's facility does not exhibit a reasonable potential to exceed applicable water quality standards for Class SB waters.

In order to obtain more accurate effluent and ambient (background) total nitrogen data for the vicinity near the discharge and the Wiscasset facility to assess the potential impact (or lack thereof) of the discharge, the Department has requested the permittee conduct effluent monitoring for nitrate, nitrite, and total kjeldahl nitrogen at a frequency of twice per month from May 1st through October 31st during calendar year 2015. Once the testing is completed, the Department will again evaluate the discharge's reasonable potential exceed applicable water quality standards, the necessity to establish water quality based limits and the appropriate monitoring requirements for the remainder of the term of the permit.

Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing

Regulatory Background

38 M.R.S.A. § 414-A and 38 M.R.S.A. § 420 prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA.

06-096 CMR 530(2)(A) specifies the dischargers subject to the rule as:

> All licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this

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

> subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedences of narrative or numerical water quality criteria.

The Department has determined that the applicant's discharge is subject to the testing requirements of the toxics rule.

06-096 CMR 530(3)(E) states:

> For effluent monitoring data and the variability of the pollutant in the effluent**,** the Department must 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, USEPA, 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.

WET, priority pollutant and analytical chemistry testing, as required by 06-096 CMR 530, are included in this permit in order to characterize the effluent.

WET, Analytical Chemistry and Priority Pollutant Test Schedules

06-096 CMR 530(2)(D)(1) specifies WET, priority pollutant, and analytical chemistry test schedules for dischargers based on their level[1] as defined by 06-096 CMR 530(2)(B). Please see 06-096 CMR 530(2)(D)(1) for a listing of default test schedules.

Explanation of Screening and Surveillance Testing Years

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

[1] A facility falls into an applicable level based on their chronic dilution factor. The chronic dilution factor associated with the discharge from the permittee is 45:1; therefore, pursuant to 06-096 CMR 530(2)(B), this facility is considered a Level II facility for purposes of toxics testing.

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

(Permit issued) **0** *month(s)*	**12**	**24**	**36**	**48**	**60**
Year 1 **Surveillance**	*Year 2* **Surveillance**	*Year 3* **Surveillance**	*Year 4* **Screening**	*Year 5* **Surveillance**	

06-096 CMR 530(2)(D)(3)(d) states in part that for Level II facilities "… *may reduce surveillance testing to one WET or specific chemical series every other year provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E)".*

An annual certification statement pursuant to 06-096 CMR 530(2)(D)(4), is established in Special Condition J, *06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing* of the permit. The annual certification statement requirement is being carried forward in this permitting action.

WET Evaluation

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on the mysid shrimp (*Mysidopsis bahia*) and sea urchin *(Arbacia punctulata)*.

On August 1, 2014, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department for the Town in accordance with the statistical approach outlined above. The 8/1/14 statistical evaluation indicates the discharge from Wiscasset's Wastewater Treatment Facility did not demonstrate a reasonable potential to exceed either the acute or chronic ambient water quality thresholds of 3.7% and 2.2%, respectively, for any of the WET species tested to date. See **Attachment D** of this Fact Sheet for a summary of the WET test results.

Based on the results of facility testing and pursuant to 06-096 CMR 530 (2)(D)(3), this permitting action is carrying forward the previously established reduced surveillance level testing for the mysid shrimp and the sea urchin of once every other year (1/2 Surveillance Years). This permitting action is also carrying forward the established screening level testing for the mysid shrimp and sea urchin (2/Screening Year).

Analytical Chemistry & Priority Pollutant Evaluation

Chemical-specific monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria. This permit provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment, and receiving water characteristics. 06-096 CMR 584 sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters. The Department's DeTox system evaluates the chemical results from your facility as well as other dischargers within the watershed. Please see **Attachment E** of this fact sheet for more information.

Priority pollutants refers to those pollutants listed under "Priority Pollutants" on the form included as **Attachment A** of the permit. Analytical chemistry refers to those pollutants listed under "Analytical Chemistry" on the form included as **Attachment A** of the permit.

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

On August 1, 2014, the Department conducted a statistical evaluation of the most recent 60 months of chemical-specific test results on file with the Department for Wiscasset's Wastewater Treatment Facility in accordance with the statistical approach outlined above. The evaluation indicates that the discharge does not exceed or demonstrate a reasonable potential to exceed the critical AWQC for any parameters tested.

Priority Pollutants

Based on the results of the August 1, 2014 statistical evaluation, this permitting action maintains the established screening level testing for priority pollutants of once per screening year (1/Screening Year) and does not establish water quality-based effluent limitations for priority pollutants. Surveillance level priority pollutant monitoring is not required for Level II facilities per 06-096 CMR 530(2)(D)(1).

Analytical Chemistry

Based on the results of facility testing and pursuant to 06-096 CMR 530 (2)(D)(3), this permitting action maintains the previously established reduced surveillance level analytical chemistry testing at a frequency of once every other surveillance year (1/2 Surveillance Year). This permitting action maintains the established screening level analytical chemistry testing at a frequency of four times per screening year (4/Screening Year).

7. DISPOSAL OF SEPTAGE WASTE IN WASTEWATER TREATMENT FACILITY

The Town has applied for, and pursuant to *Standards for the Addition of Transported Wastes to Waste Water Treatment Facilities,* 06-096 CMR 555 (last amended February 5, 2009), and the Town's written septage management plan, this permitting action authorizes the Town to receive and introduce into the treatment process or solids handling stream up to a daily maximum of 6,200 GPD of septage wastes (up to a monthly total of 186,000 gallons). See Special Condition I of the permit.

8. 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 water body to meet standards for Class SC classification.

9. PUBLIC COMMENTS

Public notice of this application was made in the *Lincoln County News* and the *Wiscasset* newspapers on or about August 4, 2014. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses,* 06-096 CMR 522 (effective January 12, 2001).

10. DEPARTMENT CONTACTS

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

Yvette Meunier
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 215-1579
e-mail: yvette.meunier@maine.gov

11. RESPONSE TO COMMENTS

Reserved until the end of the comment period.

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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF WISCASSET	)	MAINE POLLUTANT DISCHARGE
WISCASSET, YORK COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
#ME0100757	)	WASTE DISCHARGE LICENSE
#W000370-6C-H-R **APPROVAL**	)	**RENEWAL**

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

APPLICATION SUMMARY

On August 15, 2014, the Department accepted as complete for processing, a renewal application for Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100757/Waste Discharge License (WDL) #W000370-6C-F-R, which was issued on October 26, 2009 for a five-year term. The 10/26/09 MEPDES permit authorized the monthly average discharge of 0.62 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the Sheepscot River, Class SB, in Wiscasset, Maine.

PERMIT SUMMARY

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

1. Revising the minimum monitoring frequency requirements for Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS) based on the results of facility testing;

2. Incorporating the interim mercury limits established by the Department for this facility pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001);

3. Eliminating the waiver from the requirement to achieve 85 percent removal for BOD_5 and TSS;

4. Revising the timing of the screening Whole Effluent Toxicity (WET), priority pollutant, analytical chemistry and surveillance level WET, analytical chemistry testing during permit cycle; and

5. Eliminating the effluent limitations and monitoring requirements for cyanide amendable to chlorination based on results of facility testing; and

6. Establishing monitoring requirements for nitrate, nitrite and total kjehldahl nitrogen.

CONCLUSIONS

Based on the findings summarized in the attached Fact Sheet dated JANUARY 20, 2015, and subject to the special and standard conditions that follow, the Department makes the following CONCLUSIONS:

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

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

3. The provisions of the State's antidegradation policy, *Classification of Maine waters*, 38 M.R.S.A. § 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;

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

   (e) Where a discharge will result in lowering the existing water quality of any 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 discharges will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of licenses*, 38 M.R.S.A. § 414-A(1)(D).

ACTION

Based on the findings and conclusions as stated above, the Department APPROVES the above noted application of the TOWN OF WISCASSET to discharge a monthly average of 0.62 MGD of secondary treated municipal wastewater to the Sheepscot River via Outfall #001A in Wiscasset, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

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

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

3. This permit and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all 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) (amended August 25, 2013)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS _____ DAY OF _____ 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____
PATRICIA W. AHO, Commissioner

Date filed with Board of Environmental Protection _____

Date of initial receipt of application: August 12, 2014
Date of application acceptance: August 15, 2014
This Order prepared by Yvette Meunier, BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **secondary treated municipal sanitary wastewater from Outfall #001A** to the Sheepscot River at Wiscasset. Such discharges are limited and must be monitored by the permittee as specified below[1]:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	0.62 MGD *[03]*	---	Report MGD *[03]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
Biochemical Oxygen Demand (BOD_5) *[00310]*	155 lbs/day *[26]*	233 lbs/day *[26]*	258 lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
BOD_5 % Removal[2] *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Total Suspended Solids (TSS) *[00530]*	155 lbs/day *[26]*	233 lbs/day *[26]*	258 lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
TSS % Removal[2] *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	3/Week *[03/07]*	Grab *[GR]*
Total Residual Chlorine (TRC)[3] *[50060]*	---	---	---	0.1 mg/L *[19]*	---	0.3 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
Fecal Coliform Bacteria[4] *[31616]*	---	---	---	15/100 ml[4] *[13]*	---	50/100 ml *[13]*	2/Week *[02/07]*	Grab *[GR]*
pH (Std. Units) *[00400]*	---	---	---	---	---	6.0 – 9.0 SU *[12]*	1/Day *[01/01]*	Grab *[GR]*

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

FOOTNOTES: See Pages 8 through 11 of this permit for applicable footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **secondary treated municipal sanitary wastewater from Outfall #001A** to the Sheepscot River at Wiscasset. Such discharges are limited and must be monitored by the permittee as specified below[(1)]:

Effluent Characteristic	**Discharge Limitations**				**Minimum Monitoring Requirements**	
	Average	**Daily Maximum**	**Monthly Average**	**Daily Maximum**	**Measurement Frequency**	**Sample Type**
Nitrate *[00620]* *May 1 – Oct. 31, 2015*	Report lbs/day *[26]*	Report lbs/day *[26]*	Report µg/L *[28]*	Report µg/L *[28]*	2/Month *[02/30]*	Grab *[GR]*
Nitrite *[00615]* *May 1 – Oct. 31, 2015*	Report lbs/day *[26]*	Report lbs/day *[26]*	Report µg/L *[28]*	Report µg/L *[28]*	2/Month *[02/30]*	Grab *[GR]*
Total Kjehldahl Nitrogen *[00625]* *May 1 – Oct. 31, 2015*	Report lbs/day *[26]*	Report lbs/day *[26]*	Report µg/L *[28]*	Report µg/L *[28]*	2/Month *[02/30]*	Grab *[GR]*
Mercury (Total)[(5)] *[71900]*	---	---	10.1 ng/L *[3M]*	15.1 ng/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*

FOOTNOTES: See Pages 8 through 11 of this permit for applicable footnotes.

Monthly

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. ***SURVEILLANCE LEVEL*** **-** Beginning upon 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). Such discharges are limited and must be monitored by the permittee as specified below[1]:

Effluent Characteristic	Discharge Limitations		Minimum Monitoring Requirements	
	Average	**Daily Maximum**	**Measurement Frequency**	**Sample Type**
Whole Effluent Toxicity[6] **Acute – NOEL** *Mysidopsis bahia* (Mysid shrimp) *[TDM3E]*	---	Report % *[23]*	1/ 2 Year *[01/2YR]*	Composite *[24]*
Chronic – NOEL *Arbacia punctulata* (Sea Urchin) *[TBH3A]* **Monthly**	---	Report % *[23]*	1/ 2Year *[01/2YR]*	Composite *[24]*
Analytical chemistry[7,8] *[51477]*	---	Report ug/L *[28]*	1/ 2Year *[01/2YR]*	Composite/Grab *[24]*

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

FOOTNOTES: See Pages 8 through 11 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

3. ***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. Such discharges are limited and must be monitored by the permittee as specified below[(1)]:

Effluent Characteristic	Daily Maximum	Minimum Frequency	Sample Type
Whole Effluent Toxicity[(6)] **Acute – NOEL** *Mysidopsis bahia* (Mysid shrimp) *[TDM3E]*	Report % *[23]*	2/ Year *[02/YR]*	Composite *[24]*
Chronic – NOEL *Arbacia punctulata* (Sea Urchin) *[TBH3A]*	Report % *[23]*	2/ Year *[02/YR]*	Composite *[24]*
Analytical Chemistry[(7,8)] *[51477]*	Report µg/L *[28]*	1/Quarter *[01/90]*	Composite/Grab *[24]*
Priority pollutant [(8,9)] *[50008]*	Report µg/L *[28]*	1/ Year *[01/YR]*	Composite/Grab *[24]*

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

FOOTNOTES: See Pages 8 through 11 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES

1. **Sampling** –All effluent monitoring must be conducted at a location following the last treatment unit in the treatment process, including dechlorination, as to be representative of end-of-pipe effluent characteristics. Any change in sampling location must be approved by the Department in writing. The permittee must conduct sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for wastewater. 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 (effective April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

2. **Percent Removal** - The permittee must achieve a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand for all flows receiving secondary treatment. The percent removal is calculated based on influent and effluent concentration values.

3. **TRC Monitoring** – Limitations and monitoring requirements are in effect any time elemental chlorine or chlorine-based compounds are utilized to disinfect the discharge(s). The permittee must utilize a U.S. Environmental Protection Agency (USEPA)-approved test method capable of bracketing the TRC limitations specified in this permitting action. Monitoring for TRC is only required when elemental chlorine or chlorine-based compounds are in use for effluent disinfection. For instances when a facility has not disinfected with chlorine-based compounds for an entire reporting period, the facility must report "NODI-9" for this parameter on the monthly discharge monitoring report (DMR) or "N9" if the submittal is an electronic DMR.

4. **Bacteria –** Fecal coliform bacteria limits and monitoring requirements (for secondary and primary treated waste waters) are seasonal and apply between May 15 and September 30 of each year. The Department reserves the right to require bacteria limits to be in effect on a year-round basis to protect the health, safety and welfare of the public. The monthly average fecal coliform bacteria limitation is a geometric mean limitation and sample results must be reported as such.

SPECIAL CONDITIONS

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

5. **Mercury** – The permittee must conduct all mercury sampling required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the USEPA's "clean sampling techniques" found in USEPA Method 1669, *Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels*. All mercury analysis must be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry.* See **Attachment B** for a Department report form for mercury test results. Compliance with the monthly average limitation established in Special Condition A.1 of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.

6. **Whole effluent toxicity (WET) testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 3.7% and 2.2% 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 mathematical inverse of the applicable acute and chronic dilution factors of 27:1 and 45:1, respectively.

   a. **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), the permittee must initiate surveillance level acute and chronic WET testing at a minimum frequency of once every two years (1/2 Year) on the mysid shrimp (*Mysidopsis bahia*) and once every two years (1/2Year) on the sea urchin (*Arbacia punctulata*). Testing must be conducted in a different calendar quarter each sampling event.

   b. **Screening level testing -** Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level acute and chronic WET testing at a minimum frequency of two times per year (2/ Year) for both species.

   WET test results must be submitted to the Department not later than the next DMR required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 3.7% and 2.2%, respectively.

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

SPECIAL CONDITIONS

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

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

b. U.S. Environmental Protection Agency, 2002. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth edition, October 2002, USEPA 821-R-02-012.

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

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

   a. **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), the permittee must conduct analytical chemistry testing at a minimum frequency of once every two years. Testing must be conducted in a different calendar quarter of each year.

   b. **Screening level testing -** Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level analytical chemistry testing at a minimum frequency of four times per year (4/Year) in successive calendar quarters.

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

   Test results must be submitted to the Department not later than the next DMR required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department, possible exceedences of the acute, chronic or human health AWQC as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (last amended July 29, 2012). For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "NODI-9" monitoring not required this period.

SPECIAL CONDITIONS

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

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

   a. **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year) in any calendar quarter provided the sample is representative of the discharge and any seasonal or other variations in effluent quality.

B. NARRATIVE EFFLUENT LIMITATIONS

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

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

3. The permittee must not discharge wastewater that causes visible discoloration or turbidity in the receiving waters that causes those waters to be unsuitable for the designated uses and characteristics ascribed to their class.

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

C. TREATMENT PLANT OPERATOR

The treatment facility must be operated by a person holding a minimum of a **Grade III** certificate (or Registered Maine Professional Engineer) pursuant to *Sewerage Treatment Operators*, 32 M.R.S.A. §§ 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 CMR 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

D. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the wastewater collection and treatment system by a non-domestic source (user) must not pass through or interfere with the operation of the treatment system. The permittee must conduct an Industrial Waste Survey (IWS) any time a new industrial user proposes to discharge within its jurisdiction; an existing user proposes to make a significant change in its discharge; or at an alternative minimum, once every permit cycle and submit the results to the Department. The IWS must identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of the federal

SPECIAL CONDITIONS

D. LIMITATIONS FOR INDUSTRIAL USERS (cont'd)

Clean Water Act, 40 CFR Part 403 (general pretreatment regulations) or *Pretreatment Program*, 06-096 CMR 528 (last amended March 17, 2008).

E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on August 15, 2014; 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of wastewater from any other point source(s) are not authorized under this permit, and must be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

F. NOTIFICATION REQUIREMENT

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

1. Any introduction of pollutants into the wastewater collection and treatment system from an indirect discharger in a primary industrial category discharging process wastewater; and

2. Any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants to the system at the time of permit issuance. For the purposes of this section, notice regarding substantial change must include information on:

    a. the quality and quantity of wastewater introduced to the wastewater collection and treatment system; and

    b. any anticipated impact caused by the change in the quantity or quality of the wastewater to be discharged from the treatment system.

G. WET WEATHER MANAGEMENT PLAN

The permittee must maintain an approved Wet Weather 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. A specific objective of the plan must be to maximize the volume of wastewater receiving secondary treatment under all operating conditions. The revised plan must include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events.

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

SPECIAL CONDITIONS

H. OPERATIONS AND MAINTENANCE (O&M) PLAN

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

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

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

I. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

Pursuant to this permit and *Standards for the Addition of Transported Wastes to Wastewater Treatment Facilities,* 06-096 CMR 555 (effective March 9, 2009), during the effective period of this permit, the permittee is authorized to receive into the treatment process or solids handling stream up to **a daily maximum of 10,770 gallons per day (gpd)** of transported wastes, subject to the following terms and conditions.

1. **"**Transported wastes" means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.

2. The 10,770 gpd of transported wastes authorized to be received at the treatment facility by this permit is characterized as septage waste, the permittee may introduce into the treatment process no more than a daily maximum of 6,200 gpd of septage.

3. The character and handling of all transported wastes received must be consistent with the information and management plans provided in application materials submitted to the Department.

4. At no time must the addition of transported wastes cause or contribute to effluent quality violations. Transported wastes may not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility. Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. Odors and traffic from the handling of transported wastes may not result in adverse impacts to the surrounding community. If any adverse effects exist, the receipt or introduction of transported wastes into the treatment process or solids handling stream must be suspended until there is no further risk of adverse effects.

SPEICIAL CONDITIONS

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

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

6. The addition of transported wastes into the treatment process or solids handling stream must not cause the treatment facility's design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of transported wastes into the treatment process or solids handling stream must be reduced or terminated in order to eliminate the overload condition.

7. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added must not be recorded as transported wastes but should be reported in the treatment facility's influent flow.

8. During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current high flow management plan approved by the Department that provides for full treatment of transported wastes without adverse impacts.

9. In consultation with the Department, chemical analysis is required prior to receiving transported wastes from new sources that are not of the same nature as wastes previously received. The analysis must be specific to the type of source and designed to identify concentrations of pollutants that may pass through, upset or otherwise interfere with the facility's operation.

10. Access to transported waste receiving facilities may be permitted only during the times specified in the application materials and under the control and supervision of the person responsible for the wastewater treatment facility or his/her designated representative.

11. The authorization in this Special Condition is subject to annual review and, with notice to the permittee and other interested parties of record, may be suspended or reduced by the Department as necessary to ensure full compliance with 06-096 CMR 555 and the terms and conditions of this permit.

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

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

SPECIAL CONDITIONS

J. 06-096 CMR 530(2)(D)(4) STATEMENT FOR REDUCED/WAIVED TOXICS TESTING (cont'd)

a. Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;

b. Changes in the operation of the treatment works that may increase the toxicity of the discharge;

c. Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge;

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

d. Changes in stormwater collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge; and

e. Increases in the type or volume of transported (hauled) wastes accepted by the facility.

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

K. MONITORING AND REPORTING

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

Department of Environmental Protection
Central Maine Regional Office
Bureau of Land and Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333

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

SPECIAL CONDITIONS

L. REOPENING OF PERMIT FOR MODIFICATION

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

M. SEVERABILITY

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
MAINE WASTE DISCHARGE LICENSE

PROPOSED
FACT SHEET

DATE: **JANUARY 20, 2015**

PERMIT NUMBER: **#ME0100757**

WASTE DISCHARGE LICENSE: **#W000370-6C-H-R**

NAME AND ADDRESS OF APPLICANT:
TOWN OF WISCASSET
51 BATH ROAD
WISCASSET, MAINE 04578

COUNTY: **LINCOLN**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):
TOWN OF WISCASSET
69 WATER STREET
WISCASSET, MAINE 04578

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

COGNIZANT OFFICIAL CONTACT INFORMATION:
MR. WILLIAM RINES
(207) 882-8222
wwtp@wiscasset.org

1. APPLICATION SUMMARY

Application: On August 15, 2014, the Department accepted as complete for processing, a renewal application from the Town of Wiscasset for Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100757/Waste Discharge License (WDL) #W000370-6C-F-R, which was issued on October 26, 2009 for a five-year term. The 10/26/09 MEPDES permit authorized the monthly average discharge of 0.62 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the Sheepscot River, Class SB, in Wiscasset, Maine.

2. PERMIT SUMMARY

a. Terms and Conditions: This permitting action is carrying forward all the terms and conditions of the previous permitting actions except it is:

1. Revising the minimum monitoring frequency requirements for Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS) based on the results of facility testing;

2. PERMIT SUMMARY (cont'd)

2. Incorporating the interim mercury limits established by the Department for this facility pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001);

3. Eliminating the waiver from the requirement to achieve 85 percent removal for BOD_5 and TSS;

4. Revising the timing of the screening Whole Effluent Toxicity (WET), priority pollutant, analytical chemistry and surveillance level WET, analytical chemistry testing during permit cycle; and

5. Eliminating the effluent limitations and monitoring requirements for cyanide amendable to chlorination based on results of facility testing; and

6. Establishing monitoring requirements for nitrate, nitrite and total kjehldahl nitrogen.

b. History: The most current relevant regulatory actions include:

March 31, 1998 – The Department issued WDL #W000370-46-C-R for a five-year term.

April 1, 1998 – The U.S. Environmental Protection Agency (USEPA) issued a renewal of the National Pollution Discharge Elimination System (NPDES) permit #ME0100757 for a five-year term.

February 26, 1999 – The Department issued WDL Modification #W000370–5L–D-M that reduced copper monitoring from once per month to once per year and eliminated the toxics reduction evaluation (TRE) requirement for copper.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permitting program in Maine, excluding areas of special interest to Maine Indian Tribes. From this point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program, and MEPDES permit #ME0100757 has been utilized for this facility.

August 11, 2004 – The Department issued combination MEPDES permit #ME0100757/WDL #W000370-5L-E-R for a five-year term.

October 26, 2009 – The Department issued combination MEPDES permit #ME0100757/WDL #W000370-6C-F-R for a five-year term.

February 6, 2012 – The Department issued permit modification #ME0100757/WDL#W000370-6C-G-M to incorporate the average and maximum concentration limits for total mercury.

August 12, 2014 – The Town submitted a timely and complete General Application to the Department for renewal of the October 26, 2009 MEPDES permit. The application was accepted for processing on August 15, 2014, and was assigned WDL #W000370-6C-H-R / MEPDES #ME0100757.

2. PERMIT SUMMARY (cont'd)

c. Source Description: The permittee maintains a separated sewer system that is approximately 15 miles in length with 17 pump stations serving 725 users with no industrial input. The collection system does not have combined sewer overflows. There is one portable generator for auxiliary electrical power for all 17 pump stations when the commercial source of electrical power is interrupted, and a pump truck and a portable pump to serve the pump station under emergency conditions. The permittee is authorized to receive up to 10,770 gallons per day and introduce up to 6,200 gallons per day of transported wastes into the wastewater treatment process or solids handling stream. The permittee submitted a copy of their revised Septage Management Plan (revised July 2008) that has been reviewed and approved by the Department. A map showing the location of the treatment facility is included as Fact Sheet **Attachment A**.

d. Wastewater Treatment: The facility consists of a bar rack and four aeration basins, each with a capacity of 55,000 gallons, two clarifiers, two chlorine contact tanks, a dechlorination tank and two effluent pumps. Seasonal disinfection is achieved with the use of sodium hypochlorite and dechlorination is achieved with the use of sodium bisulfite. Treated wastewater is discharged to the Sheepscot River from a 14-inch diameter pipe that is submerged in 3.5 feet of water over the crown of the pipe at mean low water.

The facility has a 10,770-gallon aerated receiving tank by which the transported wastes (up to 6,200 gallons per day) can be pumped into the treatment process system or to a digester. Biosolids are dewatered using a belt filter press and transported to a composting facility in Maine.

A process flow diagram submitted by the permittee is included as Fact Sheet **Attachment B**.

3. CONDITIONS OF PERMIT

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

4. RECEIVING WATER QUALITY STANDARDS

Classification of estuarine and marine waters, 38 M.R.S.A. § 469(3-A) classifies the tidewaters of the Sheepscot River as a Class SB water. *Standards for classification of estuarine and marine waters,* 38 M.R.S.A. § 465-B(2) describes the standards for classification of Class SB waterways.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report (Report), prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists a 3.79 square mile segment associated with Indian Point, Georgetown, to Fowle Pt., Westport, (Waterbody ID #730-3) as "Category 2: Estuarine and Marine Waters Attaining Some Designated Uses, Insufficient Information for Other Uses." Attainment in this context is in regard to the designated use of

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

harvesting of shellfish. Currently, the Maine Department of Marine Resources (MeDMR) lists Area #21-B Sheepscot River (Wiscasset, Westport Island, Edgecomb) of the receiving water as prohibited to the harvesting of shellfish due the presence of overboard discharges and insufficient (limited) ambient water quality data to meet the standards in the National Shellfish Sanitation Program. The Department reserves the right to require disinfection on a year-round basis to protect the health and welfare of the public. The shellfish closure area is identified on the map included as Fact Sheet **Attachment C.**

In addition, all estuarine and marine waters are listed in Category 5-D, "Estuarine and Marine Waters Impaired by Legacy Pollutants." The Category 5-D waters partially support fishing ("shellfish consumption") due to elevated levels of PCBs and other persistent, bioaccumulating substances in lobster tomalley.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

a. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limit of 0.62 MGD based on the design capacity for the treatment facility, and a daily maximum discharge flow reporting requirement.

The Department reviewed 56 Discharge Monitoring Reports (DMRs) that were submitted for the period November 2009– June 2014. A review of data indicates the following:

Flow

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	0.62	0.17 – 0.49	0.25
Daily Maximum	Report	0.19 – 1.76	0.613

b. Dilution Factors:

06-096 CMR 530(4)(A)(2)(a) states that, *"For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model."* With a permitted flow limitation of 0.62 MGD and the location and configuration of the outfall structure, the Department has established dilution factors as follow:

Acute = 27:1 Chronic = 45:1 Harmonic mean = 90:1

c. BOD_5 and TSS: The previous permitting action established, and this permitting action is carrying forward, monthly average and weekly average technology-based concentration limits of 30 mg/L and 45 mg/L, respectively, for BOD_5 and TSS based on the secondary treatment requirements specified at *Effluent Guidelines and Standards*, 06-096 CMR 525(3)(III) (effective January 12, 2001), and a daily maximum concentration limit of 50 mg/L, which is based on a Department best professional judgment of best practicable treatment for secondary treated wastewater. The technology-based monthly average, weekly average and daily maximum mass limits of 155 lbs./day, 233 lbs./day and 258 lbs./day, respectively, established in the previous permitting action for BOD_5 and TSS are based on the

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

monthly average flow design criterion of 0.62 MGD and the applicable concentration limits, and are also being carried forward in this permitting action.

This permitting action is carrying forward a requirement for a minimum of 85% removal of BOD_5 & TSS pursuant to 06-096 CMR 525(3)(III)(a&b)(3). The permittee has not demonstrated that it qualifies for special considerations pursuant to 06-096 CMR 525(3)(IV) to maintain a waiver from the 85% removal requirement when influent concentration is less than 200 mg/L, which was established in the previous permit. Therefore, this permitting action is eliminating the waiver from the 85% removal requirement provided in the previous permitting action when influent concentration is less than 200 mg/L.

The Department reviewed 56 DMRs that were submitted for the period November 2009– June 2014 for BOD_5. It is noted that the daily maximum BOD_5 mass limit of 258 lbs./day was exceeded in March 2010 with a result of 304 lbs./day. The monthly, weekly and daily concentration limits of 30 mg/L, 45 mg/L and 50 mg/L, respectively were exceeded during the month of August 2013 with respective results of 49 mg/L, 60 mg/L and 69 mg/L. A review of data indicates the following:

BOD_5 mass

Value	Limit (lbs./day)	Range (lbs./day)
Monthly Average	155	7 – 73
Daily Maximum	258	10 – 304

BOD_5 concentration

Value	Limit (mg/L)	Range (mg/L)
Monthly Average	30	4 - 49
Daily Maximum	50	5 - 69

The Department reviewed 56 DMRs that were submitted for the period November 2009– June 2014 for TSS. It is noted that the daily maximum TSS concentration limit of 50 mg/L was exceeded in March 2010 (353 mg/L). A review of data indicates the following:

TSS mass

Value	Limit (lbs./day)	Range (lbs./day)
Monthly Average	155	15 – 75
Daily Maximum	258	22 – 353

TSS concentration

Value	Limit (mg/L)	Range (mg/L)
Monthly Average	30	8 – 28
Daily Maximum	50	13 – 43

On April 19, 1996, the USEPA issued a guidance document entitled, "*Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies"* (USEPA 1996) as the basis for determining reduced monitoring frequencies. The guidance document was issued to reduce unnecessary reporting while at the same time maintaining a high level of environmental protection for facilities that have a good compliance record and pollutant discharges at levels below permit requirements. Monitoring requirements are not considered effluent limitations under section 402(o) of

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

the Clean Water Act and therefore, anti-backsliding prohibitions would not be triggered by reductions in monitoring frequencies.

The USEPA guidance indicates "…*the basic premise underlying a performance-based reduction approach is that maintaining a low average discharge relative to the permit limits results in a low probability of the occurrence of a violation for a wide range of sampling frequencies*." The monitoring frequency reductions in USEPA's guidance were designed to maintain approximately the same level of reported violations as that experienced with the existing baseline sampling frequency in the permit. To establish baseline performance the long term average (LTA) discharge rate for each parameter is calculated using the most recent two-year data set of monthly average effluent data representative of current operating conditions. The LTA/permit limit ratio is calculated and then compared to the matrix in Table I of USEPA's guidance to determine the potential monitoring frequency reduction. It is noted Table I of USEPA's guidance was derived from a probability table that used an 80% effluent variability or coefficient of variation (cv). The permitting authority can take into consideration further reductions in the monitoring frequencies if the actual cv for the facility is significantly lower than the default 80% utilized by the USEPA in Table I.

In addition to the parameter-by-parameter performance history via the statistical evaluation cited above, the USEPA recommends the permitting authority take into consideration the facility enforcement history and the parameter-by-parameter compliance history and factors specific to the State or facility. If the facility has already been given monitoring reductions due to superior performance, the baseline may be a previous permit.

The USEPA's 1996 guidance recommends evaluation of the most current two-years of effluent data for a parameter. A review of the monitoring data for BOD_5 and TSS indicate the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

<u>BOD_5</u>

Long term average = 155 lbs./day
Monthly average limit = 19 lbs./day
Current monitoring frequency = 2/Week

$$\text{Ratio} = \frac{155 \text{ lbs./day}}{19 \text{ lbs./day}} = 8\%$$

According to Table I of the USEPA guidance, a 2/Week monitoring requirement can be reduced to 1/Month. However, the Department has determined based on results of facility testing a reduction to 1/Month testing for BOD_5 is not consistent with our analysis of the data and best professional judgment. Therefore, this permitting action is establishing a 1/Week monitoring frequency requirement.

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

TSS

Long term average = 155 lbs./day
Monthly average limit = 33 lbs./day
Current monitoring frequency = 2/Week

$$\text{Ratio} = \frac{155 \text{ lbs./day}}{33 \text{ lbs./day}} = 5\%$$

According to Table I of the USEPA guidance, a 2/Week monitoring requirement can be reduced to 1/Month. However, the Department has determined based on results of facility testing a reduction to 1/Month testing for TSS is not consistent with our analysis of the data and best professional judgment. Therefore, this permitting action is establishing a 1/Week monitoring frequency requirement.

d. Settleable Solids: The previous permitting action established, and this permitting action is carrying forward, a technology-based daily maximum concentration limit of 0.3 ml/L for settleable solids, which is considered a best practicable treatment limitation for secondary treated wastewater.

The Department reviewed 56 DMRs that were submitted for the period November 2009– June 2014 for settleable solids. It is noted that the daily maximum settleable solids concentration limit of 0.3 ml/L was exceeded in March 2011 (40 ml/L). A review of data indicates the following:

Settleable solids concentration

Value	Limit (ml/L)	Range (ml/L)	Average (ml/L)
Daily Maximum	0.3	<0.01 – 40	0.13

It is noted that the average calculated in the table above excluded the anomalous datum of 40 ml/L in March of 2011.

Given that the exceedance in March of 2011 has caused their daily maximum average to exceed the daily maximum limit the Department is not considering any further monitoring reductions. Therefore, the Department is carrying forward the previously established the monitoring frequency for settleable solids of 3/Week in this permitting action.

e. Fecal Coliform Bacteria – The previous permitting action established, and this permitting action is carrying forward, seasonal monthly average and daily maximum concentration limits of 15 colonies/100 ml and 50 colonies/100 ml, respectively, for fecal coliform bacteria, which are consistent with the National Shellfish Sanitation Program. Bacteria limits are seasonal and apply between May 15 and September 30 of each year; however, the Department reserves the right to require year-round disinfection to protect the health, safety and welfare of the public.

The Department reviewed 22 DMRs that were submitted for the period November 2009– June 2014 for fecal coliform bacteria. It is noted that the daily maximum concentration limit of 50 colonies/100 ml was exceeded in August 2010, May 2011 and June 2012 during this time frame. The monthly average concentration limit of 15 colonies/100 ml was exceeded in May 2013 A review of data indicates the following:

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

Fecal coliform bacteria

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	15	1 – 21	6
Daily Maximum	50	2 – 178	31

A review of the monitoring data for fecal coliform bacteria indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 6 col/100 ml
Monthly average limit = 15 col/100 ml
Current monitoring frequency = 2/Week

$$\text{Ratio} \quad \frac{6 \text{ col/100 ml}}{15 \text{ col/100 ml}} = 40\%$$

According to Table I of the USEPA Guidance, a 2/Week monitoring requirement can be reduced to 2/Month. However, the Department has determined based on the frequency of fecal coliform violations that a reduction to 2/Month testing for fecal coliform bacteria is not consistent with our analysis of the data and best professional judgment. Therefore, the Department is carrying forward the monitoring frequency for fecal coliform bacteria of 2/Week.

f. Total Residual Chlorine (TRC): The previous permitting action established technology-based monthly average and water quality-based daily maximum concentration limits of 0.1 mg/L and 0.3 mg/L, respectively, for TRC. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department permitting actions impose the more stringent of either a water quality-based or BPT-based limit. With dilution factors as determined above, end-of-pipe (EOP) water quality-based concentration thresholds for TRC may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	A & C Dilution Factors	Calculated Acute Threshold	Chronic Threshold
0.013 mg/L	0.0075 mg/L	27:1(A) 45:1 (C)	0.35 mg/L	0.34 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that need to dechlorinate the discharge in order to meet water quality-based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. The Town dechlorinates the effluent prior to discharge in order to achieve compliance with the water quality-based thresholds. The calculated acute water quality-based threshold of 0.35 mg/L is less stringent than the daily maximum technology-based standard of 0.3 mg/L and therefore the previously established daily maximum technology-based standard of 0.3 mg/L is being carried forward in this permitting action. The monthly average technology-based standard of 0.1 mg/L is more stringent than the calculated chronic water quality-based threshold of 0.34 mg/L and is therefore being carried forward in this permitting action.

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

The Department reviewed 34 DMRs that were submitted for the period November 2009 – June 2014. A review of data indicates the following:

Total residual chlorine

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	0.1	0.00 – 0.04	0.01
Daily Maximum	0.3	0.01 - 0.25	0.08

A review of the monitoring data for TRC indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 0.1 mg/L
Monthly average limit = 0.01 mg/L
Current monitoring frequency = 1/Day

$$\text{Ratio} = \frac{0.01 \text{ mg/L}}{0.1 \text{ mg/L}} = 10\%$$

According to Table I of the EPA Guidance, a 1/Day monitoring requirement can be reduced to 1/Week. However, the Department has determined based on the violations for fecal coliform bacteria that a reduction to 1/Week testing for TRC is not consistent with our analysis of the data and best professional judgment. Therefore, this permitting action is carrying forward the 1/Day monitoring frequency requirement.

g. pH: The previous permitting action established, and this permitting action is carrying forward, a technology-based pH limit of 6.0 – 9.0 standard units (SU), which is based on 06-096 CMR 525(3)(III), and a minimum monitoring frequency requirement of once per day.

The Department reviewed 56 DMRs that were submitted for the period November 2009 – June 2014. A review of data indicates the following:

pH

Value	Limit (SU)	Minimum (SU)	Maximum (SU)
Range	6.0 – 9.0	6.0	7.3

In consideration of the compliance history with pH, this permitting action is carrying forward the minimum monitoring frequency requirement of once per day.

h. Mercury: Pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001), the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL W000370-6C-F-R by establishing interim monthly average and daily maximum effluent concentration limits of 10.1 nanograms/liter (ng/L) and 15.1 ng/L, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury. It is noted the limitations have been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit.

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

38 M.R.S.A. § 420(1-B)(B)(1) provides 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. A review of the Department's data base for the period February 2009 through December 2013 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows:

Mercury

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average	10.1	1.70 – 5.30	2.5
Daily Maximum	15.1		

Pursuant to 38 M.R.S.A. §420(1-B)(F), the Department issued a minor revision on February 6, 2012 to the May 25, 2009 permit thereby revising the minimum monitoring frequency requirement from four times per year to once per year given the permittee has maintained at least 5 years of mercury testing data.

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

i. Nitrogen: The permittee has not been conducting total nitrogen testing on its discharge to date. However, the USEPA requested the Department evaluate the reasonable potential for the discharge of total nitrogen to cause or contribute to non-attainment of applicable water quality standards, namely algal blooms, in marine waters. As of the date of this permitting action, the State of Maine has not promulgated numeric ambient water quality criteria for any of the nitrogen compounds. The Department has 50 total nitrogen data results collected on effluent from municipally-owned treatment works that discharge to marine waters in Maine. With an arithmetic mean total nitrogen discharge concentration of 14.3 mg/L and a near field dilution factor of 45:1 for the Wiscasset facility, an in-stream concentration can be calculated as follows:

Total nitrogen concentrations in effluent = 14.3 mg/L
Chronic dilution factor = 45:1

In-stream concentration after dilution: $\frac{14.3 \text{ mg/L}}{45} = 0.32 \text{ mg/L}$

Because nitrogen is not acutely toxic, the Department is considering a far-field dilution to be more appropriate when evaluating impacts of total nitrogen to a marine environment. Far field dilutions are significantly higher than the near-field dilution, ranging from 100 – 10,000 times higher depending on the location of the outfall pipe. With outfalls located in protected coves or small embayments without significant flushing, the far field dilutions factors would tend to be on the order of 100 – 1,000 times higher. With open ocean discharges, far field dilutions would tend to be 1,000 – 10,000 times higher.

The discharge from the permittee's facility to the Sheepscot River would be consider a discharge to an estuary thus, the far field dilution would likely be on the lower end of the 100 – 1,000 range. As a result, the far-field dilution may be as high as 4,500:1, thereby limiting the increase in the ambient total nitrogen by 0.003 mg/L based on the following calculation:

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

Total nitrogen concentrations in effluent = 14.3 mg/L
Chronic dilution factor = 4,500:1

In-stream concentration after dilution: $\frac{14.3 \text{ mg/L}}{4{,}500} = 0.003 \text{ mg/L}$

The Department has assessed available ambient total nitrogen data from the Midcoast Maine estuary to support an effort to develop statewide nutrient criteria for marine waters. For the Wiscasset facility, the Department calculated a mean background concentration of 0.33 mg/L. As a result, after reasonable opportunity for far field mixing, the concentration of total nitrogen in the receiving water will be 0.33 mg/L + 0.003 mg/L = 0.3303 mg/L. Given the dynamic nature of the small amount of mapped eelgrass in this location (loss of the same patch between 1994 and 2005 with reappearance by 2008, and sparse distribution in 2012), and the predominant lack of suitable substrate (Maine DOT), the Department has determined that a total nitrogen threshold value protective of eelgrass such as 0.30 mg/L used for Great Bay is not appropriate. The Department's best professional judgment is that for an estuary like the Sheepscot, 0.30 mg/L is too conservative, and that an analysis of most Maine and northeastern estuaries similar to the Sheepscot River (in the absence of considerable point and non-point source nitrogen) would have, on average, ambient total nitrogen concentrations greater than 0.30 mg/L. In the absence of a better threshold value the Department is utilizing a total nitrogen threshold of 0.45 mg/L for protection of aquatic life using dissolved oxygen as the response variable (Great Bay criteria). Therefore, the in-stream concentration is less than the Department and USEPA's best professional judgment based total nitrogen threshold of 0.45 mg/L considered necessary to protect aquatic life in the receiving water. Therefore, the Department is making a best professional judgment determination that the discharge of total nitrogen from the permittee's facility does not exhibit a reasonable potential to exceed applicable water quality standards for Class SB waters.

In order to obtain more accurate effluent and ambient (background) total nitrogen data for the vicinity near the discharge and the Wiscasset facility to assess the potential impact (or lack thereof) of the discharge, the Department has requested the permittee conduct effluent monitoring for nitrate, nitrite, and total kjeldahl nitrogen at a frequency of twice per month from May 1st through October 31st during calendar year 2015. Once the testing is completed, the Department will again evaluate the discharge's reasonable potential exceed applicable water quality standards, the necessity to establish water quality based limits and the appropriate monitoring requirements for the remainder of the term of the permit.

Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing

Regulatory Background

38 M.R.S.A. § 414-A and 38 M.R.S.A. § 420 prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA.

06-096 CMR 530(2)(A) specifies the dischargers subject to the rule as:

> All licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this

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

> subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedences of narrative or numerical water quality criteria.

The Department has determined that the applicant's discharge is subject to the testing requirements of the toxics rule.

06-096 CMR 530(3)(E) states:

> For effluent monitoring data and the variability of the pollutant in the effluent**,** the Department must 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, USEPA, 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.

WET, priority pollutant and analytical chemistry testing, as required by 06-096 CMR 530, are included in this permit in order to characterize the effluent.

WET, Analytical Chemistry and Priority Pollutant Test Schedules

06-096 CMR 530(2)(D)(1) specifies WET, priority pollutant, and analytical chemistry test schedules for dischargers based on their level[1] as defined by 06-096 CMR 530(2)(B). Please see 06-096 CMR 530(2)(D)(1) for a listing of default test schedules.

Explanation of Screening and Surveillance Testing Years

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

[1] A facility falls into an applicable level based on their chronic dilution factor. The chronic dilution factor associated with the discharge from the permittee is 45:1; therefore, pursuant to 06-096 CMR 530(2)(B), this facility is considered a Level II facility for purposes of toxics testing.

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

(Permit issued) **0** *month(s)*	**12**	**24**	**36**	**48**	**60**
Year 1 **Surveillance**	*Year 2* **Surveillance**	*Year 3* **Surveillance**	*Year 4* **Screening**	*Year 5* **Surveillance**	

06-096 CMR 530(2)(D)(3)(d) states in part that for Level II facilities "… *may reduce surveillance testing to one WET or specific chemical series every other year provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E)".*

An annual certification statement pursuant to 06-096 CMR 530(2)(D)(4), is established in Special Condition J, *06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing* of the permit. The annual certification statement requirement is being carried forward in this permitting action.

WET Evaluation

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on the mysid shrimp (*Mysidopsis bahia*) and sea urchin *(Arbacia punctulata)*.

On August 1, 2014, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department for the Town in accordance with the statistical approach outlined above. The 8/1/14 statistical evaluation indicates the discharge from Wiscasset's Wastewater Treatment Facility did not demonstrate a reasonable potential to exceed either the acute or chronic ambient water quality thresholds of 3.7% and 2.2%, respectively, for any of the WET species tested to date. See **Attachment D** of this Fact Sheet for a summary of the WET test results.

Based on the results of facility testing and pursuant to 06-096 CMR 530 (2)(D)(3), this permitting action is carrying forward the previously established reduced surveillance level testing for the mysid shrimp and the sea urchin of once every other year (1/2 Surveillance Years). This permitting action is also carrying forward the established screening level testing for the mysid shrimp and sea urchin (2/Screening Year).

Analytical Chemistry & Priority Pollutant Evaluation

Chemical-specific monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria. This permit provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment, and receiving water characteristics. 06-096 CMR 584 sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters. The Department's DeTox system evaluates the chemical results from your facility as well as other dischargers within the watershed. Please see **Attachment E** of this fact sheet for more information.

Priority pollutants refers to those pollutants listed under "Priority Pollutants" on the form included as **Attachment A** of the permit. Analytical chemistry refers to those pollutants listed under "Analytical Chemistry" on the form included as **Attachment A** of the permit.

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

On August 1, 2014, the Department conducted a statistical evaluation of the most recent 60 months of chemical-specific test results on file with the Department for Wiscasset's Wastewater Treatment Facility in accordance with the statistical approach outlined above. The evaluation indicates that the discharge does not exceed or demonstrate a reasonable potential to exceed the critical AWQC for any parameters tested.

Priority Pollutants

Based on the results of the August 1, 2014 statistical evaluation, this permitting action maintains the established screening level testing for priority pollutants of once per screening year (1/Screening Year) and does not establish water quality-based effluent limitations for priority pollutants. Surveillance level priority pollutant monitoring is not required for Level II facilities per 06-096 CMR 530(2)(D)(1).

Analytical Chemistry

Based on the results of facility testing and pursuant to 06-096 CMR 530 (2)(D)(3), this permitting action maintains the previously established reduced surveillance level analytical chemistry testing at a frequency of once every other surveillance year (1/2 Surveillance Year). This permitting action maintains the established screening level analytical chemistry testing at a frequency of four times per screening year (4/Screening Year).

7. DISPOSAL OF SEPTAGE WASTE IN WASTEWATER TREATMENT FACILITY

The Town has applied for, and pursuant to *Standards for the Addition of Transported Wastes to Waste Water Treatment Facilities,* 06-096 CMR 555 (last amended February 5, 2009), and the Town's written septage management plan, this permitting action authorizes the Town to receive and introduce into the treatment process or solids handling stream up to a daily maximum of 6,200 GPD of septage wastes (up to a monthly total of 186,000 gallons). See Special Condition I of the permit.

8. 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 water body to meet standards for Class SC classification.

9. PUBLIC COMMENTS

Public notice of this application was made in the *Lincoln County News* and the *Wiscasset* newspapers on or about August 4, 2014. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses,* 06-096 CMR 522 (effective January 12, 2001).

10. DEPARTMENT CONTACTS

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

Yvette Meunier
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 215-1579
e-mail: yvette.meunier@maine.gov

11. RESPONSE TO COMMENTS

Reserved until the end of the comment period.

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

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

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

Date Sample Collected _____ Date Sample Analyzed _____

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

Last Revision - April 24, 2014

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

MARINE AND ESTUARY VERSION

Please see the footnotes on the last page.

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

Maine Department of Environmental Protection

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

Maine Department of Environmental Protection

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

Maine Department of Environmental Protection

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

Notes:

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

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

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

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

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

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

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

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

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

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

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.

Comments:

ATTACHMENT B

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

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT C

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WHOLE EFFLUENT TOXICITY REPORT
MARINE WATERS

Facility Name _____ MEPDES Permit # _____

Pipe # _____

Facility Representative _____ Signature _____

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

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

Chlorinated? _____ Dechlorinated? _____

Results

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

Effluent Limitations

A-NOEL	
C-NOEL	

Data summary

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

place * next to values statistically different from controls

Salinity Adjustment

brine	
sea salt	
other	

Reference toxicant

	mysid 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 D

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

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

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

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

Scheduled Toxicity Testing for the next calendar year

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

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

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

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

web site: www.maine.gov/dep

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
MAINE WASTE DISCHARGE LICENSE

PROPOSED
FACT SHEET

DATE: **JANUARY 20, 2015**

PERMIT NUMBER: **#ME0100757**

WASTE DISCHARGE LICENSE: **#W000370-6C-H-R**

NAME AND ADDRESS OF APPLICANT:
TOWN OF WISCASSET
51 BATH ROAD
WISCASSET, MAINE 04578

COUNTY: **LINCOLN**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):
TOWN OF WISCASSET
69 WATER STREET
WISCASSET, MAINE 04578

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

COGNIZANT OFFICIAL CONTACT INFORMATION:
MR. WILLIAM RINES
(207) 882-8222
wwtp@wiscasset.org

1. APPLICATION SUMMARY

Application: On August 15, 2014, the Department accepted as complete for processing, a renewal application from the Town of Wiscasset for Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100757/Waste Discharge License (WDL) #W000370-6C-F-R, which was issued on October 26, 2009 for a five-year term. The 10/26/09 MEPDES permit authorized the monthly average discharge of 0.62 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the Sheepscot River, Class SB, in Wiscasset, Maine.

2. PERMIT SUMMARY

a. Terms and Conditions: This permitting action is carrying forward all the terms and conditions of the previous permitting actions except it is:

1. Revising the minimum monitoring frequency requirements for Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS) based on the results of facility testing;

2. PERMIT SUMMARY (cont'd)

2. Incorporating the interim mercury limits established by the Department for this facility pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001);

3. Eliminating the waiver from the requirement to achieve 85 percent removal for BOD_5 and TSS;

4. Revising the timing of the screening Whole Effluent Toxicity (WET), priority pollutant, analytical chemistry and surveillance level WET, analytical chemistry testing during permit cycle; and

5. Eliminating the effluent limitations and monitoring requirements for cyanide amendable to chlorination based on results of facility testing; and

6. Establishing monitoring requirements for nitrate, nitrite and total kjehldahl nitrogen.

b. History: The most current relevant regulatory actions include:

March 31, 1998 – The Department issued WDL #W000370-46-C-R for a five-year term.

April 1, 1998 – The U.S. Environmental Protection Agency (USEPA) issued a renewal of the National Pollution Discharge Elimination System (NPDES) permit #ME0100757 for a five-year term.

February 26, 1999 – The Department issued WDL Modification #W000370–5L–D-M that reduced copper monitoring from once per month to once per year and eliminated the toxics reduction evaluation (TRE) requirement for copper.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permitting program in Maine, excluding areas of special interest to Maine Indian Tribes. From this point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program, and MEPDES permit #ME0100757 has been utilized for this facility.

August 11, 2004 – The Department issued combination MEPDES permit #ME0100757/WDL #W000370-5L-E-R for a five-year term.

October 26, 2009 – The Department issued combination MEPDES permit #ME0100757/WDL #W000370-6C-F-R for a five-year term.

February 6, 2012 – The Department issued permit modification #ME0100757/WDL#W000370-6C-G-M to incorporate the average and maximum concentration limits for total mercury.

August 12, 2014 – The Town submitted a timely and complete General Application to the Department for renewal of the October 26, 2009 MEPDES permit. The application was accepted for processing on August 15, 2014, and was assigned WDL #W000370-6C-H-R / MEPDES #ME0100757.

2. PERMIT SUMMARY (cont'd)

c. Source Description: The permittee maintains a separated sewer system that is approximately 15 miles in length with 17 pump stations serving 725 users with no industrial input. The collection system does not have combined sewer overflows. There is one portable generator for auxiliary electrical power for all 17 pump stations when the commercial source of electrical power is interrupted, and a pump truck and a portable pump to serve the pump station under emergency conditions. The permittee is authorized to receive up to 10,770 gallons per day and introduce up to 6,200 gallons per day of transported wastes into the wastewater treatment process or solids handling stream. The permittee submitted a copy of their revised Septage Management Plan (revised July 2008) that has been reviewed and approved by the Department. A map showing the location of the treatment facility is included as Fact Sheet **Attachment A**.

d. Wastewater Treatment: The facility consists of a bar rack and four aeration basins, each with a capacity of 55,000 gallons, two clarifiers, two chlorine contact tanks, a dechlorination tank and two effluent pumps. Seasonal disinfection is achieved with the use of sodium hypochlorite and dechlorination is achieved with the use of sodium bisulfite. Treated wastewater is discharged to the Sheepscot River from a 14-inch diameter pipe that is submerged in 3.5 feet of water over the crown of the pipe at mean low water.

The facility has a 10,770-gallon aerated receiving tank by which the transported wastes (up to 6,200 gallons per day) can be pumped into the treatment process system or to a digester. Biosolids are dewatered using a belt filter press and transported to a composting facility in Maine.

A process flow diagram submitted by the permittee is included as Fact Sheet **Attachment B**.

3. CONDITIONS OF PERMIT

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

4. RECEIVING WATER QUALITY STANDARDS

Classification of estuarine and marine waters, 38 M.R.S.A. § 469(3-A) classifies the tidewaters of the Sheepscot River as a Class SB water. *Standards for classification of estuarine and marine waters,* 38 M.R.S.A. § 465-B(2) describes the standards for classification of Class SB waterways.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report (Report), prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists a 3.79 square mile segment associated with Indian Point, Georgetown, to Fowle Pt., Westport, (Waterbody ID #730-3) as "Category 2: Estuarine and Marine Waters Attaining Some Designated Uses, Insufficient Information for Other Uses." Attainment in this context is in regard to the designated use of

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

harvesting of shellfish. Currently, the Maine Department of Marine Resources (MeDMR) lists Area #21-B Sheepscot River (Wiscasset, Westport Island, Edgecomb) of the receiving water as prohibited to the harvesting of shellfish due the presence of overboard discharges and insufficient (limited) ambient water quality data to meet the standards in the National Shellfish Sanitation Program. The Department reserves the right to require disinfection on a year-round basis to protect the health and welfare of the public. The shellfish closure area is identified on the map included as Fact Sheet **Attachment C.**

In addition, all estuarine and marine waters are listed in Category 5-D, "Estuarine and Marine Waters Impaired by Legacy Pollutants." The Category 5-D waters partially support fishing ("shellfish consumption") due to elevated levels of PCBs and other persistent, bioaccumulating substances in lobster tomalley.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

a. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limit of 0.62 MGD based on the design capacity for the treatment facility, and a daily maximum discharge flow reporting requirement.

The Department reviewed 56 Discharge Monitoring Reports (DMRs) that were submitted for the period November 2009– June 2014. A review of data indicates the following:

Flow

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	0.62	0.17 – 0.49	0.25
Daily Maximum	Report	0.19 – 1.76	0.613

b. Dilution Factors:

06-096 CMR 530(4)(A)(2)(a) states that, *"For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model."* With a permitted flow limitation of 0.62 MGD and the location and configuration of the outfall structure, the Department has established dilution factors as follow:

Acute = 27:1 Chronic = 45:1 Harmonic mean = 90:1

c. BOD_5 and TSS: The previous permitting action established, and this permitting action is carrying forward, monthly average and weekly average technology-based concentration limits of 30 mg/L and 45 mg/L, respectively, for BOD_5 and TSS based on the secondary treatment requirements specified at *Effluent Guidelines and Standards*, 06-096 CMR 525(3)(III) (effective January 12, 2001), and a daily maximum concentration limit of 50 mg/L, which is based on a Department best professional judgment of best practicable treatment for secondary treated wastewater. The technology-based monthly average, weekly average and daily maximum mass limits of 155 lbs./day, 233 lbs./day and 258 lbs./day, respectively, established in the previous permitting action for BOD_5 and TSS are based on the

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

monthly average flow design criterion of 0.62 MGD and the applicable concentration limits, and are also being carried forward in this permitting action.

This permitting action is carrying forward a requirement for a minimum of 85% removal of BOD_5 & TSS pursuant to 06-096 CMR 525(3)(III)(a&b)(3). The permittee has not demonstrated that it qualifies for special considerations pursuant to 06-096 CMR 525(3)(IV) to maintain a waiver from the 85% removal requirement when influent concentration is less than 200 mg/L, which was established in the previous permit. Therefore, this permitting action is eliminating the waiver from the 85% removal requirement provided in the previous permitting action when influent concentration is less than 200 mg/L.

The Department reviewed 56 DMRs that were submitted for the period November 2009– June 2014 for BOD_5. It is noted that the daily maximum BOD_5 mass limit of 258 lbs./day was exceeded in March 2010 with a result of 304 lbs./day. The monthly, weekly and daily concentration limits of 30 mg/L, 45 mg/L and 50 mg/L, respectively were exceeded during the month of August 2013 with respective results of 49 mg/L, 60 mg/L and 69 mg/L. A review of data indicates the following:

BOD_5 mass

Value	Limit (lbs./day)	Range (lbs./day)
Monthly Average	155	7 – 73
Daily Maximum	258	10 – 304

BOD_5 concentration

Value	Limit (mg/L)	Range (mg/L)
Monthly Average	30	4 - 49
Daily Maximum	50	5 - 69

The Department reviewed 56 DMRs that were submitted for the period November 2009– June 2014 for TSS. It is noted that the daily maximum TSS concentration limit of 50 mg/L was exceeded in March 2010 (353 mg/L). A review of data indicates the following:

TSS mass

Value	Limit (lbs./day)	Range (lbs./day)
Monthly Average	155	15 – 75
Daily Maximum	258	22 – 353

TSS concentration

Value	Limit (mg/L)	Range (mg/L)
Monthly Average	30	8 – 28
Daily Maximum	50	13 – 43

On April 19, 1996, the USEPA issued a guidance document entitled, "*Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies"* (USEPA 1996) as the basis for determining reduced monitoring frequencies. The guidance document was issued to reduce unnecessary reporting while at the same time maintaining a high level of environmental protection for facilities that have a good compliance record and pollutant discharges at levels below permit requirements. Monitoring requirements are not considered effluent limitations under section 402(o) of

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

the Clean Water Act and therefore, anti-backsliding prohibitions would not be triggered by reductions in monitoring frequencies.

The USEPA guidance indicates "…*the basic premise underlying a performance-based reduction approach is that maintaining a low average discharge relative to the permit limits results in a low probability of the occurrence of a violation for a wide range of sampling frequencies*." The monitoring frequency reductions in USEPA's guidance were designed to maintain approximately the same level of reported violations as that experienced with the existing baseline sampling frequency in the permit. To establish baseline performance the long term average (LTA) discharge rate for each parameter is calculated using the most recent two-year data set of monthly average effluent data representative of current operating conditions. The LTA/permit limit ratio is calculated and then compared to the matrix in Table I of USEPA's guidance to determine the potential monitoring frequency reduction. It is noted Table I of USEPA's guidance was derived from a probability table that used an 80% effluent variability or coefficient of variation (cv). The permitting authority can take into consideration further reductions in the monitoring frequencies if the actual cv for the facility is significantly lower than the default 80% utilized by the USEPA in Table I.

In addition to the parameter-by-parameter performance history via the statistical evaluation cited above, the USEPA recommends the permitting authority take into consideration the facility enforcement history and the parameter-by-parameter compliance history and factors specific to the State or facility. If the facility has already been given monitoring reductions due to superior performance, the baseline may be a previous permit.

The USEPA's 1996 guidance recommends evaluation of the most current two-years of effluent data for a parameter. A review of the monitoring data for BOD_5 and TSS indicate the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

<u>BOD_5</u>

Long term average = 155 lbs./day
Monthly average limit = 19 lbs./day
Current monitoring frequency = 2/Week

$$\text{Ratio} = \frac{155 \text{ lbs./day}}{19 \text{ lbs./day}} = 8\%$$

According to Table I of the USEPA guidance, a 2/Week monitoring requirement can be reduced to 1/Month. However, the Department has determined based on results of facility testing a reduction to 1/Month testing for BOD_5 is not consistent with our analysis of the data and best professional judgment. Therefore, this permitting action is establishing a 1/Week monitoring frequency requirement.

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

TSS

Long term average = 155 lbs./day
Monthly average limit = 33 lbs./day
Current monitoring frequency = 2/Week

$$\text{Ratio} = \frac{155 \text{ lbs./day}}{33 \text{ lbs./day}} = 5\%$$

According to Table I of the USEPA guidance, a 2/Week monitoring requirement can be reduced to 1/Month. However, the Department has determined based on results of facility testing a reduction to 1/Month testing for TSS is not consistent with our analysis of the data and best professional judgment. Therefore, this permitting action is establishing a 1/Week monitoring frequency requirement.

d. Settleable Solids: The previous permitting action established, and this permitting action is carrying forward, a technology-based daily maximum concentration limit of 0.3 ml/L for settleable solids, which is considered a best practicable treatment limitation for secondary treated wastewater.

The Department reviewed 56 DMRs that were submitted for the period November 2009– June 2014 for settleable solids. It is noted that the daily maximum settleable solids concentration limit of 0.3 ml/L was exceeded in March 2011 (40 ml/L). A review of data indicates the following:

Settleable solids concentration

Value	Limit (ml/L)	Range (ml/L)	Average (ml/L)
Daily Maximum	0.3	<0.01 – 40	0.13

It is noted that the average calculated in the table above excluded the anomalous datum of 40 ml/L in March of 2011.

Given that the exceedance in March of 2011 has caused their daily maximum average to exceed the daily maximum limit the Department is not considering any further monitoring reductions. Therefore, the Department is carrying forward the previously established the monitoring frequency for settleable solids of 3/Week in this permitting action.

e. Fecal Coliform Bacteria – The previous permitting action established, and this permitting action is carrying forward, seasonal monthly average and daily maximum concentration limits of 15 colonies/100 ml and 50 colonies/100 ml, respectively, for fecal coliform bacteria, which are consistent with the National Shellfish Sanitation Program. Bacteria limits are seasonal and apply between May 15 and September 30 of each year; however, the Department reserves the right to require year-round disinfection to protect the health, safety and welfare of the public.

The Department reviewed 22 DMRs that were submitted for the period November 2009– June 2014 for fecal coliform bacteria. It is noted that the daily maximum concentration limit of 50 colonies/100 ml was exceeded in August 2010, May 2011 and June 2012 during this time frame. The monthly average concentration limit of 15 colonies/100 ml was exceeded in May 2013 A review of data indicates the following:

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

Fecal coliform bacteria

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	15	1 – 21	6
Daily Maximum	50	2 – 178	31

A review of the monitoring data for fecal coliform bacteria indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 6 col/100 ml
Monthly average limit = 15 col/100 ml
Current monitoring frequency = 2/Week

$$\text{Ratio} \quad \frac{6 \text{ col/100 ml}}{15 \text{ col/100 ml}} = 40\%$$

According to Table I of the USEPA Guidance, a 2/Week monitoring requirement can be reduced to 2/Month. However, the Department has determined based on the frequency of fecal coliform violations that a reduction to 2/Month testing for fecal coliform bacteria is not consistent with our analysis of the data and best professional judgment. Therefore, the Department is carrying forward the monitoring frequency for fecal coliform bacteria of 2/Week.

f. Total Residual Chlorine (TRC): The previous permitting action established technology-based monthly average and water quality-based daily maximum concentration limits of 0.1 mg/L and 0.3 mg/L, respectively, for TRC. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department permitting actions impose the more stringent of either a water quality-based or BPT-based limit. With dilution factors as determined above, end-of-pipe (EOP) water quality-based concentration thresholds for TRC may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	A & C Dilution Factors	Calculated Acute Threshold	Chronic Threshold
0.013 mg/L	0.0075 mg/L	27:1(A) 45:1 (C)	0.35 mg/L	0.34 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that need to dechlorinate the discharge in order to meet water quality-based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. The Town dechlorinates the effluent prior to discharge in order to achieve compliance with the water quality-based thresholds. The calculated acute water quality-based threshold of 0.35 mg/L is less stringent than the daily maximum technology-based standard of 0.3 mg/L and therefore the previously established daily maximum technology-based standard of 0.3 mg/L is being carried forward in this permitting action. The monthly average technology-based standard of 0.1 mg/L is more stringent than the calculated chronic water quality-based threshold of 0.34 mg/L and is therefore being carried forward in this permitting action.

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

The Department reviewed 34 DMRs that were submitted for the period November 2009 – June 2014. A review of data indicates the following:

Total residual chlorine

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	0.1	0.00 – 0.04	0.01
Daily Maximum	0.3	0.01 - 0.25	0.08

A review of the monitoring data for TRC indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 0.1 mg/L
Monthly average limit = 0.01 mg/L
Current monitoring frequency = 1/Day

$$\text{Ratio} = \frac{0.01 \text{ mg/L}}{0.1 \text{ mg/L}} = 10\%$$

According to Table I of the EPA Guidance, a 1/Day monitoring requirement can be reduced to 1/Week. However, the Department has determined based on the violations for fecal coliform bacteria that a reduction to 1/Week testing for TRC is not consistent with our analysis of the data and best professional judgment. Therefore, this permitting action is carrying forward the 1/Day monitoring frequency requirement.

g. pH: The previous permitting action established, and this permitting action is carrying forward, a technology-based pH limit of 6.0 – 9.0 standard units (SU), which is based on 06-096 CMR 525(3)(III), and a minimum monitoring frequency requirement of once per day.

The Department reviewed 56 DMRs that were submitted for the period November 2009 – June 2014. A review of data indicates the following:

pH

Value	Limit (SU)	Minimum (SU)	Maximum (SU)
Range	6.0 – 9.0	6.0	7.3

In consideration of the compliance history with pH, this permitting action is carrying forward the minimum monitoring frequency requirement of once per day.

h. Mercury: Pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001), the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL W000370-6C-F-R by establishing interim monthly average and daily maximum effluent concentration limits of 10.1 nanograms/liter (ng/L) and 15.1 ng/L, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury. It is noted the limitations have been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit.

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

38 M.R.S.A. § 420(1-B)(B)(1) provides 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. A review of the Department's data base for the period February 2009 through December 2013 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows:

Mercury

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average	10.1	1.70 – 5.30	2.5
Daily Maximum	15.1		

Pursuant to 38 M.R.S.A. §420(1-B)(F), the Department issued a minor revision on February 6, 2012 to the May 25, 2009 permit thereby revising the minimum monitoring frequency requirement from four times per year to once per year given the permittee has maintained at least 5 years of mercury testing data.

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

i. Nitrogen: The permittee has not been conducting total nitrogen testing on its discharge to date. However, the USEPA requested the Department evaluate the reasonable potential for the discharge of total nitrogen to cause or contribute to non-attainment of applicable water quality standards, namely algal blooms, in marine waters. As of the date of this permitting action, the State of Maine has not promulgated numeric ambient water quality criteria for any of the nitrogen compounds. The Department has 50 total nitrogen data results collected on effluent from municipally-owned treatment works that discharge to marine waters in Maine. With an arithmetic mean total nitrogen discharge concentration of 14.3 mg/L and a near field dilution factor of 45:1 for the Wiscasset facility, an in-stream concentration can be calculated as follows:

Total nitrogen concentrations in effluent = 14.3 mg/L
Chronic dilution factor = 45:1

In-stream concentration after dilution: $\frac{14.3 \text{ mg/L}}{45} = 0.32 \text{ mg/L}$

Because nitrogen is not acutely toxic, the Department is considering a far-field dilution to be more appropriate when evaluating impacts of total nitrogen to a marine environment. Far field dilutions are significantly higher than the near-field dilution, ranging from 100 – 10,000 times higher depending on the location of the outfall pipe. With outfalls located in protected coves or small embayments without significant flushing, the far field dilutions factors would tend to be on the order of 100 – 1,000 times higher. With open ocean discharges, far field dilutions would tend to be 1,000 – 10,000 times higher.

The discharge from the permittee's facility to the Sheepscot River would be consider a discharge to an estuary thus, the far field dilution would likely be on the lower end of the 100 – 1,000 range. As a result, the far-field dilution may be as high as 4,500:1, thereby limiting the increase in the ambient total nitrogen by 0.003 mg/L based on the following calculation:

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

Total nitrogen concentrations in effluent = 14.3 mg/L
Chronic dilution factor = 4,500:1

In-stream concentration after dilution: $\frac{14.3 \text{ mg/L}}{4{,}500} = 0.003 \text{ mg/L}$

The Department has assessed available ambient total nitrogen data from the Midcoast Maine estuary to support an effort to develop statewide nutrient criteria for marine waters. For the Wiscasset facility, the Department calculated a mean background concentration of 0.33 mg/L. As a result, after reasonable opportunity for far field mixing, the concentration of total nitrogen in the receiving water will be 0.33 mg/L + 0.003 mg/L = 0.3303 mg/L. Given the dynamic nature of the small amount of mapped eelgrass in this location (loss of the same patch between 1994 and 2005 with reappearance by 2008, and sparse distribution in 2012), and the predominant lack of suitable substrate (Maine DOT), the Department has determined that a total nitrogen threshold value protective of eelgrass such as 0.30 mg/L used for Great Bay is not appropriate. The Department's best professional judgment is that for an estuary like the Sheepscot, 0.30 mg/L is too conservative, and that an analysis of most Maine and northeastern estuaries similar to the Sheepscot River (in the absence of considerable point and non-point source nitrogen) would have, on average, ambient total nitrogen concentrations greater than 0.30 mg/L. In the absence of a better threshold value the Department is utilizing a total nitrogen threshold of 0.45 mg/L for protection of aquatic life using dissolved oxygen as the response variable (Great Bay criteria). Therefore, the in-stream concentration is less than the Department and USEPA's best professional judgment based total nitrogen threshold of 0.45 mg/L considered necessary to protect aquatic life in the receiving water. Therefore, the Department is making a best professional judgment determination that the discharge of total nitrogen from the permittee's facility does not exhibit a reasonable potential to exceed applicable water quality standards for Class SB waters.

In order to obtain more accurate effluent and ambient (background) total nitrogen data for the vicinity near the discharge and the Wiscasset facility to assess the potential impact (or lack thereof) of the discharge, the Department has requested the permittee conduct effluent monitoring for nitrate, nitrite, and total kjeldahl nitrogen at a frequency of twice per month from May 1st through October 31st during calendar year 2015. Once the testing is completed, the Department will again evaluate the discharge's reasonable potential exceed applicable water quality standards, the necessity to establish water quality based limits and the appropriate monitoring requirements for the remainder of the term of the permit.

Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing

Regulatory Background

38 M.R.S.A. § 414-A and 38 M.R.S.A. § 420 prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA.

06-096 CMR 530(2)(A) specifies the dischargers subject to the rule as:

> All licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this

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

> subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedences of narrative or numerical water quality criteria.

The Department has determined that the applicant's discharge is subject to the testing requirements of the toxics rule.

06-096 CMR 530(3)(E) states:

> For effluent monitoring data and the variability of the pollutant in the effluent**,** the Department must 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, USEPA, 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.

WET, priority pollutant and analytical chemistry testing, as required by 06-096 CMR 530, are included in this permit in order to characterize the effluent.

WET, Analytical Chemistry and Priority Pollutant Test Schedules

06-096 CMR 530(2)(D)(1) specifies WET, priority pollutant, and analytical chemistry test schedules for dischargers based on their level[1] as defined by 06-096 CMR 530(2)(B). Please see 06-096 CMR 530(2)(D)(1) for a listing of default test schedules.

Explanation of Screening and Surveillance Testing Years

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

[1] A facility falls into an applicable level based on their chronic dilution factor. The chronic dilution factor associated with the discharge from the permittee is 45:1; therefore, pursuant to 06-096 CMR 530(2)(B), this facility is considered a Level II facility for purposes of toxics testing.

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

(Permit issued) **0** *month(s)*	**12**	**24**	**36**	**48**	**60**
Year 1 **Surveillance**	*Year 2* **Surveillance**	*Year 3* **Surveillance**	*Year 4* **Screening**	*Year 5* **Surveillance**	

06-096 CMR 530(2)(D)(3)(d) states in part that for Level II facilities "… *may reduce surveillance testing to one WET or specific chemical series every other year provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E)".*

An annual certification statement pursuant to 06-096 CMR 530(2)(D)(4), is established in Special Condition J, *06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing* of the permit. The annual certification statement requirement is being carried forward in this permitting action.

WET Evaluation

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on the mysid shrimp (*Mysidopsis bahia*) and sea urchin *(Arbacia punctulata)*.

On August 1, 2014, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department for the Town in accordance with the statistical approach outlined above. The 8/1/14 statistical evaluation indicates the discharge from Wiscasset's Wastewater Treatment Facility did not demonstrate a reasonable potential to exceed either the acute or chronic ambient water quality thresholds of 3.7% and 2.2%, respectively, for any of the WET species tested to date. See **Attachment D** of this Fact Sheet for a summary of the WET test results.

Based on the results of facility testing and pursuant to 06-096 CMR 530 (2)(D)(3), this permitting action is carrying forward the previously established reduced surveillance level testing for the mysid shrimp and the sea urchin of once every other year (1/2 Surveillance Years). This permitting action is also carrying forward the established screening level testing for the mysid shrimp and sea urchin (2/Screening Year).

Analytical Chemistry & Priority Pollutant Evaluation

Chemical-specific monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria. This permit provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment, and receiving water characteristics. 06-096 CMR 584 sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters. The Department's DeTox system evaluates the chemical results from your facility as well as other dischargers within the watershed. Please see **Attachment E** of this fact sheet for more information.

Priority pollutants refers to those pollutants listed under "Priority Pollutants" on the form included as **Attachment A** of the permit. Analytical chemistry refers to those pollutants listed under "Analytical Chemistry" on the form included as **Attachment A** of the permit.

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

On August 1, 2014, the Department conducted a statistical evaluation of the most recent 60 months of chemical-specific test results on file with the Department for Wiscasset's Wastewater Treatment Facility in accordance with the statistical approach outlined above. The evaluation indicates that the discharge does not exceed or demonstrate a reasonable potential to exceed the critical AWQC for any parameters tested.

Priority Pollutants

Based on the results of the August 1, 2014 statistical evaluation, this permitting action maintains the established screening level testing for priority pollutants of once per screening year (1/Screening Year) and does not establish water quality-based effluent limitations for priority pollutants. Surveillance level priority pollutant monitoring is not required for Level II facilities per 06-096 CMR 530(2)(D)(1).

Analytical Chemistry

Based on the results of facility testing and pursuant to 06-096 CMR 530 (2)(D)(3), this permitting action maintains the previously established reduced surveillance level analytical chemistry testing at a frequency of once every other surveillance year (1/2 Surveillance Year). This permitting action maintains the established screening level analytical chemistry testing at a frequency of four times per screening year (4/Screening Year).

7. DISPOSAL OF SEPTAGE WASTE IN WASTEWATER TREATMENT FACILITY

The Town has applied for, and pursuant to *Standards for the Addition of Transported Wastes to Waste Water Treatment Facilities,* 06-096 CMR 555 (last amended February 5, 2009), and the Town's written septage management plan, this permitting action authorizes the Town to receive and introduce into the treatment process or solids handling stream up to a daily maximum of 6,200 GPD of septage wastes (up to a monthly total of 186,000 gallons). See Special Condition I of the permit.

8. 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 water body to meet standards for Class SC classification.

9. PUBLIC COMMENTS

Public notice of this application was made in the *Lincoln County News* and the *Wiscasset* newspapers on or about August 4, 2014. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses,* 06-096 CMR 522 (effective January 12, 2001).

10. DEPARTMENT CONTACTS

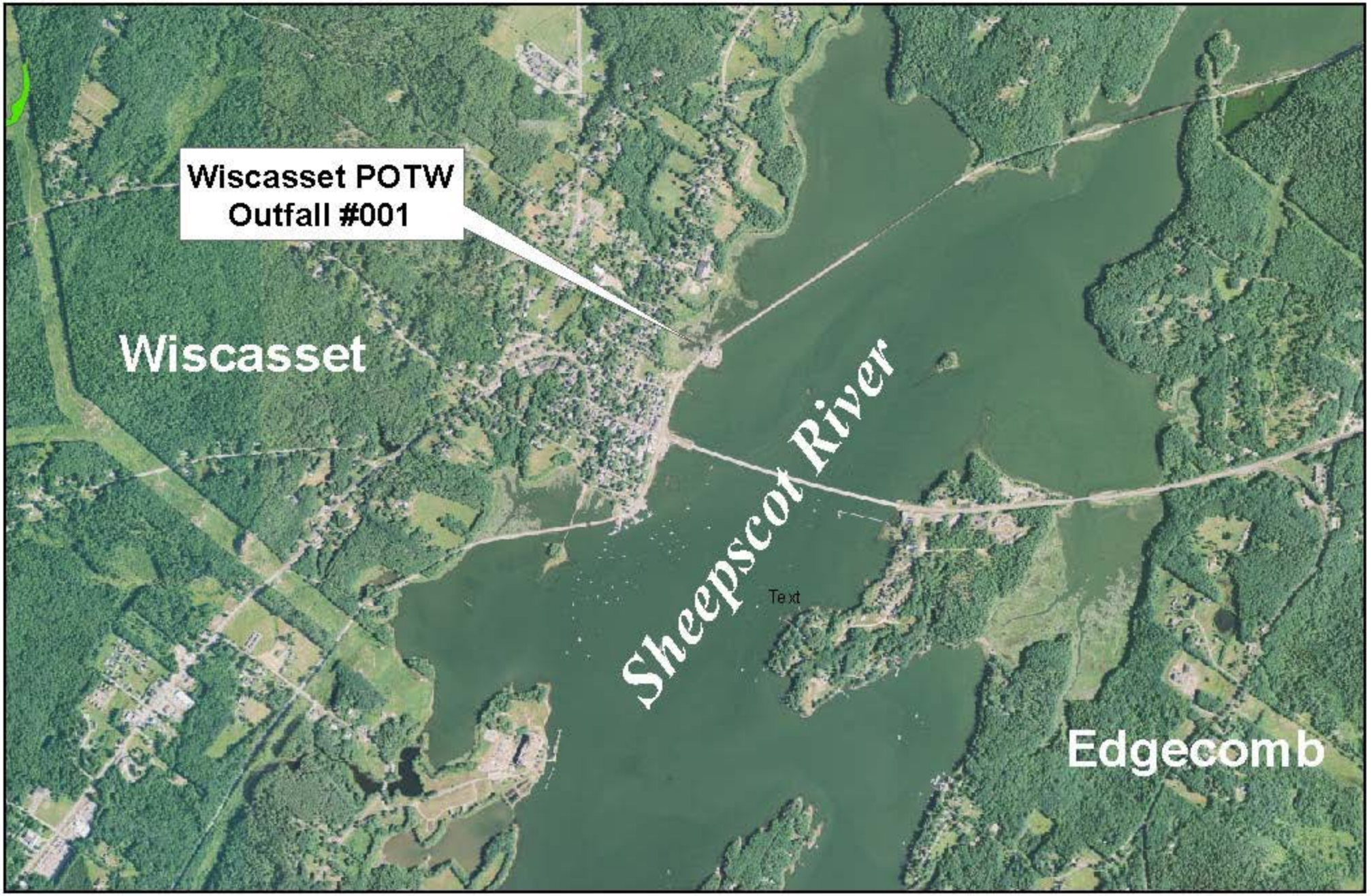
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Yvette Meunier
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 215-1579
e-mail: yvette.meunier@maine.gov

11. RESPONSE TO COMMENTS

Reserved until the end of the comment period.

ATTACHMENT A



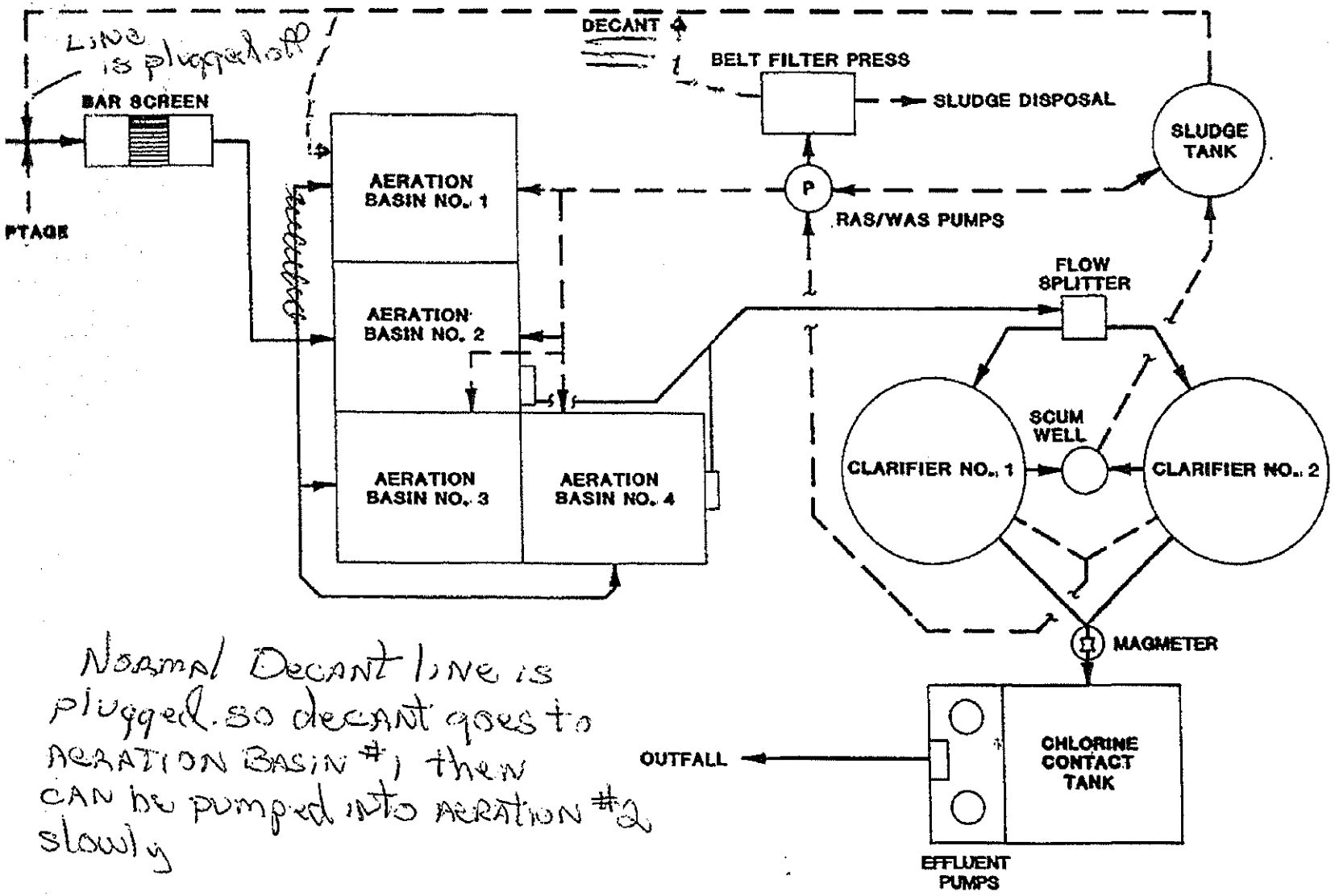
0 0.25 0.5 1 1.5 Miles

Map Created by Maine DEP
August 6, 2014

N
W E
S

Wiscasset Publicly Owned Treatment Works, Wiscasset Maine

ATTACHMENT B



Normal Decant line is plugged. so decant goes to AERATION BASIN #1 then CAN be pumped into AERATION #2 slowly

Figure 10

WISCASSET POTW UPGRADE

PROCESS FLOW DIAGRAM

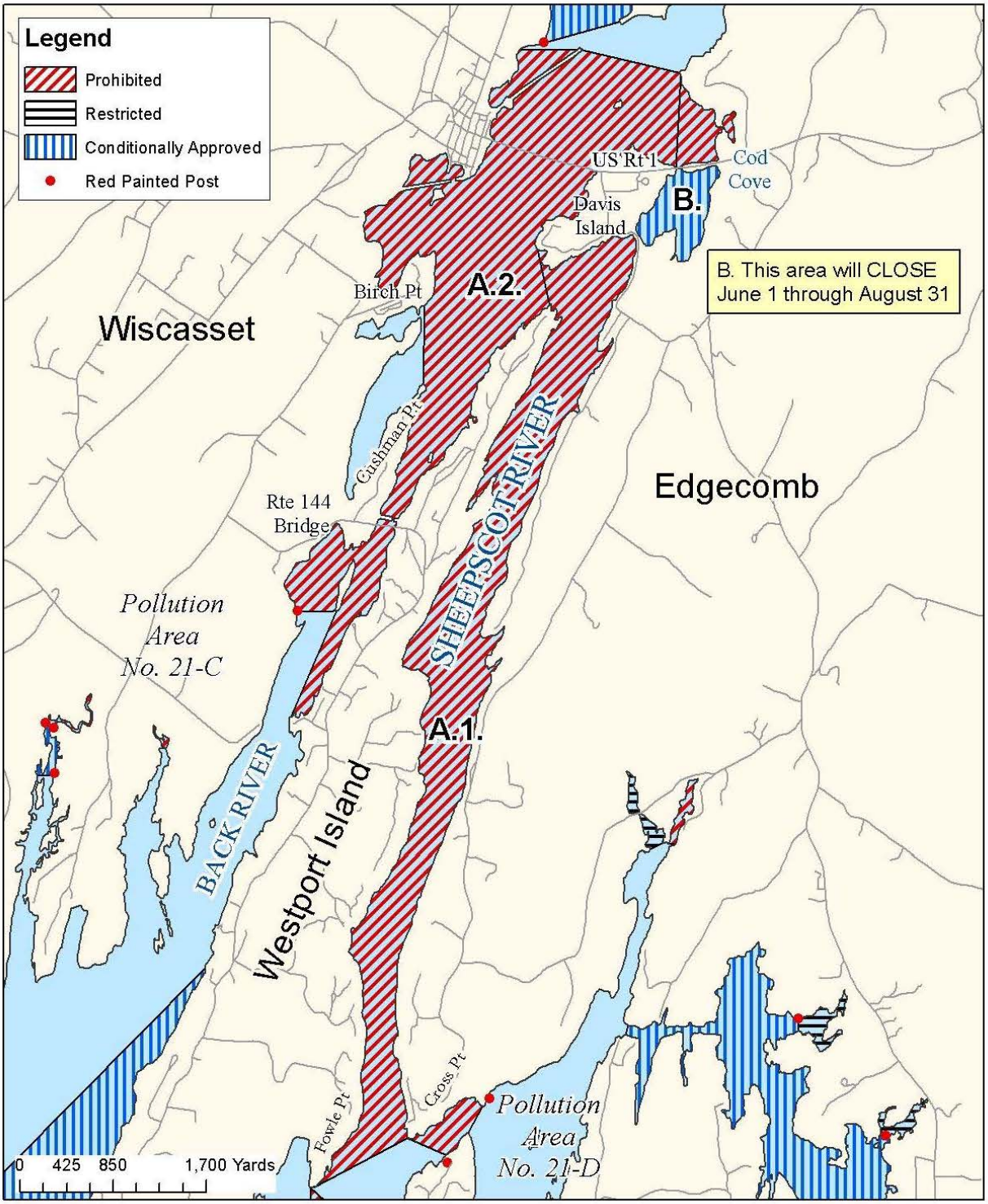
ATTACHMENT C

April 8, 2014

Maine Department of Marine Resources

Pollution Area No. 21-B

Sheepscot River (Wiscasset, Westport Island, Edgecomb)



OFFICES AT 2 BEECH ST., BAKER BUILDING, HALLOWELL, MAINE
http://www.Maine.gov/dmr
PHONE: (207) 624-6550 FAX: (207) 624-6024

ATTACHMENT D

FACILITY WET EVALUATION REPORT

Facility: WISCASSET **Permit Number:** ME0100757 **Report Date:** 8/1/2014

Receiving Water: SHEEPSCOT RIVER **Rapidmix:** ?

Diluition Factors: 1/4 Acute: 27 Acute: 27.000 Chronic: 45

Effluent Limits: Acute (%): 14.815 Chronic (%): 2.222 **Date range for Evaluation: From** 01/Aug/2009 **To:** 01/Aug/2014

Test Type: **A_NOEL**

Test Species: **MYSID SHRIMP**

Test Date	Result (%)	Status
09/26/2011	75.000	OK
11/17/2013	100.000	OK

Species Summary:

Test Number: 2 **RP:** 3.800 **Min Result (%):** 75.000 **RP factor (%):** 19.737 **Status:** OK

Test Type: **C_NOEL**

Test Species: **SEA URCHIN**

Test Date	Result (%)	Status
09/26/2011	100.000	OK
05/19/2013	10.000	OK
11/17/2013	10.000	OK

Species Summary:

Test Number: 3 **RP:** 3.000 **Min Result (%):** 10.000 **RP factor (%):** 3.333 **Status:** OK

ATTACHMENT E

Maine Department of Environmental Protection
General Processing Steps in "DeTox"

I. Preparation

Select Watershed

↓

Select values for pH, Temp, hardness,
Background %, Reserve %

Algorithms for some pollutants →

Water quality tables →

↓

Calculate water quality criteria: Acute, Chronic, Health

II. Segment Assimilative Capacity

Get facility information: location, stream flows

↓

Identify lowermost facility

↓

Get stream flows for Acute, Chronic, Health (1Q10, 7Q10, HM)

↓

Calculate segment capacity by pollutant and criterion:
Stream flow x criterion x 8.34 = pounds

↓

Set aside Reserve and Background:
Segment capacity x (1 – background – reserve) = *Segment Assimilative Capacity*

Save Segment Assimilative Capacities by pollutant and criterion

III. Evaluate History by Pollutant

Select each facility effluent data for each facility

Data input and edits →

↓

Identify "less than" results and assign at ½ of reporting limit

↓

Bypass pollutants if all results are "less than"

↓

Average concentrations and calculate pounds:
Ave concentration x license flow x 8.34 = *Historical Average*

↓

Determine reasonable potential (RP) using algorithm

↓

Calculate RP adjusted pounds:
Historical Average x RP factor = *RP Historical Allocation*

↓

Save for comparative evaluation

↓

Calculate adjusted maximum pounds:
Highest concentration x RP factor x license flow x 8.34 = *RP Maximum Value*

IV. Determine Facility History Percentage

By pollutant, identify facilities with *Historical Average*

↓

Sum all Historical Averages within segment

↓

By facility, calculate percent of total:
Facility pounds / Total pounds = *Facility History %*

V. Segment Allocation

By pollutant and criterion, select *Segment Assimilative Capacity*

↓

Select individual *Facility History %*

↓

Determine facility allocation:
Assimilative Capacity x Facility History % = *Segment Allocation*

↓

Save for comparative evaluation

VI. Individual Allocation

Select individual facility and dilution factor (DF)

↓

Select pollutant and water quality criterion

↓

By pollutant and criterion, calculate individual allocations:
[DF x 0.75 x criterion] + [0.25 x criterion] = Individual Concentration

↓

Determine individual allocation:
Individual Concentration x license flow x 8.34 = *Individual Allocation*

↓

Save for comparative evaluation

VII. Make Initial Allocation

By facility, pollutant and criterion, get:
Individual Allocation, Segment Allocation, RP Historical Allocation

↓

Compare allocation and select the smallest

↓

Save as *Facility Allocation*

VIII. Evaluate Need for Effluent Limits

By facility, pollutant and criterion select
Segment Allocation, *Individual Allocation* and *RP Maximum value*

↓

If *RP Maximum value* is greater than either *Segment Allocation* or *Individual Allocation*, use lesser value as *Effluent Limit*

↓

Save *Effluent Limit* for comparison

IX. Reallocation of Assimilative Capacity

Starting at top of segment, get *Segment Allocation*, *Facility Allocation* and *Effluent Limit*

↓

If *Segment Allocation* equals *Effluent Limit*, move to next facility downstream

↓

If not, subtract *Facility Allocation* from *Segment Allocation*

↓

Save difference

↓

Select next facility downstream

↓

Figure remaining *Segment Assimilative Capacity* at and below facility, less tributaries

↓

Add saved difference to get an adjusted *Segment Assimilative Capacity*

↓

Reallocate *Segment Assimilative Capacity* among downstream facilities per step V

↓

Repeat process for each facility downstream in turn

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

DATE: October 2008

TO: Interested Parties

FROM: Dennis Merrill, DEP

SUBJECT: DEP's system for evaluating toxicity from multiple discharges

****

Following the requirements of DEP's rules, Chapter 530, section 4(F), the Department is evaluating discharges of toxic pollutants into a freshwater river system in order to prevent cumulative impacts from multiple discharges. This is being through the use of a computer program known internally as "DeTox". The enclosed package of information is intended to introduce you to this system.

Briefly, the DeTox program evaluates each wastewater facility within a watershed in three different ways in order to characterize its effluent: 1) the facility's past history of discharges, 2) its potential toxicity at the point of discharge on an individual basis, and 3) the facility's contribution to cumulative toxicity within a river segment in conjunction with other facilities. The value that is most protective of water quality becomes the value that is held in the DeTox system as an allocation for the specific facility and pollutant.

The system is not static and uses a five-year "rolling" data window. This means that, over time, old test results drop off and newer ones are added. The intent of this process is to maintain current, uniform facility data to estimate contributions to a river's total allowable pollutant loading prior to each permit renewal.

Many facilities are required to do only a relatively small amount of pollutant testing on their effluent. This means, statistically, the fewer tests done, the greater the possibility of effluent limits being necessary based on the facility's small amount of data. To avoid this situation, most facilities, especially those with low dilution factors, should consider conducting more than the minimum number of tests required by the rules.

Attached you will find three documents with additional information on the DeTox system:

- Methods for evaluating the effects of multiple discharges of toxic pollutants
- Working definitions of terms used in the DeTox system
- Reviewing DeTox Reports
- Prototype facility and pollutant reports

If you have questions as you review these, please do not hesitate to contact me at Dennis.L.Merrill@maine.gov or 287-7788.

Maine Department of Environmental Protection

Methods for evaluating the effects of multiple discharges of toxic pollutants.

Reference: DEP Rules, Chapter 530, section 4(F)

To evaluate discharges of toxic pollutants into a freshwater river system and prevent cumulative impacts from multiple discharges, DEP uses a computer program called "DeTox that functions as a mathematical evaluation tool.

It uses physical information about discharge sources and river conditions on file with the Department, established water quality criteria and reported effluent test information to perform these evaluations. Each toxic pollutant and associated water quality criterion for acute, chronic and/or human health effects is evaluated separately.

Each facility in a river drainage area has an assigned position code. This "address" is used to locate the facility on the river segment and in relation to other facilities and tributary streams. All calculations are performed in pounds per day to allow analysis on a mass balance. Pollutants are considered to be conservative in that once in the receiving water they will not easily degrade and have the potential to accumulate.

The process begins with establishing an assimilative capacity for each pollutant and water quality criterion at the most downstream point in the river segment. This calculation includes set-aside amounts for background and reserve quantities and assumed values for receiving water pH, temperature and hardness. The resulting amount of assimilative capacity is available for allocation among facilities on the river.

Each facility is evaluated to characterize its past discharge quantities. The historical discharge, in pounds per day, is figured using the average reported concentration and the facility's permitted flow. As has been past practice, a reasonable potential (RP) factor is used as a tool to estimate the largest discharge that may occur with a certain degree of statistical certainty. The RP factor is multiplied by the historical average to determine an allocation based on past discharges. The RP factor is also multiplied by the single highest test to obtain a maximum day estimate. Finally, the direct average without RP adjustment is used to determine the facility's percent contribution to the river segment in comparison to the sum of all discharges of the pollutant. This percent multiplied by the total assimilative capacity becomes the facility's discharge allocation used in evaluations of the segment loadings.

Additionally, individual facility discharges are evaluated as single sources, as they have been in the past to determine if local conditions are more limiting than a segment evaluation.

With all of this information, facilities are evaluated in three ways. The methods are:

1. The facility's past history. This is the average quantity discharged during the past five years multiplied by the applicable RP factor. This method is often the basis for an allocation when the discharge quantity is relatively small in comparison to the water quality based allocation.
2. An individual evaluation. This assumes no other discharge sources are present and the allowable quantity is the total available assimilative capacity. This method may be used when a local condition such as river flow at the point of discharge is the limiting factor.
3. A segment wide evaluation. This involves allocating the available assimilative capacity within a river segment based on a facility's percent of total past discharges. This method would be used when multiple discharges of the same pollutant to the same segment and the available assimilative capacity is relatively limited.

The value that is most protective of water quality becomes the facility's allocation that is held in the system for the specific facility and pollutant. It is important to note that the method used for allocation is facility and pollutant specific and different facilities on the same segment for the same pollutant can have different methods used depending on their individual situations.

Discharge amounts are always allocated to all facilities having a history of discharging a particular pollutant. This does not mean that effluent limits will be established in a permit. Limits are only needed when past discharge amounts suggest a reasonable potential to exceed a water quality based allocation, either on an individual or segment basis. Similar to past practices for single discharge evaluations, the single highest test value is multiplied by a RP factor and if product is greater than the water quality allowance, an effluent limit is established. It is important to remember an allocation is "banking" some assimilative capacity for a facility even if effluent limits are not needed.

Evaluations are also done for each tributary segment with the sum of discharge quantities in tributaries becoming a "point source" to the next most significant segment. In cases where a facility does not use all of its assimilative capacity, usually due to a more limiting individual water quality criterion, the unused quantity is rolled downstream and made available to other facilities.

The system is not static and uses a five-year rolling data window. Over time, old tests drop off and newer ones are added on. These changes cause the allocations and the need for effluent limits to shift over time to remain current with present conditions. The intent is to update a facility's data and relative contribution to a river's total assimilative capacity prior to each permit renewal. Many facilities are required to do only minimal testing to characterize their effluents. This creates a greater degree of statistical uncertainty about the true long-term quantities. Accordingly, with fewer tests the RP factor will be larger and result in a greater possibility of effluent limits being necessary. To avoid this situation, most facilities, especially those with relatively low dilution factors, are encouraged to conduct more that a minimum number of tests. It is generally to a facility's long-term benefit to have more tests on file since their RP factor will be reduced.

Maine Department of Environmental Protection

Working Definitions of Terms Used in the DeTox System.

Allocation. The amount of pollutant loading set aside for a facility. Separate amounts are set for each *water quality criterion.* Each pollutant having a history of being discharged will receive an allocation, but not all allocations become *effluent limits.* Allocation may be made in three ways: *historical allocation, individual allocation* or *segment allocation.*

Assimilative capacity. The amount of a pollutant that river segment can safely accept from point source discharges. It is determined for the most downstream point in a river segment using the *water quality criterion* and river flow. Separate capacities are set for acute, chronic and human health criteria as applicable for each pollutant. Calculation of this capacity includes factors for *reserve* and *background* amounts.

Background. A concentration of a pollutant that is assumed to be present in a receiving water but not attributable to discharges. By rule, this is set as a rebuttable presumption at 10% of the applicable *water quality criterion.*

Effluent limit. A numeric limit in a discharge permit specifically restricting the amount of a pollutant that may be discharged. An effluent limit is set only when the highest discharge, including an adjustment for *reasonable potential,* is greater than a facility's water quality based *allocation* for a pollutant.

Historical allocation (or *RP history*). One of three ways of developing an *allocation.* The facility's average history of discharges, in pounds at design flow, is multiplied by the appropriate *reasonable potential* factor. An allocation using this method does not become an *effluent limit.*

Historical discharge percentage. For each pollutant, the average discharge concentration for each facility in a segment is multiplied by the permitted flow (without including a *reasonable potential* factor). The amounts for all facilities are added together and a percent of the total is figured for each facility. When a facility has no detectable concentrations, that pollutant is assumed to be not present and it receives no percentage.

Individual allocation. One of three ways of developing an *allocation.* The facility's single highest discharge on record multiplied by the appropriate *reasonable potential* factor is compared to a water quality based quantity with an assumption that the facility is the only point source to that receiving water. If the RP-adjusted amount is larger, the water quality amount may become an *effluent limit.*

Less than. A qualification on a laboratory report indicating the concentration of a pollutant was below a certain concentration. Such a result is evaluated as being one half of the Department's reporting limit in most calculations.

Reasonable potential (RP). A statistical method to determine the highest amount of a pollutant likely to be present at any time based on the available test results. The method produces a value or RP factor that is multiplied by test results. The method relies on an EPA guidance document, and considers the coefficient of variation and the number of tests. Generally, the fewer number of tests, the higher the RP factor.

Reserve. An assumed concentration of a pollutant that set aside to account for non-point source of a pollutant and to allow new discharges of a pollutant. By rule this is set at 15% of the applicable *water quality criterion.*

Segment allocation. One of three ways of developing an *allocation.* The amount is set by multiplying a facility's *historical discharge percentage* for a specific pollutant by the *assimilative capacity* for that pollutant and criterion. A facility will have different allocation percentages for each pollutant. This amount may become an *effluent limit.*

Tributary. A stream flowing into a larger one. A total pollutant load is set by adding the all facilities *allocations* on the tributary and treating this totaled amount as a "point source" to the next larger segment.

Water quality criteria. Standards for acceptable in-stream or ambient levels of pollutants. These are established in the Department's Chapter 584 and are expressed as concentrations in ug/L. There may be separate standards for acute and chronic protection aquatic life and/or human health. Each criterion becomes a separate standard. Different stream flows are used in the calculation of each.

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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).

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

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

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

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

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

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

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

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

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

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

(b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.

(c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.

(d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.

(e) The permittee shall install flow measuring facilities of a design approved by the Department.

(f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.

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

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

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

5. Bypasses.

(a) Definitions.

(i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

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

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

(c) Notice.

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

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

(d) Prohibition of bypass.

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

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
(C) The permittee submitted notices as required under paragraph (c) of this section.

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

6. Upsets.

(a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
(b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
(c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;
(ii) The permitted facility was at the time being properly operated; and
(iii) The permittee submitted notice of the upset as required in paragraph D(1)(f) , below. (24 hour notice).
(iv) The permittee complied with any remedial measures required under paragraph B(4).

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

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

(c) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;
(ii) The individual(s) who performed the sampling or measurements;
(iii) The date(s) analyses were performed;
(iv) The individual(s) who performed the analyses;
(v) The analytical techniques or methods used; and
(vi) The results of such analyses.

(d) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit.

(e) State law provides that any person who tampers with or renders inaccurate any monitoring devices or method required by any provision of law, or any order, rule license, permit approval or decision is subject to the penalties set forth in 38 MRSA, §349.

D. REPORTING REQUIREMENTS

1. Reporting requirements.

(a) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).

(iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

(b) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Transfers. This permit is not transferable to any person except upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.

(d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

(e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(f) Twenty-four hour reporting.

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance

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

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

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

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

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

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

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

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

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

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

(i) One hundred micrograms per liter (100 ug/l);
(ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

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

(i) Five hundred micrograms per liter (500 ug/l);
(ii) One milligram per liter (1 mg/l) for antimony;
(iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

5. Publicly owned treatment works.

(a) All POTWs must provide adequate notice to the Department of the following:

(i) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA or Chapter 528 if it were directly discharging those pollutants.
(ii) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
(iii) For purposes of this paragraph, adequate notice shall include information on (A) the quality and quantity of effluent introduced into the POTW, and (B) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(b) When the effluent discharged by a POTW for a period of three consecutive months exceeds 80 percent of the permitted flow, the permittee shall submit to the Department a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

E. OTHER REQUIREMENTS

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

(a) For municipal sources. During power failure, all wastewaters which are normally treated shall receive a minimum of primary treatment and disinfection. Unless otherwise approved, alternate power supplies shall be provided for pumping stations and treatment facilities. Alternate power supplies shall be on-site generating units or an outside power source which is separate and independent from sources used for normal operation of the wastewater facilities.

(b) For industrial and commercial sources. The permittee shall either maintain an alternative power source sufficient to operate the wastewater pumping and treatment facilities or halt, reduce or otherwise control production and or all discharges upon reduction or loss of power to the wastewater pumping or treatment facilities.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 <u>or</u> 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.