



STATE OF MAINE
Department of Environmental Protection

Paul R. Lepage
GOVERNOR

Patricia W. Aho
COMMISSIONER

June 5, 2015

Mr. Lewis Pinkham
Town of Milbridge
PO Box 66
Milbridge, Maine 04658
e-mail: milbridgetown@yahoo.com

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100404
Maine Waste Discharge License (WDL) Application #W000862-6B-G-R
Proposed Draft Permit

Dear Mr. Pinkham:

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 **Monday, July 6, 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

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-3901 FAX: (207) 287-3435
RAY BLDG., HOSPITAL ST.

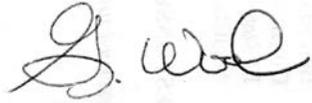
BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

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) 764-6477 FAX: (207) 764-1507

If you have any questions regarding the matter, please feel free to call me at 287-7693.

Sincerely,

A handwritten signature in black ink, appearing to read "G. Wood". The signature is fluid and cursive, with the first name "G." and the last name "Wood" clearly distinguishable.

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

Enc.

cc: Tanya Hovell, DEP/EMRO
Barry Mower, DEP/CMRO
David Webster, USEPA
David Pincumbe, USEPA
Alex Rosenberg, USEPA
David Webster, USEPA
Olga Vergara, USEPA
Maine Department of Marine Resources
Maine Department of Inland Fisheries & Wildlife
Ivy Frignoca, CLF



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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF MILBRIDGE)	MAINE POLLUTANT DISCHARGE
MILBRIDGE, WASHINGTON COUNTY, ME.)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS)	AND
ME0100404)	WASTE DISCHARGE LICENSE
W000862-6B-G-R)	RENEWAL
APPROVAL)	

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

APPLICATION SUMMARY

The Town has submitted a timely and complete application to the Department to renew combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100404/Maine Waste Discharge License (WDL) #W000862-6B-E-R, issued by the Department on April 5, 2010, for a five-year term. The 4/5/10 permit authorized the discharge of up to a monthly average flow of 70,000 gallons/day (gpd) of secondary treated waste water to the Narraguagus River, Class SB, in Milbridge, Maine.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions except that this permit is;

1. Reducing the monitoring frequencies for biochemical oxygen demand (BOD), total suspended solids (TSS) and fecal coliform bacteria from 1/Week to 2/Month and reducing the monitoring frequency for settleable solids from 5/Week to 3/Week based on a statistical evaluation of test results submitted to the Department during the term of the permit issued on April 5, 2010.
2. Establishing water quality based mass limits for total copper along with a 1/Quarter requirement given a statistical evaluation indicates the discharge has a reasonable potential exceed both the acute and chronic ambient water quality criteria (AWQC) for total copper.

CONCLUSIONS

BASED on the findings in the attached **PROPOSED DRAFT** Fact Sheet dated June 5, 2015, and subject to the Conditions listed below, the Department makes the following conclusions:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
3. The provisions of the State's antidegradation policy, 38 MRSA Section 464(4)(F), will be met, in that:
 - a. Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - b. Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
 - c. Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
 - d. Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and
 - e. Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

ACTION

THEREFORE, the Department APPROVES the above noted application of the TOWN OF MILBRIDGE, to discharge up to a monthly average flow of 70,000 gpd (0.07 MGD) of secondary treated sanitary waste water to the Narraguagus River, Class SB, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits," revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S.A. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (effective April 1, 2003)].

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

COMMISSIONER OF ENVIRONMENTAL PROTECTION

BY: _____
Patricia W. Aho, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application _____ March 13, 2015 _____.

Date of application acceptance _____ March 24, 2015 _____.

Date filed with Board of Environmental Protection _____

This order prepared by Gregg Wood, Bureau of Land and Water Quality.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge secondary treated waste waters from **OUTFALL # 001** to the Narraguagus River. Such discharges shall be limited and monitored by the permittee as specified below.

Effluent Characteristic	Discharge Limitations						Minimum Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow <i>[50050]</i>	70,000 gpd <i>[07]</i>	---	Report gpd <i>[07]</i>	---	---	---	Continuous <i>[99/99]</i>	Recorder <i>[RC]</i>
Biochemical Oxygen Demand (BOD ₅) ^(1a) <i>[00310]</i>	18 lbs/Day <i>[26]</i>	26 lbs/Day <i>[26]</i>	29 lbs/Day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	2/Month <i>[02/30]</i>	24 Hr. Composite <i>[24]</i>
BOD5 % Removal ^(1b) <i>[81010]</i>	---	---	---	85% <i>[23]</i>	---	---	---	---
Total Suspended Solids (TSS) ^(1a) <i>[00545]</i>	18 lbs/Day <i>[26]</i>	26 lbs/Day <i>[26]</i>	29 lbs/Day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	2/Month <i>[02/30]</i>	24 Hr. Composite <i>[24]</i>
TSS % Removal ^(1b) <i>[81011]</i>	---	---	---	85% <i>[23]</i>	---	---	---	---
Settleable Solids <i>[00545]</i>	---	---	---	---	---	0.3 ml/L <i>[25]</i>	3/Week <i>[03/07]</i>	Grab <i>[GR]</i>
Fecal Coliform Bacteria ⁽²⁾ <i>[74055]</i>	---	---	---	15/100 ml ⁽³⁾ <i>[13]</i>	---	50/100 ml <i>[13]</i>	2/Month <i>[02/30]</i>	Grab <i>[GR]</i>
Total Residual Chlorine ⁽⁴⁾ <i>[50060]</i>	---	---	---	---	---	0.052 mg/L <i>[19]</i>	1/Day <i>[01/01]</i>	Grab <i>[GR]</i>
pH (Std. Units) <i>[00400]</i>	---	---	---	---	---	6.0-9.0 <i>[12]</i>	3/Week <i>[02/07]</i>	Grab <i>[GR]</i>
Copper (Total) <i>[01042]</i>	0.047 lbs/Day <i>[26]</i>	---	0.012 lbs/Day <i>[26]</i>	Report mg/L <i>[19]</i>	---	Report mg/L <i>[19]</i>	1/Quarter <i>[01/90]</i>	24 Hr. Composite <i>[24]</i>

The italicized numeric values bracketed in the table below and on the following pages are code numbers that Department personnel utilize to code Discharge Monitoring Reports (DMR's).

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – OUTFALL #001 (cont’d)

SURVEILLANCE LEVEL – 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 shall conduct surveillance level testing as follows:

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity⁽⁵⁾ <u>Acute – NOEL</u> <i>Mysidopsis bahia</i> [TDM3E] (Mysid Shrimp)	---	---	---	Report % [23]	1/2Years [01/2Y]	Composite [24]
<u>Chronic – NOEL</u> <i>Arbacia punctulata</i> [TBH3A] (Sea urchin)	---	---	---	Report % [23]	1/2 Years [01/2Y]	Composite [24]
Analytical Chemistry^(6,8) [51168]	---	---	---	Report ug/L [28]	1/2 Years [01/2Y]	Composite/Grab [24]

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – OUTFALL #001 (cont’d)

SCREENING LEVEL - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee shall conduct screening level testing as follows:

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity⁽⁵⁾ <u>Acute – NOEL</u> <i>Mysidopsis bahia</i> [TDM3E] (Mysid Shrimp)	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
<u>Chronic – NOEL</u> <i>Arbacia punctulata</i> [TBH3A] (Sea urchin)	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
Analytical Chemistry^(6,8) [51168]	---	---	---	Report ug/L [28]	1/Quarter [01/90]	Composite/Grab [24]
Priority Pollutant^(7,8) [50008]	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/Grab [24]

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Footnotes:

Sampling Locations:

Effluent sampling for all parameters shall be collected after the last treatment process prior to discharge to the receiving water. Any change in sampling location(s) must be reviewed and approved by the Department in writing. Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. Samples that are sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of the *Maine Comprehensive and Limited Laboratory Certification Rules*, 10-144 CMR263 (last amended February 13, 2000).

1. **BOD & TSS** –

- a. **2/Month** – there shall be at least ten (10) days between sampling events.
- b. **Percent Removal** - The treatment facility shall maintain a minimum of 85 percent removal of both BOD₅ and TSS. Due to the configuration of the waste water collection and treatment systems, this permit does not require the permittee to perform routine compliance monitoring with said limitation. However, the limitations are in effect and enforceable at all times.

2. **Fecal coliform bacteria** - Limits are seasonal and apply between May 15th and September 30th of each calendar year. The Department reserves the right to require disinfection on a year-round basis to protect the health and welfare of the public. There shall be at least ten (10) days between sampling events.

3. **Fecal coliform bacteria** – The monthly average limitation is a geometric mean limitation and shall be calculated and reported as such.

4. **Total residual chlorine (TRC)** – Limitations and monitoring requirements for TRC are applicable whenever elemental chlorine or chlorine based compounds are being utilized to disinfect the discharge. The permittee shall utilize approved methods that are capable of bracketing the TRC limitation in this permit.

SPECIAL CONDITIONS

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

Footnotes:

5. **Whole Effluent Toxicity (WET)** - Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the acute and chronic critical thresholds of 25 % and 4% respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points. Acute tests shall be conducted on the mysid shrimp (*Mysidopsis bahia*) and chronic tests shall be conducted on the sea urchin (*Arbacia punctulata*). The critical acute and chronic thresholds were derived as the mathematic inverse of the applicable acute and chronic dilution factors of 4:1 and 24:1 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 shall conduct surveillance level testing at a minimum frequency of once per year (1/Year). Testing shall be conducted in a different calendar quarter of each year such that a WET test is conducted each of the four calendar quarters during the first four years of the term of the permit.
 - b. **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement the permittee shall conduct screening level WET testing at a minimum frequency of twice per year (2/Year). There shall be at least 6 months between sampling events.

WET test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 25% and 4%, respectively. See **Attachment A** of this permit for a copy of the Department's WET report form.

SPECIAL CONDITIONS

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

Footnotes:

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

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

Each time a WET test is performed, the permittee shall sample and analyze for the parameters in the WET Chemistry and the Analytical Chemistry sections of the Department form entitled, *Maine Department of Environmental Protection, WET and Chemical Specific Data Report Form*. See **Attachment B** of this permit.

6. **Analytical chemistry** – Refers to a suite of chemicals in **Attachment B** of this permit.

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 shall conduct surveillance analytical chemistry testing at a minimum frequency of 1/Year.

Screening level testing - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee shall conduct screening level analytical chemistry testing at a minimum frequency of once per calendar quarter (1/Quarter).

7. **Priority pollutant testing** – Refers to a suite of chemicals in **Attachment B** of this permit.

Screening 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 shall conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year). It is noted Chapter 530 does not require routine surveillance level priority pollutant testing in the first three years or the fifth year of the term of this permit.

SPECIAL CONDITIONS

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

Footnotes:

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

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

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time which would impair the uses designated by the classification of the receiving waters.
2. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the uses designated by the classification of the receiving waters.
3. The discharge shall not cause visible discoloration or turbidity in the receiving waters which would impair the uses designated by the classification of the receiving waters.
4. Notwithstanding specific conditions of this permit the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

B. TREATMENT PLANT OPERATOR

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

SPECIAL CONDITIONS

C. LIMITATIONS FOR INDUSTRIAL USERS

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

D. AUTHORIZED DISCHARGERS

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on March 24, 2015; 2) the terms and conditions of this permit; and 3) only from Outfall #001. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5)(*Bypass*) of this permit.

E. NOTIFICATION REQUIREMENT

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

1. Any introduction of pollutants into the waste water collection and treatment system from an indirect discharger in a primary industrial category discharging process waste water.
2. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system.
3. For the purposes of this section, adequate notice shall include information on:
 - a. The quality and quantity of waste water introduced to the waste water collection and treatment system; and
 - b. Any anticipated impact of the change in the quantity or quality of the waste water to be discharged from the treatment system.

SPECIAL CONDITIONS

F. WET WEATHER MANAGEMENT PLAN

The treatment facility staff shall maintain a current written Wet Weather Flow Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall. The plan shall include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures to be adhered to during the events.

The Plan shall include wet weather response operating procedures, with a list and locations of alarmed equipment and monitors, and an outline of an alarm response plan identifying person(s) and action(s) to be taken in the event of a problem.

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

G. OPERATIONS AND MAINTENANCE (O&M) PLAN

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

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

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

H. SEPTIC TANK MAINTENANCE

To ensure that the individual septic tanks/sand filters are providing best practicable treatment and achieving desired percent removal levels for BOD and TSS, the permittee will be required to maintain a revolving inspection and maintenance schedule for pumping out the solids in all the septic tanks. For the commercial entities the septic tanks shall be pumped once per year and the grease traps cleaned once per year.

SPECIAL CONDITIONS

H. SEPTIC TANK MAINTENANCE (cont'd)

Milbridge is responsible for maintaining a log that documents the date of inspections, comments as to the solids contents and scum layers observed during each inspection as well as the quantity of septage removed from each septic tank should pumping be deemed necessary. The permittee must pump out the tanks to remove accumulated solids if solids accumulate to, or occupy one-third or more of the tanks' working (liquid) volume capacity.

All dates and comments on the inspections shall be documented in logs which shall be made available to Department personnel upon request. The Town of Milbridge will be responsible for maintaining a log that documents the date and quantity of septage removed from each septic tank connected to the collection system. The logs shall be kept current and available to Department personnel for inspection during business hours.

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

By December 31 of each calendar year, the permittee shall provide the Department with a certification describing any of the following that have occurred since the effective date of this permit [*ICIS Code 75305*]: See **Attachment D** of the Fact Sheet of this permit for an acceptable certification form to satisfy this Special Condition.

1. 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;
2. Changes in the operation of the treatment works that may increase the toxicity of the discharge; and
3. Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge.

(d) Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge.

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

The Department reserves the right to reinstate annual (surveillance level) testing or other toxicity testing if new information becomes available that indicates the discharge may cause or have a reasonable potential to cause exceedences of ambient water quality criteria/thresholds or if annual certifications described above are not submitted.

SPECIAL CONDITIONS

J. MONITORING AND REPORTING

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

Maine Department of Environmental Protection
Eastern Maine Regional Office
Bureau of Land and Water Quality
106 Hogan Road
Bangor, Maine 04401

Alternatively, if you are submitting an electronic DMR (eDMR), the completed eDMR must be electronically submitted to the Department by a facility authorized DMR Signatory not later than close of business on the 15th day of the month following the completed reporting period. Hard Copy documentation submitted in support of the eDMR must be 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.

K. REOPENING OF PERMIT FOR MODIFICATIONS

Upon evaluation of the tests results or monitoring requirements specified in Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at 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 effluent or ambient water quality monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information including, but not limited to, new information from ambient water quality studies of the receiving waters.

SPECIAL CONDITIONS

L. 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 shall remain in full force and effect, and shall be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

ATTACHMENT A

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

Facility Name _____ MEPDES Permit # _____
Pipe # _____

Facility Representative _____ Signature _____

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

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

Chlorinated? _____ Dechlorinated? _____

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

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

place * next to values statistically different from controls

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

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

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

ATTACHMENT B

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)

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.

WHOLE EFFLUENT TOXICITY		Effluent Limits, %			Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)	WET Result, % Do not enter % sign	Reporting Limit Check	Possible Exceedence ⁽⁷⁾		
		Acute	Chronic	Acute					Chronic		
	Mysid Shrimp										
	Sea Urchin										
WET CHEMISTRY											
	pH (S.U.) ⁽⁹⁾										
	Total Organic Carbon (mg/L)				NA						
	Total Solids (mg/L)				NA						
	Total Suspended Solids (mg/L)				NA						
	Salinity (ppt.)										
ANALYTICAL CHEMISTRY ⁽³⁾											
	Also do these tests on the effluent with WET. Testing on the receiving water is optional	Reporting Limit	Effluent Limits, ug/L					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)					

WET and Chemical Specific Data Report Form

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PRIORITY POLLUTANTS ⁽⁴⁾		Effluent Limits			Reporting Limit Check	Possible Exceedence ⁽⁷⁾		
	Reporting Limit	Acute ⁽⁶⁾	Chronic ⁽⁶⁾	Health ⁽⁶⁾		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						

WET and Chemical Specific Data Report Form

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

V	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.

Printed 5/5/2014

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 C

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

FACT SHEET

Date: **June 5, 2015**

MEPDES PERMIT: **ME0100404**
WASTE DISCHARGE LICENSE: **W000862-6B-G-R**

NAME AND ADDRESS OF APPLICANT:

**TOWN OF MILBRIDGE
22 School Street, Box 66
Milbridge, Maine 04658--0066**

COUNTY: **Washington County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**Town of Milbridge
Mill Street
Milbridge, Maine**

RECEIVING WATER / CLASSIFICATION: **Narraguagus Bay, Class SB**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

**Mr. Lewis Pinkham
Town Manager
546-2422
e-mail: milbridgetown@yahoo.com**

1. APPLICATION SUMMARY

- a. Application: The Town of Milbridge (Town/permittee hereinafter) has submitted a timely and complete application to the Department to renew combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100862/Maine Waste Discharge License (WDL) #W000862-6B-E-R, issued by the Department of Environmental Protection (Department hereinafter) on April 5, 2010, for a five-year term. The 4/5/10 permit authorized the discharge of up to a monthly average flow of 70,000 gallons/day (gpd) of secondary treated waste water to the Narraguagus River, Class SB, in Milbridge, Maine. See **Attachment A** of this Fact Sheet for a location map.

1. APPLICATION SUMMARY (cont'd)

- b. Source Description & Waste Water Treatment - Waste waters discharged from the outfall pipe #001 located off of Mill Street consist of storm water, secondary treated waste waters from 67 residential sandfilter systems and secondary treated waste water from three small biological treatment plants that serve commercial entities. The individual systems discharge waste waters to the municipal collection system where a central disinfection chamber system is designed to apply sodium hypochlorite to the wastewater in order to reduce the concentration of bacteria to levels below the effluent limits values specified in Special Condition A of the permit. The combined flow in the collection system is discharged through a 16-inch outfall pipe that extends approximately 270 feet out into the coastal waters and discharges at 2 feet below mean low water at the outlet.

2. PERMIT SUMMARY

- a. Terms and conditions – This permitting action is carrying forward all the terms and conditions except that this permit is;
 1. Reducing the monitoring frequencies for biochemical oxygen demand (BOD), total suspended solids (TSS) and fecal coliform bacteria from 1/Week to 2/Month and reducing the monitoring frequency for settleable solids from 5/Week to 3/Week based on a statistical evaluation of test results submitted to the Department during the term of the permit issued on April 5, 2010.
 2. Establishing water quality based mass limits for total copper along with a 1/Quarter requirement given a statistical evaluation indicates the discharge has a reasonable potential exceed both the acute and chronic ambient water quality criteria (AWQC) for total copper.
- b. History – Relevant regulatory actions for the discharge(s) from the Town's waste water treatment facility are as follows:

December 22, 1982 - The Department issued Waste Discharge License #862 that authorized the discharge of untreated municipal waste waters to tidewaters of Milbridge until the construction of a waste water treatment facility was completed.

December 28, 1982 - The Town of Milbridge submitted a final application to the U.S. Environmental Protection Agency (EPA) for a variance from secondary treatment requirements (primary treatment only) pursuant to Section 301(h) of the Clean Water Act (CWA).

May 14, 1985 - The EPA tentatively approved the request for a variance from secondary treatment requirements for a 0.070 MGD discharge.

2. PERMIT SUMMARY (cont'd)

December 26, 1985 - The Department issued a certification, pursuant to section 401 of the CWA, of the public notice draft National Pollutant Discharge Elimination System (NPDES) permit #ME0100404.

January 2, 1986 - The EPA issued NPDES permit #ME0100404 with primary treatment limitations and monitoring requirements similar to other NPDES permits for primary treatment facilities. At the time of permit issuance, the existing sewer system consisted of a combined system that discharged untreated waste waters directly to the tidewaters of Milbridge via three (3) outfalls.

January 24, 1990 - The Department issued Waste Discharge License renewal #W000862-45-A-R for a five (5) year term.

November 6, 1995 – The Department issued WDL renewal #W000862-59-B-R for a five (5) year term.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES program in Maine. It is noted Section 301(h) permits in the NPDES permit program were not, and can not, be delegated to a State.

October 7, 2003 – The USEPA and the Department issued joint NPDES permit #ME0100404/WDL #W000862-5J-D-R for a five-year term.

September 24, 2007 – The USEPA issued a tentative decision to deny a Section 301(h) waiver of secondary treatment for the Milbridge discharge.

March 31, 2008 - The Town submitted an application to the USEPA and the Department to renew the NPDES permit/WDL for the Milbridge facility.

April 5, 2010 - The Department issued MEPDES permit #ME0100862/WDL #W000862-6B-E-R, for a five-year term.

March 13, 2015 – The Town of Milbridge submitted a timely and complete application to the Department to renew the MEPDES permit/WDL.

3. CONDITIONS OF PERMITS

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

4. RECEIVING WATER QUALITY STANDARDS

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

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

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

Discharges to Class SB waters may not cause adverse impact to estuarine and marine life in that the receiving waters must be of sufficient quality to support all estuarine and marine species indigenous to the receiving water without detrimental changes in the resident biological community. There may be no new discharge to Class SB waters that would cause closure of open shellfish areas by the Department of Marine Resources. For the purpose of allowing the discharge of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety, the department may find that the discharged effluent will not cause adverse impact to estuarine and marine life as long as the materials and methods used provide protection for non-target species. When the department issues a license for the discharge of aquatic

4. RECEIVING WATER QUALITY STANDARDS

pesticides authorized under this paragraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine, Department of Environmental Protection, 2012 Integrated Water Quality Monitoring and Assessment Report (often referred to as the 305b report), published by the Department lists the segment of the Narragagus River in the vicinity of the Milbridge discharge in several categories indicating impairment of water quality standards. The categories are as follows:

Category 4-A: Estuarine and Marine Waters With Impaired Use - TMDL Completed. The table lists Waterbody ID 705-1, DMR Area #53, Narraguagus River, Milbridge, 821 acres, Class SB as being prohibited from the harvesting of shellfish due to elevated bacteria levels caused by overboard discharges and non-point sources. The report indicates the TMDL is complete but there is insufficient new data to determine if attainment has been achieved. It is noted in the report that bacteria may impair either recreational uses (swimming) or shellfish consumption uses, or both. Shell fish consumption impairments only apply to waters naturally capable of supporting the shellfish harvesting use (i.e., water of high salinity for the propagation of shellfish). See **Attachment A** of this Fact Sheet for a map delineating DMR Area #53.

Category 5-D: Estuarine and Marine Waters Impaired by Legacy Pollutants states all marine and estuarine waters are listed in Category 5-D, partially supporting fish (fish and shellfish consumption) due to elevated levels of PCB's, and other persistent, bioaccumulating substances in lobster tomally.

The Maine Department of Marine Resources (DMR) assesses information on shellfish growing areas to ensure that shellfish harvested are safe for consumption. The Maine Department of Marine Resources has authority to close shellfish harvesting areas wherever there is a pollution source, a potential pollution threat, or poor water quality. The DMR traditionally closes shellfish harvesting areas if there are known sources of discharges with unacceptable bacteria levels (in-stream thresholds established in the National Shellfish Sanitation Program) or maintains shellfish harvesting closure areas due to lack of updated information regarding ambient water quality conditions. In addition, the DMR prohibits shellfish harvesting in the immediate vicinity of all wastewater treatment outfall pipes as a precautionary measure in the event of a failure in the treatment plant's disinfection system. Thus, shellfish harvesting Area #53 is closed to the harvesting of shellfish due to insufficient or limited ambient water quality data to determine that the area meets the standards in the National Shellfish Sanitation Program.

As for legacy pollutants, the Department is not aware of any data or reason to suspect the discharge from the Town of Milbridge's facility is causing or contributing to the impairment.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- a. Flow – The previous permit established a monthly average flow limitation of 0.07 MGD (70,000 gpd) based on the design capacity of the new waste water treatment facilities. The previous permitting also established a reporting requirement for daily maximum flow, a requirement common to other facility permits and based upon Department best professional judgment (BPJ). Both are being carried forward in this permit.

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2012 – February 2015 indicates values have been reported as follows:

Flow (DMRs=38)

Value	Limit (gpd)	Range (gpd)	Mean (gpd)
Monthly average	70,000	16,500 – 96,130	42,425
Daily maximum	Report	20,780 – 483,240	153,224

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

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

(a) *For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model.*

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

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

As indicated in Section 5 of the Fact Sheet of the previous permitting action, the Department utilized the facility outfall configuration and location information, the facility monthly average design flow of 70,000 gpd, and in-stream mixing characteristics determined from modeling to establish an acute dilution factor (mean low tide conditions) as follows:

Acute- 4:1

Chronic 24:1

Harmonic mean⁽¹⁾ – 72:1

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

Footnote:

(1) Pursuant to Department rule Chapter 530, “*Surface Water Toxics Control Program*”, §4(a)(2)(c), the harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by a factor of three (3).

- c. Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) – This permitting action is carrying forward the monthly and weekly average BOD5 and TSS best practicable treatment (BPT) concentration limits of 30 mg/L and 45 mg/L respectively, that are based on secondary treatment requirements in Department rule Chapter 525(3)(III). The maximum daily BOD5 and TSS concentration limits of 50 mg/L is based on a Department best professional judgment of BPT. All three concentration limits are common to all permits for publicly owned treatment works permitted by the Department. The monthly average, weekly average and daily maximum technology based mass limits are based on the monthly average flow limitation of 0.07 MGD and the applicable concentration limits and are also being carried forward in this permitting action. The mass limits are calculated as follows.

Monthly average: $(0.07 \text{ MGD})(8.34 \text{ lbs/gal})(30 \text{ mg/L}) = 18 \text{ lbs/day}$

Weekly average: $(0.07 \text{ MGD})(8.34 \text{ lbs/gal})(45 \text{ mg/L}) = 26 \text{ lbs/day}$

Daily maximum: $(0.07 \text{ MGD})(8.34 \text{ lbs/gal})(50 \text{ mg/L}) = 29 \text{ lbs/day}$

A review of the monthly DMR data for the period January 2012 – February 2015 indicates the permittee has been in compliance with said limit(s) 100% of the time as values have been reported as follows:

BOD Mass (DMRs=38)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	18	1.7 – 5.6	3
Daily Maximum	29	2.3 - 11	5

BOD Concentration (DMRs=38)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	5.5 - 17	9
Daily Maximum	50	5.8 - 24	12

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

TSS mass (DMRs=38)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	18	1.9 – 7.9	3
Daily Maximum	29	3.1 - 24	6

TSS concentration (DMRs=38)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	7.4 - 18	11
Daily Maximum	50	8 - 27	13

This permitting action carries forward the requirement for 85% removal for BOD and TSS pursuant to Department rule Chapter 525(3)(III)(a&b)(3).

The previous permit established monitoring frequencies for BOD and TSS at 1/Week are based on Department policy for facilities with a monthly average flow limitation between 0.05 MGD and 0.1 MGD.

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

Although EPA’s 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering 39 months of data (January 2012 – February 2015). A review of the mass monitoring data for BOD & TSS indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as 17% and 17% respectively. According to Table I of the EPA Guidance, a 1/Week monitoring requirement can be reduced to 2/Month. Therefore, this permitting action is reducing the monitoring frequency for BOD and TSS to 2/Month with at least 10 days between monitoring events.

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

- d. Settleable Solids – This permitting action is carrying forward a daily maximum concentration limit of 0.3 ml/L that is a considered a Department best professional judgement determination of BPT for secondary treated waste waters. The 4/5/10 permit established a monitoring frequency of 5/Week for settleable solids based on a Department BPJ of a level of monitoring necessary to determine on-going with the concentration limitation and is consistent with the monitoring frequency for like facilities permitted by the Department.

A review of the monthly DMR data for the period January 2012 – February 2015 indicates the permittee has been in compliance with said limit(s) 100% of the time as values have been reported as follows:

Settleable solids (DMRs=38)

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

As with BOD and TSS, the Department considered 39 months of data (January 2012 – March 2015). A review of the concentration monitoring data for settleable solids indicates the ratios (expressed in percent) of the long term effluent average to the daily maximum limit can be calculated as 17%. According to Table I of the EPA Guidance and the terms and conditions established in Department guidance, a 5/Week monitoring requirement can be reduced to 3/week. Therefore, this permitting action is reducing the monitoring frequency for settleable solids to 2/Week.

- e. Fecal coliform bacteria – The previous permit established seasonal (May 15th – September 30th) monthly average and daily maximum fecal coliform bacteria limits of 15 colonies/100 ml and 50 colonies/100 ml respectively, that are consistent with the National Shellfish Sanitation Program. The Department reserves the right to impose year-round bacteria limits if necessary to protect the health, safety and welfare of the public. A monitoring frequency of 1/Week was established based on a long standing Department guidance document that establishes monitoring frequencies based on a facilities monthly average flow limitation.

A review of the monthly DMR data for the period May 2012 – September 2014 indicates values have been reported as follows:

Fecal coliform bacteria (DMRs=15)

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	15	<1 - 7	2.5
Daily Maximum	50	<1 - 13	5.2

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

As with the other parameters assessed, the Department considered three seasons of data (May 2012 – September 2015). A review of the concentration monitoring data for fecal coliform bacteria indicates the ratios (expressed in percent) of the long term effluent average to the monthly limit can be calculated as 17%. According to Table I of the EPA Guidance and the terms and conditions established in Department guidance, a 1/Week monitoring requirement can be reduced to 2/Month. Therefore, this permitting action is reducing the monitoring frequency for fecal coliform bacteria to 2/Month with a requirement that there be at least ten (10) days between sampling events.

- f. Total Residual Chlorine - The previous permit established a daily maximum water quality based limit of 0.052 mg/L for the discharge. Limits on total residual chlorine (TRC) are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. The Department imposes the more stringent of the water quality or technology based limits in permitting actions. End-of-pipe water quality based concentration thresholds may be calculated as follows:

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution	Acute Limit	Chronic Limit
Chlorine	0.013 mg/L	0.0075 mg/L	4:1	24:1	0.052 mg/L	0.18 mg/L

Example calculation: Acute – 0.013 mg/L (4) = 0.052 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that dechlorinate the discharge in order to meet water quality based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. The permittee does have to dechlorinate the effluent to achieve compliance with water quality-based limitations.

The daily maximum (acute) water quality based TRC concentration threshold calculated above is more stringent than the BPT limitation of 0.3 mg/L. Therefore, the water quality based limitation of 0.052 mg/L is being carried forward in this permitting action. Limitations and monitoring requirements for TRC are applicable any time elemental chlorine or chlorine-based compounds are being utilized to disinfect the discharge(s). A monitoring frequency of 1/Day was established in this permit based on a long standing Department guidance document that establishes monitoring frequencies based on a facilities monthly average flow limitation.

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

A review of the monthly DMR data for the period May 2012 – September 2014 indicates values have been reported as follows:

Total residual chlorine (DMRs=15)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	0.052	0.04 – 0.08	0.05

The Department’s guidance entitled, Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996 (Maine DEP May 22, 2014) states “*Permits with parameters requiring testing with limits based on water quality criteria will not be eligible for any testing reductions as a matter of policy.*” Therefore, the monitoring frequency of 1/Day for TRC is being carried forward in this permit.

- g. pH – The previous permit establishing a BPT pH range limitation of 6.0 –9.0 standard units pursuant to Department rule found at Chapter 525(3)(III)(c) along with a monitoring frequency of 5/Week. The monitoring frequency was based on a Department BPJ of a level of monitoring necessary to determine on-going with the concentration limitation and is consistent with the monitoring frequency for like facilities permitted by the Department.

A review of the monthly DMR data for the period January 2012 – March 2015 indicates the permittee has been in compliance with said limit(s) 100% of the time with values ranging from 6.0 – 7.4 su. This permit is reducing the monitoring frequency from 5/Week to 3/Week to be consistent with the monitoring frequency reduction for settleable solids.

- h. 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 in marine waters, namely dissolved oxygen (DO) deficiencies and cultural eutrophication caused by algal blooms or impacts to eelgrass beds. The Department has 50 total nitrogen data results with an arithmetic mean of 14.3 mg/L collected from various municipally owned treatment works that discharge to Casco Bay. None of the facilities are specifically designed to remove total nitrogen. For the MEPDES permitting program, the Department considers 14.3 mg/L be representative of total nitrogen discharge levels for all facilities discharging to marine waters in the absence of facility specific data.

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

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. According to several studies in EPA's Region I, numeric nutrient criteria have been established for relatively few estuaries but the criteria that have been set typically fall between 0.35 mg N/L and 0.50 mg N/L to protect aquatic life in marine waters using dissolved oxygen as the indicator and to control cultural eutrophication effects namely diurnal DO swings and supersaturated DO levels. While the thresholds are site-specific many of the nitrogen thresholds set for the protection of eelgrass habitat are similar and fall between 0.30 mg N/L and 0.39 mg N/L.

Extrapolating estuarine criteria to an exposed coastal marine environment may result in thresholds that are not appropriate given the lower ambient nutrient concentrations expected in the open ocean. Based on studies in EPA Region I and the Department's best professional judgment of thresholds that are protective of Maine water quality standards, the Department is utilizing a threshold of 0.45 mg/L for the protection of aquatic life in marine waters using dissolved oxygen as the indicator and 0.32 mg/L for the protection of eelgrass beds in the vicinity of discharge outfalls. There are eelgrass beds present off of Fickett Point that are within ½ mile of the permittee's outfall pipe.

Except for ammonia other nitrogen species are 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. The permittee's facility has a chronic near field dilution factor of 24:1. 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 open ocean discharges, far field dilutions would tend to be 1,000 – 10,000 times higher. 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 times higher. The discharge from the permittee's facility is to below mean low water of an estuary with significant tidal flushing; thus, the far field dilution factor would likely be not less than 100 times higher. Applying this most protective far field dilution multiplier of 100 times to the near field dilution factor of 24:1 results in a far-field dilution factor of 2,400:1. By this analysis, the increase in the ambient total nitrogen due to permittee's effluent discharge is as follows:

Total nitrogen concentrations in effluent = 14.3 mg/L
Chronic dilution factor = 2,400:1

In-stream concentration after dilution: $\frac{14.3 \text{ mg/L}}{2,400} = 0.006 \text{ mg/L}$

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

The Department has been collecting ambient total nitrogen data in close proximity to the Maine coastline to support an effort to develop statewide nutrient criteria for marine waters. For the permittee's facility, the Department calculated a mean background concentration of 0.22 mg/l (n=4) based on ambient data collected by the Department. As a result, after reasonable opportunity for far field mixing, the increase in the concentration of total nitrogen in the receiving water due to the discharge from the permittee's facility will not be measureable thus, the instream concentration of total nitrogen will remain at 0.22 mg/L. This concentration is lower than the Department's and EPA's best professional judgment of a critical threshold of 0.32 mg/L to protect the eelgrass beds in the vicinity of the permittee's outfall pipe. 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.

- h. Whole Effluent Toxicity (WET) & Chemical-Specific Testing: Maine law, 38 M.R.S.A., Sections 414-A and 420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department Rules, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants* set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

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

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

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

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

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

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

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

Level IV – chronic dilution >500:1 and Q ≤1.0 MGD

Department rule Chapter 530 (2)(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the Chapter 530 criteria, the permittee’s facility falls into the Level II frequency category as the facility has a chronic dilution factor ≥20:1 but <100:1. Chapter 530(2)(D)(1) specifies that routine surveillance and screening level testing requirements are as follows:

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

Level	WET Testing	Priority pollutant testing	Analytical chemistry
II	1 per year	None required	2 per year

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

Level	WET Testing	Priority pollutant testing	Analytical chemistry
II	2 per year	1 per year	4 per year

A recent review of Milbridge’s data indicates that it has fulfilled the 06-096 CMR Chapter 530 testing requirements to date. See **Attachment C** of this Fact Sheet for a summary of the WET test results and **Attachment B** of this Fact Sheet for a summary of the chemical specific test dates.

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

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

Chapter 530 §3 states, *“The Department shall establish appropriate discharge prohibitions, effluent limits and monitoring requirements in waste discharge licenses if a discharge contains pollutants that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an ambient excursion in excess of a numeric or narrative water quality criteria or that may impair existing or designated uses. The licensee must also control whole effluent toxicity (WET) when discharges cause, have a reasonable potential to cause, or contribute to an ambient excursion above the narrative water quality criteria. “In determining if effluent limits are required, the Department shall consider all information on file and effluent testing conducted during the preceding 60 months. However, testing done in the performance of a Toxicity Reduction Evaluation (TRE) approved by the Department may be excluded from such evaluations.”*

WET Evaluation

On April 10, 2015, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department in accordance with the statistical approach in Chapter 530. The evaluation indicates there are no WET test results that exceed or have a reasonable potential to exceed the acute or chronic critical thresholds of 25% and 4%, respectively.

06-096 CMR Chapter 530(D)(3)(c) states in part *“Dischargers in Level II 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).”*

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

Based on the results of the 4/10/15 statistical evaluation, the permittee qualifies for the Chapter 530(2)(D)(3)(c) testing reduction for the mysid shrimp and sea urchin. Department rule Chapter 530 (2)(D)(1) specifies that surveillance testing is to be established as follows:

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

Level	WET Testing
II	1/2 year for the mysid shrimp 1/2 year for the sea urchin

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

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.

Level	WET Testing
II	2 per year for sea urchin 2 per year for mysid shrimp

06-096 CMR 530(2)(D)(4) states, “All dischargers having waived or reduced testing must file statements with the Department on or before December 31 of each year describing the following.

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

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

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

Analytical chemistry & priority pollutant evaluation

06-096 CMR Chapter 530 §4(C), states “*The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions.*” The Department shall use the same general methods as those in section 4(D) to determine background concentrations. For pollutants not listed by the Department, an assumed concentration of 10% of the applicable water quality criteria must be used in calculations. The Department has no information on the background levels of metals in the water column of the Narraguagus River in the vicinity of the Town’s outfall. Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

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

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

As with WET test results, on 4/10/15, the Department conducted a statistical evaluation on the most recent 60 months of analytical chemistry and priority pollutant test results on file with the Department in accordance with the statistical approach outlined in Chapter 530.

The evaluation indicates the only pollutant of concern is total copper. All nine test results reported in the the most current 60-month period have a reasonable potential to exceed the acute AWQC of 5.78 ug/L and one test result of 50 ug/L (2/20/13) that has a reasonable potential to exceed the chronic AWQC of 3.73 ug/L.

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

Chapter 530 §(3)(D) states “*Expression of effluent limits. Where the need for effluent limits has been determined, limits derived from acute water quality criteria must be expressed as daily maximum values. Limits derived from chronic or human health criteria must be expressed as monthly average values.*” With a permitted flow of 0.070 MGD MGD, the monthly average and daily maximum water quality based mass limit for total copper for the permittee’s facility are calculated as follows:

Copper

Acute AWQC = 5.78 mg/L (based on 20°C, pH of 8.0, salinity of 30 ppt)

Acute dilution factor = 4:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP concentration=[4 x 0.90 x 0.00578 mg/L] + [0.10 x 0.00578 mg/L] = 0.021 mg/L

EOP mass limit: (0.021 mg/L)(8.34)(0.07 MGD) = **0.012 lbs/day**

Chronic AWQC = 3.73 mg/L (based on 20°C, pH of 8.0, salinity of 30 ppt)

Chronic dilution factor = 24:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP concentration=[24 x 0.90 x 0.00373 mg/L] + [0.10 x 0.00373 mg/L]=0.081 mg/L

EOP mass limit: (0.081 mg/L)(8.34)(0.07 MGD) = **0.047 lbs/day**

Chapter 530 §(3)(D)(1) states “*For specific chemicals, effluent limits must be expressed in total quantity that may be discharged and in effluent concentration. In establishing concentration, the Department may increase allowable values to reflect actual flows that are lower than permitted flows and/or provide opportunities for flow reductions and pollution prevention provided water quality criteria are not exceeded. With regard to concentration limits, the Department may review past and projected flows and set limits to reflect proper operation of the treatment facilities that will keep the discharge of pollutants to the minimum level practicable.*”

In May 2012, Maine law 38 M.R.S.A. §464, ¶¶ K was enacted which reads as follows, “*Unless otherwise required by an applicable effluent limitation guideline adopted by the department, any limitations for metals in a waste discharge license may be expressed only as mass-based limits.*” There are no applicable effluent limitation guidelines adopted by the Department or the USEPA for metals from a publicly owned treatment works.

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

Chapter 530 does not establish specific monitoring frequencies for parameters that exceed or have a reasonable to exceed AWQC. This permitting action is establishing the monitoring frequency for total copper based on a best professional judgment given the timing, frequency and severity of the exceedence or reasonable potential to exceed AWQC. Because every test submitted in the most current 60-months has a reasonable potential to exceed the acute AWQC, the Department is establishing a monitoring frequency of 1/Quarter to be consistent with routine screening level testing frequency pursuant to 06-096 CMR Chapter 530.

With the exception of total copper, monitoring frequencies for priority pollutant and analytical chemistry testing established in this permitting action are based on the Chapter 530 rule. 06-096 CMR 530(2)(D)(3)(c) states in part, *“Dischargers in Level II 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).”*

Based on the results of the 4/10/15 statistical evaluation, the permittee qualifies for the testing reduction. Therefore, the surveillance monitoring frequency is as follows:

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

Level	Priority pollutant testing	Analytical chemistry
II	Not required	1/2 Years

06-096 CMR Chapter 530(2)(D)(1) specifies that screening testing is to be established as follows:

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.

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

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

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

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

8. PUBLIC COMMENTS

Public notice of this application was made in the Machias Valley News newspaper on or about March 9, 2015. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

9. DEPARTMENT CONTACTS

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

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

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

10. RESPONSE TO COMMENTS

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

ATTACHMENT A

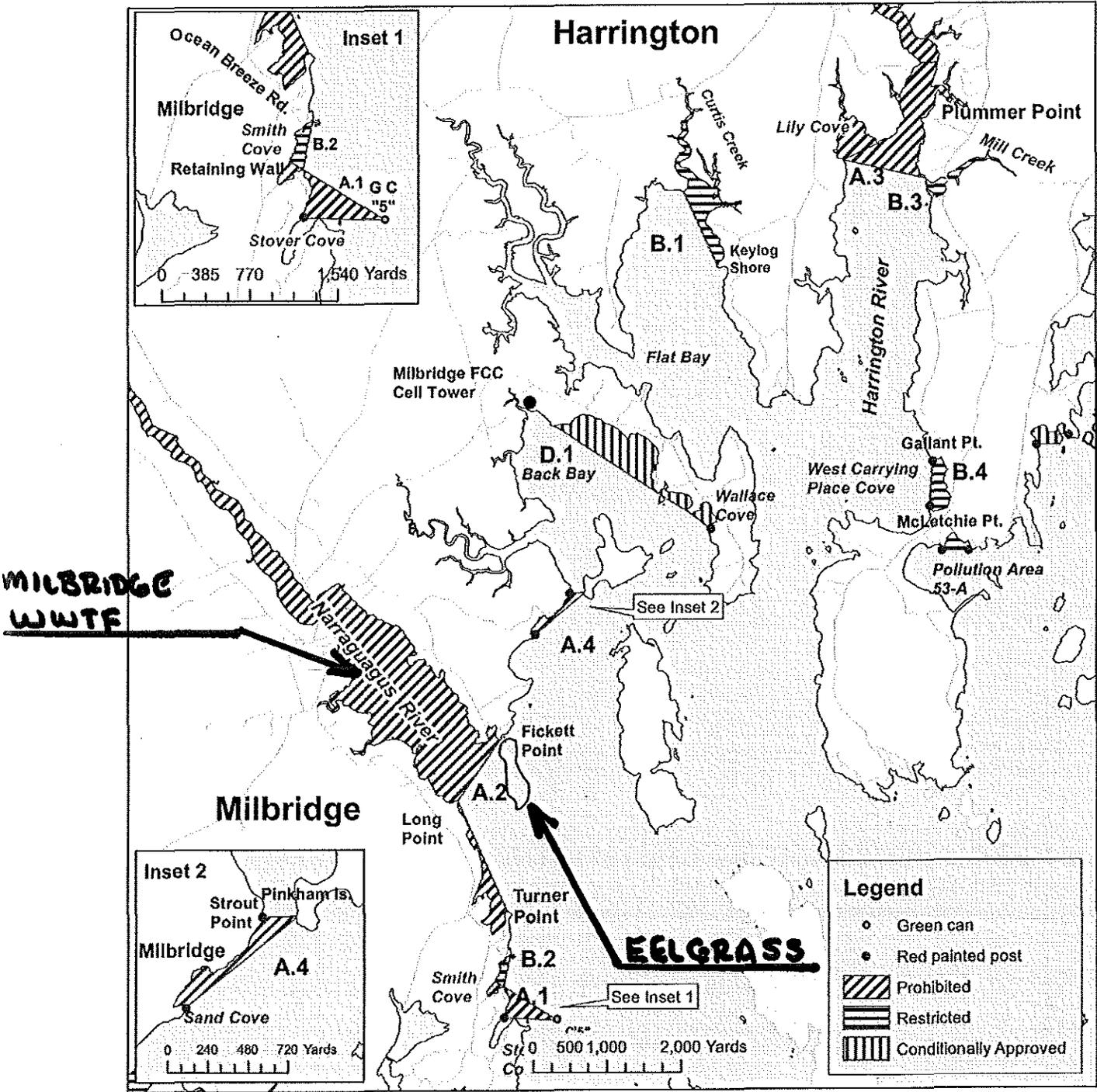
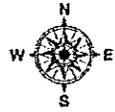
March 27, 2015



Maine Department of Marine Resources

Pollution Area No. 53

Narraguagus River and vicinity to the Harrington River
(Cherryfield, Milbridge, Harrington)



MILBRIDGE
WWTF

EELGRASS

- Legend**
- Green can
 - Red painted post
 - ▨ Prohibited
 - ▧ Restricted
 - ▩ Conditionally Approved

ATTACHMENT B

5/19/2015

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 19/May/2010-19/May/2015



Facility Name: MILBRIDGE

NPDES: ME0100404

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
03/20/2011	0.08	0.08	17	10	0	0	0	7	0	F	0
10/25/2011	0.05	0.06	17	10	0	0	0	7	0	F	0
05/22/2012	0.06	0.03	10	9	0	0	0	1	0	F	0
06/12/2012	0.04	0.04	1	1	0	0	0	0	0	F	0
02/20/2013	0.03	0.09	11	10	0	0	0	1	0	F	0
05/06/2013	NR	NR	16	10	0	0	0	6	0	F	0
07/09/2013	0.05	0.03	11	10	0	0	0	1	0	F	0
10/08/2013	0.02	0.04	11	10	0	0	0	1	0	F	0
04/01/2014	0.08	0.06	101	13	0	46	25	6	11	F	0
04/02/2014	0.08	0.04	29	1	28	0	0	0	0	F	0
07/15/2014	0.05	0.04	39	10	28	0	0	1	0	F	0

Key:

A = Acid O = Others P = Pesticides
 BN = Base Neutral M = Metals V = Volatiles

ATTACHMENT C

5/19/2015

WET TEST REPORT

Data for tests conducted for the period

19/May/2010 - 19/May/2015



MILBRIDGE

NPDES= ME010040

Effluent Limit: Acute (%) = 25.000

Chronic (%) = 4.167

Species	Test	Percent	Sample date	Critical %	Exception	RP
MYSID SHRIMP	A_NOEL	100	03/21/2011	25.000		
MYSID SHRIMP	A_NOEL	100	10/25/2011	25.000		
MYSID SHRIMP	A_NOEL	100	05/06/2013	25.000		
MYSID SHRIMP	A_NOEL	100	04/02/2014	25.000		
SEA URCHIN	C_NOEL	50	03/21/2011	4.167		
SEA URCHIN	C_NOEL	50	10/25/2011	4.167		
SEA URCHIN	C_NOEL	100	05/06/2013	4.167		
SEA URCHIN	C_NOEL	50	04/02/2014	4.167		

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

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

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

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

Scheduled Toxicity Testing for the next calendar year

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

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

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

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

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

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

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