STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

April 30, 2014

Mr. Thomas Milligan
City Engineer
City of Biddeford
P.O. Box 586
Biddeford, Maine 04005
tmilligan@biddefordmaine.org

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100048
Maine Waste Discharge License (WDL) Application #W000683-5M-J-R
**Preliminary Draft Permit**

Dear Mr. Milligan:

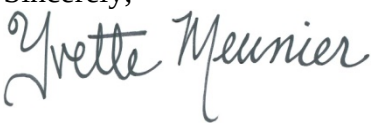
Enclosed is a **preliminary draft** MEPDES permit/WDL (permit hereinafter) which the Department proposes to issue as a formal proposed draft document after opportunity for your review and comment. By transmittal of this letter you are provided with an opportunity to comment on the preliminary draft permit and its conditions. If it contains errors or does not accurately reflect present or proposed conditions, please respond to this Department so that changes can be considered.

All comments on the preliminary draft permit must be received in the Department of Environmental Protection office on or before the close of business on **Wednesday, May 14, 2014.** Failure to submit comments in a timely fashion will result in the proposed draft permit 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 M. Meunier
Division of Water Quality Management
Bureau of Land and Water Quality

Enc.

cc: Stuart Rose, DEP/SMRO
Barry Mower, DEP/CMRO
Susanne Meidel, DEP/CMRO
Pam Parker, DEP/CMRO
Brian Pitt, EPA
Olga Vergara, EPA
Alex Rosenberg, EPA
David Pincumbe, EPA

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

DEPARTMENT ORDER

**IN THE MATTER OF**

| | | |
|---|---|---|
| CITY OF BIDDEFORD | ) | MAINE POLLUTANT DISCHARGE |
| BIDDEFORD, YORK COUNTY, MAINE | ) | ELIMINATION SYSTEM PERMIT |
| PUBLICLY OWNED TREATMENT WORKS | ) | AND |
| #ME0100048 | ) | WASTE DISCHARGE LICENSE |
| #W000683-5M-J-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 CITY OF BIDDEFORD (CITY), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

## APPLICATION SUMMARY

On February 2, 2014, the Department accepted as complete for processing, a renewal application for Maine Pollutant Discharge Elimination System (MEPDES) #ME0100048 /Waste Discharge License (WDL) #W000683-5M-F-R, which was issued on May 27, 2009 for a five-year term. The 5/27/09 MEPDES permit authorized the monthly average discharge of 6.5 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the Saco River, Class SB, in Biddeford, Maine. The permit also authorized the City to discharge untreated combined sewer overflows (CSO) to the Saco River, Class SC and to Thatcher Brook, Class B.

The Department issued issued: A minor permit revision on December 21, 2010 (to incorporate Special Conditions to establish and implement an Asset Management Program, establish a repair and replacement reserve account and conduct a process energy audit); and a minor permit revision on February 6, 2012 (remove the monthly average limitations, monitoring requirements, reporting requirements and schedule of compliance for inorganic arsenic and total arsenic).

It is noted that two CSO points were eliminated during the term of the previous permit: CSO #003 to Thatcher Brook and #008 to the Saco River.

## 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 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);

## PERMIT SUMMARY (cont'd)

3. Revising the timing of the screening WET, priority pollutant, analytical chemistry and surveillance level WET, priority pollutant, analytical chemistry testing during permit cycle;

4. Eliminating the effluent limitations and monitoring requirements for total and inorganic arsenic based on new water quality based criteria;

5. Eliminating the effluent limitations and monitoring requirements for cyanide, ammonia, and bis (2ethylhexyl) phthalate based on results on facility testing;

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

7. Revising the daily maximum limit of transported wastes.

## CONCLUSIONS

Based on the findings summarized in the attached **PRELIMINARY DRAFT** Fact Sheet dated April 30, 2014, 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.

**CONCLUSIONS (cont'd)**

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 CITY OF BIDDEFORD to discharge a monthly average of 6.5 MGD of secondary treated municipal wastewater to the Saco River via Outfall #001 and an unspecified quantity of untreated combined stormwater and sanitary wastewater via eight (8) CSOs in Biddeford, 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 _____ 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____
PATRICIA W. AHO, Commissioner

Date filed with Board of Environmental Protection _____

Date of initial receipt of application: February 2, 2014
Date of application acceptance: February 2, 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 #001** to the Saco River at Biddeford. 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]* | 6.5 MGD *[03]* | --- | Report MGD *[03]* | --- | --- | --- | Continuous *[99/99]* | Recorder *[RC]* |
| Biochemical Oxygen Demand ($BOD_5$) *[00310]* | 1,626 lbs/day *[26]* | 2,439 lbs/day *[26]* | Report lbs/day *[26]* | 30 mg/L *[19]* | 45 mg/L *[19]* | 50 mg/L *[19]* | 5/Week *[05/07]* | Composite *[24]* |
| $BOD_5$ % Removal[(2)] *[81010]* | --- | --- | --- | 85% *[23]* | --- | --- | 1/Month *[01/30]* | Calculate *[CA]* |
| Total Suspended Solids (TSS) *[00530]* | 1,626 lbs/day *[26]* | 2,439 lbs/day *[26]* | Report lbs/day *[26]* | 30 mg/L *[19]* | 45 mg/L *[19]* | 50 mg/L *[19]* | 5/Week *[05/07]* | Composite *[24]* |
| TSS % Removal[(2)] *[81011]* | --- | --- | --- | 85% *[23]* | --- | --- | 1/Month *[01/30]* | Calculate *[CA]* |
| Settleable Solids *[00545]* | --- | --- | --- | --- | --- | 0.3 ml/L *[25]* | 5/Week *[05/07]* | Grab *[GR]* |
| Total Residual Chlorine[(3)] *[50060]* | --- | --- | --- | 0.1 mg/L *[19]* | --- | 0.13 mg/L *[19]* | 2/Day *[02/01]* | Grab *[GR]* |
| Fecal Coliform Bacteria[(4)] *[31616]* | --- | --- | --- | 15/100 ml[(4)] *[13]* | --- | 50/100 ml *[13]* | 5/Week *[05/07]* | Grab *[GR]* |
| pH (Std. Units) *[00400]* | --- | --- | --- | --- | --- | 6.0 – 9.0 SU *[12]* | 1/Day *[01/01]* | Grab *[GR]* |

**Monthly**

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 – OUTFALL #001 (cont'd)

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

| Effluent Characteristic | Discharge Limitations | | | | Minimum Monitoring Requirements | |
|---|---|---|---|---|---|---|
| | Average | Daily Maximum | Monthly Average | Daily Maximum | Measurement Frequency | Sample Type |
| Nitrate<br>*May 1 – Oct. 31, 2015* | Report lbs/day<br>*[26]* | Report lbs/day<br>*[26]* | Report µg/L<br>*[28]* | Report µg/L<br>*[28]* | 2/Month<br>*[02/30]* | Grab<br>*[GR]* |
| Nitrite<br>*May 1 – Oct. 31, 2015* | Report lbs/day<br>*[26]* | Report lbs/day<br>*[26]* | Report µg/L<br>*[28]* | Report µg/L<br>*[28]* | 2/Month<br>*[02/30]* | Grab<br>*[GR]* |
| Total Kjehldahl Nitrogen<br>*May 1 – Oct. 31, 2015* | Report lbs/day<br>*[26]* | Report lbs/day<br>*[26]* | Report µg/L<br>*[28]* | Report µg/L<br>*[28]* | 2/Month<br>*[02/30]* | Grab<br>*[GR]* |
| Mercury (Total)[(5)]<br>*[71900]* | --- | --- | 14.6 ng/L<br>*[3M]* | 33.8 ng/L<br>*[3M]* | 1/Year<br>*[01/YR]* | Grab<br>*[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.**

**Monthly**

## SPECIAL CONDITIONS

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

2. ***SURVEILLANCE LEVEL*** **-** Beginning upon issuance and lasting through 24 months prior to permit expiration **(1)** (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).

| Effluent Characteristic | Discharge Limitations | | Minimum Monitoring Requirements | |
|---|---|---|---|---|
| | Average | Daily Maximum | Measurement Frequency | Sample Type |
| **Whole Effluent Toxicity**[6]<br>**Acute – NOEL**<br>*Mysidopsis bahia* (Mysid shrimp) *[TDM3E]* | --- | Report %<br>*[23]* | 1/ Year<br>*[01/YR]* | Composite<br>*[24]* |
| **Chronic – NOEL**<br>*Arbacia punctulata* (Sea Urchin) *[TBH3A]* | --- | 5.9 %<br>*[23]* | 2/Year<br>*[02/YR]* | Composite<br>*[24]* |
| ~~**Monthly**~~<br>Analytical chemistry[7,9] *[51477]* | --- | Report ug/L<br>*[28]* | 1/ Year<br>*[01/YR]* | Composite/Grab<br>*[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.

| Effluent Characteristic | Daily Maximum | Minimum Frequency | Sample Type |
|---|---|---|---|
| **Whole Effluent Toxicity[6]**<br>**Acute – NOEL**<br>*Mysidopsis bahia* (Mysid shrimp) *[TDM3E]* | Report %<br>*[23]* | 1/ Quarter<br>*[01/90]* | Composite<br>*[24]* |
| **Chronic – NOEL**<br>*Arbacia punctulata* (Sea Urchin) *[TBH3A]* | 5.9 %<br>*[23]* | 1/ Quarter<br>*[01/90]* | Composite<br>*[24]* |
| **Analytical Chemistry[7,9]**<br>*[51477]* | Report µg/L<br>*[28]* | 1/Quarter<br>*[01/90]* | Composite/Grab<br>*[24]* |
| **Priority pollutant [8,9]**<br>*[50008]* | Report µg/L<br>*[28]* | 1/ Year<br>*[01/YR]* | Composite/Grab<br>*[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** – Influent sampling must be conducted downstream of screenings and grit removal in a wet well where the two grit channels combines. 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.

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

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. Pursuant to *Effluent Guidelines and Standards*, 06-096 CMR 525(3)(IV)(a) (effective January 12, 2001), the percent removal requirement is waived when the monthly average influent concentration is less than 200 mg/L. For instances when this occurs, the permittee must report "*NODI-9*" on the monthly Discharge Monitoring Report.

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 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 DMR or "N9" if the submittal is an electronic DMR.

## SPECIAL CONDITIONS

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

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.

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 10.3% and 5.9% 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 9.7:1 and 17.1:1, 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 per year (1/Year) on the mysid shrimp (*Mysidopsis bahia*) and twice per year (2/Year) 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 four times per year (1/Quarter) for both species. Acute and chronic tests must be conducted on the mysid shrimp (*Mysidopsis bahia*) and four times per year (1/Quarter) on the sea urchin (*Arbacia punctulata*), respectively.

## SPECIAL CONDITIONS

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

WET test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 10.3% and 5.9%, 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.

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, EPA 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, EPA 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 per year. 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.

## SPECIAL CONDITIONS

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

8. **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.

9. **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 Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department, possible 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.

## 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 usages designated for the classification of the receiving waters.

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

3. The permittee must not discharge 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.

## SPECIAL CONDITIONS

### C. TREATMENT PLANT OPERATOR

The treatment facility must be operated by a person holding a minimum of a **Grade V** 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 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 February 2, 2014; 2) the terms and conditions of this permit; and 3) only from Outfall #001 and the eight (8) CSOs listed in Special Condition K, *Combined Sewer Overflows (CSOs)* of this permit. 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.

## SPECIAL CONDITIONS

### F. NOTIFICATION REQUIREMENT (cont'd)

3. 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.

### 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.

## SPEICIAL CONDITIONS

## 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 26,500 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. Of the 26,500 gpd of transported wastes authorized by this permit, the permittee may introduce into the treatment process a daily maximum of 6,500 gpd of septage wastes.

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.

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 facilities 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.

## SPEICIAL CONDITIONS

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

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 the 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. EFFLUENT LIMITATIONS AND CONDITIONS FOR COMBINED SEWER OVERFLOWS (CSOs)

Pursuant to *Combined Sewer Overflow Abatement,* 06-096 CMR 570 (effective date February 5, 2000), the permittee is authorized to discharge from the following locations of CSOs (stormwater and sanitary wastewater) subject to the conditions and requirements herein.

1. CSO Locations

| Outfall # | Location | Receiving Water & Class |
|---|---|---|
| 004 | Bradbury Street CSO | Saco River, Class SC |
| 005 | Western Avenue CSO | Saco River, Class SC |
| 006 | Horrigan Court CSO | Saco River, Class SC |
| 007 | Elm Street (Route #1) CSO | Saco River, Class SC |
| 009 | Water Street CSO | Saco River, Class SC |
| 011 | Biddeford Textile CSO | Saco River, Class SC |
| 013 | Rumery's Boatyard CSO | Saco River, Class SC |
| 014 | Lafayette Street CSO | Saco River, Class SC |

## SPECIAL CONDITIONS

## J. EFFLUENT LIMITATIONS AND CONDITIONS FOR COMBINED SEWER OVERFLOWS (CSOs) (cont'd)

2. Prohibited Discharges

   a) The discharge of dry weather flows is prohibited. All such discharges must be reported to the Department in accordance with Standard Condition D (1) of this permit.

   b) No discharge may occur as a result of mechanical failure, improper design or inadequate operation or maintenance.

   c) No discharges may occur at flow rates below the maximum design capacities of the wastewater treatment facility, pumping stations or sewerage system.

3. Narrative Effluent Limitations

   a) The permittee must not discharge wastewater that contains a visible oil sheen, settled substances, foam, or floating solids at any time that impair the characteristics and designated uses ascribed to the classification of the receiving waters.

   b) The permittee must not discharge wastewater that contains materials in concentrations or combinations that are hazardous or toxic to aquatic life; or which would impair the usage designated by the classification of the receiving waters.

   c) The permittee must not discharge wastewater that imparts color, turbidity, toxicity, radioactivity or other properties that cause the receiving waters to be unsuitable for the designated uses and other characteristics ascribed to their class.

   d) Notwithstanding specific conditions of this permit, the effluent by itself or in combination with other discharges may 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.

4. CSO Master Plan [see 06-096 CMR 570(2) and (3)]

   The permittee must implement CSO control projects in accordance with an approved CSO Master Plan and abatement schedule. The CSO Master Plan entitled *Phase II Combined Sewer Overflow Master Plan for the City of Biddeford, Maine* dated June 2008 and revised January 2009 with abatement project schedule was approved on January 22, 2009. The abatement schedule may be amended from time to time based on mutual agreements between the permittee and the Department. The permittee must notify the Department in writing prior to any proposed changes to the implementation schedule. Based on the approved abatement schedule, the permittee must comply with the following schedule dates:

   **On or before July 1, 2015, [***ICIS Code 82299***]** the permittee shall complete an SSES evaluation of the sewer system, which shall be used in the updated Master Plan, and submit it to the Department for review.

   **On or before December 31, 2015**, the permittee shall complete construction of the Elm Street South (PACTS) sewer separation project.

## SPECIAL CONDITIONS

## J. EFFLUENT LIMITATIONS AND CONDITIONS FOR COMBINED SEWER OVERFLOWS (CSOs) (cont'd)

**On or before December 31, 2016**, the permittee shall complete construction of the Horrigan Court storage tank.

**On or before December 31, 2018,** the permittee shall complete construction of the Graham Street sewer separation project.

**On or before December 31, 2015,** the permittee shall complete an update to the CSO Master Plan which reflects findings from the SSES study and submit the report to the Department for review and approval.

5. Nine Minimum Controls (NMC) [see 06-096 CMR 570(5)]

   The permittee must implement and follow the Nine Minimum Control documentation as approved by USEPA on May 29, 1997. Work performed on the Nine Minimum Controls during the year must be included in the annual *CSO Progress Report* (see below*).*

6. CSO Compliance Monitoring Program [see 06-096 CMR 570(6)]

   The permittee must conduct block testing or flow monitoring according to an approved *Compliance Monitoring Program* on all CSO points, as part of the CSO Master Plan. Annual flow volumes for all CSO locations must be determined by actual flow monitoring, or by estimation using a model such as USEPA's Storm Water Management Model (SWMM).

   Results must be submitted annually as part of the annual *CSO Progress Report* (see below), and must include annual precipitation, CSO volumes (actual or estimated) and any block test data required. Any abnormalities during CSO monitoring must also be reported. The results must be reported on the Department form "CSO Activity and Volumes" (**Attachment D** of this permit) or similar format and submitted electronically to the Department.

   CSO control projects that have been completed must be monitored for volume and frequency of overflow to determine the effectiveness of the project toward CSO abatement. This requirement must not apply to those areas where complete separation has been completed and CSO outfalls have been eliminated.

7. Addition of New Wastewater [see 06-096 CMR 570(8)]

   06-096 CMR 570(8) lists requirements relating to any proposed addition of wastewater to the combined sewer system. Documentation of the new wastewater additions to the system and associated mitigating measures must be included in the annual *CSO Progress Report* (see below). Reports must contain the volumes and characteristics of the wastewater added or authorized for addition and descriptions of the sewer system improvements and estimated effectiveness.

## SPECIAL CONDITIONS

## J. EFFLUENT LIMITATIONS AND CONDITIONS FOR COMBINED SEWER OVERFLOWS (CSOs) (cont'd)

8. Annual CSO Progress Reports [see 06-096 CMR 570(7)]

**By March 1 of each year** *[ICIS Code 11099]* the permittee must submit *CSO Progress Reports* covering the previous calendar year (January 1 to December 31). The CSO Progress Report must include, but is not necessarily limited to, the following topics as further described in 06-096 CMR 570: CSO abatement projects, schedule comparison, progress on inflow sources, costs, flow monitoring results, CSO activity and volumes, nine minimum controls update, sewer extensions, and new commercial or industrial flows.

The CSO Progress Reports must be completed on a standard form entitled "Annual CSO Progress Report", furnished by the Department, and submitted in electronic form, if possible, to the following address:

CSO Coordinator
Department of Environmental Protection
Bureau of Land and Water Quality
17 State House Station
Augusta, Maine 04333
e-mail: CSOCoordinator@maine.gov

9. Signs

If not already installed, the permittee must install and maintain an identification sign at each CSO location as notification to the public that intermittent discharges of untreated sanitary wastewater occur. The sign must be located at or near the outfall and be easily readable by the public. The sign must be a minimum of 12" x 18" in size with white lettering against a green background and must contain the following information:

**CITY OF BIDDEFORD**
**WET WEATHER**
**SEWAGE DISCHARGE**
**CSO # AND NAME**

10. Definitions

For the purposes of this permitting action, the following terms are defined as follows:

a. Combined Sewer Overflow - a discharge of excess waste water from a municipal or quasi-municipal sewerage system that conveys both sanitary wastes and stormwater in a single pipe system and that is in direct response to a storm event or snowmelt.

b. Dry Weather Flows - flow in a sewerage system that occurs as a result of non-storm events or are caused solely by ground water infiltration.

c. Wet Weather Flows - flow in a sewerage system that occurs as a direct result of a storm event, or snowmelt in combination with dry weather flows.

## SPECIAL CONDITIONS

## K. 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 E** of the permit for an acceptable certification form to satisfy this Special Condition.

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

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

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

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

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

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

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

## L. INDUSTRIAL PRETREATMENT PROGRAM

1. Pollutants introduced into POTWs by a non-domestic source (user) must not pass-through the publicly owned treatment works (POTW) or interfere with the operation or performance of the works.

    a. The permittee must develop and enforce specific effluent limits (local limits) or conditions (Best Management Practices) for Industrial User(s), and all other users, as appropriate, which together with appropriate changes in the POTW facilities or operation, are necessary to ensure continued compliance with the POTWs MEPDES permit or sludge use or disposal practices. Specific local limits must not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond.

    **Within 180 days of the effective date of this permit**, *[ICIS code PR002]* the permittee must prepare and submit a written technical evaluation to the Department analyzing the need to revise local limits. As part of this evaluation, the permittee must assess how the POTW performs with respect to influent and effluent of pollutants, water quality concerns, sludge quality, sludge processing concerns/inhibition, biomonitoring results, activated sludge inhibition, worker health and safety and collection system concerns. In preparing this evaluation, the permittee must complete the "Re-Assessment of Technically Based Local Limits" form included as **Attachment F** of this permit with the technical evaluation to assist in determining whether existing local limits

## SPECIAL CONDITIONS

## L. INDUSTRIAL PRETREATMENT PROGRAM (cont'd)

need to be revised. Justifications and conclusions should be based on actual plant data if available and should be included in the report. Should the evaluation reveal the need to revise local limits, the permittee must complete the revisions within 120 days of notification by the Department and submit the revisions to the Department for approval. The permittee must carry out the local limits revisions in accordance with USEPA's document entitled, *Local Limits Development Guidance (July 2004).*

2. The permittee must implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the permittee's approved Pretreatment Program, and the General Pretreatment Regulations, found at 40 CFR 403 and *Pretreatment Program*, 06-096 CMR 528 (last amended March 17, 2008). At a minimum, the permittee must perform the following duties to properly implement the Industrial Pretreatment Program (IPP):

   a. Carry out inspection, surveillance, and monitoring procedures which will determine, independent of information supplied by the industrial user, whether the industrial user is in compliance with the Pretreatment Standards. At a minimum, all significant industrial users must be sampled and inspected at the frequency established in the approved IPP but in no case less than once per year and maintain adequate records.

   b. Issue or renew all necessary industrial user control mechanisms within 90 days of their expiration date or within 180 days after the industry has been determined to be a significant industrial user.

   c. Obtain appropriate remedies for noncompliance by an industrial user with any pretreatment standard and/or requirement.

   d. Maintain an adequate revenue structure for continued implementation of the Pretreatment Program.

   e. The permittee must provide the Department with an annual report describing the permittee's pretreatment program activities for the twelve-month period ending 60 days prior to the due date in accordance with federal regulation found at 40 CFR 403.12(i) and 06-096 CMR 528(12)(i). **The annual report *[ICIS code 53199]* must be consistent with the format described in the "MEPDES Permit Requirements For Industrial Pretreatment Annual Report" form included as Attachment G of this permit and must be submitted no later than March 1 of each calendar year.**

   f. The permittee must obtain approval from the Department prior to making any significant changes to the industrial pretreatment program in accordance with federal regulation found at 40 CFR 403.18(c) and 06-096 CMR 528(18).

   g. The permittee must assure that applicable National Categorical Pretreatment Standards are met by all categorical industrial users of the POTW. These standards are published in the federal regulations found at 40 CFR 405-471.

## SPECIAL CONDITIONS

## L. INDUSTRIAL PRETREATMENT PROGRAM (cont'd)

h. The permittee must modify its pretreatment program to conform to all changes in the federal regulations and State rules that pertain to the implementation and enforcement of the industrial pretreatment program. **Within 180 days of the effective date of this permit,** *[ICIS code 50799]* the permittee must provide the Department in writing, proposed changes to the permittee's pretreatment program deemed necessary to assure conformity with current federal regulations and State rules. At a minimum, the permittee must address in its written submission the following areas: (1) Enforcement response plan; (2) revised sewer use ordinances; and (3) slug control evaluations. The permittee will implement these proposed changes pending the Department's approval under federal regulation 40 CFR 403.18 and 06-096 CMR 528(18). This submission is separate and distinct from any local limits analysis submission described in section 1(a) above.

## M. 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 (13$^{th}$) 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 (15$^{th}$) 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
Southern Maine Regional Office
Bureau of Land and Water Quality
Division of Water Quality Management
312 Canco Road
Portland, Maine 04103

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 **15$^{th}$ 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 (13$^{th}$) 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 (15$^{th}$) 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 15$^{th}$ day of the month following the completed reporting period.

## N. 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

## SPECIAL CONDITIONS

### N. REOPENING OF PERMIT FOR MODIFICATION (cont'd)

additional monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

### O. 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.

# 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 - February 4, 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.

| | | | Effluent Limits, % | | | Receiving Water or Ambient | Effluent Concentration (ug/L or as noted) | | Possible Exceedence [7] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **WHOLE EFFLUENT TOXICITY** | | Acute | Chronic | | | WET Result, % Do not enter % sign | Reporting Limit Check | 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 Acute[6] | Chronic[6] | Health[6] | | | Reporting Limit Check | Possible Exceedence [7] 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] | 10 | | | | (8) | | | | | |
| M | LEAD | 3 | | | | (8) | | | | | |
| M | NICKEL | 5 | | | | (8) | | | | | |
| M | SILVER | 1 | | | | (8) | | | | | |
| M | ZINC | 5 | | | | (8) | | | | | |

**Maine Department of Environmental Protection**

**WET and Chemical Specific Data Report Form**
**This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.**

| | **PRIORITY POLLUTANTS** [4] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 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 | | | | | | | | | |

**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.**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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**

**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.

# 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 _____ Date Tested _____

mm/dd/yy 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 A-NOEL | sea urchin 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

# MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
## CSO ACTIVITY AND VOLUMES

| | |
|---|---|
| MUNICIPALITY OR DISTRICT | MEPDES / NPDES PERMIT NO. |
| REPORTING YEAR | SIGNED BY: |
| YEARLY TOTAL PRECIPITATION INCHES | DATE: |

| CSO EVENT NO. | START DATE OF STORM | PRECIP. DATA | | FLOW DATA (GALLONS PER DAY) OR BLOCK ACTIVITY("1") | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL INCHES | MAX. HR. INCHES | LOCATION: NUMBER: | LOCATION: NUMBER: | LOCATION: NUMBER: | LOCATION: NUMBER: | LOCATION: NUMBER: | LOCATION: NUMBER: | EVENT OVERFLOW GALLONS | EVENT DURATION HRS |
| 1 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| 7 | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 9 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| 11 | | | | | | | | | | | |
| 12 | | | | | | | | | | | |
| 13 | | | | | | | | | | | |
| 14 | | | | | | | | | | | |
| 15 | | | | | | | | | | | |
| 16 | | | | | | | | | | | |
| 17 | | | | | | | | | | | |
| 18 | | | | | | | | | | | |
| 19 | | | | | | | | | | | |
| 20 | | | | | | | | | | | |
| 21 | | | | | | | | | | | |
| 22 | | | | | | | | | | | |
| 23 | | | | | | | | | | | |
| 24 | | | | | | | | | | | |
| 25 | | | | | | | | | | | |
| | TOTALS | | | | | | | | | | |

Note 1: Flow data should be listed as gallons per day. Storms lasting more than one day should show total flow for each day.

Note 2: Block activity should be shown as a "1" if the block floated away.

# ATTACHMENT E

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
Commissioner

MEPDES#_____Facility Name_____

| Since the effective date of your permit, have there been; | | NO | YES<br>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

# ATTACHMENT F

## RE-ASSESSMENT OF TECHNICALLY BASED INDUSTRIAL DISCHARGE LIMITS

Pursuant to federal regulation 40 CFR Part 122.21(j)(4) and Department rule Chapter 528, all Publicly Owned Treatment Works (POTWs) with approved Industrial Pretreatment Programs (IPPs) shall provide the Department with a written evaluation of the need to revise local industrial discharge limits under federal regulation 40 CFR Part 403.5(c)(1) and Department rule 06-096 CMR Chapter 528(6)**.**

Below is a form designed by the U.S. Environmental Protection Agency (EPA - New England) to assist POTWs with approved IPPs in evaluating whether their existing Technically Based Local Limits (TBLLs) need to be recalculated. The form allows the permittee and Department to evaluate and compare pertinent information used in previous TBLLs calculations against present conditions at the POTW. **Please read the directions below before filling out the attached form.**

### ITEM I.

* In Column (1), list what your POTW's influent flow rate was when your existing TBLLs were calculated. In Column (2), list your POTW's present influent flow rate. Your current flow rate should be calculated using the POTW's average daily flow rate from the previous 12 months.

* In Column (1) list what your POTW's SIU flow rate was when your existing TBLLs were calculated. In Column (2), list your POTW's present SIU flow rate.

* In Column (1), list what dilution ratio and/or 7Q10 value was used in your previous MEPDES permit. In Column (2), list what dilution ration and/or 7Q10 value is presently being used in your reissued MEPDES permit.

  The 7Q10 value is the lowest seven day average flow rate, in the river, over a ten-year period. The 7Q10 value and/or dilution ratio used by the Department in your MEPDES permit can be found in your MEPDES permit "Fact Sheet."

* In Column (1), list the safety factor, if any, that was used when your existing TBLLs were calculated.

* In Column (1), note how your bio-solids were managed when your existing TBLLs were calculated. In Column (2), note how your POTW is presently disposing of its biosolids and how your POTW will be disposing of its biosolids in the future.

### ITEM II.

* List what your existing TBLLs are - as they appear in your current Sewer Use Ordinance (SUO).

## RE-ASSESSMENT OF TECHNICALLY BASED INDUSTRIAL DISCHARGE LIMITS

### ITEM III.

* Identify how your existing TBLLs are allocated out to your industrial community. Some pollutants may be allocated differently than others, if so please explain.

### ITEM IV.

* Since your existing TBLLs were calculated, identify the following in detail:

  (1) if your POTW has experienced any upsets, inhibition, interference or pass-through as a result of an industrial discharge.

  (2) if your POTW is presently violating any of its current MEPDES permit limitations - include toxicity.

### ITEM V.

* Using current sampling data, list in Column (1) the average and maximum amount of pollutants (in pounds per day) received in the POTW's influent. Current sampling data is defined as data obtained over the last 24 month period.

  All influent data collected and analyzed must be in accordance with federal regulation 40 CFR Part 136. Sampling data collected should be analyzed using the lowest possible detection method(s), e.g. graphite furnace, or other approved method.

  Based on your existing TBLLs, as presented in Item II., list in Column (2) each Maximum Allowable Industrial Headworks Loading (MAIHL) value corresponding to each of the local limits derived from an applicable environmental criteria or standard, *e.g.* water quality, sludge, MEPDES permit, inhibition, etc. For each pollutant, the MAIHL equals the calculated Maximum Allowable Headwork Loading (MAHL) minus the POTW's domestic loading source(s). For more information, please see, *Local Limits Development Guidance (July 2004).*

### ITEM VI.

* Using current sampling data, list in Column (1) the average and maximum amount of pollutants (in micrograms per liter) present your POTW's effluent. Current sampling data is defined as data obtained during the last 24 month period.

  All effluent data collected and analyzed must be in accordance with federal regulation 40 CFR Part 136. Sampling data collected should be analyzed using the lowest possible detection method(s), *e.g.* graphite furnace, or other approved method.

## RE-ASSESSMENT OF TECHNICALLY BASED INDUSTRIAL DISCHARGE LIMITS

* List in Column (2A) what the Ambient Water Quality Criteria (AWQC) (found in Department rule Chapter 584 –*Surface Water Quality Criteria For Toxic Pollutants, Appendix A,* October 2005) were (in micrograms per liter) when your TBLLs were calculated. Please note what hardness value was used at that time. Hardness should be expressed in milligrams per liter of Calcium Carbonate. In the absence of a specific AWQC, control(s) adequate to protect the narrative water quality standards for the receiving water may be applied.

List in Column (2B) the current AWQC values for each pollutant multiplied by the dilution ratio used in your reissued MEPDES permit. For example, with a dilution ratio of 25:1 at a hardness of 20 mg/l - Calcium Carbonate (copper's chronic freshwater AWQC equals 2.36 ug/l) the chronic MEPDES permit limit for copper would equal 45 ug/l. Example calculation:

EOP concentration = [Dilution factor x 0.75 x AWQC] + [0.25 x AWQC]
Chronic AWQC = 2.36 ug/L

Chronic EOP = [ 25 x $0.75^{(1)}$ x 2.36 ug/L] + [0.25 x 2.36 ug/L] = 45 ug/L

(1) Department rule Chapter 530, *Surface Water Toxics Control Program*, October 2005) requires that 10% of the AWQC be set aside for background that may be present in the receiving water and 15% of the AWQC be set aside as a reserve capacity for new dischargers or expansion of existing discharges.

## ITEM VII.

* In Column (1), list all pollutants (in micrograms per liter) limited in your reissued MEPDES permit. In Column (2), list all pollutants limited in your previous MEPDES permit.

## ITEM VIII.

* Using current sampling data, list in Column (1) the average and maximum amount of pollutants in your POTW's biosolids. Current data is defined as data obtained during the last 24-month period. Results are to be expressed as total dry weight.

All biosolids data collected and analyzed must be in accordance with federal 40 CFR Part 136.

In Column (2A), list current State and/or Federal sludge standards that your facility's biosolids must comply with. Also note how your POTW currently manages the disposal of its biosolids. If your POTW is planning on managing its biosolids differently, list in Column (2B) what your new biosolids criteria will be and method of disposal.

If you have any questions, please contact the State Pretreatment Coordinator at the Maine Department of Environmental Protection, Bureau of Land & Water Quality, Division of Water Quality Management, State House Station #17, Augusta, ME. 04333. The telephone number is (207) 287-8898, and the email address is james.r.crowley@maine.gov.

## REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

POTW Name & Address : _____

MEDES Permit # : _____

Date EPA approved current TBLLs : _____

Date EPA approved current Sewer Use Ordinance : _____

## ITEM I.

In Column (1) list the conditions that existed when your current TBLLs were calculated. In Column (2), list current conditions or expected conditions at your POTW.

| | **Column (1)** | **Column (2)** |
|---|---|---|
| | EXISTING TBLLs | PRESENT CONDITIONS |
| POTW Flow (MGD) | _____ | _____ |
| SIU Flow (MGD) | _____ | _____ |
| Dilution Ratio or 7Q10 from the MEPDES Permit) | _____ | _____ |
| Safety Factor | _____ | _____ |
| Biosolids Disposal Method(s) | _____ | _____ |

**REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)**

**ITEM II.**

EXISTING TBLLs

| POLLUTANT | NUMERICAL LIMIT (mg/l) or (lb/day) | POLLUTANT | NUMERICAL LIMIT (mg/l) or (lb/day) |
|---|---|---|---|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |

**ITEM III.**

Note how your existing TBLLs, listed in Item II., are allocated to your Significant Industrial Users (SIUs), i.e. uniform concentration, contributory flow, mass proportioning, other. Please specify by circling.

**ITEM IV.**

Has your POTW experienced any upsets, inhibition, interference or pass-through from industrial sources since your existing TBLLs were calculated?

If yes, explain. _____
_____

Has your POTW violated any of its MEPDES permit limits and/or toxicity test requirements?

If yes, explain. _____
_____

**REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)**

**ITEM V.**

Using current POTW influent sampling data fill in Column (1). In Column (2), list your Maximum Allowable Industrial Headwork Loading (MAIHL) values used to derive your TBLLs listed in Item II. In addition, please note the environmental criteria for which each MAIHL value was established, *i.e.* water quality, sludge, MEPDES, etc.

| | **Column (1)** | | **Column (2)** | |
|---|---|---|---|---|
| Pollutant | Influent Data Analyses | | MAIHL Values | Criteria |
| | Maximum (lb/day) | Average (lb/day) | (lb/day) | |
| Arsenic | _____ | _____ | _____ | _____ |
| Cadmium | _____ | _____ | _____ | _____ |
| Chromium | _____ | _____ | _____ | _____ |
| Copper | _____ | _____ | _____ | _____ |
| Cyanide | _____ | _____ | _____ | _____ |
| Lead | _____ | _____ | _____ | _____ |
| Mercury | _____ | _____ | _____ | _____ |
| Nickel | _____ | _____ | _____ | _____ |
| Silver | _____ | _____ | _____ | _____ |
| Zinc | _____ | _____ | _____ | _____ |
| Other (List) | | | | |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

**REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)**

**ITEM VI.**

Using current POTW effluent sampling data, fill in Column (1). In Column (2A) list what the Ambient Water Quality Criteria (AWQC) were at the time your existing TBLLs were developed. List in Column (2B) current AWQC values multiplied by the dilution ratio used in your reissued MEPDES permit.

| | **Column (1)** Effluent Data Analyses | | **Columns (2A)** Water Quality Criteria (AWQC) | **(2B)** |
|---|---|---|---|---|
| | Maximum (ug/l) | Average (ug/l) | From TBLLs (ug/l) | Today (ug/l) |
| **Pollutant** | | | | |
| Arsenic | _____ | _____ | _____ | _____ |
| Cadmium* | _____ | _____ | _____ | _____ |
| Chromium* | _____ | _____ | _____ | _____ |
| Copper* | _____ | _____ | _____ | _____ |
| Cyanide | _____ | _____ | _____ | _____ |
| Lead* | _____ | _____ | _____ | _____ |
| Mercury | _____ | _____ | _____ | _____ |
| Nickel* | _____ | _____ | _____ | _____ |
| Silver | _____ | _____ | _____ | _____ |
| Zinc* | _____ | _____ | _____ | _____ |
| Other (List) | | | | |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

*Hardness Dependent (mg/l - $CaCO_3$)

**RE-ASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)**

**ITEM VII.**

In Column (1), identify all pollutants limited in your reissued MEPDES permit. In Column (2), identify all pollutants that were limited in your previous MEPDES permit.

| **Column (1)** REISSUED PERMIT | | **Column (2)** PREVIOUS PERMIT | |
|---|---|---|---|
| Pollutants | Limitations (ug/l) | Pollutants | Limitations (ug/l) |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |

**ITEM VIII.**

Using current POTW biosolids data, fill in Column (1). In Column (2A), list the biosolids criteria that were used at the time your existing TBLLs were calculated. If your POTW is planning on managing its biosolids differently, list in Column (2B) what your new biosolids criteria would be and method of disposal.

| | | **Columns** | |
|---|---|---|---|
| | **Column (1)** Biosolids Data Analyses Average (mg/kg) | **(2A)** Biosolids Criteria From TBLLs (mg/kg) | **(2B)** New (mg/kg) |
| **Pollutant** | | | |
| Arsenic | _____ | _____ | _____ |
| Cadmium | _____ | _____ | _____ |
| Chromium | _____ | _____ | _____ |
| Copper | _____ | _____ | _____ |
| Cyanide | _____ | _____ | _____ |
| Lead | _____ | _____ | _____ |
| Mercury | _____ | _____ | _____ |
| Nickel | _____ | _____ | _____ |
| Silver | _____ | _____ | _____ |
| Zinc | _____ | _____ | _____ |
| Molybdenum | _____ | _____ | _____ |
| Selenium | _____ | _____ | _____ |
| Other (List) | _____ | _____ | _____ |

# ATTACHMENT G

**MEPDES PERMIT REQUIREMENTS**
**FOR**
**INDUSTRIAL PRETREATMENT ANNUAL REPORT**

The information described below shall be included in the pretreatment program annual reports:

1. An updated list of all industrial users by category, as set forth in federal regulation 40 CFR Part 403.8 and Department rule 06-096 CMR Chapter 528(9) indicating compliance or noncompliance with the following:

   - baseline monitoring reporting requirements for newly promulgated industries
   - compliance status reporting requirements for newly promulgated industries
   - periodic (semi-annual) monitoring reporting requirements,
   - categorical standards, and
   - local limit.

2. A summary of compliance and enforcement activities during the preceding year, including the number of:

   - significant industrial users inspected by POTW (include inspection dates for each industrial user);
   - significant industrial users sampled by POTW (include sampling dates for each industrial user);
   - compliance schedules issued (include list of subject users);
   - written notices of violations issued (include list of subject users);
   - administrative orders issued (include list of subject users),
   - criminal or civil suits filed (include list of subject users); and
   - penalties obtained (include list of subject users and penalty amounts).

3. A list of significantly violating industries required to be published in a local newspaper in accordance with federal regulation 40 CFR Part 403.8(f)(2)(viii) and Department rule 06-096 CMR Chapter 528(9)(f)(2)(vii).

4. A narrative description of program effectiveness including present and proposed changes to the program, such as funding, staffing, ordinances, regulations, rules and/or statutory authority.

5. A summary of all pollutant analytical results for influent, effluent, sludge and any toxicity or bioassay data from the wastewater treatment facility. The summary shall include a comparison of influent sampling results versus threshold inhibitory concentrations for the POTW and effluent sampling results versus water quality standards. Such a comparison shall be based on the sampling program described in the paragraph below or any similar sampling program described in this permit.

**MEPDES PERMIT REQUIREMENTS**
**FOR**
**INDUSTRIAL PRETREATMENT ANNUAL REPORT**

At a minimum, annual sampling and analysis of the influent and effluent of the POTW shall be conducted for the following pollutants:

| | |
|---|---|
| a.) Total Cadmium | f.) Total Nickel |
| b.) Total Chromium | g.) Total Silver |
| c.) Total Copper | h.) Total Zinc |
| d.) Total Lead | i.) Total Cyanide |
| e.) Total Mercury | j.) Total Arsenic |

The sampling program shall consist of one 24-hour, flow-proportioned, composite and at least one grab sample that is representative of the flows received by the POTW. The composite shall consist of hourly, flow-proportioned grab samples taken over a 24-hour period if the sample is collected manually, or shall consist of a minimum of 48 samples collected at 30-minute intervals if an automated sampler is used. Cyanide shall be taken as a grab sample during the same period as the composite sample. Sampling and preservation shall be consistent with federal regulation 40 CFR Part 136.

6. A detailed description of all interference and pass-through that occurred during the past year.

7. A thorough description of all investigations into interference and pass-through during the past year.

8. A description of monitoring, sewer inspections and evaluations which were done during the past year to detect interference and pass-through, specifying parameters and frequencies.

9. A description of actions being taken to reduce the incidence of significant violations by significant industrial users.

10. The date of the latest adoption of local limits and an indication as to whether or not the City is under a State or Federal compliance schedule that includes steps to be taken to revise local limits.

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

***PRELIMINARY DRAFT***
**FACT SHEET**

DATE: **APRIL 30, 2014**

PERMIT NUMBER: **#ME0100048**

WASTE DISCHARGE LICENSE: **#W000683-5M-J-R**

NAME AND ADDRESS OF APPLICANT:
**CITY OF BIDDEFORD**
**P.O. BOX 586**
**BIDDEFORD, MAINE 04005**

COUNTY: **YORK**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):
**CITY OF BIDDEFORD**
**64 WATER STREET**
**BIDDEFORD, MAINE 04005**

RECEIVING WATER CLASSIFICATION: **SACO RIVER/CLASS SC**

COGNIZANT OFFICIAL CONTACT INFORMATION:
**MR. THOMAS MILLIGAN, CITY ENGINEER**
**(207) 284-9118**
**tmilligan@biddefordmaine.org**

## 1. APPLICATION SUMMARY

Application: On February 2, 2014, the Department of Environmental Protection (Department) accepted as complete for processing, a renewal application for Maine Pollutant Discharge Elimination System (MEPDES) #ME0100048 /Waste Discharge License (WDL) #W000683-5M-F-R, which was issued on May 27, 2009 for a five-year term. The 5/27/09 MEPDES permit authorized the monthly average discharge of 6.5 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the Saco River, Class SB, in Biddeford, Maine. The permit also authorized the City to discharge untreated combined sewer overflows (CSO) to the Saco River, Class SC and to Thatcher Brook, Class B.

It is noted that the Department issued two minor permit revisions on December 21, 2010 (to incorporate Special Conditions to establish and implement an Asset Management Program, establish a repair and replacement reserve account and conduct a process energy audit), and February 6, 2012 (remove the

## 1. APPLICATION SUMMARY (cont'd)

monthly average limitations, monitoring requirements, reporting requirements and schedule of compliance for inorganic arsenic and total arsenic).

## 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 settleable solids 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. Revising the timing of the screening WET, priority pollutant, analytical chemistry and surveillance level WET, priority pollutant, analytical chemistry testing during permit cycle;

4. Eliminating the effluent limitations and monitoring requirements for total and inorganic arsenic based on new water quality based criteria;

5. Eliminating the effluent limitations and monitoring requirements for cyanide, ammonia, and bis (2-ethylhexyl) phthalate based on results on facility testing;

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

7. Revising the daily maximum limit of transported wastes.

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

April 22, 1994 – The United States Environmental Protection Agency (USEPA) issued an Administrative Order to the City (No. 94-12) that required development of a draft facilities plan and schedule for upgrading the treatment plant [including, if necessary, treatment capacity expansion and/or addition of advanced treatment] and relocating the outfall.

September 30, 1996 – The USEPA issued National Pollution Discharge Elimination System (NPDES) permit #ME0100048 for a five-year term.

August 4, 1997 – The Department issued WDL #W000683-47-C-R for a five-year term. The WDL contained two tiers of limitations that took into consideration a treatment plant upgrade and relocation of the outfall structure.

May 4, 1998 – The USEPA issued a minor modification to the 9/30/96 NPDES permit to clarify that future limitations and monitoring requirements became effective after relocation of the outfall structure.

**2. PERMIT SUMMARY (cont'd)**

June 7, 2000 – The Department administratively modified WDL #W000683-47-C-R by establishing interim average and maximum concentration limits for the discharge of mercury.

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 #ME0100048 has been utilized for this facility.

October 21, 2001 – The Department administratively modified the 8/4/97 WDL by requiring the City of Biddeford to begin disinfecting the discharge from the wastewater treatment facility on a year-round basis.

June 25, 2003 – The Department issued combination MEPDES permit #ME0100048/WDL #W000683-5M-E-R for a five-year term.

January 22, 2009 – The Department reviewed and approved a CSO Master Plan and abatement schedule entitled *Phase II Combined Sewer Overflow Master Plan for the City of Biddeford, Maine* dated June 2008 and revised January 2009.

May 27, 2009 – The Department issued combination MEPDES permit #ME0100048/WDL #W000683-5M-F-R for a five-year term.

December 21, 2010 – The Department issued permit modification #ME0100048/WDL#W000683-5M-G-M to incorporate Special Conditions to establish and implement an Asset Management Program, establish a repair and replacement reserve account and conduct a process energy audit.

February 6, 2012 – The Department issued permit modification #ME0100048/WDL#W000683-5M-H-M to incorporate the average and maximum concentration limits for total mercury.

September 5, 2013 – The Department issued permit modification #ME0100048/WDL#W000683-5M-I-M to remove the monthly average limitations, monitoring requirements, reporting requirements and schedule of compliance for inorganic arsenic and total arsenic.

February 2, 2014 – The City submitted a timely and complete General Application to the Department for renewal of the May 27, 2009 MEPDES permit. The application was accepted for processing on February 2, 2014, and was assigned WDL #W000683-5M-J-R / MEPDES #ME0100048.

c. Source Description: The wastewater treatment facility was originally constructed and went on-line in 1962 and currently serves a population of approximately 15,000 users**.** The treatment facility receives sanitary wastewaters generated by residential, commercial, and industrial users. There are 15 industries [13 significant industrial users (SIUs) and 2 categorical industrial user (CIU)] for which pretreatment of their wastewaters is required and monitored by the Department via industrial pretreatment requirements established in Special Condition M, *Industrial Pretreatment Program*, of this permitting action.

## 2. PERMIT SUMMARY (cont'd)

The City's sanitary sewer collection system consists of approximately thirty-nine (39) miles of piping with twenty-three (23) pump stations. Two (2) of the pump stations are equipped with on-site back-up power and the remaining twenty –one (21) stations are served by portable generators. All but one (1) station is equipped with SCADA systems that are transmitted to the Public Works Department of the City as well as the wastewater treatment plant. The sanitary collection system is estimated to be 33% separated from the stormwater collection system and 67% combined with the stormwater collection system.

As a result, the permittee has identified eight combined sewer overflow (CSO) points in the collection system which are monitored via Special Condition J, *Combined Sewer Overflows (CSOs),* in this permitting action. It is noted that since issuance of the previous permitting action, the City has successfully conducted a number of sewer upgrade and separation projects resulting in the elimination of two CSOs (#003 to Thatcher Brook and #008 to the Saco River). With the elimination of CSO #003 the facility no longer discharges to Thatcher Brook. The City is currently monitoring the collection system to determine the effectiveness of these projects.

The facility is authorized to receive up to 10,000 gallons per day of septage from local septage haulers but is limited to introducing 6,500 gpd into the wastewater treatment process on any given day. The City has made significant changes to their sludge handling process and has requested and has been authorized in this permit renewal to hold and meter a maximum daily volume of 10,000 gallons of transported waste that will be conveyed directly into solids dewatering process. The City submitted a copy their Septage Management Plan (revised January 2014) 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 located at 63 Water Street in Biddeford provides secondary biological treatment of wastewater utilizing the activated sludge process. Since the 2009 permit renewal the facility has made several improvements some of which include; continued sewer separation work, replacement of the sludge belt presses with rotary screw presses, installation of a sludge thickener, taking the Biofilter off line and replacing sludge pumps and blowers. The wastewater entering the treatment facility receives primary treatment via screening and grit removal. Screenings and grit are removed at the headworks by means of an automatic climbing rake and grit screw apparatus, respectively.

The wastewater is conveyed straight from the primary treatment to two separate aeration basins with fine bubble diffused aeration. Clarification of the wastewater is achieved by two circular secondary clarifiers each measuring 85 feet in diameter. It is noted that until 2012 a dual stage activated biofilter system (ABF) consisting of a fixed film biotower process was utilized, but is currently offline. Secondary effluent is disinfected with sodium hypochlorite in a serpentine chlorine contact chamber and dechlorinated with sodium bisulfate prior to being discharged to the Saco River through a steel outfall pipe measuring 30 inches in diameter that extends out into the Saco River approximately 350 feet. The last 136 feet of the outfall pipe contains elements of the diffuser placed parallel to and at the edge of the river channel. The diffuser consists of a steel pipe measuring 24 inches in diameter with seven (7) angled ports, each 12 inches in diameter spaced 20 feet on-center. The diffuser is located approximately 15 feet below the mean low water line.

## 2. PERMIT SUMMARY (cont'd)

In the previous permit it was noted that CSO #001 could still be utilized in the event of an emergency and could discharge during extreme high tides. It is noted that CSO #001 has been permanently sealed and can no longer discharge secondary treated wastewaters or untreated combined stormwater and sanitary wastewater.

Sludge dewatering is accomplished by means of a rotary screw press. Dewatered sludge is trucked off-site to a compost facility..

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(8)(E)(2) classifies the tidewaters of the Saco River as a Class SC water. *Standards for classification of estuarine and marine waters,* 38 M.R.S.A. § 465-B(3) describes the standards for classification of Class SC 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 the Saco River Estuary in Biddeford as, "Category 4-A: Estuarine and Marine Waters with Impaired Use, TMDL Completed." Sampling conducted in calendar year 1998 indicates the 0.90 square miles of the Saco River Estuary in Biddeford (waterbody ID #811-8) is impaired by bacteria. The Department completed the TMDL in 2009 and it was approved by USEPA on September 28, 2009.

"Category 5-A: Estuarine and Marine Waters Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)." Sampling conducted in calendar year 1998 indicates the 0.90 square miles of the Saco River Estuary in Biddeford (waterbody ID #811-8) is impairing marine life use support due to the presence of toxicity and copper from a municipal point source and CSOs. The Report specifies that this non-attainment is on a low priority schedule for development of a total maximum daily load (TMDL).

## 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 6.5 MGD based on the design capacity for the treatment facility, and a daily maximum discharge flow reporting requirement.

The Department reviewed 55 Discharge Monitoring Reports (DMRs) that were submitted for the period June 2009 – December 2013. A review of data indicates the following:

**Flow**

| Value | Limit (MGD) | Range (MGD) | Mean (MGD) |
|---|---|---|---|
| Monthly Average | 6.5 | 1.53 – 5.34 | 2.85 |
| Daily Maximum | Report | 2.64 – 12.45 | 6.19 |

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 6.5 MGD and the location and configuration of the outfall structure, the Department has established dilution factors as follow:

Acute = 9.7:1 Chronic = 17:1 Harmonic mean[1] = 51:1

c. Biochemical Oxygen Demand ($BOD_5$) and Total Suspended Solids (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 and weekly average mass limits of 1,626 lbs./day and 2,439 lbs./day, respectively, established in the previous permitting action for $BOD_5$ and TSS are based on the monthly average flow design criterion of 6.5MGD 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).

A requirement to achieve 85% removal at all times at facilities with combined sewers is not attainable due to the complexity of the sewer systems and the highly variable influent concentration. The Department is carrying forward a waiver on the percent removal requirement when influent strength is less than 200 mg/L for facilities with combined sewers.

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

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

The Department reviewed 55 DMRs that were submitted for the period June 2009 – December 2013 for $BOD_5$. It is noted that the daily maximum $BOD_5$concentration limit of 50 mg/L was exceeded in December 2010 with a result of 74 mg/L and in November 2013 with a result of 90 mg/L. A review of data indicates the following:

**$BOD_5$ mass**

| Value | Limit (lbs./day) | Range (lbs./day) | Mean (lbs./day) |
|---|---|---|---|
| Monthly Average | 1,626 | 83 – 500 | 192 |
| Weekly Average | 2,439 | 98 – 1,286 | 337 |
| Daily Maximum | Report | 127 – 5,015 | 815 |

**$BOD_5$ concentration**

| Value | Limit (mg/L) | Range (mg/L) | Mean (mg/L) |
|---|---|---|---|
| Monthly Average | 30 | 4.1 - 16 | 7.6 |
| Weekly Average | 45 | 5.4 – 30 | 10.4 |
| Daily Maximum | 50 | 6.5 - 90 | 19 |

The Department reviewed 55 DMRs that were submitted for the period June 2009 – December 2013 for TSS. It is noted that the daily maximum TSS concentration limit of 50 mg/L was exceeded in December 2010 (75 mg/L), April 2011 (93 mg/L), November 2011 (55 mg/L), December 2012 (70 mg/L) and November 2013 (115 mg/L). A review of data indicates the following:

**TSS mass**

| Value | Limit (lbs./day) | Range (lbs./day) | Mean (lbs./day) |
|---|---|---|---|
| Monthly Average | 1,626 | 89 – 603 | 222 |
| Weekly Average | 2,439 | 105 – 1,968 | 413 |
| Daily Maximum | Report | 120 – 7,266 | 1,109 |

**TSS concentration**

| Value | Limit (mg/L) | Range (mg/L) | Mean (mg/L) |
|---|---|---|---|
| Monthly Average | 30 | 4.4 – 14 | 8.5 |
| Weekly Average | 45 | 6.2 – 33 | 11.5 |
| Daily Maximum | 50 | 67.5 – 115 | 23.3 |

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

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

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:

$BOD_5$

Long term average = 192 lbs./day
Monthly average limit = 1,626 lbs./day
Current monitoring frequency = 5/Week

$$\text{Ratio} = \frac{192 \text{ lbs./day}}{1{,}626 \text{ lbs./day}} = 11\%$$

According to Table I of the USEPA guidance, a 5/Week monitoring requirement can be reduced to 1/Week. However, the Department has determined based on results of facility testing a reduction to 1/Week testing for $BOD_5$is not consistent with our analysis of the data and best professional judgment. Therefore, this permitting action is carrying forward the 5/Week monitoring frequency requirement.

TSS

Long term average = 222 lbs./day
Monthly average limit = 1,626 lbs./day
Current monitoring frequency = 5/Week

$$\text{Ratio} = \frac{222 \text{ lbs./day}}{1{,}626 \text{ lbs./day}} = 13\%$$

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

According to Table I of the USEPA guidance, a 5/Week monitoring requirement can be reduced to 1/Week. However, the Department has determined based on results of facility testing a reduction to 1/Week testing for TSS is not consistent with our analysis of the data and best professional judgment. Therefore, this permitting action is carrying forward the 5/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 55 DMRs that were submitted for the period June 2009 – December 2013. It is noted that the daily maximum settleable solids concentration limit of 0.3 mg/L was exceeded in March 2011 (0.7 mg/L), December 2012 (0.6 mg/L), and November 2013 (1.0 mg/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 | 0.1 – 1.0 | 0.14 |

A review of the monitoring data for settleable solids 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 = 0.14 ml/L
Daily maximum limit = 0.3 ml/L
Current monitoring frequency = 7/Week

$$\text{Ratio} = \frac{0.14 \text{ ml/L}}{0.3 \text{ ml/L}} = 47\%$$

According to Table I of the USEPA guidance, a 7/Week monitoring requirement can be reduced to 3/Week. However, the Department has determined based on results of facility testing a reduction to 5/Week testing for settleable solids is consistent with our analysis of the data and best professional judgment. Therefore, the monitoring frequency for settleable solids has been reduced to 5/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 55 DMRs that were submitted for the period June 2009 – December 2013. It is noted that the daily maximum concentration limit of 15 colonies/100 ml was exceeded several times during this time frame. 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 | 1.0 – 10.5 | 3.0 |
| Daily Maximum | 50 | 2.0 – 220.2 | 36.4 |

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 = 3.0 col/100 ml
Monthly average limit = 15 col/100 ml
Current monitoring frequency = 5/Week

Ratio = $\frac{3.0 \text{ col/100 ml}}{15 \text{ col/100 ml}}$ =20%

According to Table I of the EPA Guidance, a 5/Week monitoring requirement can be reduced to 1/Week. However, the Department has determined based on results of facility testing a reduction to 1/Week testing for fecal coliform bacteria is not consistent with our analysis of the data and BPJ. Therefore, the Department is carrying forward the monitoring frequency for fecal coliform bacteria of 5/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 0.13 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 | 9.7:1(A)<br>16.9:1 (C) | 0.13 mg/L | 0.13 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 City 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 0.13 mg/L is more stringent than the daily maximum technology-based standard of 0.3 mg/L and is therefore 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 0.13 mg/L and is therefore being carried forward in this permitting action.

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

The Department reviewed 54 DMRs that were submitted for the period June 2009 – December 2013. It is noted that the daily maximum total residual chlorine concentration limit of 0.13 mg/L was exceeded in July 2010 (0.48 mg/L) and October 2010 (0.29 mg/L). A review of data indicates the following:

**Total residual chlorine**

| Value | Limit (mg/L) | Range (mg/L) | Mean (mg/L) |
|---|---|---|---|
| Monthly Average | 0.1 | 0.01 – 0.04 | 0.01 |
| Daily Maximum | 0.13 | 0.01 - 0.48 | 0.05 |

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 = 0.01 mg/L
Monthly average limit = 0.1 mg/L
Current monitoring frequency = 2/Day

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

According to Table I of the EPA Guidance, a 2/Day monitoring requirement can be reduced to 1/Week. However, the Department has determined based on results of facility testing 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 2/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 55 DMRs that were submitted for the period June 2009 – December 2013. It is noted that the daily minimum pH limit of 6.0 SU was exceeded in November 2012 (5.86 SU), June 2013 (5.67 SU) and September 2013 (5.93 SU). A review of data indicates the following:

**pH**

| Value | Limit (SU) | Minimum (SU) | Maximum (SU) |
|---|---|---|---|
| Range | 6.0 – 9.0 | 5.67 | 7.50 |

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 W000683-47-C-R by establishing interim monthly average and daily maximum effluent concentration limits of 14.6 parts per trillion (ppt) and 22.0 ppt, respectively, and a minimum monitoring frequency

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

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.

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 October 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 | 14.6 | 2.20 – 5.86 | 5.8 |
| Daily Maximum | 22.0 | | |

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. In fact, the permittee has been monitoring mercury at a frequency of 4/Year since June 2000 or 11 years.

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.

h. Total Nitrogen: The facility has not been conducting total nitrogen testing 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 the Saco River. The Department has numerous total nitrogen data results for municipally-owned treatment works throughout the State. Assuming a discharge concentration of 5.0 mg/L (5,000 µg/L) (typical from POTWs), and a near field dilution factor of 17:1 an in-stream concentration can be calculated as follows:

Total Nitrogen concentrations in effluent = 5,000 µg/L
Chronic dilution factor = 17:1

In-stream concentration after dilution: $\frac{5{,}000\ \mu g/L}{17} = 294\ \mu g/L$

When considering a far-field dilution, which is significantly higher than the near-field dilution, it is assumed that the in-stream concentration at the far-field location will be significantly lower than 294 µg/L. Therefore, the Department is making a best professional judgment determination that the discharge of nitrogen from the facility does exhibit a reasonable potential to exceed applicable water quality standards for Class SC waters

In order to obtain a more accurate nutrient data set this permitting action is establishing a requirement to conduct effluent monitoring for nitrate, nitrite, and total kjehldahl nitrogen at a frequency of twice a month from May 1st through October 31st during the first year after issuance of the permit.

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

***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 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**

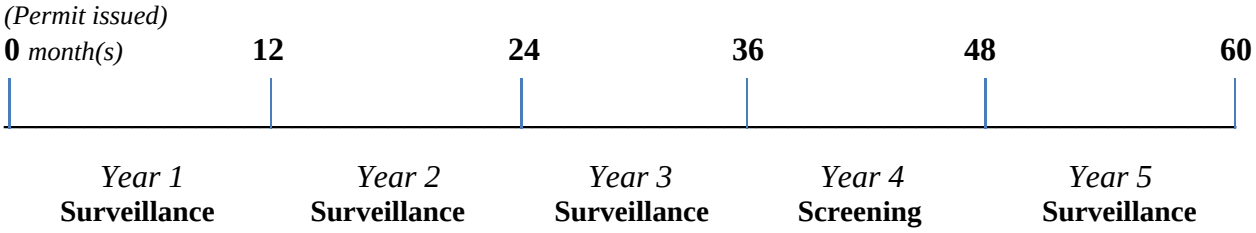
06-096 CMR 530(2)(D)(1) specifies WET, priority pollutant, and analytical chemistry test schedules for dischargers based on their level[1] as defined by 06-096 CMR 530(2)(B). Please see 06-096 CMR 530(2)(D)(1) for a listing of default test schedules.

[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 17:1; therefore, pursuant to 06-096 CMR 530(2)(B), this facility is considered a Level I facility for purposes of toxics testing.

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

**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.




06-096 CMR 530(2)(D)(3)(d) states in part that for Level I facilities "… *may reduce surveillance testing to one WET or specific chemical series per 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 L, *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).*

Based on the results of the previous statistical evaluation the previous permitting action established a chronic ambient water quality limit of 5.9% for the sea urchin.

On January 15, 2014, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department for the City in accordance with the statistical approach outlined above. The 1/15/14 statistical evaluation indicates the discharge from Biddeford's Wastewater Treatment Facility demonstrated a reasonable potential to exceed the chronic ambient water quality thresholds of 5.9% for the sea urchin. See **Attachment C** 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 (1/Surveillance Year). This permitting action is also carrying forward the default surveillance level testing for and the sea urchin (2/Surveillance Year) and a numeric limit of 5.9% for the sea urchin. This

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

permitting action is also carrying forward the established screening level testing for the mysid shrimp and sea urchin (4/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 D** 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.

On January 16, 2014, the Department conducted a statistical evaluation of the most recent 60 months of chemical-specific test results on file with the Department for Biddeford'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. See **Attachment E** of this Fact Sheet for a facility chemical data report.

Priority Pollutants

Based on the results of the January 16, 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 I facilities per 06-096 CMR 530(2)(D)(3)(b).

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 per surveillance year (1/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. COMBINED SEWER OVERFLOWS

This permit does not contain effluent limitations on the individual CSO outfalls listed in the table below.

| Outfall | Location | Receiving Water & Class |
|---|---|---|
| 004 | Bradbury Street CSO | Saco River, Class SC |
| 005 | Western Avenue CSO | Saco River, Class SC |
| 006 | Horrigan Court CSO | Saco River, Class SC |
| 007 | Elm Street (Route #1) CSO | Saco River, Class SC |
| 009 | Water Street CSO | Saco River, Class SC |
| 011 | Biddeford Textile CSO | Saco River, Class SC |
| 013 | Rumery's Boatyard CSO | Saco River, Class SC |
| 014 | Lafayette Street CSO | Saco River, Class SC |

*Combined Sewer Overflow Abatement* 06-096 CMR 570 (last amended February 8, 1978) states that for discharges from overflows from combined municipal storm and sanitary sewer systems, the requirement of "best practicable treatment" specified in 38 M.R.S.A. 414-A(1)(D) may be met by agreement with the discharger, as a condition of its permit, through development of a plan within a time period specified by the Department. The City submitted to the Department a CSO Master Plan entitled, "*Sewer System Master Plan for CSO Abatement City of Biddeford*, prepared by Olver Associates, Inc., and approved by the Department on June 18, 2007.

The City has been actively implementing the recommendations of the Master Plan and to date has significantly reduced the volume of untreated combined sewer overflows to the receiving water. Special Condition K, *Effluent Limitations and Conditions For Combined Sewer Overflows*, of the permit contains a schedule of compliance for items in the most current up-to-date abatement plan which must be completed.

The Department acknowledges that the elimination of the eight remaining CSOs in the collection system of sanitary wastewater is a costly, long-term project. As the Biddeford treatment facility and the sewer collection system are upgraded and maintained in accordance with the CSO Master Plan and Nine Minimum Controls, there should be reductions in the frequency and volume of CSO activities and in the wastewater receiving primary treatment only at the treatment plant, and, over time, improvement in the quality of the wastewater discharged to the receiving waters.

## 8. PRETREATMENT

The permittee is required to administer a pretreatment program based on the authority granted under Federal regulations 40 CFR Part 122.44(j), 40 CFR Part 403, section 307 of the Federal Water Pollution Control Act (Clean Water Act), and *Pretreatment Program*, 06-096 CMR 528 (amended March 17, 2008). The permittee's pretreatment program received USEPA approval on July 19, 1985, and as a result, appropriate pretreatment program requirements were incorporated into the previous National Pollutant Discharge Elimination System (NPDES) permit that were consistent with that approval and federal pretreatment regulations in effect when the permit was issued. The State of Maine has been authorized by the USEPA to administer the federal pretreatment program as part of receiving authorization to administer the NPDES program.

**8. PRETREATMENT (cont'd)**

The permit contains a condition for industrial pretreatment (see Special Condition M) pursuant to 40 CFR Part 403 and 06-096 Code of Maine Rules chapter 528 Pretreatment Program. Conditions for pretreatment have been in place at Biddeford since at least the 2003 permit cycle. Annual reports are required pursuant to 40 CFR Part 403.12(i), and Chapter 528 Section 12(i), which contain information describing the effluent from industrial sources discharging to the facility. As of 2013 there are 15 regulated Industrial Users (IUs) in the Biddeford Pretreatment Program; AVX Tantalum (CIU), Fiber Materials, Floatation Technologies, Intermat, Interstate Brands, Journal Tribune, Maine Energy Recovery Company, Maine Textiles International, METSO Paper, Prescott Metal, Praxair (CIU), SMMC, Target, Volk Packaging, White Star Laundry.. These IUs run analyses and submit reports to the City a minimum of twice a year (or more often), and the City runs an independent analysis & carries out a facility inspection once a year. In addition, the State Pretreatment Coordinator conducts either a Pretreatment Audit (Insp-G) or a Pretreatment Compliance Inspection (Insp-P) of the Biddeford Pretreatment Program at a frequency of approximately once a year. In Biddeford Local Limits have been technically derived for BOD, TSS, pH, ammonia nitrogen, arsenic, cadmium, chromium, copper, cyanide, lead, mercury, nickel, silver, zinc, molybdenum, and selenium. The individual IU permits contain limits for site-specific relevant contaminants. Additionally, the City submits an Annual Pretreatment Report to the State Pretreatment Coordinator summarizing the year's compliance and enforcement activities. The Biddeford MEPDES permit periodically requires effluent testing for a suite of additional pollutants (analytical chemistry), priority pollutants and whole effluent toxicity (WET testing). The Fact Sheet discusses the results of statistical evaluations conducted in accordance with USEPA's Technical Support Document for Water Quality-Based Toxics Control.

Upon issuance of this permit, the permittee is obligated to modify (if applicable) its pretreatment program to be consistent with current federal regulations and State rules. Those activities that the permittee must address include, but are not limited to, the following: (1) develop and enforce Department-approved specific effluent limits (technically-based local limits - last approved by the USEPA on May 13, 1999; (2) revise the local sewer-use ordinance or regulation, as appropriate, to be consistent with federal regulations and State rules; (3) develop an enforcement response plan; (4) implement a slug control evaluation program; (5) track significant non-compliance for industrial users; and (6) establish a definition of and track significant industrial users. These requirements are necessary to ensure continued compliance with the POTWs MEPDES permit and its sludge use or disposal practices.

In addition to the requirements described above, this permit requires that **within 180 days of the effective date of this permit,** the permittee must submit to the Department in writing, a description of proposed changes to permittee's pretreatment program deemed necessary to assure conformity with current federal and State pretreatment regulations and rules, respectively. These requirements are included in the permit to ensure that the pretreatment program is consistent and up-to-date with all pretreatment requirements in effect. **By March 1st of each calendar year,** the permittee must submit a pretreatment annual report detailing the activities of the program for the twelve-month period ending 60 days prior to the due date.

## 9. DISPOSAL OF SEPTAGE WASTE IN WASTEWATER TREATMENT FACILITY

The City 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 City's written septage management plan, this permitting action authorizes the City to receive and introduce into the treatment process or solids handling stream up to a daily maximum of 16,500 GPD of transported wastes (septage wastes) (up to a monthly total of 495,000 gallons). See Special Condition J of the permit.

## 10. 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.

## 11. PUBLIC COMMENTS

Public notice of this application was made in the *Journal Tribune* newspaper on or about January 31, 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).

## 12. 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

## 13. RESPONSE TO COMMENTS

***Reserved until the end of the public comment period.***

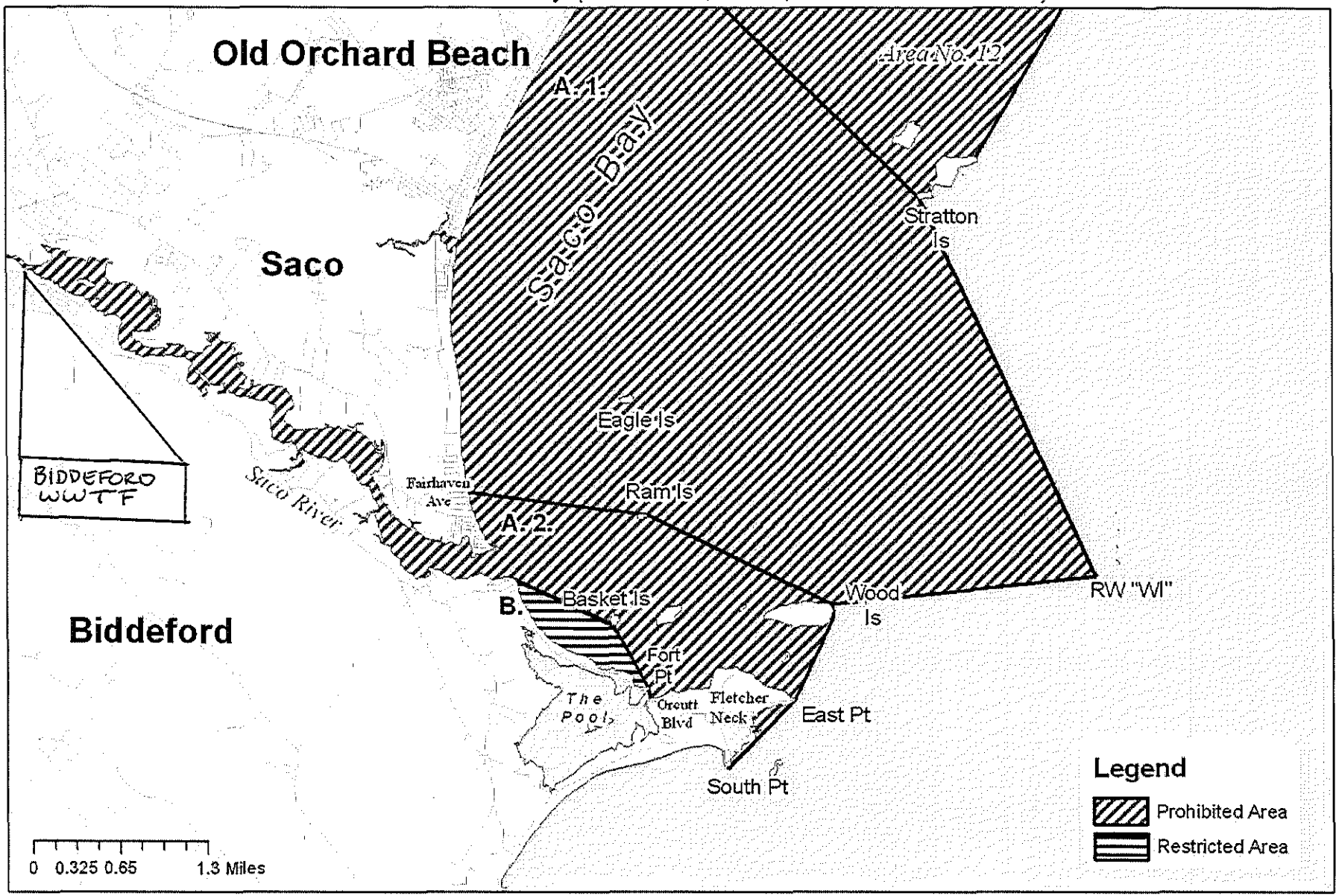
# ATTACHMENT A

# Maine Department of Marine Resources

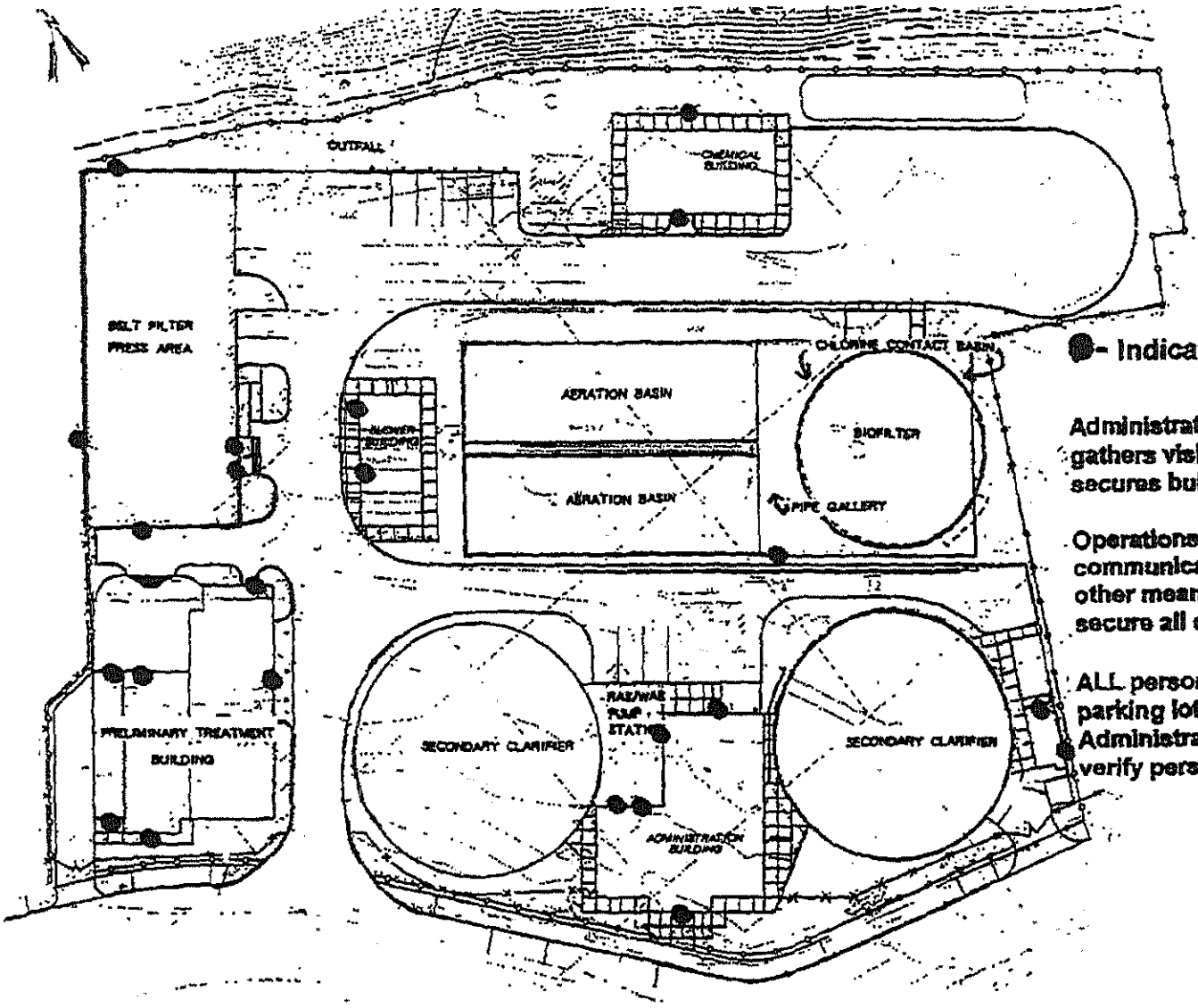
## *Pollution Area No. 10*

Saco River and Saco Bay (Biddeford, Saco, Old Orchard Beach)

10/3/12



# ATTACHMENT B




● - Indicates Exit

Administration pers
gathers visitor log a
secures building.

Operations personn
communicate by ra
other means, sweep
secure all other buil

ALL personnel meet
parking lot across fi
Administration Build
verify personnel co

# ATTACHMENT C

# WET TEST REPORT

**Data for tests conducted for the period**

15/Jan/2009 - 15/Jan/2014

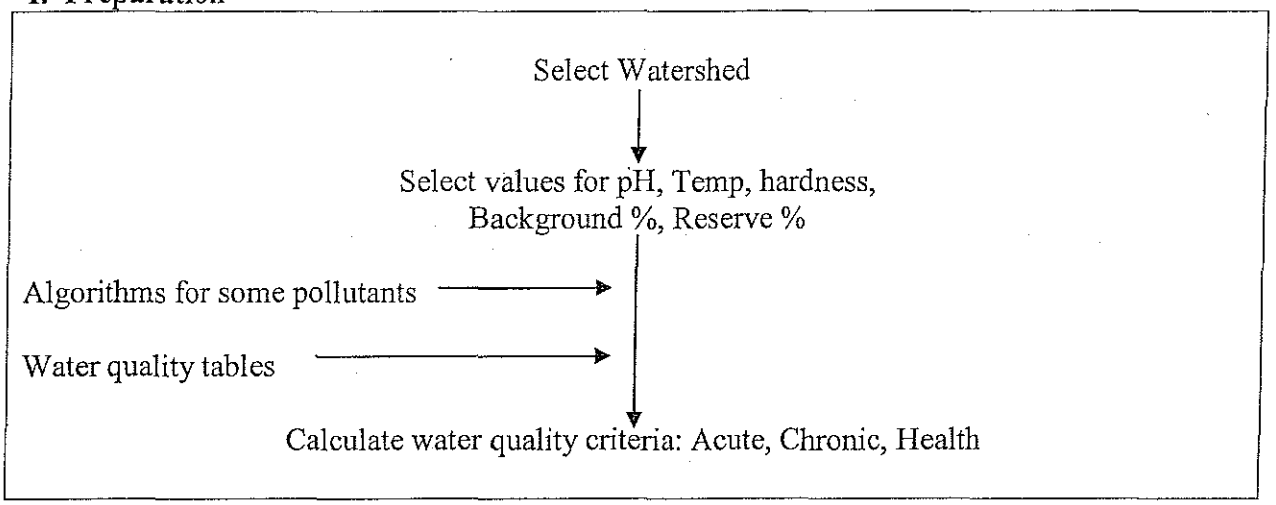
**BIDDEFORD** NPDES= ME010004 Effluent Limit: Acute (%) = 10.309 Chronic (%) = 5.917

| Species | Test | Percent | Sample date | Critical % | Exception | RP |
|---|---|---|---|---|---|---|
| MYSID SHRIMP | A_NOEL | 100 | 08/17/2009 | 10.309 | | |
| MYSID SHRIMP | A_NOEL | 100 | 03/16/2010 | 10.309 | | |
| MYSID SHRIMP | A_NOEL | 100 | 11/15/2011 | 10.309 | | |
| MYSID SHRIMP | A_NOEL | 100 | 08/13/2012 | 10.309 | | |
| MYSID SHRIMP | A_NOEL | 100 | 11/12/2012 | 10.309 | | |
| MYSID SHRIMP | A_NOEL | 100 | 04/21/2013 | 10.309 | | |
| MYSID SHRIMP | A_NOEL | 100 | 07/23/2013 | 10.309 | | |
| MYSID SHRIMP | A_NOEL | 100 | 10/15/2013 | 10.309 | | |
| SEA URCHIN | C_NOEL | 100 | 08/17/2009 | 5.917 | | |
| SEA URCHIN | C_NOEL | 10 | 12/16/2009 | 5.917 | | |
| SEA URCHIN | C_NOEL | 100 | 03/16/2010 | 5.917 | | |
| SEA URCHIN | C_NOEL | 25 | 08/17/2010 | 5.917 | | |
| SEA URCHIN | C_NOEL | 100 | 04/13/2011 | 5.917 | | |
| SEA URCHIN | C_NOEL | 10 | 11/15/2011 | 5.917 | | |
| SEA URCHIN | C_NOEL | 100 | 02/27/2012 | 5.917 | | |
| SEA URCHIN | C_NOEL | 5.90 | 08/13/2012 | 5.917 | Y | |
| SEA URCHIN | C_NOEL | 100 | 11/12/2012 | 5.917 | | |
| SEA URCHIN | C_NOEL | 100 | 04/21/2013 | 5.917 | | |
| SEA URCHIN | C_NOEL | 100 | 07/23/2013 | 5.917 | | |
| SEA URCHIN | C_NOEL | 100 | 10/15/2013 | 5.917 | | |

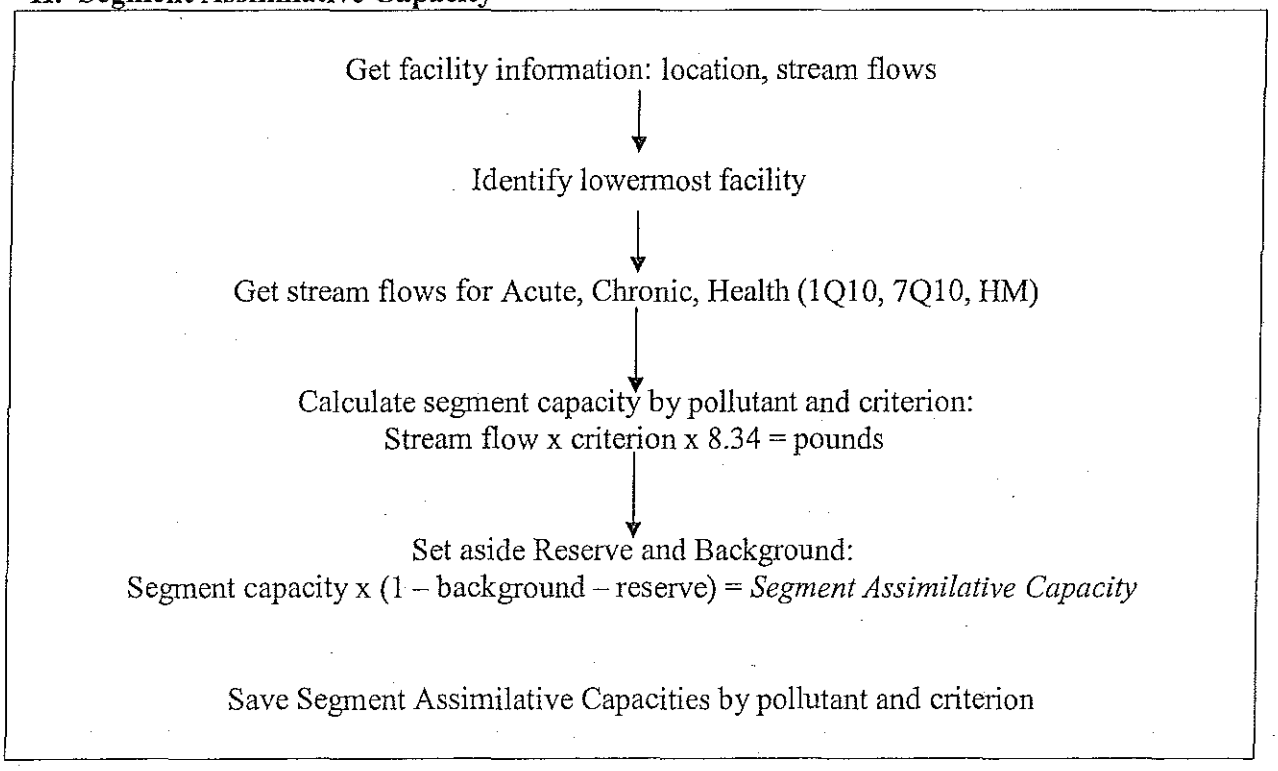
# ATTACHMENT D

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

**I. Preparation**

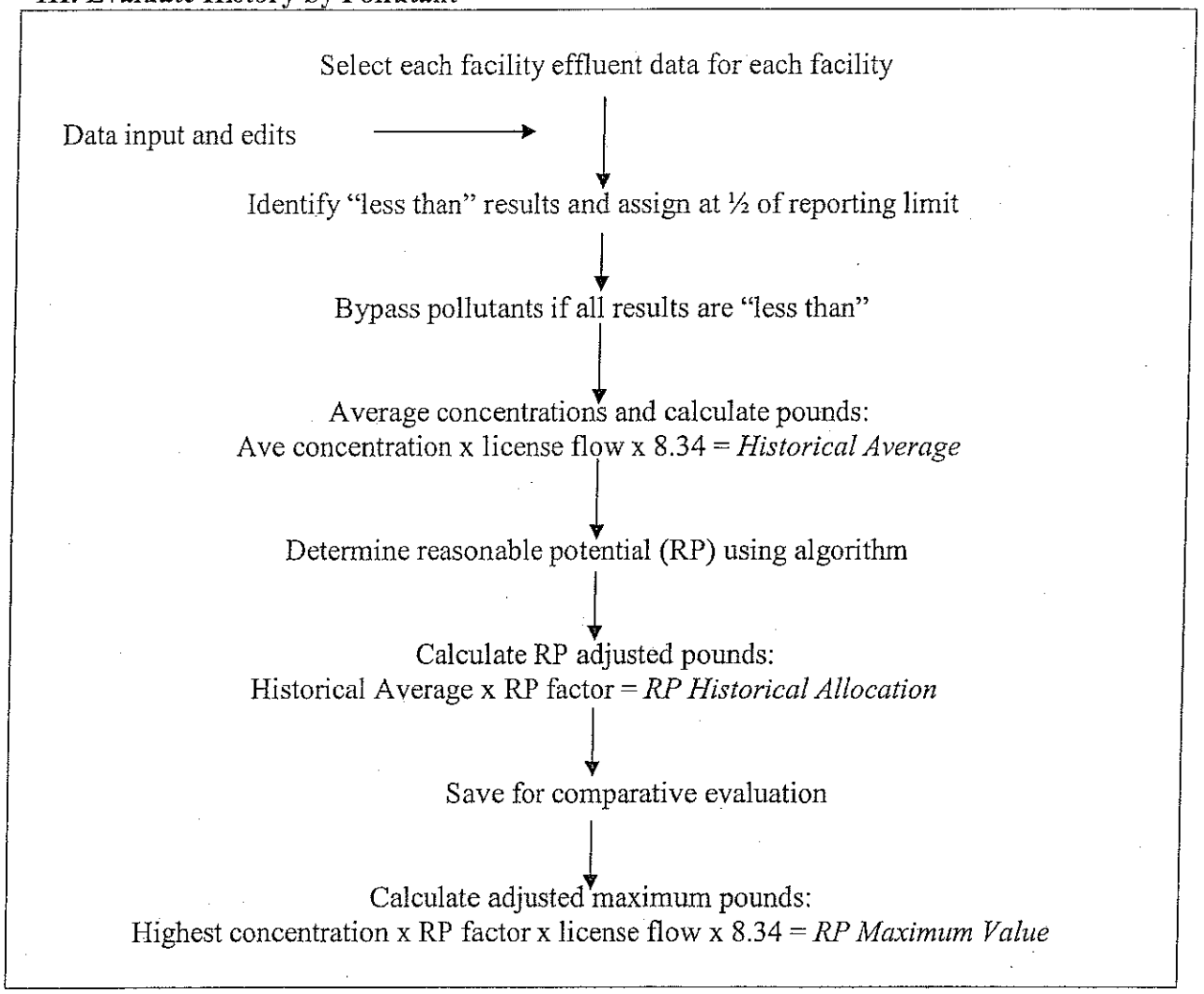



**II. Segment Assimilative Capacity**

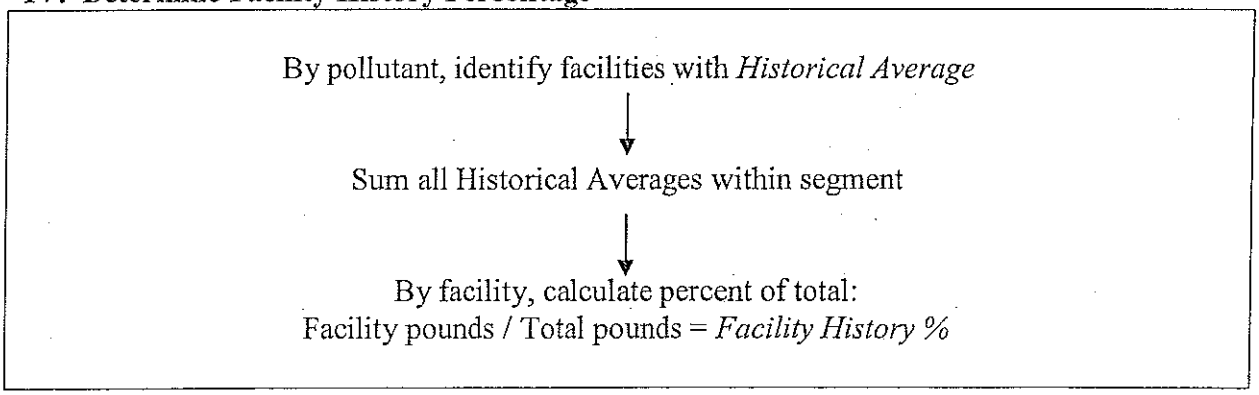


Maine Department of Environmental Protection
General Processing Steps in "DeTox"

**III. Evaluate History by Pollutant**




**IV. Determine Facility History Percentage**



**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.

# ATTACHMENT E

# FACILITY PRIORITY POLLUTANT DATA REPORT

**Data Date Range:** 15/Jan/2009 - 15/Jan/2014

Facility name: **BIDDEFORD** Permit Number: **ME0100048**

| Parameter: ALUMINUM | Test date | Result (ug/l) | Lsthan |
|---|---|---|---|
| | 08/17/2009 | 50.000 | N |
| | 12/16/2009 | 100.000 | N |
| | 03/16/2010 | 78.000 | N |
| | 08/17/2010 | 56.000 | N |
| | 04/13/2011 | 64.000 | N |
| | 10/24/2011 | 58.000 | N |
| | 11/15/2011 | 68.000 | N |
| | 08/13/2012 | 507.000 | N |
| | 11/12/2012 | 90.000 | N |
| | 02/13/2013 | 83.000 | N |
| | 04/21/2013 | 54.000 | N |
| | 07/23/2013 | 120.000 | N |
| | 10/15/2013 | 27.000 | N |
| **Parameter:** AMMONIA | **Test date** | **Result (ug/l)** | **Lsthan** |
| | 02/09/2009 | 3400.000 | N |
| | 05/18/2009 | 3900.000 | N |
| | 08/17/2009 | 2300.000 | N |
| | 12/16/2009 | 940.000 | N |
| | 03/16/2010 | 2400.000 | N |
| | 06/23/2010 | 1000.000 | N |
| | 08/17/2010 | 4300.000 | N |
| | 09/19/2010 | 1000.000 | N |
| | 12/08/2010 | 2200.000 | N |
| | 02/02/2011 | 4100.000 | N |
| | 04/06/2011 | 4300.000 | N |
| | 04/13/2011 | 3300.000 | N |
| | 07/11/2011 | 1200.000 | N |
| | 10/24/2011 | 4100.000 | N |
| | 11/15/2011 | 3700.000 | N |
| | 05/24/2012 | 780.000 | N |
| | 08/13/2012 | 6600.000 | N |
| | 11/12/2012 | 270.000 | N |
| | 02/13/2013 | 8000.000 | N |
| | 04/21/2013 | 11000.000 | N |
| | 07/23/2013 | 2600.000 | N |
| | 10/15/2013 | 6100.000 | N |
| **Parameter:** ARSENIC | **Test date** | **Result (ug/l)** | **Lsthan** |
| | 08/17/2009 | 4.000 | N |
| | 06/23/2010 | 3.000 | N |
| | 09/19/2010 | 5.000 | N |
| | 12/08/2010 | 2.000 | N |
| | 02/02/2011 | 2.000 | N |
| | 07/11/2011 | 3.000 | N |
| | 02/27/2012 | 1.000 | N |
| | 05/23/2012 | 2.000 | N |
| | 08/13/2012 | 1.700 | N |

Facility name: **BIDDEFORD** Permit Number: **ME0100048**

| | | | |
|---|---|---|---|
| | 02/13/2013 | 1.400 | N |
| **Parameter**: BIS(2-ETHYLHEXYL)PHTH | **Test date** | **Result (ug/l)** | **Lsthan** |
| | 08/17/2009 | 5.000 | N |
| | 01/20/2010 | 3.000 | N |
| | 03/08/2010 | 3.000 | N |
| | 06/24/2010 | 9.000 | N |
| | 07/12/2011 | 7.000 | N |
| | 02/28/2012 | 5.000 | N |
| | 11/12/2012 | 22.000 | N |
| **Parameter**: CHLORINE | **Test date** | **Result (ug/l)** | **Lsthan** |
| | 08/17/2009 | 10.000 | N |
| **Parameter**: CHROMIUM | **Test date** | **Result (ug/l)** | **Lsthan** |
| | 08/17/2009 | 0.800 | N |
| | 04/13/2011 | 3.000 | N |
| **Parameter**: COPPER | **Test date** | **Result (ug/l)** | **Lsthan** |
| | 02/09/2009 | 10.300 | N |
| | 05/18/2009 | 8.600 | N |
| | 08/17/2009 | 11.600 | N |
| | 12/16/2009 | 9.000 | N |
| | 03/16/2010 | 23.000 | N |
| | 08/17/2010 | 10.000 | N |
| | 04/13/2011 | 25.000 | N |
| | 10/24/2011 | 10.000 | N |
| | 11/15/2011 | 13.000 | N |
| | 02/28/2012 | 5.400 | N |
| | 08/13/2012 | 9.450 | N |
| | 11/12/2012 | 14.000 | N |
| | 02/13/2013 | 7.860 | N |
| | 04/21/2013 | 19.000 | N |
| | 07/23/2013 | 8.000 | N |
| | 10/15/2013 | 4.000 | N |
| **Parameter**: CYANIDE | **Test date** | **Result (ug/l)** | **Lsthan** |
| | 06/23/2010 | 5.000 | N |
| | 10/24/2011 | 6.000 | N |
| **Parameter**: LEAD | **Test date** | **Result (ug/l)** | **Lsthan** |
| | 12/16/2009 | 2.000 | N |
| | 03/16/2010 | 1.000 | N |
| | 08/17/2010 | 2.000 | N |
| | 04/13/2011 | 8.000 | N |
| | 10/24/2011 | 1.000 | N |
| | 11/15/2011 | 1.000 | N |
| | 02/28/2012 | 0.700 | N |
| | 08/13/2012 | 1.420 | N |
| | 11/12/2012 | 1.000 | N |
| | 02/13/2013 | 0.860 | N |

Facility name: **BIDDEFORD** Permit Number: **ME0100048**

| | | | |
|---|---|---|---|
| | 04/21/2013 | 0.700 | N |
| | 07/23/2013 | 2.000 | N |
| | 10/15/2013 | 0.700 | N |
| **Parameter**: MERCURY | **Test date** | **Result (ug/l)** | **Lsthan** |
| | 02/10/2009 | 0.005 | N |
| | 05/19/2009 | 0.003 | N |
| | 08/17/2009 | 0.005 | N |
| | 12/15/2009 | 0.005 | N |
| | 03/08/2010 | 0.003 | N |
| | 06/24/2010 | 0.004 | N |
| | 09/20/2010 | 0.006 | N |
| | 12/09/2010 | 0.005 | N |
| | 02/03/2011 | 0.004 | N |
| | 04/07/2011 | 0.002 | N |
| | 07/12/2011 | 0.004 | N |
| | 10/25/2011 | 0.006 | N |
| | 11/16/2011 | 0.004 | N |
| | 02/28/2012 | 0.003 | N |
| | 05/24/2012 | 0.004 | N |
| | 08/14/2012 | 0.004 | N |
| | 11/13/2012 | 0.003 | N |
| | 11/13/2012 | 0.004 | N |
| | 02/13/2013 | 0.003 | N |
| | 04/22/2013 | 0.002 | N |
| | 07/24/2013 | 0.003 | N |
| | 10/16/2013 | 0.002 | N |
| **Parameter**: NICKEL | **Test date** | **Result (ug/l)** | **Lsthan** |
| | 08/17/2009 | 2.900 | N |
| | 08/17/2010 | 2.000 | N |
| | 04/13/2011 | 2.000 | N |
| | 11/15/2011 | 3.000 | N |
| | 02/28/2012 | 1.650 | N |
| | 08/13/2012 | 2.480 | N |
| | 11/12/2012 | 2.000 | N |
| | 02/13/2013 | 2.300 | N |
| **Parameter**: SALINITY | **Test date** | **Result (ug/l)** | **Lsthan** |
| | 08/17/2010 | 31.000 | N |
| | 04/13/2011 | 29.000 | N |
| **Parameter**: TOC | **Test date** | **Result (ug/l)** | **Lsthan** |
| | 10/24/2011 | 8600.000 | N |
| | 04/21/2013 | 9700.000 | N |
| | 10/15/2013 | 11000.000 | N |
| **Parameter**: TSS | **Test date** | **Result (ug/l)** | **Lsthan** |
| | 04/13/2011 | 78.000 | N |
| | 11/15/2011 | 6400.000 | N |
| | 04/21/2013 | 6000.000 | N |

# FACILITY PRIORITY POLLUTANT DATA REPORT

**Data Date Range:** 15/Jan/2009-15/Jan/2014

Showing only those values not reported as a less than result

Facility name: **BIDDEFORD** Permit Number: **ME0100048**

| | | | |
|---|---|---|---|
| | 10/15/2013 | 6300.000 | N |
| **Parameter:** ZINC | **Test date** | **Result (ug/l)** | **Lsthan** |
| | 08/17/2009 | 41.400 | N |
| | 12/16/2009 | 23.000 | N |
| | 03/16/2010 | 24.000 | N |
| | 08/17/2010 | 34.000 | N |
| | 04/13/2011 | 46.000 | N |
| | 10/24/2011 | 25.000 | N |
| | 11/15/2011 | 21.000 | N |
| | 02/28/2012 | 25.200 | N |
| | 08/13/2012 | 21.800 | N |
| | 11/12/2012 | 37.000 | N |
| | 02/13/2013 | 25.300 | N |
| | 04/21/2013 | 20.000 | N |
| | 07/23/2013 | 21.000 | N |
| | 10/15/2013 | 22.000 | N |