



STATE OF MAINE
Department of Environmental Protection

Paul R. LePage
GOVERNOR

Patricia W. Aho
COMMISSIONER

June 11, 2013

Mr. Michael Hanson
Sanford Sewerage District
P.O. Box 338
Sanford, ME. 04093-0038

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100617
Maine Waste Discharge License (WDL) Application #W000870-5M-H-R
Final Permit

Dear Mr. Hanson:

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

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

If you have any questions regarding the matter, please feel free to call me at 592-7161.

Sincerely,

Cindy L. Dionne
Division of Water Quality Management
Bureau of Land and Water Quality

Enc.

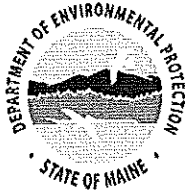
cc: Matthew Hight, DEP/SMRO
Sandy Mojica, USEPA
James Crowley, DEP/CMRO

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

DEPARTMENT ORDER

IN THE MATTER OF

SANFORD SEWERAGE DISTRICT)	MAINE POLLUTANT DISCHARGE
SANFORD, YORK COUNTY, MAINE)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS)	AND
#ME0100617)	WASTE DISCHARGE LICENSE
#W000870-5M-H-R)	RENEWAL
APPROVAL)	

Pursuant to the provisions of the *Federal Water Pollution Control Act*, Title 33 USC, §1251, *Conditions of licenses*, 38 M.R.S.A. § 414-A, and applicable regulations, the Department of Environmental Protection (Department) has considered the application of the SANFORD SEWERAGE DISTRICT (permittee/SSD), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The permittee submitted a timely and complete application to the Department for renewal of Waste Discharge License (WDL) #W000870-5M-E-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100617, which was issued on April 23, 2008, and expired on April 23, 2013. The 4/23/08 MEPDES permit authorized the permittee to discharge a monthly average flow of up to 8.8 million gallons per day (MGD) of advanced treated sanitary wastewater from a publicly owned treatment works (POTW) to the Mousam River, Class C, in Sanford, Maine.

The Department issued a minor permit revision on November 3, 2011 for the establishment of an Asset Management Program and to establish a repair and replacement reserve account.

PERMIT SUMMARY

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

- Revising the minimum monitoring frequency requirements for biochemical oxygen demand (BOD₅), total suspended solids (TSS), settleable solids (SS), *Escherichia coli* bacteria, pH, Total phosphorus, and ammonia based on the results of facility testing;
- Revising the seasonal monthly average and daily maximum concentration limits for *E. coli* bacteria based on changes to Maine's water quality standards for Class C waters;
- Revising the water quality-based monthly average mass limit for total aluminum based on individual allocation methodology, and modifying the monthly average

PERMIT SUMMARY (cont'd)

concentration limit to a report-only condition;

- Revising the water quality-based monthly average and daily maximum mass limits for copper based on the individual allocation methodology, and modifying the monthly average and daily maximum concentration limits to a report-only conditions;
- Revising the Tier III (High Flow) aluminum and copper limits accordingly, as they are derived from the Tier II limits;
- 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);
- Revising previous Special Condition G, now called *Disposal of Transported Wastes in Wastewater Treatment Facility*, based on the revised rule, *Standards for the Addition of Transported Wastes to Waste Water Treatment Facilities*, 06-096 CMR 555 (last amended February 5, 2009);
- Incorporating the Asset Management Program (AMP) and Repair and replacement Reserve Account guidance details and regulatory milestones;
- Eliminating all terms and conditions related to Combined Sewer Overflows (CSO) as the facility is no longer considered a CSO community; and
- Incorporating Pump Station Emergency Bypass criteria for the one remaining emergency outfall.

CONCLUSIONS

Based on the findings summarized in the attached Final Fact Sheet dated June 11, 2013, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

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

CONCLUSIONS (cont'd)

- (b) Where high quality waters of the State constitute an outstanding natural resource, that water quality will be maintained and protected;
 - (c) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharges will be subject to effluent limitations that require application of best practicable treatment as defined in 38 M.R.S.A. § 414-A(1)(D).

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ACTION

THEREFORE, the Department APPROVES the above noted application of the SANFORD SEWERAGE DISTRICT to discharge a monthly average flow of up to 8.8 million gallons per day (MGD) of advanced (tertiary) treated sanitary wastewater from a publicly owned treatment works (POTW) to the Mousam River, Class C, in Sanford, 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) (effective April 1, 2003)]

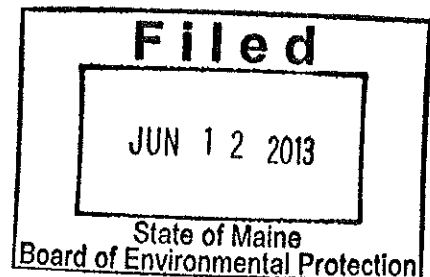
PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS 12th DAY OF June 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

Michael Kuhn
For PATRICIA W. AHO, Commissioner



Date filed with Board of Environmental Protection _____

Date of initial receipt of application: March 1, 2013

Date of application acceptance: March 1, 2013

This Order prepared by Cindy L. Dionne, BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge advanced (tertiary) treated sanitary wastewater from Outfall 001A to the Mousam River in Sanford. Tier II discharges are limited and shall be monitored by the permittee as specified below⁽¹⁾:

The permittee is not authorized to discharge when the Mousam River is less than 20 cfs.

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow [50050] (October 1 – April 30) (May 1 – September 30)	4.4 MGD 3.48 MGD [03]	--- ---	Report Report [03]	--- ---	--- ---	--- ---	Continuous Continuous [99/99]	Recorder Recorder [RC]
BOD₅ [00310] (October 1 – April 30) (May 1 – September 30)	1,101 lbs./day 261 lbs./day [26]	1,651 lbs./day 392 lbs./day [26]	1,835 lbs./day 522 lbs./day [26]	30 mg/L 10 mg/L [19]	45 mg/L 15 mg/L [19]	50 mg/L 20 mg/L [19]	2/Week [02/07] 3/Week [03/07]	Composite Composite [24]
BOD% Removal ⁽²⁾ [81010]	---	---	---	85%[23]	---	---	1/Month [01/30]	Calculate [CA]
TSS [00530] (October 1 – April 30) (May 1 – September 30)	1,101 lbs./day 290 lbs./day [26]	1,651 lbs./day 435 lbs./day [26]	1,835 lbs./day 580 lbs./day [26]	30 mg/L 10 mg/L [19]	45 mg/L 15 mg/L [19]	50 mg/L 20 mg/L [19]	2/Week [02/07] 3/Week [03/07]	Composite Composite [24]
TSS% Removal ⁽²⁾ [81011]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]
Settleable Solids [00545]	---	---	---	---	---	0.3 ml/L [25]	3/Week [03/07]	Grab [GR]

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 12 through 15 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

2. The permittee is authorized to discharge advanced (tertiary) treated sanitary wastewater from Outfall 001A to the Mousam River in Sanford. Tier II discharges are limited and shall be monitored by the permittee as specified below (cont'd)⁽¹⁾:

The permittee is not authorized to discharge when the Mousam River is less than 20 cfs.

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
<i>E. coli</i> Bacteria ⁽³⁾ [31616] (May 15 – September 30)	---	---	---	126/100 ml ⁽⁴⁾ [13]	---	643/100 ml [13]	1/Week [01/07]	Grab [GR]
pH (Std. Units) [00400]	---	---	---	---	---	6.0-9.0 [12]	4/Week [04/07]	Grab [GR]
River Flow ⁽⁵⁾ [00058]	---	---	---	---	---	>20 cfs ⁽⁶⁾ [08]	2/Week [02/07]	Measure [MS]
Dissolved Oxygen [00300] (May 1 – September 30)	---	---	---	---	---	>7.5 ppm ⁽⁷⁾ [26]	1/Day [01/01]	Measure [MS]
Phosphorus (Total) [00665] (May 1 – September 30) (October 1 – April 30)	3.0 lbs./day 23 lbs./day [26]	---	---	---	---	---	2/Week [02/07] 2/Month [02/30]	Grab [GR]
Ammonia-Nitrogen [00610] (May 15 – September 30) (October 1 – May 14)	---	14.5 lbs./day ---	---	---	---	---	2/Week [02/07] 2/Month [02/30]	Grab [GR]

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

FOOTNOTES: See Pages 12 through 15 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

3. The permittee is authorized to discharge **advanced treated sanitary wastewater** from **Outfall 001A** to the Mousam River in Sanford. Tier II discharges are limited and shall be monitored by the permittee as specified below (cont'd)⁽¹⁾:

The permittee is not authorized to discharge when the Mousam River is less than 20 cfs.

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Aluminum (Total) [01105]	9.39 lbs./day [26]	---	---	Report µg/L [28]	---	---	1/Quarter [01/90]	Composite [24]
Copper (Total) [01042]	0.28 lbs./day [26]	---	0.36 lbs./day [26]	Report µg/L [28]	---	Report µg/L [28]	1/Quarter [01/90]	Composite [24]
Mercury ⁽⁸⁾ [71900]	---	---	---	4.5 ng/L [3M]	---	6.8 ng/L [3M]	1/Year [01/YR]	Grab [GR]

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

FOOTNOTES: See Pages 12 through 15 of this permit for applicable footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd) Outfall #001A – Tier II

4. ***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	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity ⁽⁹⁾ <u>Acute – NOEL</u> <i>Ceriodaphnia dubia</i> (Water flea) [TDA3B] <i>Salvelinus fontinalis</i> (Brook trout) [TDA6F]	---	---	---	Report % [23] Report % [23]	2/Year [02/YR] 1/Year [01/YR]	Composite [24] Composite [24]
<u>Chronic – NOEL</u> <i>Ceriodaphnia dubia</i> (Water flea) [TBP3B] <i>Salvelinus fontinalis</i> (Brook trout) [TBQ6F]	---	---	---	25% [23] Report % [23]	2/Year [02/YR] 1/Year [01/YR]	Composite [24] Composite [24]
Analytical chemistry ⁽¹⁰⁾ [51477]	---	---	---	Report µg/L [28]	1/Year [01/YR]	Composite/Grab [24]

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

FOOTNOTES: See Pages 12 through 15 of this permit for applicable footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd) Outfall #001A – Tier II

5. **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	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity ⁽⁹⁾ Acute – NOEL <i>Ceriodaphnia dubia</i> (Water flea) [TDA3B] <i>Salvelinus fontinalis</i> (Brook trout) [TDA6F]	---	---	---	Report % [23] Report % [23]	1/Qtr. [01/90] 1/Qtr. [01/90]	Composite [24] Composite [24]
Chronic – NOEL <i>Ceriodaphnia dubia</i> (Water flea) [TBP3B] <i>Salvelinus fontinalis</i> (Brook trout) [TBQ6F]	---	---	---	25% [23] Report % [23]	1/Qtr. [01/90] 1/Qtr. [01/90]	Composite [24] Composite [24]
Analytical chemistry ⁽¹⁰⁾ [51477]	---	---	---	Report µg/L [28]	1/Qtr. [01/90]	Composite/Grab [24]
Priority Pollutant ⁽¹¹⁾ [50008]	---	---	---	Report µg/L [28]	1/Year [01/YR]	Composite/Grab [24]

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

FOOTNOTES: See Pages 12 through 15 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

6. **HIGH RIVER FLOW** - Between February 15 – April 15 of each year and when the receiving water flow is ≥ 100 cfs as measured at the Route #4 bridge in Sanford, the permittee is authorized to discharge **secondary treated sanitary wastewater from Outfall 001B** to the Mousam River in Sanford. **Tier III** discharges are limited and shall be monitored by the permittee as specified below (cont'd)⁽¹⁾:

The permittee is not authorized to discharge when the Mousam River is less than 20 cfs.

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
River Flow⁽⁵⁾ [00058]	---	---	---	---	---	≥ 100 cfs ⁽⁶⁾ [12]	2/Week [02/07]	Measure [MS]
Flow [50050]	8.8 MGD [03]	Report MGD [03]	Report MGD [03]	---	---	---	Continuous [99/99]	Recorder [RC]
BOD₅ [00310]	2,202 lbs./day [26]	3,303 lbs./day [26]	3,670 lbs./day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	1/Week [01/07]	Composite [24]
TSS [00530]	2,202 lbs./day [26]	3,303 lbs./day [26]	3,670 lbs./day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	1/Week [01/07]	Composite [24]
Phosphorus (Total) [00665]	23 lbs./day [26]	---	46 lbs./day [26]	---	---	---	1/Week [01/07]	Grab [GR]
Ammonia-Nitrogen [00610]	612 lbs./day [26]	---	---	12.5 mg/L [19]	---	---	1/Week [01/07]	Grab [GR]

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

FOOTNOTES: See Pages 12 through 15 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

7. **HIGH RIVER FLOW** - Between February 15 -- April 15 of each year and when the receiving water flow is ≥ 100 cfs as measured at the Route #4 bridge in Sanford, the permittee is authorized to discharge **secondary treated sanitary wastewater from Outfall 001B** to the Mousam River in Sanford. **Tier III** discharges are limited and shall be monitored by the permittee as specified below (cont'd)⁽¹⁾:

The permittee is not authorized to discharge when the Mousam River is less than 20 cfs.

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Aluminum (Total) [01105]	18.8 lbs./day [26]	---	---	Report $\mu\text{g/L}$ [28]	---	---	1/Quarter [01/90]	Composite [24]
Copper (Total) [01042]	0.56 lbs./day [26]	---	0.72 lbs./day [26]	Report $\mu\text{g/L}$ [28]	---	Report $\mu\text{g/L}$ [28]	1/Quarter [01/90]	Composite [24]
Mercury ⁽⁸⁾ [71900]	---	---	---	4.5 ng/L [3M]	---	6.8 ng/L [3M]	1/Year [01/YR]	Grab [GR]

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

FOOTNOTES: See Pages 12 through 15 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES

1. **Sampling** – The permittee shall 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 shall be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. Samples that are sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A § 413 are subject to provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000). 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 shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

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

2. **Percent Removal** - The treatment facility shall maintain a minimum of 85 percent removal of both BOD₅ and TSS for all flows receiving secondary treatment during all months that the facility discharges. Compliance with the limitation shall be based on a twelve-month rolling average. Calendar monthly average percent removal values shall be calculated based on influent and effluent concentrations. For the purposes of this permitting action, the twelve-month rolling average calculation is based on the most recent twelve-month period when the facility has discharged and the average influent concentration is greater than 200 mg/L.
3. **Bacteria Limits** – *E. coli* bacteria limits and monitoring requirements are seasonal and apply between May 15 and September 30 of each year. The Department reserves the right to require year-round bacteria limits to protect the health, safety and welfare of the public.
4. **Bacteria Reporting** – The monthly average *E. coli* bacteria limitation is a geometric mean limitation and sample results shall be reported as such.
5. **River Flow** – Shall be measured at the Route #4 bridge staff gauge in Sanford.
6. **River Flow** – These flow thresholds are daily minimum flows in the Mousam River as measured at the Route #4 bridge staff gauge in Sanford, not a daily maximum threshold.

SPECIAL CONDITIONS

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

FOOTNOTES

7. **Dissolved Oxygen** - Daily minimum dissolved oxygen limitation between May 1 and September 30 of each calendar year, not a daily maximum limit.
8. **Mercury** – The permittee shall 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 shall 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.3 and A.7 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.
9. **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 dilution of 25%), 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.
 - a. **Surveillance level testing** - Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee shall initiate surveillance level acute and chronic WET testing at a minimum frequency of twice per year (2/Year) for the water flea (*Ceriodaphnia dubia*) and once per year (1/Year) for the brook trout (*Salvelinus fontinalis*). Testing shall 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 shall conduct screening level acute and chronic WET testing at a minimum frequency of once per quarter (1/Quarter) for both species. Acute and chronic tests shall be conducted on both the water flea and the brook trout. Testing shall be conducted in a different calendar quarter each sampling event.

SPECIAL CONDITIONS

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

FOOTNOTES

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

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. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, 5th ed. EPA 821-R-02-012. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the acute method manual).
- b. U.S. Environmental Protection Agency. 2002. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, 4th ed. EPA 821-R-02-013. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the freshwater chronic method manual).

Results of WET tests shall be reported on the "Whole Effluent Toxicity Report Fresh 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.

10. **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 shall conduct analytical chemistry testing at a minimum frequency of once per year (1/Year). As with WET testing, testing shall 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 shall conduct screening level analytical chemistry testing at a minimum frequency of four times per year (1/Quarter) in successive calendar quarters.

SPECIAL CONDITIONS

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

FOOTNOTES

11. **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 shall 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.

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

Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department, possible exceedences of the acute, chronic or human health AWQC as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005). 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 shall not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the usages designated for the classification of the receiving waters.
2. The permittee shall not discharge effluent that contains materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated for the classification of the receiving waters.
3. The permittee shall not discharge effluent that causes visible discoloration or turbidity in the receiving waters or that impairs the usages designated for the classification of the receiving waters.
4. Notwithstanding specific conditions of this permit, the permittee shall not discharge effluent that lowers the quality of any classified body of water below such classification, or lowers the existing quality of any body of water if the existing quality is higher than the classification.

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. 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 March 1, 2013; 2) the terms and conditions of this permit; and 3) only from Outfall #001. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

E. NOTIFICATION REQUIREMENT

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

1. Any introduction of pollutants into the 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 shall 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.

F. LIMITATIONS FOR INDUSTRIAL USERS

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

SPECIAL CONDITIONS

G. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and **postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office such that the DMRs are received by the Department on or before the fifteenth (15th) day of the month** following the completed reporting period. A signed copy of the DMR and all other reports required herein shall 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 **15th day of the month** following the completed reporting period. Hard copy documentation submitted in support of the eDMR must be postmarked on or before the **thirteenth (13th) day of the month or hand-delivered** to the Department's Regional Office such that it is received by the Department on or before the fifteenth (15th) day of the month following the completed reporting period. Electronic documentation in support of the eDMR must be submitted not later than close of business on the 15th day of the month following the completed reporting period.

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

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

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

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

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

SPECIAL CONDITIONS

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

(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.

I. OPERATIONS AND MAINTENANCE (O&M) PLAN

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

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

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

J. WET WEATHER MANAGEMENT PLAN

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

Once the Wet Weather Plan has been approved, the permittee shall review the 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.

K. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

Pursuant to this permit and *Standards for the Addition of Transported Wastes to Waste Water Treatment Facilities*, 06-096 CMR 555 (last amended February 5, 2009), during the effective period of this permit, the permittee is authorized to receive and introduce into the treatment process or solids

SPECIAL CONDITIONS

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

handling stream up to a **daily maximum of 40,000 gallons per day (gpd)** of transported wastes, subject to the following terms and conditions.

1. "Transported wastes" means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.
2. The 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.
3. At no time shall 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 shall be suspended until there is no further risk of adverse effects.
4. The permittee shall maintain records for each load of transported wastes in a daily log which shall 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 shall be maintained at the treatment facility for a minimum of five years.
5. The addition of transported wastes into the treatment process or solids handling stream shall 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 shall be reduced or terminated in order to eliminate the overload condition.
6. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added shall not be recorded as transported wastes but should be reported in the treatment facility's influent flow.

SPECIAL CONDITIONS

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

7. 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.
8. 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.
9. 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.
10. 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.

L. INDUSTRIAL PRETREATMENT PROGRAM

1. Pollutants introduced into POTWs by a non-domestic source (user) shall not pass-through the POTW or interfere with the operation or performance of the works.
 - a. The permittee shall 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 shall 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 shall prepare and submit a written technical evaluation to the Department analyzing the need to revise local limits. As part of this evaluation, the permittee shall 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 shall complete the "Re-Assessment of Technically Based Local Limits" form included as **Attachment D** of this permit with the technical evaluation to assist in determining whether existing local limits 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 shall complete the revisions within 120 days of notification by the Department and submit the revisions to the Department for approval. The permittee shall carry out the local limits

SPECIAL CONDITIONS

L. INDUSTRIAL PRETREATMENT PROGRAM (cont'd)

revisions in accordance with USEPA's document entitled, Local Limits Development Guidance (July 2004).

2. The permittee shall 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 shall 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 shall 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] shall be consistent with the format described in the "MEPDES Permit Requirements For Industrial Pretreatment Annual Report" form included as Attachment E of this permit and shall be submitted no later than December 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.
 - 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

SPECIAL CONDITIONS

L. INDUSTRIAL PRETREATMENT PROGRAM (cont'd)

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. PUMP STATION EMERGENCY BYPASSES

Discharges from emergency bypass structures in pump stations are not authorized by this permit. The permittee shall make provisions to monitor the pump station identified below via an electronic flow estimation system to record frequency, duration and estimation of flow discharged. An electronic device utilized to measure levels in the wet well and measure duration of the overflow is an acceptable methodology for determining quantity. Discharges from the pump stations shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

Outfall Number	Outfall Location	Receiving Water and Class
002	Jagger Mill Road	Mousam River, Class C

N. ASSET MANAGEMENT PROGRAM (AMP)

The permittee shall maintain an AMP in accordance with Department guidance entitled, *Maine Department of Environmental Protection, Clean Water State Revolving Fund (CWSRF) Guidance for Minimum Requirements for an Asset Management Program and Reserve Account In Order to Qualify for CWSRF Principal Forgiveness*, DEPLW1190-2010. The AMP shall be reviewed and updated as necessary at least annually. The AMP must be kept on-site at the permittee's office and made available to Department staff for review during normal business hours.

On October 17, 2012 the permittee submitted a complete and timely certification form for the implementation of a CWSRF AMP in accordance with the Department guidance document DEPLW1190-2010.

O. REPAIR AND REPLACEMENT RESERVE ACCOUNT

Annually, beginning October 21, 2012 and lasting through October 21, 2016, the permittee shall fund a Repair and Replacement Reserve Account in the amount recommended in the permittee's Asset Management Plan or at a minimum of 2% of the permittee's total yearly waste water operation and maintenance budget.

SPECIAL CONDITIONS

O. REPAIR AND REPLACEMENT RESERVE ACCOUNT (cont'd)

Annually, on or before October 21, 2012 and lasting through October 21, 2016 (ICIS Code 59499) the permittee shall submit a certification to the Department indicating a Repair and Replacement Reserve Account has been fully funded as required above. See **Attachment F** of this permit for a copy of the certification form. The permittee shall attach copies of yearly audit reports to the annual certification forms showing funds in the reserve account for each year for the five years and, if funds were expended, a description of how the funds were used.

P. REOPENING OF PERMIT FOR MODIFICATION

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

Q. SEVERABILITY

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

ATTACHMENT A

Maine Department of Environmental Protection
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) _____ Flow for Day (MGD)⁽¹⁾ _____ Flow Avg. for Month (MGD)⁽²⁾ _____
 Acute dilution factor _____ Date Sample Collected _____ Date Sample Analyzed _____
 Chronic dilution factor _____
 Human health dilution factor _____
 Criteria type: M(arine) or F(resh) _____
 Laboratory Address _____ Telephone _____
 Lab Contact _____ Lab ID # _____

Last Revision - April 25, 2012

FRESH WATER VERSION

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

Please see the footnotes on the last page.

WHOLE EFFLUENT TOXICITY				Effluent Limits, %		Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)	Possible Exceedance ⁽⁷⁾	
Reporting Limit		Acute ⁽⁶⁾	Chronic ⁽⁶⁾	Reporting Limit Check	Acute			Chronic	Health
Trout - Acute									
Trout - Chronic									
Water Flea - Acute									
Water Flea - Chronic									
WET CHEMISTRY									
pH (S.U.) ⁽⁹⁾						(8)			
Total Organic Carbon (mg/L)						(8)			
Total Solids (mg/L)									
Total Suspended Solids (mg/L)									
Alkalinity (mg/L)						(8)			
Specific Conductance (umhos)									
Total Hardness (mg/L)						(8)			
Total Magnesium (mg/L)						(8)			
Total Calcium (mg/L)						(8)			
ANALYTICAL CHEMISTRY⁽³⁾									
Also do these tests on the effluent with WET. Testing on the receiving water is optional									
TOTAL RESIDUAL CHLORINE (mg/L) ⁽⁹⁾	0.05					NA			
AMMONIA	NA					(8)			
ALUMINUM	NA					(8)			
ARSENIC	5					(8)			
CADMIUM	1					(8)			
CHROMIUM	10					(8)			
COPPER	3					(8)			
CYANIDE	5					(8)			
LEAD	3					(8)			
NICKEL	5					(8)			
SILVER	1					(8)			
ZINC	5					(8)			

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

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

PRIORITY POLLUTANTS ⁽⁴⁾		Reporting Limit		Effluent Limits		Health ⁽⁶⁾	Reporting Limit Check	Possible Exceedance ⁽⁷⁾	
				Acute ⁽⁶⁾	Chronic ⁽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-DICHLOROBENZENE	5							
BN	1,2-DIPHENYLHYDRAZINE	20							
BN	1,3-MIDICHLOROBENZENE	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	DIN-BUTYL PHTHALATE	5							
BN	DIN-OCTYL PHTHALATE	5							
BN	DIBENZO(A,H)ANTHRACENE	5							
BN	DIETHYL PHTHALATE	5							
BN	DIMETHYL PHTHALATE	5							
BN	FLUORANTHENE	5							

DEPLW 0740-B2007

[illegible]

[illegible]

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

DEPLW 0740-B2007

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:	<div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div>	Sampling time:	_____ AM/PM
	mm	dd	yy		
Sampling Location: _____					
Weather Conditions: _____					
Please describe any unusual conditions with the influent or at the facility during or preceding the time of sample collection: _____					
Optional test - not required but recommended where possible to allow for the most meaningful evaluation of mercury results: _____					
Suspended Solids	_____	mg/L	Sample type:	_____	Grab (recommended) or Composite

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____	
Date of analysis: _____	Result: _____ ng/L (PPT)
Please Enter Effluent Limits for your facility	
Effluent Limits: Average = _____ ng/L	Maximum = _____ ng/L
Please attach any remarks or comments from the laboratory that may have a bearing on the results or their interpretation. If duplicate samples were taken at the same time please report the average. _____	

CERTIFICATION

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

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT C

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

Facility Name _____ MEPDES Permit # _____

Facility Representative _____ Signature _____

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

Facility Telephone # _____ Date Collected _____ Date Tested _____

mm/dd/yy

mm/dd/yy

Chlorinated? _____ Dechlorinated? _____

Results	% effluent		Effluent Limitations	
	water flea	trout	A-NOEL	C-NOEL
A-NOEL				
C-NOEL				

Data summary	water flea			trout		
	% survival		no. young	% survival		final weight (mg)
QC standard	A>90	C>80	>15/female	A>90	C>80	> 2% increase
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

for trout show final wt and % incr for both controls

Reference toxicant	water flea		trout	
	A-NOEL	C-NOEL	A-NOEL	C-NOEL
toxicant / date				
limits (mg/L)				
results (mg/L)				

Comments _____

Laboratory conducting test _____

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

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

ATTACHMENT D

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 TBLs 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:

$$\text{EOP concentration} = [\text{Dilution factor} \times 0.75 \times \text{AWQC}] + [0.25 \times \text{AWQC}]$$
$$\text{Chronic AWQC} = 2.36 \text{ ug/L}$$

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

- (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)
	<u>EXISTING TBLLs</u>	<u>PRESENT CONDITIONS</u>
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

<u>POLLUTANT</u>	<u>NUMERICAL LIMIT</u> (mg/l) or (lb/day)	<u>POLLUTANT</u>	<u>NUMERICAL LIMIT</u> (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.

<u>Pollutant</u>	<u>Column (1)</u> <u>Influent Data Analyses</u>		<u>Column (2)</u> <u>MAIHL Values</u>	<u>Criteria</u>
	<u>Maximum</u> (lb/day)	<u>Average</u> (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.

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

*Hardness Dependent (mg/l - CaCO3)

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

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	
<u>Pollutants</u>	<u>Limitations (ug/l)</u>	<u>Pollutants</u>	<u>Limitations (ug/l)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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 TBLs 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.

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

ATTACHMENT E

**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.

ATTACHMENT F

CLEAN WATER STATE REVOLVING FUND
REPAIR AND REPLACEMENT RESERVE ACCOUNT
CERTIFICATION

I _____ representing the _____
(print name of cognizant official) (print name of permittee)

hereby certify to the Maine Department of Environmental Protection that as of _____
(date)

a *Clean Water State Revolving Fund (CWSRF) Repair and Replacement Reserve Account* has been established and is fully funded in accordance with Department Guidance entitled, *Maine Department of Environmental Protection, Clean Water State Revolving Fund (CWSRF) Guidance for Minimum Requirements for an Asset Management Program and Reserve Account In Order to Qualify for CWSRF Principal Forgiveness, DEPLW1190-2010*; and

That our total yearly wastewater operation and maintenance budget for the previous year was \$ _____; and

That the amount recommended in our asset management plan, or as a minimum, 2% of our total yearly wastewater operation and maintenance budget was \$ _____; and

That \$ _____ was deposited to the Repair and Replacement Reserve Account last year; and

That \$ _____ was expended from this account last year in accordance with the Department Guidance; and

That the current balance of the Repair and Replacement Reserve Account is \$ _____.

Signature _____ Date _____

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

FACT SHEET

DATE: JUNE 11, 2013

PERMIT NUMBER: #ME0100617

WASTE DISCHARGE LICENSE: #W000870-5M-H-R

NAME AND ADDRESS OF APPLICANT:
SANFORD SEWERAGE DISTRICT
P.O. BOX 338, RIVER, STREET
SANFORD, MAINE 04083

COUNTY: YORK

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):
SANFORD SEWERAGE DISTRICT
192 GAVEL STREET
SANFORD, MAINE 04073

RECEIVING WATER CLASSIFICATION: MOUSAM RIVER/CLASS C

COGNIZANT OFFICIAL CONTACT INFORMATION:

MR. MICHAEL HANSON, SUPERINTENDENT
(207) 324-5313
mhanson@sanfordsewerage.org

1. APPLICATION SUMMARY

Application: The Sanford Sewerage District (permittee/SSD) has applied to the Department of Environmental Protection (Department) for renewal of Waste Discharge License (WDL) #W000870-5M-E-R /Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100617, which was issued on April 23, 2008, and expired on April 23, 2013. The 4/23/08 MEPDES permit authorized the seasonal monthly average discharge of up to 8.8 million gallons per day (MGD) of advanced treated sanitary wastewater from a publicly owned treatment works (POTW) to the Mousam River, Class C, in Sanford, Maine.

1. APPLICATION SUMMARY (cont'd)

It is noted that the Department issued a minor permit revision on November 3, 2001 for the establishment of an Asset Management Program as well as a repair and replacement reserve account for the District.

2. PERMIT SUMMARY

- a. Terms and Conditions: This permitting action is carrying forward all the terms and conditions of the previous permitting action except it is:
- Revising the minimum monitoring frequency requirements for biochemical oxygen demand (BOD₅), total suspended solids (TSS), settleable solids (SS), *Escherichia coli* bacteria, pH, Total phosphorus, and ammonia based on the results of facility testing;
 - Revising the seasonal monthly average and daily maximum concentration limits for *E. coli* bacteria based on changes to Maine's water quality standards for Class C waters;
 - Revising the water quality-based monthly average mass limit for total aluminum based on individual allocation methodology, and modifying the monthly average concentration limit to a report-only condition;
 - Revising the water quality-based monthly average and daily maximum mass limits for copper based on the individual allocation methodology, and modifying the monthly average and daily maximum concentration limits to a report-only conditions;
 - Revising the Tier III (High Flow) aluminum and copper limits accordingly, as they are derived from the Tier II limits;
 - 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);
 - Revising previous Special Condition G, now called *Disposal of Transported Wastes in Wastewater Treatment Facility*, based on the revised rule, *Standards for the Addition of Transported Wastes to Waste Water Treatment Facilities*, 06-096 CMR 555 (last amended February 5, 2009);
 - Incorporating the Asset Management Program (AMP) and Repair and replacement Reserve Account guidance details and regulatory milestones;
 - Eliminating all terms and conditions related to Combined Sewer Overflows (CSO) as the facility is no longer considered a CSO community; and
 - Incorporating Pump Station Emergency Bypass criteria for the one remaining emergency outfall.
- b. History: This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the permittee's facility.

2. PERMIT SUMMARY (cont'd)

September 29, 1993 – The United States Environmental Protection Agency (USEPA) issued a renewal of National Pollutant Discharge Elimination System (NPDES) permit #ME0100617 for a five-year term.

June 13, 1994 – The Department issued WDL renewal #W000870-46-C-R for a five-year term.

July 14, 1998 – The USEPA issued Administrative Order (AO) #ME0100617, Docket No. 98-12 based on the SSD's inability to consistently meet the effluent limitations for ammonia, aluminum, copper, BOD₅, TSS, SS, pH and phosphorus and failure to fully implement the industrial pretreatment and CSO abatement requirements in the 1993 NPDES permit. The AO required the SSD to submit a Waste Water Treatment Facility Upgrade Facilities Plan and Implementation Schedule, a CSO Abatement Master Plan and Implementation Schedule and a final Local Industrial Discharge Limits Report containing proposed modifications to the existing local limits. The SSD has complied with the submission requirements of the AO. The AO established year-round interim mass and/or concentration limits for aluminum, copper, TSS, BOD₅, SS and seasonal interim limits for ammonia, BOD₅ and phosphorus.

January, 1999 – The SSD submitted an application to the USEPA to renew NPDES permit #ME0100617. The USEPA deemed the application complete for processing on February 4, 1999. The USEPA never acted on the application by issuing a NPDES permit.

May 23, 2000 – The Department administratively modified the WDL for the SSD facility by establishing interim monthly average and daily maximum concentration limits for 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 #ME0101443 has been utilized for this facility. On March 26, 2011, the USEPA authorized the Department to administer the MEPDES program in Indian territories of the Penobscot Nation and Passamaquoddy Tribe.

February 2001 – The Department submitted a final TMDL report to the USEPA for review and approval. The document entitled, Mousam River TMDL, Town of Sanford, Final Report, Feb 2001, was prepared due to the fact that a 3.7 mile segment of the Mousam River from the Route #4 bridge in Sanford to Estes Lake in Sanford was not attaining the standards of its assigned classification for dissolved oxygen and certain toxic substances. It is noted the SSD discharge is located approximately 0.8 miles downstream of the Route #4 bridge and 2.9 miles upstream of Estes Lake in Sanford. The TMDL was developed for BOD₅, phosphorus, ammonia nitrogen, and seven toxic substances.

March 8, 2001 – The USEPA approved the Department's February 2001 TMDL for the aforementioned 3.7 mile segment of the Mousam River.

March 28, 2003 – The Department issued combination MEPDES permit #ME0100617/WDL #W000870-5L-D-R for a five-year term.

2. PERMIT SUMMARY (cont'd)

March 30, 2005 – The Department modified the 3/28/03 MEPDES permit by extending the date for compliance with Tier II limitations from 6/1/05 to 8/15/05 and eliminated all water quality based limitations for bis (2-ethylhexyl) phthalate, cadmium, silver and zinc.

August 12, 2005 – The Department modified the 3/28/03 MEPDES permit by extending the date for compliance with Tier II limitations from 8/15/05 to 9/30/05.

October 31, 2005 – The Department modified the 3/28/03 MEPDES permit by extending the date for compliance with Tier II ammonia limitations from 11/1/05 to 12/15/05.

April 10, 2006 – The Department modified the 3/28/03 MEPDES permit/WDL by incorporating the terms and conditions of *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective October 9, 2005).

February 19, 2008 – The SSD submit a timely and complete application to the Department to renew the MEPDES permit / WDL for the waste water treatment facility.

April 23, 2008 – The Department issued WDL #W000870-5M-E-R / MEPDES permit #ME0100617 to the District for a five-year term.

November 3, 2011 – The Department issued a Minor Revision (WDL#000870-5M-F-M / ME0100617) to the District for inclusion of an Asset Management Plan (AMP) and establishment of a repair and replacement account.

March 1, 2013 – The District submitted a timely and complete General Application to the Department for renewal of the April 23, 2008 MEPDES permit. The application was accepted for processing on that same day, and was assigned WDL #W000870-5M-H-R / MEPDES #ME0100617.

March 4, 2013 – The SSD submitted a formal request to be removed from the CSO Program. Their justification was that they have not experienced an overflow in the past six (6) years and only one discharge in the prior six (6) years. On March 8, 2013, the Department approved the District's request to be removed from the program.

- c. Source Description: The wastewater treatment facility located on Gavel Road in Sanford treats domestic, industrial, and commercial wastewater from entities within the permittee's boundaries in the City of Sanford. The wastewater treatment facility serves a population of approximately 12,000 users. Several industrial users are required to pre-treat their wastewater and the District monitors all industrial pretreatment under Department guidelines. The sanitary collection system is approximately 60 miles in length, is 5% combined (sanitary and storm water) and 95% is separated, and has 15 pump stations (two with on-site back-up power and 11 supported by portable generators). The Sanford Sewer District is authorized to receive and treat up to 40,000 gallons per day of septage received from local septage haulers. A map showing the location of the treatment facility is included as Fact Sheet **Attachment A**.
- d. Wastewater Treatment: To comply with the most stringent limitations established in the 3/28/03 permit as recommended in the 2001 TMDL prepared by the Department, the SSD upgraded its

2. PERMIT SUMMARY (cont'd)

facility in 2004-2005 to provide advanced tertiary treatment with biological nutrient removal capabilities. All influent wastewater is pumped by the Mousam River pump station to the grit removal facilities. Screenings removal equipment is located at the pump station ahead of the wet well. Septage receiving facilities are located near the grit removal facilities and septage is metered into the grit removal facilities at a controlled rate. Effluent from the grit removal facilities flows by gravity to a biological nutrient removal (BNR) oxidation ditch treatment system. The oxidation ditch provides sequential aerobic, anoxic, and anaerobic treatment zones to provide biological treatment of BOD₅, TSS, nitrogen (nitrification and denitrification) and phosphorus.

Mixed liquor from the oxidation ditch flows to two circular secondary clarifiers. Settled sludge is either returned to the BNR system or wasted to a holding tank. Secondary clarifier effluent flows to the secondary equalization basin and pump station. The equalization basin moderates peak influent flows by allowing a reduction in peak flows to the tertiary and disinfection treatment facilities. If influent flow exceeds the desired maximum tertiary flow rate for an extended period of time, excess flows are diverted from the equalization basin to the long term storage lagoons (stabilization lagoons). Flow from the secondary equalization basin is pumped to the tertiary treatment facilities. Poly-aluminum chloride (PAC) or ferric chloride is added to the wastewater prior to the flocculation tanks to precipitate remaining phosphorus. Flocculation tank effluent enters the inclined plate clarifiers where sludge solids (chemical phosphorus sludge) settles. Clarifier effluent receives additional treatment in sand filters that further reduce effluent BOD₅, TSS and phosphorus concentrations. During the summer period, filter effluent is disinfected using ultraviolet light and post-aerated with diffused aeration.

Treated effluent is discharged to the Mousam River via a serpentine outfall channel located adjacent to the river. Periodically, water is pumped out of the long term storage lagoons using the intermediate pump station. The stored water is pumped to either to the grit removal facilities, flocculation tanks, disinfection facilities or directly to the effluent outfall depending on the characteristics and test results of the water and the effluent discharge permit requirements at the time. Waste activated sludge and chemical phosphorus sludge are mechanically dewatered and disposed of in an existing sludge landfill located adjacent to the treatment 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 (effective October 9, 2005), 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 major river basins, 38 M.R.S.A. § 467(6)(A)(2) classifies the Mousam River main stem, from a point located 0.5 miles above Mill Street in Springvale to its confluence with Estes Lake, as Class C waters. *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465(4) describes the standards for classification of Class C waters.

Natural Resources Protection Act, 38 M.R.S.A. § 480-B(5) classifies Estes Lake as a Great Pond (GPA). *Standards for classification of lakes and ponds*, 38 M.R.S.A. § 465-A describes the standards for classification of Class GPA waters.

Classification of Maine waters, 38 M.R.S.A. § 464(4)(A)(3) states that the Department may not issue a waste discharge license to any discharge into a tributary of GPA waters that by itself or in combination with other activities causes water quality degradation that would impair the characteristics and designated uses of downstream GPA waters or causes an increase in the trophic state of those GPA waters.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2010 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 Mousam River at Sanford as, "Category 4-A: Rivers and Streams with Impaired Use other than Mercury, TMDL Completed." On March 8, 2001, the USEPA approved the Department's Mousam River Total Maximum Daily Load (TMDL), dated February 1, 2001.

The TMDL report for the Mousam River indicated that a 3.7 mile segment of the Mousam River from the Route #4 bridge in Sanford to Estes Lake was not attaining the standards of its assigned classification for dissolved oxygen and certain toxic substances based on two ambient water quality sampling events conducted by the Department in the summer of 1999. The report states that the major impact to the 3.7 mile segment of river is from nutrients (respiration of bottom attached algae) and nitrogenous BOD (ammonia), which represent 50% and 25%, respectively, of the total dissolved oxygen depletion.

The water quality model developed by the Department indicates that at full permitted loading, the SSD wastewater treatment facility discharge was responsible for two-thirds (2/3) of the total dissolved oxygen depletion. The report also states that low dissolved oxygen levels above the SSD discharge are likely due to natural sources and nutrient rich runoff from urban areas of Sanford and Springvale but that non-point source pollution in general does not appear to be a significant factor contributing to dissolved oxygen depletion.

The Report lists all of Maine's fresh waters as, "Category 4-A: Waters Impaired by Atmospheric Deposition of Mercury." Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, "All freshwaters are listed in Category 4A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources." Pursuant to 38 M.R.S.A. § 420(1-B)(B), "a facility is not in

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

violation of the ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413 subsection 11." The Department has established interim monthly average and daily maximum mercury concentration limits and reporting requirements for this facility pursuant to 06-096 CMR 519.

The SSD has completed its CSO abatement plan and is no longer considered a CSO community. The Department has no information that the discharge from the SSD, as regulated in this permit in accordance with the recommendations of the approved TMDL, causes or contributes to violations water quality standards.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Tier I limitations were eliminated in the last permit, as they were interim limits only applicable during the renovations of the treatment facility. For the purpose of consistency and historical context, this permit will continue to refer to the two tiers of limitations as Tier II and Tier III. Outfall 001 is identified as "Outfall 001A" and "Outfall 001B" is used when referring to the Tier III limitations for the purpose of aiding laboratory coding and process control.

Tier II (Outfall #001A) Mousam River flow must be ≥ 20 cubic feet per second (cfs)

May 1 – September 30 - monthly average flow limit = 3.48 MGD

October 1- April 30 - monthly average flow limit = 4.4 MGD

Tier III (Outfall #001B) Mousam River flow must be ≥ 100 cfs

February 15 – April 15 - monthly average flow limit = 8.8 MGD

OUTFALL #001A – Tier II, Advanced Treated Effluent

- a. Flow: Both the May 1 – September 30 and October 1 – April 30 monthly average flow limits of 3.48 MGD and 4.4 MGD, respectively, were established based on water quality concerns and are being carried forward in this permit. This permitting action is also carrying forward a daily maximum discharge flow reporting requirement for both flow regimes.

The Department reviewed 47 Discharge Monitoring Reports (DMRs) that were submitted for the period January 1, 2009 – December 31, 2012. A review of data indicates the following:

Flow (May 1 – September 30)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	3.48	1.14 – 2.53	1.7
Daily Maximum	Report	1.415 – 3.834	2.3

Flow (October 1- April 30)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	4.4	1.16 – 2.93	1.9
Daily Maximum	Report	1.415 – 4.359	2.9

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

- b. Dilution Factors: As recommended in the February 2001 TMDL, this permit is carrying forward the prohibition of discharging when the Mousam River is below 20 cfs. This permit is also carrying forward the criterion that 20 cfs is the 7Q10 and 1Q10 critical low flow of the Mousam River for the discharge from the Sanford Sewerage District. It is noted that 20 cfs is not the statistical 7Q10 or 1Q10 of the Mousam River at the point of discharge based on long-term flow records of the Mousam River. The statistical 7Q10 is estimated to be 10 cfs. As for the harmonic mean, because the statistical 7Q10 is estimated to be 10 cfs, the Department is multiplying the 7Q10 by a factor of three to calculate a harmonic mean flow of 30 cfs to be used in calculating a harmonic mean dilution factor for this permitting action. Dilution factors associated with the discharge from the SSD's wastewater treatment facility were derived in accordance with 06-096 CMR 530(4)(A) and were calculated as follows:

$$\text{Dilution Factor} = \frac{\text{River Flow (cfs)}(\text{Conv. Factor}) + \text{Plant Flow}}{\text{Plant Flow}}$$

May 1 – September 30

$$\text{Acute \& Chronic: } 1\text{Q}10 \text{ \& } 7\text{Q}10 = 20 \text{ cfs} \Rightarrow \frac{(20 \text{ cfs})(0.6464) + (3.48 \text{ MGD})}{(3.48 \text{ MGD})} = 4.7:1$$

October 1 – April 30

$$\text{Acute \& Chronic: } 1\text{Q}10 \text{ \& } 7\text{Q}10 = 20 \text{ cfs} \Rightarrow \frac{(20 \text{ cfs})(0.6464) + (4.4 \text{ MGD})}{(4.4 \text{ MGD})} = 3.9:1$$

Year-round

$$\text{Harmonic Mean: } = 30 \text{ cfs} \Rightarrow \frac{(30 \text{ cfs})(0.6464) + (4.4 \text{ MGD})}{(4.4 \text{ MGD})} = 5.4:1$$

- c. BOD₅ and TSS: In the course of reviewing the most recent facility data, it should be noted that on Page 1 of EPA New England's TMDL Review (dated March 8, 2001) of the Mousam River TMDL, it states "The major factors (for non-attainment) are nutrients (respiration of bottom attached algae) and nitrogenous BOD (ammonia) from the Sanford Discharge." On Page 24 of the TMDL for the Mousam River it states "An explicit margin of safety equal to 10% of Sanford's allocation was provided for summer BOD." In this instance "summer" is considered May 1-September 30. Based on this information, reduction of nutrient load from the SSD to the Mousam River is a primary goal for the facility.

1. October 1 – April 30: Previous permitting action established, and this permit is carrying forward monthly and weekly average BOD₅ and TSS concentration limits of 30 mg/L and 45 mg/L respectively, that were based on secondary treatment requirements specified in *Effluent Guidelines and Standards*, 06-096 CMR 525(3)(III) (effective January 12, 2001). The maximum daily BOD₅ and TSS concentration limits of 50 mg/L were based on a Department best professional judgment of best practicable treatment (BPT) for secondary treated

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

wastewater. The monthly average, weekly average and daily maximum mass limitations were calculated based on the applicable concentration limits and a monthly average flow limitation of 4.4 MGD. All BOD₅ and TSS limits are being carried forward in this permitting action. The Department reviewed 47 DMRs that were submitted for the period January 1, 2009 – December 31, 2012. A review of data indicates the following:

BOD₅ mass (October 1 – April 30)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	1,101	23 – 151	60
Weekly Average	1,651	25 – 288	94
Daily Maximum	1,835	27 – 301	115

BOD₅ concentration (October 1 – April 30)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	2.0 – 5.0	3
Weekly Average	45	2.3 – 8.2	4
Daily Maximum	50	2.5 – 8.8	5

TSS mass (October 1 – April 30)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	1,101	4 – 110	34
Weekly Average	1,651	5.455 – 413	80
Daily Maximum	1,835	10 – 265	82

TSS concentration (October 1 – April 30)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	0.3 – 4.9	2
Weekly Average	45	0.5 – 7.1	3
Daily Maximum	50	0.9 – 9.4	4

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.

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

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

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 BOD₅ and TSS for the October 1-April 30 period indicate the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

BOD₅

Long term average = 60 lbs./day
Monthly average limit = 1,101 lbs./day
Current monitoring frequency = 3/Week

$$\text{Ratio} = \frac{60 \text{ lbs./day}}{1,101 \text{ lbs./day}} = 5.4\%$$

According to Table I of the USEPA guidance, a 3/Week monitoring requirement can be reduced to 1/Week. However, the Department has determined that a reduction to 2/Week testing for BOD₅ is consistent with our analysis of the data and BPJ. Therefore, the monitoring frequency for BOD₅ has been reduced to 2/Week during the Oct. 1 – April 30 monitoring period in this permitting action.

TSS

Long term average = 34 lbs./day
Monthly average limit = 1,101 lbs./day
Current monitoring frequency = 3/Week

$$\text{Ratio} = \frac{34 \text{ lbs./day}}{1,101 \text{ lbs./day}} = 3\%$$

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

According to Table I of the EPA Guidance, a 3/Week monitoring requirement can be reduced to 1/Week. However, the Department has determined that a reduction to 2/Week testing for TSS is consistent with our analysis of the data and BPJ. Therefore, the monitoring frequency for TSS has been reduced to 2/Week during the Oct. 1 – April 30 monitoring period in this permitting action.

2. May 1 – September 30: The monthly average, weekly average and daily maximum concentration limits for BOD₅ and TSS of 10 mg/L, 15 mg/L and 20 mg/L respectively, were established as a Department best professional judgment (BPJ) of BPT limitations based on the historical effluent data for this time of year. The monthly average, weekly average and daily maximum BOD₅ mass limits are based on the recommendations in the 2001 TMDL and are water quality based. All BOD₅ and TSS limits are being carried forward in this permitting action.

The Department reviewed 47 DMRs that were submitted for the period January 1, 2009 – December 31, 2012. A review of data indicates the following:

BOD₅ mass (May 1 – September 30)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	261	20 – 51	33
Weekly Average	392	23 – 72	42
Daily Maximum	522	23 – 89	52

BOD₅ concentration (May 1 – September 30)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	10	2.0 – 2.9	2
Weekly Average	15	2.0 – 4.1	3
Daily Maximum	20	2.0 – 5.7	3

TSS mass (May 1 – September 30)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	290	3.2 – 98.0	12
Weekly Average	435	3.4 – 85.0	17
Daily Maximum	580	4.9 – 100.0	25

TSS concentration (May 1 – September 30)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	10	0.3 – 4.0	0.7
Weekly Average	15	0.3 – 4.8	1.2
Daily Maximum	20	0.5 – 8.2	1.9

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

The Department has determined that when a parameter has water-quality based limits (as opposed to technology-based limits, then a reduction in monitoring is not appropriate. Therefore, no reduction in monitoring during the May 1-September 30 period is proposed at this time.

- 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 (BPT) for secondary treated wastewater.

The Department reviewed 48 DMRs that were submitted for the period January 1, 2009 – December 31, 2012. 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 – 0.1	0.1

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 = 0.10 ml/L

Daily maximum limit = 0.3 ml/L

Current monitoring frequency = 5/Week

$$\text{Ratio} = \frac{0.10 \text{ ml/L}}{0.3 \text{ ml/L}} = 33\%$$

According to Table I of the USEPA guidance, a 5/Week monitoring requirement can be reduced to 2/Week. However, the Department has determined that a reduction to 3/Week testing for settleable solids is consistent with our analysis of the data and BPJ. Therefore, the monitoring frequency for settleable solids has been reduced to 3/Week in this permitting action.

- e. E. coli Bacteria: The previous permitting action established seasonal (May 15 through September 30) monthly average and daily maximum concentration limits for *E. coli* bacteria of 142 colonies/100 ml (geometric mean) and 949 colonies/100 ml (instantaneous level), respectively. In calendar year 2005, the Maine Legislature approved new geometric mean and instantaneous water quality standards of 126 colonies/100 ml and 236 colonies/100 ml, respectively, for Class C waters. Therefore, this permitting action is reducing the monthly average limit from 142 colonies/100 ml to 126 colonies/100 ml. The Department has determined that it is necessary to make reductions in the daily maximum effluent limitation for bacteria for facilities that have a dilution factor of less than 6.5:1, including SSD. The new daily maximum effluent limitation is based on the following formula:

$$\text{Effluent Limit} = (236)(\text{Dilution Factor}) - (\text{Background})(\text{Dilution Factor} - 1)$$

*Default assumed background bacteria content is 126 for Class C waters

$$\text{Daily Maximum Effluent Limit} = (236)(4.7) - (126)(3.7) = 643 \text{ col/100 ml}$$

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

Although *E. coli* bacteria limits are seasonal and apply between May 15 and September 30 of each year, the Department reserves the right to impose year-round bacteria limits if deemed necessary to protect the health, safety and welfare of the public.

The Department reviewed 20 DMRs that were submitted for the period May 31, 2009 – September 30, 2012. A review of data indicates the following:

E. coli Bacteria

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	126	1 – 4	1
Daily Maximum	643	1 -33	4

A review of the monitoring data for *E. coli* 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 = 1 col/100 ml

Monthly average limit = 126 col/100 ml

Current monitoring frequency = 2/Week

$$\text{Ratio} = \frac{1 \text{ col/100 ml}}{126 \text{ col/100 ml}} = 0.8\%$$

According to Table I of the USEPA Guidance, a 2/Week monitoring requirement can be reduced to 1/Month. However, the Department has determined that a reduction to 1/Week testing for *E. coli* is consistent with our analysis of the data and BPJ. Therefore, the monitoring frequency for *E. coli* bacteria has been reduced to 1/Week during the monitoring period of May 15 – September 30 in this permitting action.

- f. 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 48 DMRs that were submitted for the period January 1, 2009 – December 31, 2012. A review of data indicates the following:

pH

Value	Limit (SU)	Minimum (SU)	Maximum (SU)
Range	6.0 – 9.0	6.4	8.0

In consideration of compliance history with pH, this permitting action is revising the minimum monitoring frequency requirement for pH from once per day to four times per week.

- g. 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

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

Notice of Interim Limits for the Discharge of Mercury to the permittee thereby administratively modifying WDL #W000870-5L-D-R by establishing interim monthly average and daily maximum effluent concentration limits of 4.5 parts per trillion (ppt) and 6.8 ppt, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury. On February 6, 2012, the Department issued a minor revision to the April 23, 2008 permit thereby revising the minimum monitoring frequency requirement for mercury from once per quarter to once per year pursuant to 38 M.R.S.A. § 420(1-B)(F).

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 2004 through the present indicates the following:

Mercury

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Monthly Average	4.5	0.5 – 7.7	2.7
Daily Maximum	6.8		

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

- h. Total Phosphorus (Total-P): This permitting action is carrying forward previously established seasonal limits for total phosphorus.

1. October 1 – April 30 - The monthly average and daily maximum mass limits of 23 lbs./day and 46 lbs./day, respectively, were originally established to protect Estes Lake from algal blooms.

The Department reviewed 47 DMRs that were submitted for the period January 1, 2009 – December 31, 2012. A review of data indicates the following:

Total-P Mass (October 1 – April 30)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	23	0.1 – 3.7	1.9
Daily Maximum	46	0.1 – 10	2.9

A review of the monitoring data for Total phosphorus 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 = 1.9 lbs./day

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

Monthly average limit = 23 lbs./day

Current monitoring frequency = 1/Week

Ratio = $\frac{1.9 \text{ lbs./day}}{23 \text{ lbs./day}} = 8.3\%$

According to Table I of the USEPA Guidance, a 1/Week monitoring requirement can be reduced to 1/ 2 Months. However, the Department has determined that a reduction to 2/Month testing for total phosphorus is consistent with our analysis of the data and BPJ. Therefore, the monitoring frequency for total phosphorus has been reduced to 2/Month during the monitoring period of October 1 – May 14 in this permitting action.

2. May 1 – September 30 – The previous permitting action established a monthly average May 1 – September 30 mass limit of 3.0 lbs./day recommended in the 2001 TMDL due to dissolved oxygen depletion in the Mousam River caused by algae respiration. The TMDL took into consideration the natural, non-point, and ground water source inputs of phosphorus in developing the limitation of 3.0 lbs./day. This mass limitation is being carried forward in this permitting action.

The Department reviewed 20 DMRs that were submitted for the period January 1, 2009 – December 31, 2012. A review of data indicates the following:

Total-P Mass (May 1 – September 30)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	3.0	0.4 – 2.4	1.0

A review of the monitoring data for Total phosphorus 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 = 1.0 lbs./day
Monthly average limit = 3.0 lbs./day
Current monitoring frequency = 3/Week

Ratio = $\frac{1.0 \text{ lbs./day}}{3.0 \text{ lbs./day}} = 33\%$

According to Table I of the USEPA Guidance, a 3/Week monitoring requirement can be reduced to 1/Week. However, the Department has determined that a reduction to 2/Week testing for total phosphorus is consistent with our analysis of the data and BPJ. Therefore, the monitoring frequency for total phosphorus has been reduced to 2/Week during the monitoring period of May 1 – September 30 in this permitting action.

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

- i. Ammonia – As with phosphorus, previous permitting action established seasonal limitations for ammonia based on the 2001 TMDL. The TMDL considered natural, non-point, and ground water source inputs of ammonia in developing both the October 1 – May 14 and May 15 – September 30 limitations for the SSD discharge.
 1. October 1 – May 14 – For the October 1 – May 14 monthly average mass limit, the TMDL recommended the SSD be limited to 276 lbs./day based on an AWQC of 2.6 mg/L which is based on a river temperature of 15°C and a pH of 7.0 standard units. Back-calculating a concentration limit based on the mass and a flow limitation of 4.4 MGD yields a concentration of 7.52 mg/L. The calculated end of pipe (EOP) concentration of 7.52 mg/L was increased by a factor of 1.5 to 11.3 mg/L as not to penalize facilities for operating at flows less than permitted design flow of the wastewater plant. This represents an effluent concentration that is achievable through proper operation and maintenance of the treatment plant.

The Department reviewed 31 DMRs that were submitted for the period January 1, 2009 – December 31, 2012. A review of data indicates the following:

Ammonia Mass (October 1 – May 14)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	276	0.0 – 57	14

Ammonia Concentration (October 1 – May 14)

Value	Threshold (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	11.3	<0.09 – 3.1	0.8

A review of the monitoring data for Ammonia 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 = 14.0 lbs./day
Monthly average limit = 276 lbs./day
Current monitoring frequency = 1/Week

$$\text{Ratio} = \frac{14.0 \text{ lbs./day}}{276 \text{ lbs./day}} = 5\%$$

According to Table I of the USEPA Guidance, a 1/Week monitoring requirement can be reduced to 1/2 Months. However, the Department has determined that a reduction to 2/Month testing for Ammonia is consistent with our analysis of the data and BPJ. Therefore, the monitoring frequency for Ammonia has been reduced to 2/Month during the monitoring period of October 1 – May 14 in this permitting action.

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

2. May 15-September 30 – For the May 15 – September 30 period, the previous permitting action established a weekly average mass limitation of 14.5 lbs./day, based on the 2001 TMDL, to meet water quality in the summer months. No concentration limits were established to give the SSD flexibility in managing the nitrification process in the treatment plant during the summer. The weekly average mass limitation is being carried forward in this permit.

The Department reviewed 20 DMRs that were submitted for the period January 1, 2009 – December 31, 2012. A review of data indicates the following:

Ammonia Mass (May 15 – September 30)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Weekly Average	14.5	0.7 – 3.2	2

The Department believes that a reduction of the monitoring requirement from 3/Week to 2/Week for the May 15-September 30 period is consistent with our analysis of the data and BPJ. Therefore, the monitoring frequency for ammonia has been reduced to 2/Week during the monitoring period of May 15-September 30 in this permit.

- j. Dissolved Oxygen – The two previous permits required the SSD to monitor and maintain a dissolved oxygen content of >7.5 ppm in the effluent from the wastewater treatment facility between May 1 and September 30 based on a recommendation in the 2001 TMDL. Maintaining a minimum dissolved oxygen of >7.5 ppm in the effluent is necessary in order for the Mousam River to attain the Class C dissolved oxygen standards of 5 ppm and 60% saturation at all times and 6.5 ppm as a 30-day rolling average. This permit is carrying forward the monitoring limits and frequency (1/Day).

The Department reviewed 20 DMRs that were submitted for the period January 1, 2009 – September 30, 2012. A review of data indicates the following:

Dissolved Oxygen

Limit (ppm)	Minimum (ppm)	Maximum (ppm)
> 7.5	7.7	8.7

- k. River Flow: Based on the recommendations of the 2001 TMDL, this permit is carrying forward the prohibition that no discharge from the SSD occur when the flow in the Mousam River is below 20 cfs as measured at the gauge at the Route #4 bridge. The prohibition was established to protect water quality during low flow conditions in the river. The permittee is required to measure the river flow 2/Week when discharging. Measurements must be taken at the permanent gauging station installed at the Route #4 bridge approximately 0.8 river miles upstream from the SSD's wastewater treatment outfall pipe. The gauge at the Route #4 bridge must be calibrated annually by the U. S. Geological Survey or a qualified hydrogeologist. Calibration records must be retained for a period of at least 3 years from the date of calibration, and made available to Department personnel upon request. The Department reviewed 47 DMRs that were submitted for the period January 1, 2009 – December

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

31, 2012. A review of data indicates the following:

River Flow

Discharge Threshold (cfs)	Minimum (cfs)	Maximum (cfs)
> 20	21	131

In summary, results from facility testing during the Tier II period indicate that the SSD has generated BOD₅, TSS, ammonia, and total phosphorus well below the limits set in the TMDL.

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

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 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. 06-096 CMR 584 sets forth AWQC for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

WET, priority pollutant and analytical chemistry testing, as required by 06-096 CMR 530, is included in this permit in order to characterize the effluent. WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on invertebrate water flea (*Ceriodaphnia dubia*) and vertebrate brook trout (*Salvelinus fontinalis*). 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. 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

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 permittee discharges domestic (sanitary) and industrial process wastewater to surface waters and is therefore subject to the testing requirements of the toxics rule.

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.

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

06-096 CMR 530(2)(B) categorizes dischargers subject to the toxics rule into one of four levels (Levels I through IV). Level I dischargers are those dischargers having a chronic dilution factor of less than 20 to 1.

06-096 CMR 530(2)(D) specifies default WET, priority pollutant, and analytical chemistry test schedules for Level I dischargers as follows:

Default Surveillance level testing – Beginning upon issuance of this permit modification and lasting 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), Level I facilities must conduct two WET tests and four analytical chemistry tests during surveillance level testing.

Default Screening level testing – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, Level I facilities must conduct four WET tests, four analytical chemistry tests and one priority pollutant during surveillance level testing.

06-096 CMR 530(3)(C) states in part;

If these data indicate that the discharge is causing an exceedence of applicable water quality criteria, then: (1) the licensee must, within 45 days of becoming aware of an exceedence, submit a TRE plan for review and approval and implement the TRE after Department approval; and (2) the Department must, within 180 days of the Department's written approval of the TRE plan, modify the waste discharge license to specify effluent limits and monitoring requirements necessary to control the level of pollutants and meet receiving water classification standards.

1. Whole Effluent Toxicity (WET) Evaluation: 06-096 CMR 530(3)(E) states:

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

The previous permitting action established a chronic water quality-based limit of 25% for the water flea based on results of a December 20, 2007 statistical evaluation conducted by the Department of available effluent data which indicated a test result exhibited a reasonable potential to exceed the critical chronic threshold. On February 1, 2013, the Department conducted a statistical evaluation on

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

the most recent 60 months of WET test results on file with the Department for the permittee in accordance with the statistical approach outlined above. The 2/1/13 statistical evaluation indicates the discharge from the Sanford Sanitary District exceeded the chronic ambient water quality threshold for the water flea on August 9, 2011. However, the four following test results for the water flea indicated no exceedences or reasonable potential to exceed the chronic ambient water quality criteria. See Attachment C of this Fact Sheet for a summary of the WET test results.

This permitting action maintains the established reduced surveillance level testing for the brook trout (1/Year) and maintains the routine surveillance level testing for the water flea (2/Year).

Surveillance level WET testing is as follows:

Level	WET Testing
I	1 per year for the brook trout 2 per year for the water flea

Screening level WET testing is as follows:

Level	WET Testing
I	4 per year for the brook trout 4 per year for the water flea

06-096 CMR 530 (2)(D)(4) states:

All dischargers having waived or reduced testing must file statements with the Department on or before December 31 of each year describing the following.

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

Special Condition L of the previous permit established, Surface Waters Toxics Control Program Statement For Reduced Toxics Testing, pursuant to 06-096 CMR 530(2)(D)(4). The annual certification statement requirement is being carried forward in this permitting action. This permit provides for reconsideration of testing requirements, including the imposition of certain testing, in consideration of the nature of the wastewater discharged, existing wastewater treatment, receiving water characteristics, and results of testing.

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

m. Analytical Chemistry & Priority Pollutant Testing Evaluation:

06-096 CMR 530(4)(C) states:

The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions. The Department shall use the same general methods as those in section 4(D) to determine background concentrations. For pollutants not listed by the Department, an assumed concentration of 10% of the applicable water quality criteria must be used in calculations.

Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

06-096 CMR 530(4)(E) states,

In allocating assimilative capacity for toxic pollutants, the Department shall hold a portion of the total capacity in an unallocated reserve to allow for new or changed discharges and non-point source contributions. The unallocated reserve must be reviewed and restored as necessary at intervals of not more than five years. The water quality reserve must be not less than 15% of the total assimilative quantity.

Therefore, the Department is reserving 15% of the applicable water quality criteria in the calculations of this permitting action.

06-096 CMR 530(3)(E) states, "Where it is determined through [the statistical approach referred to in USEPA's Technical Support Document for Water Quality-Based Toxics Control] 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."

The 2001 TMDL recommends that the permit issued for this facility contain mass and concentrations for seven toxic substances (arsenic, silver, selenium, copper, lead, zinc, and aluminum). In the document labeled "EPA New England's TMDL Review" (dated 3/8/01) on page 3 under the section named "Review Elements" it states: "...the year-round and higher-tier flow TMDLs for toxic substances (ammonia, selenium, copper, lead, zinc, and aluminum) are based on EPA's AWQC which serve as the numeric water quality targets. The year-round and higher-tiered flow TMDLs for arsenic are based on the natural background level of arsenic in the Mousam River."

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

38 M.R.S.A. § 464 (4)(K) states that "Unless otherwise required by an applicable effluent limitation guideline adopted by the department, any limitations for metals in a waste discharge license may be expressed only as mass-based limits."

Taking into consideration the limits set in the TMDL and the results of facility testing that has taken place since the TMDL, it is the Department's belief that only those chemicals that have exhibited reasonable potential to exceed or exceedences of AWQC need to be limited in this permit.

As with WET test results, on April 5, 2013, the Department conducted a statistical evaluation on the most recent 60 months of analytical chemistry and priority pollutant test results on file with the Department. **The statistical evaluation indicates the discharge has four test results that have reasonable potential (RP) to exceed the chronic AWQC for aluminum. The evaluation also indicated that the effluent exhibited RP to exceed the chronic AWQC for copper eight times and exhibited RP to exceed the acute AWQC for copper on six testing dates. See Attachment D of this Fact Sheet for a summary of detectable test results.**

In accordance with 06-096 CMR 530 (4), the Department has established guidance for establishing waste load allocations indicates that the most protective of water quality becomes the facility's allocation. According to the 4/5/13 statistical evaluation, aluminum and copper are to be limited based on the individual allocation method due to the low dilution factors associated with the facility. However, limits were also assigned in the 2001 TMDL report. The more stringent, either the previously-recommended limit in the TMDL, or the calculated individual allocation will be the authorized limit.

- n. Aluminum: The previous permitting action established monthly average mass and concentration limits of 10 lbs./day and 414 µg/L, respectively, for aluminum based on a December 20, 2007 statistical evaluation of effluent data on file at that time which indicated that the effluent had a reasonable potential to exceed the chronic AWQC for aluminum. The previous permit established 1/Quarter monitoring frequency for aluminum which is being carried forward.

Individual allocation methodology-Aluminum

In the individual allocation, the Department continues to utilize the formula it has used in permitting actions since October 2005 taking into consideration background (10% of AWQC) and a reserve (15% of AWQC). The formula is as follows:

End of Pipe (EOP) concentration threshold = [Dilution factor x 0.75 x AWQC] + [0.25 x AWQC]

Mass limit = (EOP concentration in mg/L¹)(8.34 lbs./gal)(permit flow limit in MGD)

Chronic AWQC = 87 µg/L

Dilution factor = 3.9:1

Using the above-stated calculation for EOP concentration threshold, the calculation for aluminum is

¹ Note: 1 mg/L = 1,000 µg/L

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

as follows:

$$\text{EOP concentration threshold} = [3.9 \times 0.75 \times 87 \mu\text{g/L}] + [0.25 \times 87 \mu\text{g/L}] = 276.2 \mu\text{g/L}$$

$$\text{Monthly Average Mass Limit: } \frac{(276.2 \mu\text{g/L})(8.34)(4.4 \text{ MGD})}{1000 \mu\text{g/mg}} = 10.14 \text{ lbs./day}$$

Comparison of Calculated Limit to TMDL – Aluminum

The 2001 TMDL recommends a water quality-based monthly average mass limit of 9.39 lbs./day for aluminum when the flow is at 4.4 MGD. When compared to the above-stated calculated limits for Individual allocation (10.14 lbs./day) the TMDL limit is the more protective of water quality. Therefore, the TMDL limit of 9.39 lbs./day is the chronic mass limit for aluminum.

- o. Copper (Total): The previous permitting action established monthly average and daily maximum mass limits of 0.28 lbs./day and 0.36 $\mu\text{g/L}$, respectively, and monthly average and daily maximum concentration limits of 11 $\mu\text{g/L}$ and 14 $\mu\text{g/L}$ for copper. This permit is carrying forward the monitoring frequency of 1/Quarter for total copper.

Individual allocation methodology – Copper

Acute AWQC = 3.07 $\mu\text{g/L}$
Dilution factor = 3.9:1

Using the above-stated calculation for EOP concentration threshold, the calculation for copper is as follows:

$$\text{EOP concentration threshold} = [3.9 \times 0.75 \times 3.07 \mu\text{g/L}] + [0.25 \times 3.07 \mu\text{g/L}] = 9.7 \mu\text{g/L}$$

$$\text{Daily Maximum Mass Limit: } \frac{(9.7 \mu\text{g/L})(8.34)(4.4 \text{ MGD})}{1000 \mu\text{g/mg}} = 0.36 \text{ lbs./day}$$

Chronic AWQC = 2.36 $\mu\text{g/L}$
Chronic dilution factor = 3.9:1

$$\text{EOP} = [3.9 \times 0.75 \times 2.36 \mu\text{g/L}] + [0.25 \times 2.36 \mu\text{g/L}] = 7.5 \mu\text{g/L}$$

$$\text{Monthly Average Mass Limit: } \frac{(7.5 \mu\text{g/L})(8.34)(4.4 \text{ MGD})}{1000 \mu\text{g/mg}} = 0.28 \text{ lbs./day}$$

Comparison of Calculated Limits to TMDL – Copper

The 2001 TMDL recommends a water quality-based daily maximum mass limit of 0.47 lbs./day for copper when the flow is 4.4 MGD. However, the individual allocation daily maximum mass for copper is 0.36 lbs./day. Therefore, the more stringent limit of 0.36 lbs./day is the daily maximum mass limit for copper.

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

The 2001 TMDL recommends a water quality-based monthly average mass limit of 0.34 lbs./day for copper when the flow is 4.4 MGD. However, the individual allocation monthly average mass limit was calculated at 0.28 lbs./day. Therefore, the more stringent limit of **0.28 lbs./day** is the monthly average mass limit for copper.

OUTFALL #001B – Tier III, High Flow (February 15 – April 15)

As a result of the reduction of the flow limit from 4.4 MGD in Tier II, the SSD is being required to store more wastewater in the winter months. Rather than build additional storage capacity, the SSD and Department negotiated an additional flow regime (Tier III) in the previous permit whereby the SSD was authorized to discharge up to 8.8 MGD between February 15 and April 15 of each year (least water quality impact) provided the flow in the Mousam River was greater than 100 cfs.

From the issuance of the 4/23/08 permit, the facility has only once released discharge under the Tier III limits, from March through April 15, 2010. Therefore, the following measurements and calculations are restricted to only that data.

- p. River Flow: The permittee is required to measure the river flow 2/Week on a year-round basis at the permanent gauging station installed at the Route #4 bridge approximately 0.8 river miles upstream from the SSD's wastewater treatment outfall pipe. The gauge at the Route #4 bridge shall be calibrated yearly by the U. S. Geological Survey or a qualified hydrogeologist. River flow during February 15 – April 15 was measured as 284 and 176 cfs, in 2010.
- q. Flow: The established monthly average flow limit of 8.8 MGD was based on the recommendation in the 2001 TMDL and is being carried forward in this permitting action. The limit was a negotiated value by the SSD and Department and is necessary to manage the different flow regimes in the permit.

The Department reviewed 2 DMRs that were submitted for March and April, 2010. A review of data indicates that the monthly average was 6.2 MGD and the daily maximum average was 10.1 MGD.

- r. BOD₅ and TSS – The monthly average, weekly average and daily maximum mass limits for BOD₅ and TSS are based on recommendations in the 2001 TMDL. The Department has determined the limits are protective of water quality given dissolved oxygen deficits in the Mousam River only occur during the summer months. The monthly average and weekly average concentration limits of 30 mg/L, and 45 mg/L are based on secondary treatment requirements of 06-096 CMR 525(3)(III). The maximum daily BOD₅ and TSS concentration limits of 50 mg/L are based on a Department best professional judgment of best practicable treatment. All BOD₅ and TSS mass limitations are calculated based on the monthly average permit flow limit of 8.8 MGD and applicable concentration limits as follows:

Monthly average: $(8.8 \text{ MGD})(8.34)(30 \text{ mg/L}) = 2,202 \text{ lbs./day}$

Weekly average: $(8.8 \text{ MGD})(8.34)(45 \text{ mg/L}) = 3,303 \text{ lbs./day}$

Daily Maximum: $(8.8 \text{ MGD})(8.34)(50 \text{ mg/L}) = 3,670 \text{ lbs./day}$

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

The Department reviewed 2 DMRs that were submitted for the high flow period in this permitting cycle (March and April, 2010). A review of data indicates the following:

BOD₅ mass

Value	Limit (lbs./day)	Average (lbs./day)
Monthly Average	2,202	239
Weekly Average	3,303	280
Daily Maximum	3,670	404

TSS mass

Value	Limit (lbs./day)	Average (lbs./day)
Monthly Average	2,202	183
Weekly Average	3,303	189
Daily Maximum	3,670	348

BOD₅ concentration

Value	Limit (mg/L)	Average (mg/L)
Monthly Average	30	4
Weekly Average	45	6
Daily Maximum	50	6

TSS concentration

Value	Limit (mg/L)	Average (mg/L)
Monthly Average	30	3
Weekly Average	45	5
Daily Maximum	50	6

This permit is carrying forward all monitoring frequencies for BOD₅ and TSS established in the previous permit.

- s. Total Phosphorus – The monthly average and daily maximum limits of 23 lbs./day and 46 lbs./day, respectively, established in Tier II of this permit are being carried forward in Tier III. The average total phosphorus from Outfall 001B was calculated as 7.8 lbs./day (monthly average) and 13 lbs./day (daily maximum) in March and April, 2010. The monthly average and daily maximum limits as well as their monitoring frequencies are being carried forward in this permit.
- t. Ammonia - The TMDL recommends the SSD be limited to 612 lbs./day based on an AWQC of 2.7 mg/L which is based on a river temperature of 10°C and a pH of 7.0 standard units. Back-calculating a concentration limit based on the mass and a flow limitation of 8.8 MGD yields a concentration of 8.33 mg/L. The average ammonia as total nitrogen from Outfall 001B was measured as 12.0 lbs./day (monthly average) with a monthly average concentration of 0.3 mg/L in March and April, 2010.

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

To be consistent with the Tier II ammonia limit, the calculated end-of-pipe concentration of 8.33 mg/L was increased by a factor of 1.5 to 12.5 mg/L as not to penalize facilities for operating at flows less than permitted design flow of the waste water plant. This represents an effluent concentration that is achievable through proper operation and maintenance of the treatment plant.

- u. Analytical Chemistry & Priority Pollutant – The TMDL established Tier III limits for metals by multiplying the Tier II limits by a factor of two to compensate for the increased flow. Therefore, the monthly average mass limits for copper and aluminum are 0.56 lbs./day and 18.8 lbs./day, respectively. The daily maximum mass limit for copper is 0.72 lbs./day. The monitoring frequency of 1/Quarter is being carried forward for all parameters. Mercury limits and monitoring frequency established in the previous permit are being carried forward in this permit.

7. 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.

The permit contains a condition for industrial pretreatment (see Special Condition L) 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 Sanford 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 2 regulated Industrial Users (IUs) in the Sanford Pretreatment Program; Cyro Industries, and U. S. Felt. These IUs run analyses and submit reports to the District a minimum of twice a year (or more often), and the District 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 Sanford Pretreatment Program at a frequency of approximately once a year. In Sanford Local Limits have been technically derived for BOD, TSS, pH, ammonia nitrogen, total phosphorus, aluminum, 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 District submits an Annual Pretreatment Report to the State Pretreatment Coordinator summarizing the year's compliance & enforcement activities. The Sanford 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.

7. PRETREATMENT (cont'd)

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 shall 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 December 1 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.

8. DISPOSAL OF SEPTAGE WASTE IN WASTE WATER TREATMENT FACILITY

The permittee 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 SSD's written septage management plan, this permitting action authorizes the permittee to receive and introduce into the treatment process or solids handling stream up to a daily maximum of 40,000 GPD of transported wastes (septage wastes) (up to a monthly total of 1.2 million gallons). See Special Condition K of the permit.

9. 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 C classification.

10. PUBLIC COMMENTS

Public notice of this application was made in the *Sanford News* newspaper on or about February 21 and February 28, 2013. 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 shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

11. RESPONSE TO COMMENTS

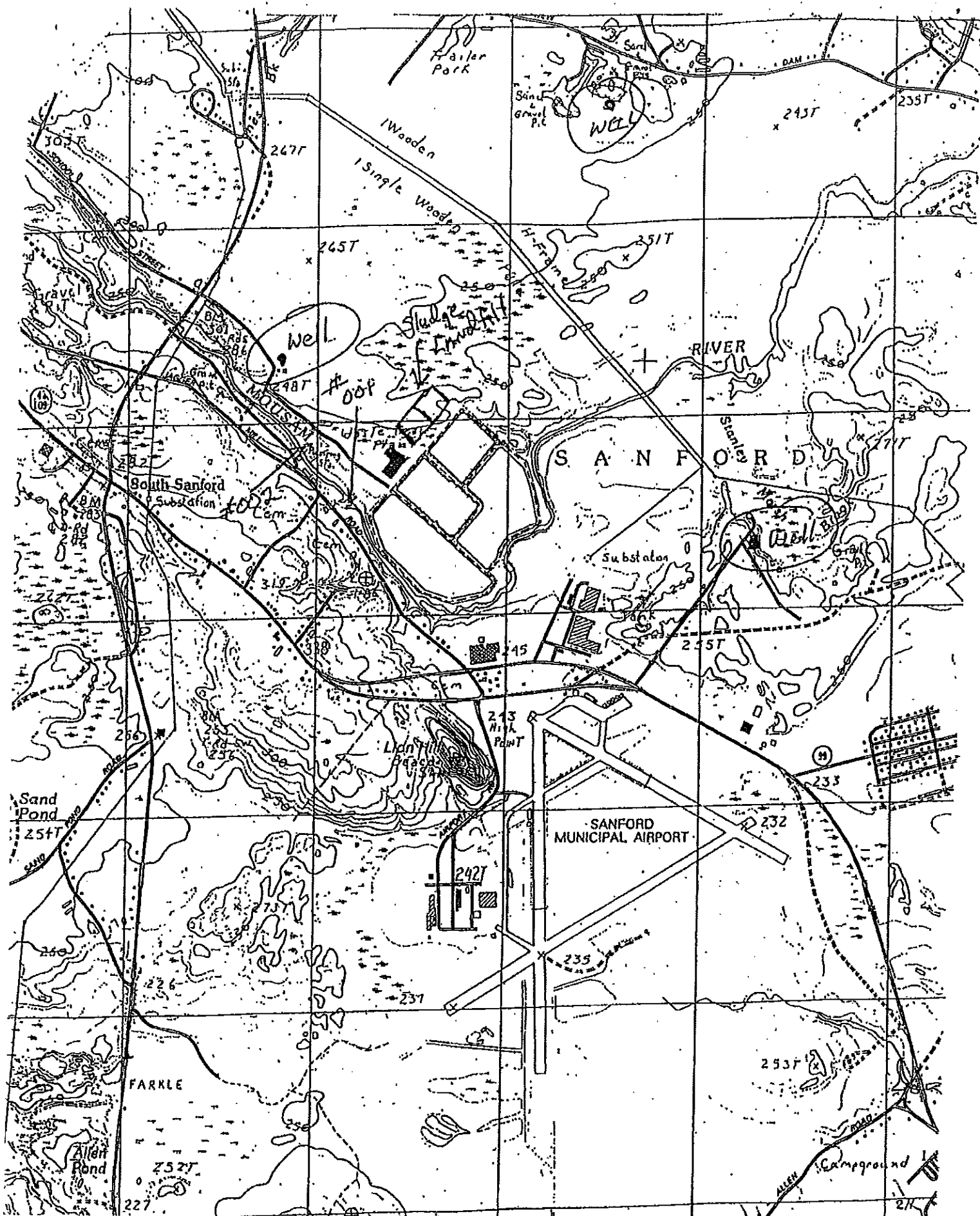
During the period of April 29, 2013 through May 31, 2013, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit to be issued to the Sanford Sewerage District for the proposed discharge. The Department did not receive significant comments on the draft permit; therefore, a response to comments was not prepared.

12. DEPARTMENT CONTACTS


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

Cindy L. Dionne
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 592-7161
e-mail: cindy.l.dionne@maine.gov

ATTACHMENT A



ATTACHMENT B

<p>OWG PR-2 RB OF 12</p>	<p>SANFORD SEWERAGE DISTRICT SANFORD, MAINE WASTEWATER TREATMENT FACILITY UPGRADE</p>	 <p>Sanford Sewerage District 100 Main Street Sanford, Maine 04856 Tel. (207) 833-4444</p>	<p>PROJECT NAME DATE OF DRAWING DRAWN BY CHECKED BY SCALE SHEET NO. OF SHEETS</p>	<p>PROJECT NO. DATE OF DRAWING DRAWN BY CHECKED BY SCALE SHEET NO. OF SHEETS</p>
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ATTACHMENT C

4/8/2013

WET TEST REPORT

Data for tests conducted for the period

08/Apr/2008 - 08/Apr/2013



SANFORD

NPDES# ME0100617

Effluent Limit: Acute (%) = 25.392

Chronic (%) = 25.392

Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	100	10/15/2008	25.392		
TROUT	A_NOEL	100	01/07/2009	25.392		
TROUT	A_NOEL	100	05/12/2010	25.392		
TROUT	A_NOEL	100	08/09/2011	25.392		
TROUT	A_NOEL	100	05/30/2012	25.392		
TROUT	A_NOEL	100	08/01/2012	25.392		
TROUT	A_NOEL	100	11/07/2012	25.392		
TROUT	A_NOEL	100	01/23/2013	25.392		
TROUT	C_NOEL	100	10/15/2008	25.392		
TROUT	C_NOEL	100	01/07/2009	25.392		
TROUT	C_NOEL	100	05/12/2010	25.392		
TROUT	C_NOEL	100	08/09/2011	25.392		
TROUT	C_NOEL	100	05/30/2012	25.392		
TROUT	C_NOEL	100	08/01/2012	25.392		
TROUT	C_NOEL	100	11/07/2012	25.392		
TROUT	C_NOEL	100	01/23/2013	25.392		
WATER FLEA	A_NOEL	100	05/14/2008	25.392		
WATER FLEA	A_NOEL	100	10/15/2008	25.392		
WATER FLEA	A_NOEL	100	01/07/2009	25.392		
WATER FLEA	A_NOEL	100	07/14/2009	25.392		
WATER FLEA	A_NOEL	100	05/12/2010	25.392		
WATER FLEA	A_NOEL	100	10/26/2010	25.392		
WATER FLEA	A_NOEL	100	02/22/2011	25.392		
WATER FLEA	A_NOEL	100	08/09/2011	25.392		
WATER FLEA	A_NOEL	100	12/06/2011	25.392		
WATER FLEA	A_NOEL	100	05/30/2012	25.392		
WATER FLEA	A_NOEL	100	08/01/2012	25.392		
WATER FLEA	A_NOEL	100	11/07/2012	25.392		
WATER FLEA	A_NOEL	100	01/23/2013	25.392		
WATER FLEA	C_NOEL	100	05/14/2008	25.392		
WATER FLEA	C_NOEL	50	10/15/2008	25.392		
WATER FLEA	C_NOEL	100	01/07/2009	25.392		
WATER FLEA	C_NOEL	100	07/14/2009	25.392		
WATER FLEA	C_NOEL	100	05/12/2010	25.392		

WATER FLEA	C_NOEL	100	10/26/2010	25.392
WATER FLEA	C_NOEL	100	02/22/2011	25.392
WATER FLEA	C_NOEL	10	08/09/2011	25.392
WATER FLEA	C_NOEL	100	12/06/2011	25.392
WATER FLEA	C_NOEL	100	05/30/2012	25.392
WATER FLEA	C_NOEL	100	08/01/2012	25.392
WATER FLEA	C_NOEL	100	11/07/2012	25.392
WATER FLEA	C_NOEL	100	01/23/2013	25.392

Y

ATTACHMENT D

4/8/2013

FACILITY PRIORITY POLLUTANT DATA REPORT

Data Date Range: 08/Apr/2008 - 08/Apr/2013

Showing only those values not reported as a less than result



Facility name: SANFORD

Permit Number: ME0100617

Parameter: ALUMINUM

Test date	Result (ug/l)	Lsthan
05/14/2008	90.000	N
10/15/2008	49.000	N
01/07/2009	242.000	N
07/14/2009	22.000	N
05/12/2010	106.000	N
10/26/2010	38.000	N
02/22/2011	80.000	N
08/09/2011	29.000	N
12/06/2011	29.000	N

Parameter: AMMONIA

Test date	Result (ug/l)	Lsthan
02/22/2011	1630.000	N
12/06/2011	180.000	N
01/23/2013	890.000	N

Parameter: CALCIUM

Test date	Result (ug/l)	Lsthan
05/14/2008	15000.000	N
10/15/2008	14000.000	N
01/07/2009	15900.000	N
07/14/2009	15000.000	N
05/12/2010	13100.000	N
10/26/2010	12700.000	N
02/22/2011	12600.000	N
08/09/2011	10800.000	N
12/06/2011	11900.000	N
05/30/2012	13300.000	N
08/01/2012	14500.000	N
11/07/2012	14000.000	N
01/23/2013	14600.000	N

Parameter: COPPER

Test date	Result (ug/l)	Lsthan
05/14/2008	13.000	N
10/15/2008	3.000	N
01/07/2009	4.000	N
05/12/2010	7.000	N
10/26/2010	8.000	N
02/22/2011	11.000	N
08/09/2011	10.000	N
12/06/2011	6.000	N
05/30/2012	2.700	N
08/01/2012	3.100	N
11/07/2012	6.360	N
01/23/2013	7.820	N

Parameter: CYANIDE

Test date	Result (ug/l)	Lsthan
05/14/2008	7.000	N

Parameter: MAGNESIUM

Test date	Result (ug/l)	Lsthan
-----------	---------------	--------

	05/14/2008	5200.000	N
	10/15/2008	7600.000	N
	01/07/2009	7800.000	N
	07/14/2009	9300.000	N
	05/12/2010	7300.000	N
	10/26/2010	8300.000	N
	02/22/2011	8300.000	N
	08/09/2011	6800.000	N
	12/06/2011	4900.000	N
	05/30/2012	4530.000	N
	08/01/2012	13200.000	N
	11/07/2012	12200.000	N
	01/23/2013	13800.000	N

Parameter: **MERCURY**

Test date	Result (ug/l)	Lsthan
-----------	---------------	--------

05/14/2008	0.003	N
09/10/2008	0.003	N
11/13/2008	0.005	N
01/14/2009	0.004	N
04/09/2009	0.004	N
07/14/2009	0.001	N
12/02/2009	0.003	N
02/22/2010	0.004	N
05/13/2010	0.001	N
07/14/2010	0.001	N
10/07/2010	0.003	N
03/02/2011	0.001	N
05/12/2011	0.008	N
06/09/2011	0.001	N
06/27/2011	0.001	N
11/03/2011	0.001	N
01/18/2012	0.001	N

Parameter: **TOC**

Test date	Result (ug/l)	Lsthan
-----------	---------------	--------

05/12/2010	4100.000	N
10/26/2010	3900.000	N
02/22/2011	6100.000	N
08/09/2011	5000.000	N
12/06/2011	3800.000	N
05/30/2012	3800.000	N
08/01/2012	3400.000	N
01/23/2013	6000.000	N

Parameter: **TSS**

Test date	Result (ug/l)	Lsthan
-----------	---------------	--------

05/12/2010	1000.000	N
01/23/2013	2900.000	N

Parameter: **ZINC**

Test date	Result (ug/l)	Lsthan
-----------	---------------	--------

05/14/2008	36.000	N
10/15/2008	38.000	N
01/07/2009	53.000	N
07/14/2009	31.000	N
05/12/2010	31.000	N
10/26/2010	32.000	N
02/22/2011	34.000	N
08/09/2011	32.000	N

Facility name: **SANFORD**

Permit Number: **ME0100617**

12/06/2011	36.000	N
05/30/2012	33.000	N
08/01/2012	26.000	N
11/07/2012	42.000	N
01/23/2013	54.300	N

ATTACHMENT E



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
Commissioner

MEPDES# _____ Facility Name _____

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

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

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

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

Scheduled Toxicity Testing for the next calendar year

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

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

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

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

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

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

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

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

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

A. GENERAL PROVISIONS

1. **General compliance.** All discharges shall be consistent with the terms and conditions of this permit; any changes in production capacity or process modifications which result in changes in the quantity or the characteristics of the discharge must be authorized by an additional license or by modifications of this permit; it shall be a violation of the terms and conditions of this permit to discharge any pollutant not identified and authorized herein or to discharge in excess of the rates or quantities authorized herein or to violate any other conditions of this permit.

2. **Other materials.** Other materials ordinarily produced or used in the operation of this facility, which have been specifically identified in the application, may be discharged at the maximum frequency and maximum level identified in the application, provided:

(a) They are not

- (i) Designated as toxic or hazardous under the provisions of Sections 307 and 311, respectively, of the Federal Water Pollution Control Act; Title 38, Section 420, Maine Revised Statutes; or other applicable State Law; or
- (ii) Known to be hazardous or toxic by the licensee.

(b) The discharge of such materials will not violate applicable water quality standards.

3. **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of State law and the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

- (a) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act, and 38 MRSA, §420 or Chapter 530.5 for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- (b) Any person who violates any provision of the laws administered by the Department, including without limitation, a violation of the terms of any order, rule license, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.

4. **Duty to provide information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

5. **Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

6. **Reopener clause.** The Department reserves the right to make appropriate revisions to this permit in order to establish any appropriate effluent limitations, schedule of compliance or other provisions which may be authorized under 38 MRSA, §414-A(5).

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

B. OPERATION AND MAINTENANCE OF FACILITIES

1. General facility requirements.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

5. Bypasses.

(a) Definitions.

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

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

(c) Notice.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

(d) Prohibition of bypass.

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

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

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

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

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

6. Upsets.

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

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

5. Publicly owned treatment works.

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

E. OTHER REQUIREMENTS

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

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

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



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-2811

SUMMARY

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

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

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

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

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

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

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

HOW TO SUBMIT AN APPEAL TO THE BOARD

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

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

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

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

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

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

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

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

II. JUDICIAL APPEALS

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

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

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

ADDITIONAL INFORMATION

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

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