STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

October 3, 2011

Ms. Diane Barnes, City Manager
City of Calais
City Building, P.O. Box 413
Calais, ME 04619
manager@calaismaine.org

Sent via electronic mail
Delivery confirmation requested

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME00100129
Maine Waste Discharge License (WDL) # W002751-6D-I-R
Finalized MEPDES Permit Renewal

Dear Ms. Barnes:

Enclosed, please find a copy of your **final** MEPDES permit/Maine WDL, which was approved by the Department of Environmental Protection. Please read the permit/license 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.

Sincerely,

Bill Hinkel
Division of Water Quality Management
Bureau of Land and Water Quality
bill.hinkel@maine.gov
ph: 207.485.2281
Enc.
ec: Annaleis Hafford, Olver Associates, Inc. Tayna Hovell, MeDEP Lori Mitchell, MeDEP
Sandy Mojica, USEPA File #W2751

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

DEPARTMENT ORDER

IN THE MATTER OF

CITY OF CALAIS	)	MAINE POLUTANT DISCHARGE
CALAIS, WASHINGTON COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
#ME0100129	)	WASTE DISCHARGE LICENSE
#W002751-6D-I-R **APPROVAL**	)	**RENEWAL**

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 CITY OF CALAIS (City or permittee) with its supportive data, agency review comments, and other related materials on file and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The City has applied to the Department for the renewal of combination Maine Waste Discharge License (WDL) #W002751-5L-G-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100129, which was issued by the Department on September 29, 2006, and expired on September 29, 2011. The September 29, 2006 permit authorized the monthly average discharge of up to 1.5 million gallons per day (MGD) of secondary treated sanitary wastewater, an unspecified quantity of excess combined sanitary and storm water receiving primary treatment only (and seasonal disinfection) from a municipal wastewater treatment facility and an unspecified quantity of untreated combined sanitary and storm water from five (5) combined sewer overflow (CSO) outfalls to the St. Croix River, Class SC, in Calais, Maine. It is noted that the Department is correcting the description of the receiving water for CSO outfall #006 from tidal Class SC to freshwater Class C.

It is noted that, on January 18, 2011, the Department issued a minor revision to the September 29, 2006 permit to incorporate special conditions (included as Special Conditions O and P of this permit) regarding compliance with the 2010 Clean Water State Revolving Fund (CWSRF) Requirements (Asset Management Principal Forgiveness).

PERMIT SUMMARY

This permitting action is similar to the September 29, 2006 permitting action in that it is:

Secondary Treated Wastewater (Outfall #001A)

1. Monthly average discharge flow limit of 1.5 MGD and the daily maximum discharge flow reporting requirement;
2. Monthly average, weekly average and daily maximum mass limits for biochemical oxygen demand (BOD_5) and total suspended solids (TSS);

PERMIT SUMMARY (cont'd)

3. Monthly average and weekly average concentration limits and the daily maximum concentration reporting requirements for BOD_5 and TSS;
4. Requirement for a minimum of 85% removal of BOD_5 and TSS;
5. Daily maximum concentration limit for settleable solids of 0.3 ml/L;
6. Daily maximum concentration limit of 1.0 mg/L for total residual chlorine (TRC);
7. Daily maximum and monthly average concentration limitations of 50 colonies/100 mL and 15 colonies/100 mL, respectively, for fecal coliform bacteria;
8. A pH range limitation of 6.0 – 9.0 standard units;

CSO-Related Bypasses of Secondary Treatment (Outfall #002A) – For the purposes of this permitting action, this term refers to structures and or processes at the wastewater treatment facility that provide equivalent to primary treatment and disinfection of wastewater that bypass the biological treatment portion of the facility in an effort to mitigate the discharge of untreated combined sanitary waste waters and storm water from the five CSOs listed in Special Condition J of the permit.

9. Daily maximum and monthly total reporting requirements for discharge flow;
10. Daily maximum concentration reporting requirements and the monthly average percent removal reporting requirements for BOD_5 , and TSS;
11. Daily maximum concentration limits for fecal coliform bacteria and TRC;
12. Monthly average reporting requirements for overflow occurrences;
13. Daily maximum surface loading rate reporting requirement; and

Combined Sewer Overflows

14. Carrying forward authorization to discharge excess combined sanitary and storm water wastewater via five outfall points.

This permitting action is different from the September 29, 2006 permitting action in that it is:

1. Revising the minimum monitoring frequency requirement for settleable solids from once per day to five times per week;
2. Revising previous Special Condition J, *Disposal of Septage Waste in Waste Water 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) (see Special Condition I of this permit);
3. Revising Special Condition L, *06-096 CMR 530(2)(D)(4) Statement for Reduced /Waived Toxics Testing*, to include certification requirements for inflow/infiltration and transported wastes that may increase the toxicity of the discharge;
4. Updating the CSO Master Plan interim compliance dates at Special Condition J based on the current status of CSO abatement projects;
5. Correcting the classification of the St. Croix River at the point of discharge for CSO Outfall #006 from Class SC to Class C (fresh water segment); and
6. Establishing Special Condition O, *Repair and Replacement Reserve Account*, and Special Condition P, *Wastewater Facility Energy Audit*, for compliance with the 2010 Clean Water State Revolving Fund.

CONCLUSIONS

BASED on the findings summarized in the attached Fact Sheet dated October 3, 2011, and subject to the Conditions listed below, the Department makes the following conclusions:

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

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

3. The provisions of the State's antidegradation policy, 38 M.R.S.A. §464(4)(F), will be met, in that:

   (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;

   (b) Where high quality waters of the State constitute an outstanding national 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 discharge [including the five (5) combined sewer overflows (CSOs)] 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

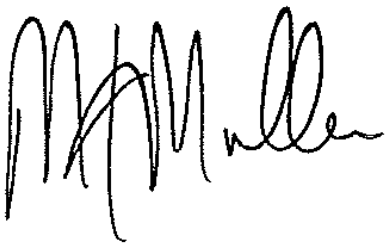
THEREFORE, the Department APPROVES the above noted application of CITY OF CALAIS to discharge a monthly average flow of up to 1.5 million gallons per day (MGD) of secondary treated sanitary wastewaters, an unspecified quantity of excess combined sanitary and storm water receiving primary treatment only (and seasonal disinfection) from a municipal wastewater treatment facility and an unspecified quantity of untreated combined sanitary and storm water from five (5) combined sewer overflow (CSO) outfalls to the St. Croix River, Class C (CSO Outfall #006) and Class SC (all other outfalls), in Calais, 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.



This permit is digitally signed by Michael Mullen on behalf of Acting Commissioner Patricia Aho. It is digitally signed pursuant to 10 M.R.S.A. § 9418. It has been filed with the Board of Environmental Protection as of the signature date.
2011.10.04 15:03:50 -04'00'

Date of initial receipt of application: June 30, 2011
Date of application acceptance: July 5, 2011
This Order prepared by Bill Hinkel, BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **secondary treated sanitary wastewater via Outfall #001A** to the St. Croix River in Calais, Maine. Such discharges shall be limited and monitored by the permittee as specified below[(1)]:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow ***[50050]***	1.5 MGD *[03]*	--	--	--	--	--	Continuous *[99/99]*	Recorder *[RC]*
BOD_5 ***[00310]***	375 lbs./day *[26]*	563 lbs./day *[26]*	Report lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Week *[02/07]*	24-Hr. Composite *[24]*
BOD_5 % Removal[(2)] ***[81010]***	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
TSS ***[00530]***	375 lbs./day *[26]*	563 lbs./day *[26]*	Report lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Week *[02/07]*	24-Hr. Composite *[24]*
TSS % Removal[(2)] ***[81011]***	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids ***[00545]***	--	--	--	--	--	0.3 ml/L *[25]*	5/Week *[05/07]*	Grab *[GR]*
Fecal Coliform Bacteria[(3)] ***[31616]* May 15-Sept. 30**	--	--	--	15/100 ml[(4)] *[13]*	--	50/100 ml *[13]*	2/Week *[02/07]*	Grab *[GR]*
Total Residual Chlorine[(5)] ***[50060]***	--	--	--	--	--	1.0 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
pH ***[00400]***	--	--	--	--	--	6.0 – 9.0 SU *[12]*	1/Day *[01/01]*	Grab *[GR]*

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

FOOTNOTES: See Pages 8-12 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

2. ***SCREENING LEVEL*** **-** Beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter[(1)].

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity[(6)] **Acute – NOEL** *Mysidopsis bahia* (Mysid Shrimp) *[TDA3E]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Composite *[24]*
Chronic – NOEL *Arbacia punctulata* (Sea Urchin) *[TBH3A]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Composite *[24]*
Analytical Chemistry [(7)] *[51168]*	---	---	---	Report µg/L *[28]*	1/Quarter *[01/90]*	Composite/Grab *[24]*
Priority Pollutants [(8)] *[51168]*	---	---	---	Report µg/L *[28]*	1/Year *[01/YR]*	Composite/Grab *[24]*

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

FOOTNOTES: See Pages 8-12 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

3. The permittee is authorized to discharge **primary treated and disinfected wastewaters via Outfall #002A** when in response to wet weather events when the influent to the wastewater treatment facility exceeds a flow rate of **1,250 gallons per minute (1.8 MGD)** for 60 minutes (peak hourly flow) **or** in accordance with the most current approved Wet Weather Flow Management Plan. Approval of said bypass will be reviewed and may be modified or terminated pursuant to Special Condition Q, *Reopening of Permit For Modification*, if there is a substantial change in the volume or character of pollutants in the collection/treatment system, if new information regarding CSO management becomes available or if necessary for implementation of an approved CSO Master Plan. Bypasses shall be monitored and reported as specified below.

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow ***[50050]***	Report Total MGD *[03]*	---	---	Report MGD *[03]*	Continuous *[99/99]*	Recorder *[RC]*
Surface Loading Rate[9] ***[50997]***	---	Report, GPD/SF *[07]*	---	---	1/Discharge Day[10] *[01/DD]*	Calculate *[CA]*
Overflow Use, Occurrences[11] ***[74062]***	---	---	Report, # of Days *[93]*	---	1/Discharge Day[10] *[01/DD]*	Record Total *[RT]*
BOD_5 ***[00310]***	---	---	---	Report mg/L *[19]*	1/Discharge Day[10] *[01/DD]*	24-Hour Composite *[24]*
BOD_5 Percent Removal[12] ***[81010]***	---	---	Report % *[23]*	---	1/Discharge Day[10] *[01/DD]*	Calculate *[CA]*
TSS ***[00530]***	---	---	---	Report mg/L *[19]*	1/Discharge Day[10] *[01/DD]*	24-Hour Composite *[24]*
TSS Percent Removal[12] ***[81011]***	---	---	Report % *[23]*	---	1/Discharge Day[10] *[01/DD]*	Calculate *[CA]*
Fecal Coliform Bacteria[3], [13] ***[31616]***	---	---	---	200/100 ml *[13]*	1/Discharge Day[10] *[01/DD]*	Grab *[GR]*
Total Residual Chlorine[13] ***[50060]***	---	---	---	1.0 mg/L *[19]*	1/Discharge Day[10] *[01/DD]*	Grab *[GR]*

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

FOOTNOTES: See Pages 8-12 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES:

1. **Sampling** – Sampling and analysis must be conducted in accordance with; a) methods approved in Title 40 *Code of Federal Regulations* (40 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 Human Services. Samples that are sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of the *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of 10-144 CMR 263.

   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.
   Influent sampling for BOD_5 and TSS shall be sampled after the influent Parshall flume but before grit removal.

2. **Percent removal** – For secondary treated wastewater, the facility shall maintain a minimum of 85 percent removal of both BOD_5 and TSS. For both primary treated and secondary treated wastewaters, the percent removal shall be based on a monthly average value calculated based on influent and effluent concentrations. The percent removal shall be waived when the monthly average influent concentration is less than 200 mg/L. For instances when this occurs, the facility shall report *"NODI-9"* on the monthly Discharge Monitoring Report.

3. **Fecal coliform bacteria** - Limits are seasonal and apply between May 15 and September 30, inclusive, of each calendar year. The Department reserves the right to require disinfection on a year-round basis to protect the health and welfare of the public.

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

5. **Total Residual Chlorine (TRC)** – Limitations and monitoring requirements are in effect any time elemental chlorine or chlorine-based compounds are utilized to disinfect the discharge(s). The permittee shall utilize a USEPA-approved test method capable of bracketing the TRC limitations specified in this permitting action.

SPECIAL CONDITIONS

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

FOOTNOTES:

6. **Whole Effluent Toxicity (WET) Testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 1.2% and 0.3%, respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points.

   a. **Surveillance level testing** - Surveillance level WET testing is waived pursuant to 06-096 CMR 530(2)(D).

   b. **Screening level testing - Beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter**, the permittee shall conduct **screening level WET testing** at a minimum frequency of once per year using the mysid shrimp (*Mysidopsis bahia*) and the sea urchin (*Arbacia punctulata*). Acute tests shall be conducted on the mysid shrimp; chronic tests shall be conducted on the sea urchin.

   Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 1.2% and 0.3%, respectively. See **Attachment B** of this permit for a copy of the Department's WET report form

   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 Organism*s, 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 Marine and Estuarine Organism*s, 3rd ed. USEPA 821-R-02-014. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the marine chronic method manual)

SPECIAL CONDITIONS

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

FOOTNOTES:

The permittee is also required to analyze the effluent for the parameters specified in the WET chemistry section, and the parameters specified in the analytical chemistry section of the form in **Attachment A** of this permit each time a WET test is performed.

7. **Analytical Chemistry** – Refers to a suite of chemical tests in **Attachment A** of the permit.

   a. **Surveillance level testing** – Surveillance level analytical testing is waived pursuant to 06-096 CMR 530(2)(D).

   b. **Screening level testing** – Beginning 12 months prior to and lasting through permit expiration and every five years thereafter, the permittee shall conduct analytical chemistry testing at a minimum frequency of once per calendar quarter for four consecutive calendar quarters.

8. **Priority Pollutant Testing –**Priority pollutants are those parameters specified at *Effluent Guidelines and Standards*, 06-096 CMR 525(4)(IV) (effective January 12, 2001).

   a. **Screening level testing** – Beginning 12 months prior to and lasting through permit expiration and every five years thereafter, the permittee shall conduct priority pollutant testing at a minimum frequency of once per year.

   Surveillance level priority pollutant testing is not required pursuant to 06-096 CMR 530(2)(D).

   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.

   Analytical chemistry and priority pollutant testing shall be conducted on samples collected at the same time as those collected for whole effluent toxicity tests, when applicable, and shall be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve the most current 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

SPECIAL CONDITIONS

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

FOOTNOTES:

established in 06-096 CMR 584. For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "NODI-9" monitoring not required this period.

All mercury sampling required to determine compliance with interim limitations established pursuant to *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001), shall be conducted in accordance with 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.

9. **Surface Overflow Rate** – For the purposes of this permitting action, "surface overflow rate" is defined as the average hourly rate per overflow occurrence in a discharge day. The permittee shall provide this information to establish data on the effectiveness of peak flows receiving primary treatment only.

10. **Discharge Day** - A "discharge day" is defined as a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

11. **Overflow occurrence** – An "overflow occurrence" is defined as the period of time between initiation of flow from the primary bypass and ceasing discharge from the primary bypass. Overflow occurrences are reported in discharge days.

    Multiple intermittent overflow occurrences in one discharge day are reported as one overflow occurrence and are sampled according to the measurement frequency specified. One composite sample for BOD_5 and total suspended solids shall be collected per discharge day and shall be of flow proportioned from each intermittent overflow during that 24-hour period.

    For overflow occurrences exceeding one day in duration, sampling shall be performed each day of the event according to the measurement frequency specified. For example, if an overflow occurs for all or part of three discharge days, the permittee shall take three composite samples for BOD_5 and TSS, initiating samples at the start of the overflow and each subsequent discharge day thereafter and terminating samples at the end of the discharge day or the end of the overflow occurrence. Samples shall be flow-proportioned.

12. **BOD_5 and TSS Removal** – The permittee shall analyze both the influent of the treatment plant and effluent from the dedicated chlorine contact chamber for BOD_5 and TSS for said discharges, and report the percent removal on the monthly Discharge Monitoring Report (DMR). As an attachment to the DMR, the permittee shall report the individual BOD_5 and TSS test results used to calculate the percent removal rates reported. For the

SPECIAL CONDITIONS

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

FOOTNOTES:

purpose of calculating BOD_5 and TSS percent removals on the treated excess combined sewer wastewater, the influent sample shall only be collected during overflow occurrences.

13. **Grab Sample** – Grab samples for fecal coliform bacteria and total residual chlorine are not required to be collected when Outfall #002A is active for a single continuous discharge event lasting less than 60 minutes or during intermittent discharge events over a course of a 24-hour period lasting less than 120 minutes and sampling is only required if said event(s) occur between the hours of 7:00 AM – 4:00 PM during the normal work week (Monday through Friday, holidays excluded).

B. NARRATIVE EFFLUENT LIMITATIONS

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

C. TREATMENT PLANT OPERATOR

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

D. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the 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.

SPECIAL CONDITIONS

E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on July 5, 2011; 2) the terms and conditions of this permit; and 3) only from Outfalls #001A (secondary treated wastewater), 002A (primary treated wastewater), and the five (5) combined sewer overflow outfalls (Outfall #003-007, inclusive) listed in Special Condition J, *Conditions for Combined Sewer Overflows,* of this permit. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5)(*Bypass*) of this permit.

F. 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 into 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.

G. WET WEATHER FLOW MANAGEMENT PLAN

The treatment facility staff shall maintain a current written Wet Weather Flow Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall.

Within 90 days of completion of new and or substantial upgrades of the wastewater treatment facility, the permittee shall submit to the Department for review and approval, a new or revised Wet Weather Management Plan which conforms to Department guidelines for such plans. 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. **The permittee shall review their plan annually** and record any necessary changes to keep the plan up to date.

SPECIAL CONDITIONS

H. OPERATION & MAINTENANCE (O&M) PLAN

This facility shall maintain a current written comprehensive Operation & Maintenance (O&M) Plan. The plan shall provide a systematic approach by which the permittee shall at all times, properly operate and maintain all facilities and systems of transport, 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.

I. 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 handling stream up to **a daily maximum of 4,000 gallons per day up to a monthly total of 80,000 gallons** of transported wastes, subject to the following terms and conditions.

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

2. Of the 4,000 GPD authorized by this permit, the permittee may receive and introduce into the treatment process or solids handling stream up to a daily maximum of 4,000 GPD of septage wastes.

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

4. At no time 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

SPECIAL CONDITIONS

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

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.

5. 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;
   (b) 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.

6. 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.

7. 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.

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

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

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

SPECIAL CONDITIONS

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

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

J. CONDITIONS FOR COMBINED SEWER OVERFLOWS

Pursuant to *Combined Sewer Overflow* Abatement 06-096 CMR 570 (last amended February 8, 1978), the permittee is authorized to discharge from the following locations of combined sewer overflows (CSOs) (storm water and sanitary wastewater) subject to the conditions and requirements herein

1. CSO locations

Outfall No./Name	Outfall Location	Receiving Water and Class
003 Headworks	Treatment Plant	St. Croix River, Class SC
004 Steamboat Street PS	Steamboat Street	St. Croix River, Class SC
005 Union Street PS	Union Street	St. Croix River, Class SC
006 King Street PS	King Street	St. Croix River, *Class C*
007 South Street PS	South Street	St. Croix River, Class SC

2. Prohibited Discharges

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

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

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

3. Narrative Effluent Limitations

   a. The effluent shall not contain a visible oil sheen, settled substances, foam, or floating solids at any time that impair the characteristics and designated uses ascribed to the classification of the receiving waters.

   b. The effluent shall not contain materials in concentrations or combinations that are hazardous or toxic to aquatic life; or which would impair the usage designated by the classification of the receiving waters.

SPECIAL CONDITIONS

J. CONDITIONS FOR COMBINED SEWER OVERFLOWS (cont'd)

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

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

The permittee shall implement CSO control projects in accordance with an approved CSO Master Plan and abatement schedule. The CSO Master Plan entitled, *"Sewer System Master Plan for CSO Abatement City of Calais",* dated August 2006, and revised April 2007, was approved by the Department on June 18, 2007. The permittee shall:

By December 31, 2013, ***(PCS Code 06699)***, the permittee shall submit to the Department for review and approval an update of the CSO Master Plan analyzing the effectiveness of the completed abatement projects to date and an implementation schedule for additional abatement projects.

To modify the dates and or projects specified above (but not dates in the Master Plan), the permittee must file an application with the Department to formally modify this permit. The work items identified in the abatement schedule may be amended from time to time based upon approval by the Department. The permittee must notify the Department in writing prior to any proposed changes to the implementation schedule.

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

The permittee shall implement and follow the Nine Minimum Control documentation as developed by the USEPA. Work preformed on the Nine Minimum Controls during the year shall be included in the annual CSO Progress Report (see below).

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

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

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

SPECIAL CONDITIONS

J. CONDITIONS FOR COMBINED SEWER OVERFLOWS (cont'd)

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

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

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

Any sewer extensions upstream of a CSO must be reviewed and approved by the Department prior to their connection to the sewer system. A Sewer Extension/Addition Reporting Form shall be completed and submitted to the Department along with plans and specifications of the proposed extension/addition.

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

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

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

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

SPECIAL CONDITIONS

J. CONDITIONS FOR COMBINED SEWER OVERFLOWS (cont'd)

9. Signs

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

CITY OF CALAIS
WET WEATHER
SEWAGE DISCHARGE
CSO # AND NAME OF OUTFALL

10. Definitions

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

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

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

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

K. MERCURY

All mercury sampling required to determine compliance with interim limitations established pursuant to *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001) shall be conducted in accordance with USEPA's "clean sampling techniques" found in USEPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analyses shall be conducted in accordance with USEPA Method 1631E, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See **Attachment D,** *Effluent Mercury Test Report*, of this permit for the Department's form for reporting mercury test results.

SPECIAL CONDITIONS

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

By December 31 of each calendar year, the permittee shall provide the Department with a certification describing any of the following that have occurred since the effective date of this permit ***[PCS Code 95799]***. See **Attachment E** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

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

(b) Changes in the operation of the treatment works that may increase the toxicity of the discharge; and

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

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

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

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

The Department reserves the right to reinstate annual (surveillance level) testing or other toxicity testing if new information becomes available that indicates the discharge may cause or have a reasonable potential to cause exceedences of ambient water quality criteria/thresholds.

M. MONITORING AND REPORTING

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

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

SPECIAL CONDITIONS

M. MONITORING AND REPORTING (cont'd)

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

Additional monthly reporting requires submitting (in electronic version preferably) a *DEP-49-CSO Form For Use With Non-Dedicated CSO Primary Clarifiers* (see **Attachment E** of this permit) to:

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

N. ASSET MANAGEMENT PROGRAM (AMP)

The permittee shall prepare 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 shall be kept on-site at the permittee's office and made available to Department staff for review during normal business hours.

On or before December 22, 2011, *(PCS Code 59499)* the permittee shall submit a certification to the Department indicating a CWSRF AMP has been implemented in accordance with the Department guidance document DEPLW1190-2010. See **Attachment F** of this minor revision for a copy of the certification form.

SPECIAL CONDITIONS

O. REPAIR AND REPLACEMENT RESERVE ACCOUNT

Beginning December 22, 2011, and every year thereafter totaling five consecutive years, 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 wastewater operation and maintenance budget.

On or before December 22, 2011, and every year thereafter for five years ***(PCS 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 G** of this minor revision 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, what the funds were used for.

P. WASTEWATER FACILITY ENERGY AUDIT

The permittee shall conduct a comprehensive process energy audit for the wastewater facilities and infrastructure. The audit shall contain the minimum scope of work as presented in a document entitled, *Maine Department of Environmental Protection, Model Energy Audit Request For Proposals,* DEPLW1189-2010.

On or before December 22, 2011, ***(PCS Code 43699)*** the permittee shall submit a final report to the Department that contains the findings of the energy audit.

Q. REOPENING OF PERMIT FOR MODIFICATIONS

Upon evaluation of the tests results or monitoring requirements specified 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 effluent and or ambient water quality monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

R. 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

Printed 7/27/2009

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
Chronic dilution factor | **Date Sample Collected** | Date Sample Analyzed
Human health dilution factor
Criteria type: M(arine) or F(resh)

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

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

FRESH WATER VERSION

Please see the footnotes on the last page.

			Effluent Limits, %			Receiving Water or Ambient	**Effluent Concentration** (ug/L or as noted)		**Possible Exceedence** [7]		
	WHOLE EFFLUENT TOXICITY		Acute	Chronic			WET Result, % Do not enter % sign	Reporting Limit Check	Acute	Chronic	
	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	Reporting Limit	Effluent Limits, ug/L Acute[6]	Chronic[6]	Health[6]			Reporting Limit Check	**Possible Exceedence** [7] Acute	Chronic	Health
	TOTAL RESIDUAL CHLORINE (mg/L) (9)	0.05				NA					
	AMMONIA	NA				(8)					
M	ALUMINUM	NA				(8)					
M	ARSENIC	5				(8)					
M	CADMIUM	1				(8)					
M	CHROMIUM	10				(8)					
M	COPPER	3				(8)					
M	CYANIDE	5				(8)					
M	LEAD	3				(8)					
M	NICKEL	5				(8)					
M	SILVER	1				(8)					
M	ZINC	5				(8)					

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

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

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form
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V	ACROLEIN	NA									
V	ACRYLONITRILE	NA									
V	BENZENE	5									
V	BROMOFORM	5									
V	CARBON TETRACHLORIDE	5									
V	CHLOROBENZENE	6									
V	CHLORODIBROMOMETHANE	3									
V	CHLOROETHANE	5									
V	CHLOROFORM	5									
V	DICHLOROBROMOMETHANE	3									
V	ETHYLBENZENE	10									
V	METHYL BROMIDE (Bromomethane)	5									
V	METHYL CHLORIDE (Chloromethane)	5									
V	METHYLENE CHLORIDE	5									
V	TETRACHLOROETHYLENE (Perchloroethylene or Tetrachloroethene)	5									
V	TOLUENE	5									
V	TRICHLOROETHYLENE (Trichloroethene)	3									
V	VINYL CHLORIDE	5									

Notes:

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

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

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

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

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

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

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

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

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

Comments:

ATTACHMENT B

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WHOLE EFFLUENT TOXICITY REPORT
FRESH WATERS

Facility Name _____ MEPDES Permit # _____

Pipe # _____

Facility Representative _____ Signature _____

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

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

Chlorinated? _____ Dechlorinated? _____

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

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
CSO ACTIVITY AND VOLUMES

MUNICIPALITY OR DISTRICT

MEPDES / NPDES PERMIT NO.

REPORTING YEAR

SIGNED BY: DATE:

YEARLY TOTAL PRECIPITATION INCHES

CSO EVENT NO.	START DATE OF STORM	PRECIP. DATA TOTAL INCHES	PRECIP. DATA MAX. HR INCHES	FLOW DATA (GALLONS PER DAY) OR BLOCK ACTIVITY("1") LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	EVENT OVERFLOW GALLONS	EVENT DURATION HRS
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2															
3															
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	TOTALS														

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

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

ATTACHMENT D

Name of Facility: _____ Federal Permit # ME _____

Pipe # _____

Purpose of this test:

- ☐ Initial limit determination
- ☐ Compliance monitoring for: _____ calendar year _____ quarter
- ☐ Supplemental or extra test

SAMPLE COLLECTION INFORMATION

Sampling Date: ____ ____ _____ (mm dd yy) Sampling time: _____ AM/PM

Sampling Location:

Weather Conditions: _____

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

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

Suspended Solids _____ mg/L Sample type: _____ Grab (recommended) or _____ Composite

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

Date of analysis: _____ **Result:** _____ **ng/L (PPT)**

Please Enter Effluent Limits for your facility

Effluent Limits: **Average =** _____ ng/L **Maximum =** _____ ng/L

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

CERTIFICATION

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

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT E

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP-49-CSO FORM FOR USE WITH NON-DEDICATED CSO PRIMARY CLARIFIERS

Doc Num: DEPLW0464

WET WEATHER BYPASS OPERATIONS REPORT FOR _____ State License No. _____ MEPDES/NPDES Permit No. _____ SIGNED BY:_____ DATE:_____

DEP-49-CSO-Non-Dedicated.xls (rev. 12/12/01)

DATE	SECONDARY BYPASS FLOW DATA						Cl RESIDUALS				BACTERIA								BOD5					TSS					WEATHER				
MONTH_____ YEAR_____	TREATED PRIMARY FLOW BYPASSING SECONDARY	PRIMARY CLARIFIER SURFACE AREA	BYPASS DURATION	PRIMARY CLARIFIER SURFACE LOADING RATE	SECONDARY FLOW TREATED	TRUE CSO BYPASS AROUND PRIMARY	MAX CHLORINE DOSE	CHLORINE RESIDUAL IN PRIMARY EFFLUENT	CHLORINE RESIDUAL IN SECONDARY EFFLUENT	CALCULATED BLENDED EFFLUENT	E.COLI / FECAL IN PRIMARY EFFLUENT	E.COLI / FECAL IN PRIMARY EFFLUENT	E.COLI / FECAL IN PRIMARY EFFLUENT	E.COLI / FECAL IN PRIMARY EFFLUENT	E.COLI / FECAL IN SECONDARY EFFLUENT	CALCULATED BLENDED EFFLUENT	pH	SETTLEABLE SOLIDS IN PRIMARY EFFLUENT	PRIMARY INFLUENT	PRIMARY EFFLUENT	PERCENT REMOVAL	SECONDARY EFFLUENT	CALCULATED BLENDED EFFLUENT	PRIMARY INFLUENT	PRIMARY EFFLUENT	PERCENT REMOVAL	SECONDARY EFFLUENT	CALCULATED BLENDED EFFLUENT	CONDITIONS	TEMPERATURE	PRECIPITATION	STORM DURATION	COMMENTS
	MG	Sf	hrs	Gpd/Sf	MG	MG	mg/L	mg/L	mg/L	mg/L	#/100	#/100	#/100	#/100	#/100			ml/L	mg/L	mg/L	%	mg/L	mg/L	mg/L	mg/L	%	mg/L	mg/L		F	In	Hrs	
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30																																
31																																
Total																																
Avr																																
Max																																

Number of discharge days

Avr		
Max		

ATTACHMENT F

CLEAN WATER STATE REVOLVING FUND
ASSET MANAGEMENT PROGRAM
CERTIFICATION

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

hereby certify that as of _____ a *Clean Water State Revolving*
(date)

Fund (CWSRF) Asset Management Program has been prepared and implemented 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.

Signature _____ Date _____

ATTACHMENT G

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
AND
WASTE DISCHARGE LICENSE

FACT SHEET

DATE: **OCTOBER 3, 2011**

MEPDES PERMIT: **#ME0100129**
WASTE DISCHARGE LICENSE: **#W002751-6D-I-R**

NAME AND ADDRESS OF APPLICANT:

CITY OF CALAIS
CALAIS CITY BUILDING
P.O. BOX 413
CALAIS, MAINE 04619

COUNTY: **WASHINGTON**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

CITY OF CALAIS WASTEWATER TREATMENT FACILITY
ELM STREET
CALAIS, MAINE 04619

RECEIVING WATER / CLASSIFICATION: **SAINT CROIX RIVER / CLASS C and SC SEGMENTS**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

MS. DIANE BARNES
CITY MANAGER
(207) 454-2521
manager@calaismaine.org

1. APPLICATION SUMMARY

a. Application: The City of Calais (City or permittee) has applied to the Department of Environmental Protection (Department) for the renewal of combination Maine Waste Discharge License (WDL) #W002751-5L-G-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100129, which was issued by the Department on September 29, 2006, and expired on September 29, 2011. The September 29, 2006 permit authorized the monthly average discharge of up to 1.5 million gallons per day (MGD) of secondary treated sanitary wastewater, an unspecified quantity of excess combined sanitary and storm water receiving primary treatment only (and seasonal disinfection) from a municipal wastewater treatment facility and an unspecified quantity of untreated combined sanitary and storm water from five (5) combined sewer overflow (CSO) outfalls to the St. Croix River, Class SC, in Calais, Maine. It is noted that the

1. APPLICATION SUMMARY (cont'd)

Department is correcting the description of the receiving water for CSO outfall #006 from tidal Class SC to freshwater Class C.

It is noted that, on January 18, 2011, the Department issued a minor revision to the September 29, 2006 permit to incorporate special conditions (included as Special Conditions O and P of this permit) regarding compliance with the 2010 Clean Water State Revolving Fund (CWSRF) Requirements (Asset Management Principal Forgiveness).

2. PERMIT SUMMARY

a. Terms and conditions: **This permitting action is similar to the September 29, 2006 permitting action in that it is carrying forward the:**

Secondary Treated Wastewater (Outfall #001A)

1. Monthly average discharge flow limit of 1.5 MGD and the daily maximum discharge flow reporting requirement;
2. Monthly average, weekly average and daily maximum mass limits for biochemical oxygen demand (BOD_5) and total suspended solids (TSS);
3. Monthly average and weekly average concentration limits and the daily maximum concentration reporting requirements for BOD_5 and TSS;
4. Requirement for a minimum of 85% removal of BOD_5 and TSS;
5. Daily maximum concentration limit for settleable solids of 0.3 ml/L;
6. Daily maximum concentration limit of 1.0 mg/L for total residual chlorine (TRC);
7. Daily maximum and monthly average concentration limitations of 50 colonies/100 mL and 15 colonies/100 mL, respectively, for fecal coliform bacteria;
8. A pH range limitation of 6.0 – 9.0 standard units;

CSO-Related Bypasses of Secondary Treatment (Outfall #002A) – For the purposes of this permitting action, this term refers to structures and or processes at the wastewater treatment facility that provide equivalent to primary treatment and disinfection of wastewater that bypass the biological treatment portion of the facility in an effort to mitigate the discharge of untreated combined sanitary waste waters and storm water from the five CSOs listed in Special Condition J of the permit.

9. Daily maximum and monthly total reporting requirements for discharge flow;
10. Daily maximum concentration reporting requirements and the monthly average percent removal reporting requirements for BOD_5 , and TSS;
11. Daily maximum concentration limits for fecal coliform bacteria and TRC;
12. Monthly average reporting requirements for overflow occurrences;
13. Daily maximum surface loading rate reporting requirement; and

2. PERMIT SUMMARY (cont'd)

Combined Sewer Overflows

14. Carrying forward authorization to discharge excess combined sanitary and storm water wastewater via five outfall points.

This permitting action is different from the September 29, 2006 permitting action in that it is:

1. Revising the minimum monitoring frequency requirement for settleable solids from once per day to five times per week;
2. Revising previous Special Condition J, *Disposal of Septage Waste in Waste Water 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) (see Special Condition I of this permit);
3. Revising Special Condition L, *06-096 CMR 530(2)(D)(4) Statement for Reduced /Waived Toxics Testing*, to include certification requirements for inflow/infiltration and transported wastes that may increase the toxicity of the discharge;
4. Updating the CSO Master Plan interim compliance dates at Special Condition J based on the current status of CSO abatement projects;
5. Correcting the classification of the St. Croix River at the point of discharge for CSO Outfall #006 from Class SC to Class C (fresh water segment); and
6. Establishing Special Condition O, *Repair and Replacement Reserve Account*, and Special Condition P, *Wastewater Facility Energy Audit*, for compliance with the 2010 Clean Water State Revolving Fund.

b. History: This section provides a summary of significant regulatory actions associated with the City's wastewater treatment facility.

September 30, 1997 – The U.S. Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) permit renewal #ME0100129 for a five-year term.

May 23, 2000 – The Department administratively modified the City's July 13, 1999 WDL by establishing interim monthly average and daily maximum technology-based concentration limitations of 16.7 ng/L and 25.1 ng/L, respectively, for mercury.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permit program in Maine, excluding areas of special interest to Maine Indian Tribes. From that point forward, the program has been referred to as the MEPDES program, and MEPDES permit #ME0100129 has been utilized as the primary reference number for the City Inn wastewater treatment facility.

June 20, 2004 – The City of Calais' consulting engineer submitted a final document entitled, *Waste Water Infrastructure Facilities Evaluation*, to the Department. The report recommends significant structural and operational improvements for the treatment plant and collection system.

2. PERMIT SUMMARY (cont'd)

April 10, 2006 – The Department issued a modification to the July 13, 1999 WDL by incorporating the WET and chemical specific testing requirements of a new Department rule, Chapter 530, *Surface Water Toxics Control Program.*

August 31, 2006 – The City of Calais submitted a document entitled, Sewer System Master Plan For CSO Abatement, City of Calais, August 2006 to the Department for review and approval.

September 2006 – The Board of Environmental Protection approved a Consent Agreement between the State of Maine and the City of Calais for violations of its waste discharge license.

September 29, 2006 – The Department issued combination WDL/MEPDES permit #W002751-5L-G-R/#ME0100129 to City for a five-year term. The September 29, 2006 permit superseded WDL #W002751-5L-E-R issued on July 13, 1999 and all previous WDLs back to the earliest order on file, dated November 20, 1984.

June 30, 2011 – City submitted a timely and complete General Application to the Department for renewal of the September 29, 2006 MEPDES permit. The application was accepted for processing on July 5, 2011, and was assigned WDL #W002751-6D-I-R / MEPDES #ME0100129.

c. Source Description: The City's wastewater treatment facility is located on Elm Street in Calais, Maine and has been treating domestic, light industrial, and commercial wastewater generated within the City of Calais since 1969. See **Attachment A** of this fact sheet for a location map. The facility serves a population of approximately 3,500 people. The City's sewer collection system is approximately 15 miles in length and is approximately 4.1% combined and 95.9% separated with ten (10) pump stations. The City has indicated there are no significant industrial users (SIUs) currently contributing wastewater to the treatment facility for which pretreatment of their waste waters is required.

The City has applied for, and pursuant to *Standards for the Addition of Transported Wastes to Waste Water Treatment Facilities,* 06-096 CMR 555 (last amended February 5, 2009), the permit authorizes the City to receive and introduce into the treatment process or solids handling stream up to a daily maximum of 4,000 GPD of transported wastes (septage wastes). See Special Condition I of the permit. It is noted that the facility also receives and introduces into the sludge handling waste stream up to 35,000 gallons per *year* of sludge generated at the Passamaquoddy Indian's Pleasant Point wastewater treatment located in Perry, Maine. Transported sludge waste is introduced into Calais' solids handling facility where it is co-mingled with sludge generated by the Calais facility. The dewatered sludge is transported to a composting facility permitted by the Department for further processing.

The collection system does not currently have sufficient capacity to transport the volume of inflow and infiltration (I&I) water experienced during periods of rainfall and snow melt. There are currently five (5) permitted combined sewer overflows (CSOs) outfalls

2. PERMIT SUMMARY (cont'd)

associated with the collection system which are listed in Special Condition J, *Combined Sewer Overflows (CSO)*, of the permit.

d. Wastewater Treatment: The City of Calais operates a conventional biological wastewater treatment facility. See **Attachment B** of this fact sheet for a schematic presentation of the treatment plant. Treatment equipment/units include, but are not limited to, a headworks section with influent bar screen, a Parshall flume structure for flow measurement, a grit removal system, primary sedimentation clarifiers and gravity sludge thickener.

Flows from the primary clarifiers pass through a splitter box and weir gate area which is intended to limit the flow volumes that can enter the secondary treatment system. The intent of this structure is to restrict flows into the aeration basins to only 1.5 MGD and to allow occasional peak flows above that amount to be discharged to the river after seasonal disinfection. A separate chlorine contact reactor is used to chlorinate peak flows.

Normal levels of plant flow less than 1.5 MGD leave the primary clarifiers and receive secondary biological treatment using three 75,000-gallon reactors with mechanical surface aerators followed by two final settling clarifiers. Sludge handling equipment includes a 15,000-gallon storage tank and belt filter press. It is noted the Calais facility accepts waste activate sludge from the Passamaquoddy Indian's Pleasant Point waste water treatment facility located in Perry, Maine.

The original 1969 plant design included an inlet overflow structure and gate to restrict peak flows into the plant to just under the facility's hydraulic capacity. This was sealed off during the 1990 upgrade. However, given the history of washouts and flooding of the treatment facility during wet weather events, the City re-opened the overflow as a CSO point.

Secondary treated effluent is seasonally disinfected with sodium hypochlorite and conveyed for discharge to the St. Croix River via a single outfall pipe measuring 18 inches in diameter that is submerged to a depth of 5.6 feet below mean low water level. Occasional peak stormwater flows receiving primary treatment only (CSO-related bypass of secondary treatment) in excess of 1.8 MGD are discharged to the St. Croix River via a single outfall pipe measuring 18 inches in diameter that terminates above the surface of the river.

It is noted Outfall #003 (CSO located just prior to the headworks of treatment plant) discharges to the St. Croix River via two outfalls pipes each measuring 18 inches in diameter that terminates above the surface of the river.

3. CONDITIONS OF PERMITS

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, *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Surface Waters Toxics Control Program*, 06-096 CMR 530 (effective October 9, 2005) 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 estuarine and marine waters, 38 M.R.S.A. § 469(7)(B)(1) classifies the tidal waters of the St. Croix River, which includes the river at the point of discharge for primary and secondary treated wastewater as well as four CSO outfalls, as Class SC waters. *Standards for classification of estuarine and marine waters*, 38 M.R.S.A. § 465-B(3) describes the standards for Class SC waters.

Classification of major river basins, 38 M.R.S.A. § 467(13)(A)(4) classifies the fresh waters of the St. Croix River, which includes the river at the point of discharge for CSO outfall #006, as Class C waters. *Standards for classification of estuarine and marine waters,* 38 M.R.S.A. § 465(4) describes the standards for Class C waters.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2008 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 tidal portion of the St. Croix River at the point of discharge as *"Category 5-B-1: Estuarine and marine waters impaired only by bacteria (TMDL required).* The 2008 Report lists the freshwater portion of the St. Croix at the point of discharge for CSO Outfall #006 as, *"Category 5-B: Rivers and Streams Impaired by Bacteria Contamination (TMDL Required)."* The Report lists sources of the impairment as newly permitted CSO community, overboard discharges, sewerage treatment plants and non-point source discharges. The draft *State of Maine 2010 Integrated Water Quality Monitoring and Assessment Report* lists this waterbody in "*Category 4-A: Estuarine and Marine Waters with Impaired Use, TMDL Completed*." The 2010 Report is pending USEPA approval. The Report states, *"(A TMDL is complete, but there is insufficient new data to determine if attainment has been achieved. Note: Bacteria may impair either recreational uses (swimming) or shellfish consumption uses, or both. Shell fish consumption impairments only apply to waters naturally capable of supporting the shellfish-harvesting use (i.e., waters of high enough salinity for propagation of shellfish.*) On September 28, 2009, the USEPA approved the Department's *Maine Statewide Bacteria TMDL (Total Maximum Daily Loads),* dated August 2009, for fresh, marine and estuarine waters impaired by bacteria. (See: http://www.maine.gov/dep/blwq/docmonitoring/tmdl2.htm) The City has developed and implemented a CSO master plan for the elimination of all CSO points associated with the collection system. The Department acknowledges that elimination of all CSO points is a costly and long-term project. As the City's sewer collection system and the City's treatment

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

facility are upgraded and maintained in according to the CSO Master Plan and Nine Minimum Controls, there should be reductions in the frequency and volume of CSO and primary treatment activities and, over time, improvement in the quality of the wastewater discharged to the receiving waters. According to *Maine Combined Sewer Overflow 2010 Status Report* (Department Document No.: DEPLW0972C-2011), since issuance of the 2006 MEPDES permit, the City experienced six (6) CSO discharge events in calendar year 2006, eight (8) in 2007, ten (10) in 2008, fourteen (14) in 2009, and eight (8) in 2010.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limit of 1.5 MGD for secondary treated wastewater via Outfall #001A, which is representative of the rate that can be consistently treated via the secondary treatment processes of the treatment plant for periods of up to a week or more. This permitting action is carrying forward a peak hourly trigger flow of 1.8 MGD (secondary clarifier capacity being the limiting factor) as the flow rate after which the permittee is authorized to bypass the secondary treatment process. Wastewater bypassing the secondary treatment process will receive primary treatment and seasonal disinfection and be discharged to the St. Croix River via a separate outfall pipe than the secondary treated wastewaters.

The following table summarizes effluent data reported on Discharge Monitoring Reports (DMRs) for the period of March 2006 through March 2011

Flow (DMRs=50) Outfall #001A

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	1.5	0.2 – 1.2	0.6
Daily Maximum	n/a	0.3 – 4.2	1.6

Primary Treated Wastewater via Outfall #002A

The previous permitting action established monthly total and daily maximum discharge flow reporting requirements for primary treated wastewater discharge via Outfall #002A.

The Department has reviewed effluent flow data for primary treated wastewater from March 2006 through March 2011, which indicates the daily maximum flow has ranged from 0.02 MGD to 4.03 MGD with an arithmetic mean of 0.77 MGD (# DMRs = 37).

This permitting action is carrying forward the monthly TOTAL and daily maximum discharge flow reporting requirements for primary treated wastewater discharged via the Outfall #002A consistent with the monitoring and reporting requirements established in MEPDES permits for other facilities authorized to discharge primary treated wastewater. This permitting action is establishing identical discharge flow monitoring requirements for Outfall #002A.

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

b. Dilution Factors: 06-096 CMR 530(4)(A)(2)(a) states that, *"For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model."*

The Department has made a determination that, at the point of discharge, freshwater river flow is dominant and has therefore calculated the dilution factors for this facility in accordance with the freshwater protocol at 06-096 CMR 530(4)(A) as follows:

Mod. Acute: ¼ Q10 [(1)]: = 194 cfs $\Rightarrow \frac{(194 \text{ cfs})(0.6464) + (1.5 \text{ MGD})}{(1.5 \text{ MGD})} = 84:1$

Acute: 1Q10 = 775 cfs[(2)] $\Rightarrow \frac{(775 \text{ cfs})(0.6464) + (1.5 \text{ MGD})}{(1.5 \text{ MGD})} = 335:1$

Chronic: 7Q10 =775 cfs[(2)] $\Rightarrow \frac{(775 \text{ cfs})(0.6464) + (1.5 \text{ MGD})}{(1.5 \text{ MGD})} = 335:1$

Harmonic Mean: = 1,928 cfs $\Rightarrow \frac{(1{,}928 \text{ cfs})(0.6464) + (1.5 \text{ MGD})}{(1.5 \text{ MGD})} = 832:1$

Footnotes

(1) 06-096 CMR 530(4)(B)(1) states,

> *Analyses using numerical acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone and to ensure a zone of passage of at least 3/4 of the cross-sectional area of any stream as required by Chapter 581. Where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design flow, up to and including all of it, as long as the required zone of passage is maintained.*

(2) The 1Q10 and 7Q10 are based on a minimum flow of 750 cfs being maintained at the paper mill in Baileyville, approximately 10 miles upstream, plus the drainage area between the mill and the discharge from the Calais wastewater treatment facility.

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

The City's outfall pipe is not fitted with diffusers or other mechanisms to assist in complete and rapid mixing of the effluent with the receiving waters. Therefore, the Department is utilizing the default stream flow of ¼ of the 1Q10 in acute evaluations pursuant to 06-096 CMR 530.

c. Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS): The previous permitting action established, and this permitting action is carrying forward, monthly average and weekly average technology-based concentration limits of 30 mg/L and 45 mg/L, respectively, for BOD_5 and TSS based on the secondary treatment requirements specified at *Effluent Guidelines and Standards*, 06-096 CMR 525(3)(III) (effective January 12, 2001), and a daily maximum concentration limit of 50 mg/L, which is based on a Department best professional judgment of best practicable treatment for secondary treated wastewater. The technology-based monthly average and weekly average mass limits of 375 lbs./day and 563 lbs./day, respectively, established in the previous permitting action for BOD_5 and TSS are based on the monthly average flow limit of 1.5 MGD and the applicable concentration limits, and are also being carried forward in this permitting action. This permitting action is carrying forward a requirement for a minimum of 85% removal of BOD_5 & TSS pursuant to 06-096 CMR 525(3)(III)(a&b)(3).

The previous permit did not establish numeric daily maximum mass limitations for BOD_5 or TSS to encourage the City from treating as much wastewater as possible through the secondary treatment system during wet weather events. This permitting action is carrying forward daily maximum mass reporting requirements for BOD_5 and TSS consistent with the determination made by the Department in the 2006 permit.

A summary of the effluent BOD_5 and TSS data as reported on the DMRs submitted to the Department for the period March 2006 through November 2011 follows.

BOD_5 Mass

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)	#DMRs
Monthly Average	375	13 – 129	48	50
Weekly Average	563	16 – 206	85	47
Daily Maximum	Report	24 – 352	111	50

BOD_5 Concentration

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)	#DMRs
Monthly Average	30	6 - 14	8	50
Weekly Average	45	7 - 14	10	47
Daily Maximum	50	5 - 20	11	50

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

TSS Mass

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)	#DMRs
Monthly Average	375	7 – 124	43	50
Weekly Average	563	12 – 172	80	46
Daily Maximum	Report	13 – 387	117	50

TSS Concentration

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)	#DMRs
Monthly Average	30	4 - 12	7	50
Weekly Average	45	5 - 16	10	47
Daily Maximum	50	6 - 23	12	50

This permitting action is carrying forward the minimum monitoring frequency requirements for BOD_5 and TSS of twice per week are being carried forward from the September 29, 2006 permit based on a long-standing Department guidance document for facilities with a monthly average flow between 0.5-1.5 MGD.

Primary Treated Wastewater via Outfall #002A

The previous permitting action established, and this permitting action is carrying forward, daily maximum concentration reporting requirements and a monthly average percent removal reporting requirements for BOD_5 and TSS for primary treated wastewater discharged via Outfall #002A.

The Department has summarized effluent BOD_5 and TSS data for primary treated wastewater for the period of October 2006 through November 2010 as follow.

BOD_5 Concentration – Primary Treatment

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)	#DMRs
Daily Maximum	Report	20 – 130	71	35

TSS Concentration – Primary Treatment

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)	#DMRs
Daily Maximum	Report	17 – 172	81	35

d. Settleable Solids: The previous permitting action established, and this permitting action is carrying forward, a daily maximum concentration limit of 0.3 ml/L, which is considered by the Department as best professional judgment of best practicable treatment.

A summary of the effluent settleable solids data as reported on the DMRs submitted to the Department for the period March 2006 through February 2011 (#DMRs = 53) indicates that the facility has been incompliance with the 0.3 ml/L limit during each sampling event.

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

This permitting action is revising the minimum monitoring frequency requirement from once per day to five times per week based on a request by the permittee in consideration of the compliance history with this parameter.

e. Fecal Coliform Bacteria: The previous permitting action established, and this permitting action is carrying forward, a daily maximum limit of 50 colonies/100 mL and a monthly average limit of 15 colonies/100 mL (geometric mean) for fecal coliform bacteria, which are consistent with the National Shellfish Sanitation Program.

The bacteria limits established in this permitting action are seasonal and apply between May 15 and September 30, inclusive, of each year. However, the Department reserves the right to require year-round disinfection to protect the health, safety and welfare of the public.

A review of the monthly Discharge Monitoring Report (DMR) data for the period September 2009 – September 2010 (applicable months only) indicates fecal coliform bacteria have been reported as follows:

Fecal coliform bacteria

Value	Limit (col/100 mL)	Range (col/100 mL)	Mean (col/100 mL)	#DMRs
Monthly Average	15	<1 – 4	8	8
Daily Maximum	50	2 – 7	5	8

This permitting action is carrying forward the minimum monitoring frequency requirement for fecal coliform bacteria of twice per week during the months of May through September, inclusive, based on a long-standing Department guidance document for facilities with a monthly average flow between 0.5-1.5 MGD.

Primary Treated Wastewater via Outfall #002A

The previous permitting action established a seasonal (May 15-Septebmer 30) daily maximum concentration limitation of 200 colonies/100 mL for fecal coliform bacteria for primary treated wastewater discharge via Outfall #002A. This limitation is based on Department best professional judgment of best practicable treatment for primary treated wastewater. During the period of May 2007 through September 2010, the City reported four fecal coliform results for primary treated wastewater discharges. Three of the four results are <1 col/10 mL and the result for July 15, 2009 is 21 col/100 mL.

f. Total Residual Chlorine (TRC): The previous permitting action established, and this permitting action is carrying forward, a technology-based daily maximum concentration limit of 1.0 mg/L for TRC. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department permitting actions impose the more stringent of either a water quality-based or BPT-based limit. With dilution factors as determined

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

above, end-of-pipe (EOP) water quality-based concentration thresholds for TRC may be calculated as follows:

Mod. Acute (A) Criterion	Chronic (C) Criterion	Mod.A & C Dilution Factors	Calculated Acute Threshold	Calculated Chronic Threshold
0.013 mg/L	0.0075 mg/L	84:1 (Mod. A) 335:1 (C)	1.1 mg/L	2.5 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that dechlorinate the discharge in order to meet water quality based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. The City currently does not dechlorinate the effluent prior to discharge.

The technology-based daily maximum concentration limit of 1.0 mg/L is more stringent than either the calculated acute or chronic water quality-based thresholds and is therefore being carried forward in this permitting action. This permitting action is carrying forward the minimum monitoring frequency of once per day based on a long-standing Department guidance document for facilities with a monthly average flow between 0.5-1.5 MGD.

A summary of the effluent TRC data for the period May 2006 through November 2010 (applicable disinfection period only) follows.

Total residual chlorine (DMRs=21)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.1 – 0.82	0.4

It is noted that although fecal coliform bacteria limits are seasonal, daily TRC monitoring is required any time chlorine-based compounds are in use for effluent disinfection. For instances when the chlorine-based compounds have not been utilized for effluent disinfection for an entire reporting period, the permittee shall report "NODI-9" for this parameter on the monthly discharge monitoring report (DMR).

Primary Treated Wastewater via Outfall #002A

The previous permitting action established, and this permitting action is carrying forward, a daily maximum concentration limitation of 1.0 mg/L for TRC for primary treated wastewater discharged via Outfall #002A. This limitation is based on based on Department best professional judgment of best practicable treatment for primary treated wastewater.

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

A summary of the effluent TRC data for primary treated wastewater for the period of October 2006 through November 2010 (applicable disinfection period only) follows.

Total residual chlorine (DMRs=7) – Primary Treatment

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.06 – 0.73	0.20

g. pH: The previous permitting action established, and this permitting action is carrying forward, a pH range limit of 6.0 – 9.0 standard units (SU), based on the secondary treatment requirements prescribed at 06-096 CMR 525(3)(III)(c). This permitting action is carrying forward the minimum monitoring frequency requirement of once per day based on a long-standing Department guidance document for facilities with a monthly average flow between 0.5-1.5 MGD.

A summary of effluent pH data as reported on the DMRs for the period of March 2006 through November 2011 (# DMRs = 50) indicates the facility has ranged from 6.2 SU to 7.9 SU during said reporting period.

h. Whole Effluent Toxicity (WET) & Chemical-Specific Testing – *Conditions of licenses*, 38 M.R.S.A. § 414-A and *Certain deposits and discharges prohibited,* 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. *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective October 9, 2005), and *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005) set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters. WET, priority pollutant and analytical chemistry testing as required by 06-096 CMR 530, is included in this permit in order to fully characterize the effluent. This permit also provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment and receiving water characteristics.

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on invertebrate and vertebrate species. Priority pollutant and analytical chemistry testing is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health AWQC as established in 06-096 CMR 584.

06-096 CMR 530 establishes four categories of testing requirements based predominately on the chronic dilution factor. The categories are as follows:

1) Level I – chronic dilution factor of <20:1.
2) Level II – chronic dilution factor of ≥20:1 but <100:1.
3) Level III – chronic dilution factor ≥100:1 but <500:1 or >500:1 and Q ≥1.0 MGD
4) Level IV – chronic dilution >500:1 and Q ≤1.0 MGD

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

06-096 CMR 530(1)(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the 06-096 CMR 530 criteria, the permittee's facility falls into the Level III frequency category as the facility has a chronic dilution factor of ≥100:1 but <500:1 and a permitted flow of < 1.0 MGD. 06-096 CMR 530(1)(D)(1) specifies that routine screening and surveillance level testing requirements are as follows:

Screening level testing – Beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter.

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

Surveillance level testing – Beginning upon issuance of the permit and lasting through 12 months prior to permit expiration.

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

See **Attachment C** of this Fact Sheet for a summary of the WET test results and **Attachment D** of this Fact Sheet for a summary of the chemical-specific test dates.

06-096 CMR 530(D)(3)(b) states, in part, *Dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E).*

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.*"

06-096 CMR 530(3) states, "*In determining if effluent limits are required, the Department shall consider all information on file and effluent testing conducted during the preceding 60 months. However, testing done in the performance of a Toxicity Reduction Evaluation (TRE) approved by the Department may be excluded from such evaluations."*

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

WET evaluation

On May 25, 2011, the Department conducted a statistical evaluation on the most recent 60 months of WET data which indicates that the discharge does not exceed or have a reasonable potential (RP) to exceed the acute or chronic critical ambient water quality criteria (AWQC) thresholds (1.2% and 0.3% – mathematical inverse of the modified acute dilution factor 84:1 and the chronic dilution factor 335:1).

Given the absence of exceedences or reasonable potential to exceed critical WET thresholds, the permittee meets the surveillance level monitoring frequency waiver criteria found at 06-096 CMR 530(D)(3)(b). Therefore, this permit is establishing a requirement for the permittee to only conduct screening level testing for both the mysid shrimp and sea urchin during the 12-month period prior to the expiration date of this permit and every five years thereafter.

In accordance with 06-096 CMR 530(2)(D)(4) and Special Condition L, *06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing*, of this permit, the permittee must annually submit to the Department a written statement evaluating its current status for each of the conditions listed.

Chemical 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."* The Department has limited information on the background levels of metals in the water column in the St. Croix River in the vicinity of the permittee's outfall. Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

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.

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

06-096 CMR 530(3)(E) states *"... that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedence of water quality criteria, appropriate water quality-based limits must be established in any licensing action."*

On May 25, 2011, the Department conducted a statistical evaluation on the most recent 60 months of chemical specific data which indicates that the discharge does not exceed or have a reasonable potential (RP) to exceed the acute, chronic or human health-based ambient water quality criteria (AWQC) for any pollutants analyzed. This permitting action is not establishing effluent limitations for specific pollutants based on the results of the May 25, 2011 statistical evaluation.

Given the absence of exceedences or reasonable potential to exceed the AWQC for specific pollutants, the permittee meets the surveillance level monitoring frequency waiver criteria found at 06-096 CMR 530(D)(3)(b).

i. *Primary Treated Wastewater*

The permittee maintains a combined sewer system from which wet weather overflow have been documented. To address and control these events, the applicant has completed a Master Plan (Long Term Control Plan) for its sewer systems and has considered various control options. The Department approved the Master Plan on June 18, 2007. The plan addresses all of the relevant considerations contained in the USEPA's CSO Policy, section II.C. See Federal Register, April 19, 1994. One element of the applicant's Master Plan is to maximize existing infrastructure to covey as much excess wet weather flow to the treatment facility as practicable. However, due to the nature and volume of wet weather flows, it is not possible to provide secondary treatment for all flows that can be conveyed to the treatment plant site. Attempting to do so would cause upsets and damage to the secondary treatment process. Expansion of the secondary system would not be practicable since the facilities would be too large to effectively treat normal dry weather flows.

Given these circumstances, and consistent with the USEPA's April 19, 1994 CSO Policy, Section II.C.7, the Department has determined that primary treatment and disinfection (when required) is an appropriate means of best practicable treatment (BPT) for some excess CSO flows and this treatment can be accomplished at the existing treatment facility site. For those flows received at the treatment facility which are greater than that which can be treated to a secondary level of treatment, the Department has made a best professional judgment (BPJ) that primary treatment and disinfection constitute appropriate and best practicable treatment. This permitting action carries forward numeric daily maximum limitations of 200 colonies/100 mL for fecal coliform bacteria and 1.0 mg/L for TRC based on Department BPJ of BPT for primary treated wastewater.

Bacterial contamination is the most direct water quality risk from wet weather discharge events and this permit contains limits for fecal coliform bacteria on a seasonal (May 15 – September 30) basis to protect the health, safety and welfare of the public. Since the

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

primary effluent is somewhat more difficult to disinfect due to a higher organic content and flow variations, the use a daily maximum of 50 colonies/100 mL for fecal coliform bacteria as in the secondary effluent would be inappropriate. The Department has made a best professional judgment determination that the limitation of 200 colonies/100 mL constitutes best practicable treatment for primary treated wastewater that, with the available dilution, is protective of receiving water quality. The total residual chlorine limit of 1.0 mg/L was established using the same considerations as for the secondary effluent.

For Outfall #002A, this permitting action is carrying forward primary treatment monitoring and reporting requirements for Discharge Flow, Surface Loading Rate, Overflow Occurrence, BOD_5, BOD_5 Percent Removal, TSS, TSS Percent Removal, Fecal Coliform Bacteria, and TRC based on a Department BPJ of data necessary to evaluate the performance of the primary treatment process.

7. COMBINED SEWER OVERFLOWS

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

Outfall No./Name	Outfall Location	Receiving Water and Class
003 Headworks	Treatment Plant	St. Croix River, Class SC
004 Steamboat Street PS	Steamboat Street	St. Croix River, Class SC
005 Union Street PS	Union Street	St. Croix River, Class SC
006 King Street PS	King Street	St. Croix River, *Class C*
007 South Street PS	South Street	St. Croix River, Class SC

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

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

The Department acknowledges that the elimination of the five remaining CSOs in the collection system and the secondary bypass (primary treated only) of sanitary wastewater is a

7. COMBINED SEWER OVERFLOWS (cont'd)

costly, long-term project. As the Calais treatment facility and the sewer collection system are upgraded and maintained in according to the CSO Master Plan and Nine Minimum Controls, there should be reductions in the frequency and volume of CSO activities and in the wastewater receiving primary treatment only at the treatment plant, and, over time, improvement in the quality of the wastewater discharged to the receiving waters.

8. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

The Department acknowledges that the elimination of the five (5) CSOs in the collection system is a costly long-term project. As the City's sewer collection system is upgraded and maintained in accordance with the City's CSO Master Plan and Nine Minimum Controls, there should be reductions in the frequency and volume of CSO activities and in the wastewater receiving primary treatment only at the treatment plant over time. The Department expects these reductions to show an improvement in the ambient water quality of the receiving waters impacted by CSO discharges. As permitted, the Department has determined the existing water uses will be maintained and protected and that the discharge will not cause or contribute to the failure of the St. Croix River to meet the applicable standards for Class C or Class SC classifications.

8. PUBLIC COMMENTS

Public notice of this application was made in accordance with *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(14)(C). 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).

9. DEPARTMENT CONTACTS

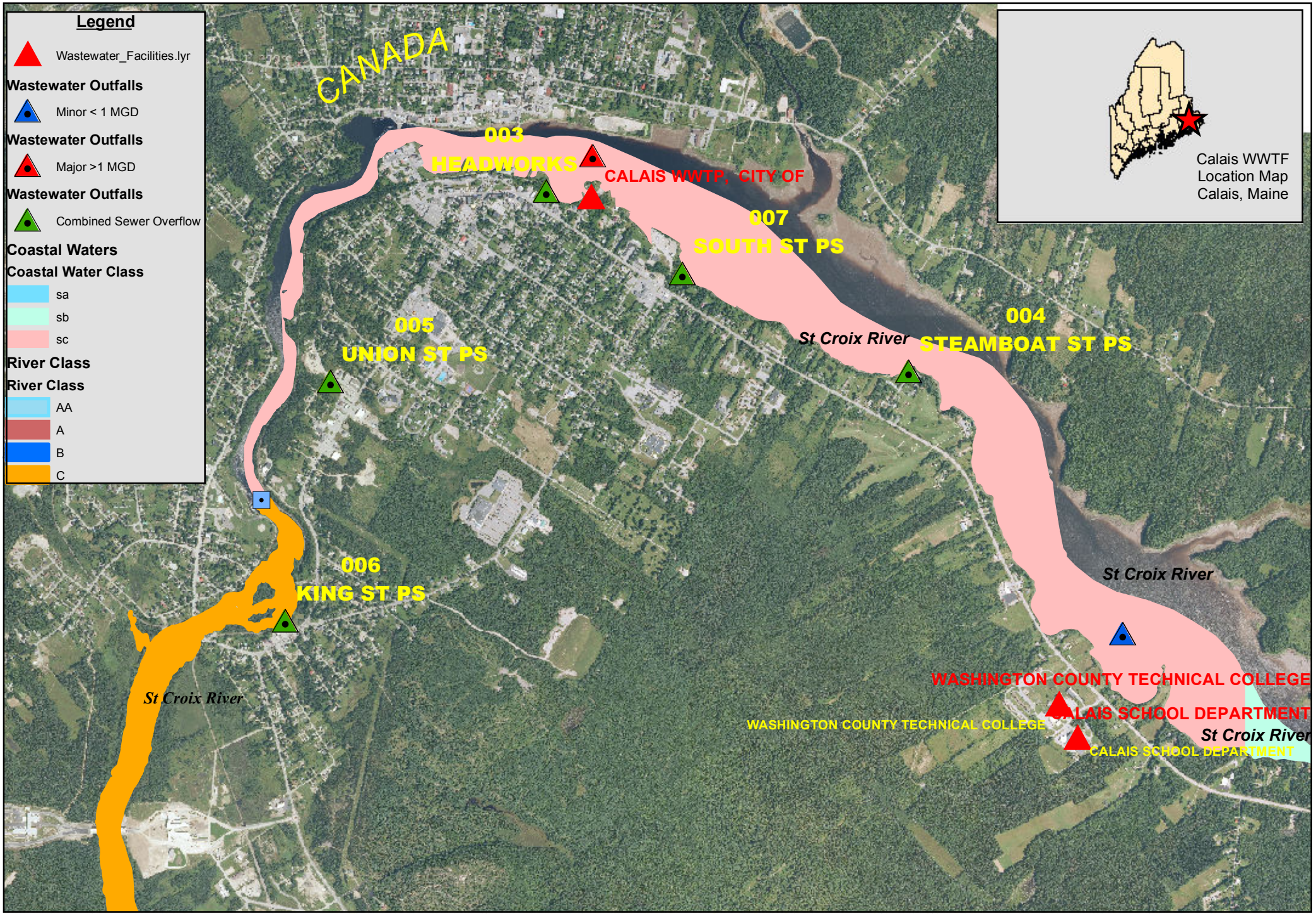
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Bill Hinkel
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017
e-mail: bill.hinkel@maine.gov Telephone: (207) 485-2281

10. RESPONSE TO COMMENTS

During the period of August 16, 2011 through the issuance date of the final permit, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit to be issued to the City of Calais for the proposed discharges. The City's consultant, Olver Associates, Inc. submitted written comments in a letter dated September 16, 2011. The only significant comment was that the sludge received from the Pleasant Point wastewater treatment facility should not be included as "transported waste" under 06-096 CMR 555 and Special Condition I of the permit. The Department concurs that this waste stream is not subject to regulation under 06-096 CMR 555 and Special Condition I of the draft permit has been revised to eliminate numeric limits on the quantity of sludge the Calais facility may receive for sludge handling.

ATTACHMENT A



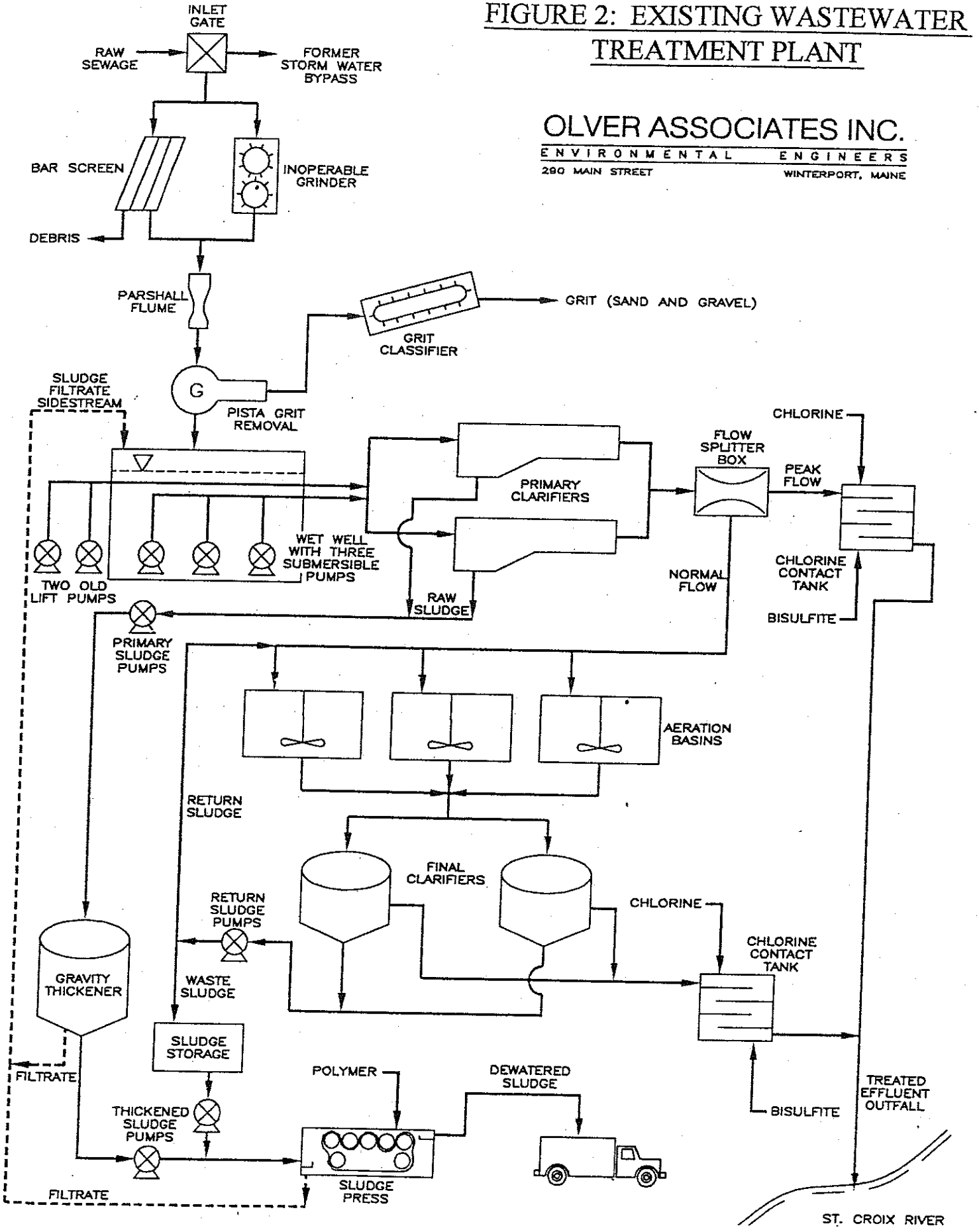
City of Calais Wastewater Treatment Facility - Calais, Maine

ATTACHMENT B

CITY OF CALAIS, MAINE

FIGURE 2: EXISTING WASTEWATER TREATMENT PLANT

OLVER ASSOCIATES INC.
ENVIRONMENTAL ENGINEERS
290 MAIN STREET WINTERPORT, MAINE



ATTACHMENT C

WET TEST REPORT

Data for tests conducted for the period

CALAIS NPDES= ME010012 Effluent Limit: Acute (%) = 0.299 Chronic (%) = 0.299

Species	Test	Percent	Sample date	Critical %	Exception	RP
MYSID SHRIMP	A_NOEL	100	06/26/2006	0.299		

ATTACHMENT D

PRIORITY POLLUTANT DATA SUMMARY

Date Range:

Facility Name: **CALAIS** NPDES: **ME0100129**

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
06/26/2006	NR	NR	14	6	0	0	0	8	0	F	0

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

ATTACHMENT E

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES# _____ Facility Name _____

Since the effective date of your permit have there been:	NO	YES (Describe in Comments)
1. changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may **increase** the toxicity of the discharge?		
2. changes in the operation of the treatment works that may **increase** the toxicity of the discharge?		
3. changes in industrial manufacturing processes contributing wastewater to the treatment works that may **increase** the toxicity of the discharge?		

COMMENTS:

Name(print) _____

Signature _____ Date _____

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

This form may be used to meet the requirements of Chap 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.

CONTENTS

A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

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

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

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

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

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

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

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

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

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

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

5. Bypasses.

(a) Definitions.

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

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

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

(c) Notice.

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

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

(d) Prohibition of bypass.

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

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

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

6. Upsets.

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

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

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

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

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

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

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

(c) Records of monitoring information shall include:

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

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

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

D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

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

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

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

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

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

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

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

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

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

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

(f) Twenty-four hour reporting.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

5. Publicly owned treatment works.

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

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

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

E. OTHER REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

DEP INFORMATION SHEET

Appealing a Commissioner's Licensing Decision

Dated: May 2004 **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. This INFORMATION SHEET, in conjunction with consulting statutory and regulatory provisions referred to herein, can help aggrieved persons with understanding their rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

DEP's *General Laws*, 38 M.R.S.A. § 341-D(4), and its *Rules Concerning the Processing of Applications and Other Administrative Matters* (Chapter 2), 06-096 CMR 2.24 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written notice of appeal within 30 calendar days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days 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 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 and the applicant a copy of the documents. All 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

The materials constituting an appeal must contain the following information at the time submitted:

1. *Aggrieved Status*. Standing to maintain an appeal requires the appellant to show they are particularly injured by 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 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 as part of an appeal only when 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 show 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, Section 24(B)(5).

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license file is public information 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.* An applicant proceeding with a project pending the outcome of an appeal 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 initiation of the appeals procedure, including the name of the DEP project manager assigned to the specific appeal, within 15 days of receiving a timely filing. The notice of appeal, all materials accepted by the Board Chair as additional evidence, and any materials submitted in response to the appeal will be sent to Board members along with a briefing and recommendation from DEP staff. Parties filing appeals and interested persons are notified in advance of the final 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. The Board will notify parties to an appeal and interested persons of its decision.

II. APPEALS TO MAINE SUPERIOR COURT

Maine law allows aggrieved persons to appeal final Commissioner licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2.26; 5 M.R.S.A. § 11001; & MRCivP 80C. Parties to the licensing decision must file a petition for review within 30 days after receipt of notice of the Commissioner's written decision. A petition for review by any other person aggrieved must be filed within 40-days from the date the written decision is rendered. The laws cited in this paragraph and other legal procedures govern the contents and processing of a Superior Court appeal.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, contact the DEP's Director of Procedures and Enforcement at (207) 287-2811.

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.