



STATE OF MAINE  
Department of Environmental Protection

Paul R. LePage  
GOVERNOR

Patricia W. Aho  
COMMISSIONER

Mr. Michael Harris  
Ellsworth Water Pollution Control Facility  
One City Hall Plaza  
Ellsworth, ME. 04605

November 7, 2012

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0102865  
Maine Waste Discharge License (WDL) Application #W009082-6D-A-N  
**Final Permit**

Dear Mr. Harris:

Enclosed please find a copy of your **final** MEPDES permit and 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 permit/license to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State Law and is subject to enforcement action.

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

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

Sincerely,

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

Enc.

cc: Clarissa Trasko, DEP/EMRO  
Sandy Mojica, USEPA  
Max Tritt, NOAA/NMFS

Lori Mitchell, DEP/CMRO  
Sean Mahoney, CLF

Brandy Piers, DEP/CMRO  
Kohl Kanwit/DMR

AUGUSTA

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AUGUSTA, MAINE 04333-0017  
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PRESQUE ISLE

1235 CENTRAL DRIVE, SKYWAY PARK  
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STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
17 STATE HOUSE STATION  
AUGUSTA, ME 04333

**DEPARTMENT ORDER**

**IN THE MATTER OF**

CITY OF ELLSWORTH	)	MAINE POLLUTANT DISCHARGE
ELLSWORTH, HANCOCK COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
ME0102865	)	WASTE DISCHARGE LICENSE
W009082-6D-A-N	)	NEW
APPROVAL	)	

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

**APPLICATION SUMMARY**

The City has submitted a complete application to the Department for a new combination Maine Pollutant Discharge Elimination System (MEPDES) permit/ Maine Waste Discharge License (WDL) (permit hereinafter). The City is seeking authorization to discharge up to a monthly average flow of 1.65 MGD of secondary treated waste water to Union River, Class SB, in Ellsworth, Maine, from a new waste water treatment facility that is currently under construction. The City anticipates the new facility to be substantially complete and commence discharging by the end of the calendar year.

The City of Ellsworth's current main waste water treatment facility is regulated via combination MEPDES #ME0100889/WDL W002529 that was issued by the Department on October 29, 2009, for a five-year term. Upon completion of construction of the new waste water treatment facility, the current main waste water treatment facility will be decommissioned and the MEPDES permit/WDL will be terminated.

## CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated September 5, 2012, 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., Section 464(4)(F), will be met, in that:
  - a. Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
  - b. Where high quality waters of the State constitute an outstanding natural resource, that water quality will be maintained and protected;
  - c. The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
  - d. Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and
  - e. The discharge will be subject to effluent limitations that require application of best practicable treatment.
4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

**ACTION**

THEREFORE, the Department APPROVES the above noted application of the CITY OF ELLSWORTH to discharge up to a monthly average flow of 1.65 million gallons per day (MGD) of secondary treated wastewaters to the Union River, Class SB, 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 becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of the this permit, the terms and conditions of the this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [Maine Administrative Procedure Act, 5 M.R.S.A. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (effective April 1, 2003)]

PLEASE NOTE ATTACHED FACT SHEET FOR GUIDANCE ON APPEAL PROCEDURES

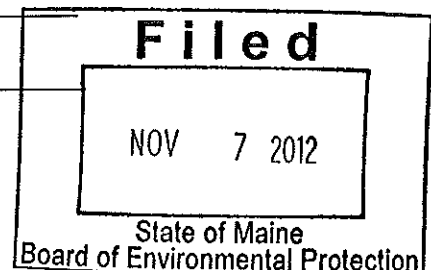
DONE AND DATED AT AUGUSTA, MAINE, THIS 7<sup>th</sup> DAY OF NOVEMBER, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Kuhns  
For Patricia W. Aho, Commissioner

Date of initial receipt of application: June 8, 2012

Date of application acceptance: June 12, 2012



Date filed with Board of Environmental Protection: \_\_\_\_\_

This order prepared by Gregg Wood, BUREAU OF LAND AND WATER QUALITY

**SPECIAL CONDITIONS****A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. Beginning the effective date of the permit, the permittee is authorized to discharge secondary treated waste waters from **Outfall #001**, to the Union River. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow, MGD <i>[50050]</i>	1.65 MGD <i>[03]</i>	---	Report MGD <i>[03]</i>	---	---	---	Continuous <i>[99/99]</i>	Recorder <i>[RC]</i>
Biochemical oxygen demand (BOD) <sub>5</sub> <i>[00310]</i>	413 #/Day <i>[26]</i>	619 #/Day <i>[26]</i>	688 #/Day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	3/Week <i>[03/07]</i>	Composite <i>[24]</i>
BOD <sub>5</sub> % Removal <sup>(1)</sup> <i>[81010]</i>	---	---	---	85 % <i>[23]</i>	---	---	1/Month <i>[01/30]</i>	Calculate <i>[CA]</i>
Total suspended solids (TSS) <i>[00530]</i>	413 #/Day <i>[26]</i>	619 #/Day <i>[26]</i>	688 #/Day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	3/Week <i>[03/07]</i>	Composite <i>[24]</i>
TSS % Removal <sup>(1)</sup> <i>[81011]</i>	---	---	---	85 % <i>[23]</i>	---	---	1/Month <i>[01/30]</i>	Calculate <i>[CA]</i>
Settleable Solids <i>[00545]</i>	---	---	---	---	---	0.3 ml/L <i>[25]</i>	1/Day <i>[01/01]</i>	Grab <i>[GR]</i>
Fecal Coliform <i>[319616]</i> (Year-round)	---	---	---	15/100 ml <sup>(2)</sup> <i>[13]</i>	---	50/100 ml <i>[13]</i>	3/Week <i>[03/07]</i>	Grab <i>[GR]</i>
Total Residual Chlorine <sup>(3)</sup> <i>[50060]</i>	---	---	---	0.1 mg/L <i>[19]</i>	---	0.3 mg/L <i>[19]</i>	1/Day <i>[01/01]</i>	Grab <i>[GR]</i>
Mercury (Total) <sup>(4)</sup>	---	---	---	32.9 ng/L <i>[3M]</i>	---	49.3 ng/L <i>[3M]</i>	1/Year <i>[01/YR]</i>	Grab <i>[GR]</i>
pH (Standard Units) <i>[00400]</i>	---	---	---	---	---	6.0-9.0 <i>[12]</i>	1/Day <i>[01/01]</i>	Grab <i>[GR]</i>

The italicized numeric values in brackets in the tables above and the tables that follow are not limitations but codes used by Department personnel to code monthly Discharge Monitoring Reports (DMR's).

**SPECIAL CONDITIONS****A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning 60 days after the commencement of the discharge and lasting through four consecutive calendar quarters, and every five years thereafter.

***SCREENING LEVEL TESTING***

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity <sup>(5)</sup> <u>Acute – NOEL</u> <i>Mysidopsis bahia</i> [TDM3E] (Mysid Shrimp)	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
<u>Chronic – NOEL</u> <i>Arbacia punctulata</i> [TBH3A] (Sea urchin)	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
Priority pollutant <sup>(6,8)</sup> [50008]	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/Grab [24]
Analytical chemistry <sup>(7,8)</sup> [51477]	---	---	---	Report ug/L [28]	1/Quarter [01/Q0]	Composite/Grab [24]

***SURVEILLANCE LEVEL TESTING*** – Pursuant To Special Condition O, *Reopening of Permit For Modifications*, of this permit, surveillance level testing and or water quality based effluent limits (if applicable) will be established after the permittee has completed the screening level testing requirements of this permit and the Department has conducted a statistical evaluation in accordance with the statistical approach outlined in the 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.).

## SPECIAL CONDITIONS

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

#### Footnotes:

**Sampling Location:** All effluent monitoring shall be conducted at a location following the last treatment unit in the treatment process as to be representative of end-of-pipe effluent characteristics. Any change in sampling location must be approved by the Department in writing.

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

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.

1. **Percent Removal** – The treatment facility shall maintain a minimum of 85 percent removal of both biochemical oxygen demand and total suspended solids for all flows receiving secondary treatment. The percent removal shall be calculated based on influent and effluent concentration values. 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" for this parameter on the monthly Discharge Monitoring Report (DMR).

## SPECIAL CONDITIONS

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

#### Footnotes:

2. **Fecal coliform bacteria** – The monthly average limitation is a geometric mean limitation and values shall be calculated and reported as such.
3. **Total Residual Chlorine** – Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine based compounds are being used to disinfect the discharge. For instances when a facility has not disinfected with chlorine based compounds for an entire reporting period, the facility shall report “NODI-9” for this parameter on the monthly DMR. The permittee shall utilize approved test methods that are capable of bracketing the limitations in this permit.
4. All mercury sampling (1/Year) required by this permit or required to determine compliance with interim limitations established pursuant to Department rule Chapter 519, shall be conducted in accordance with EPA’s “clean sampling techniques” found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis shall be conducted in accordance with EPA Method 1631E, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See **Attachment B, Effluent Mercury Test Report**, of this permit for the Department’s form for reporting mercury test results.

The limitation in the monthly average column in the table in Special Condition A (1) of this permit is an arithmetic mean of all the mercury tests ever conducted for the facility utilizing sampling Method 1669 and analysis Method 1631E.

5. **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 water quality thresholds of 2.5% and 2.0%, 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. **Screening level testing** - Beginning 60 days after the commencement of the discharge and lasting through four consecutive calendar quarters and every five years thereafter, the permittee shall conduct screening level WET testing at a minimum frequency of twice per year (2/Year). Acute tests shall be conducted on the mysid shrimp (Mysidopsis bahia) and chronic tests shall be conducted on the sea urchin (Arbacia punctulata).



## SPECIAL CONDITIONS

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

#### Footnotes:

- b. **Surveillance level testing** - Surveillance level testing will be established after the permittee has completed the screening level testing requirements of this permit and the Department has conducted a statistical evaluation in accordance with the statistical approach outlined in the 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.).

WET test results must be submitted to the Department no 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 after 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 specified above.

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

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

See **Attachment C** of this permit for the Department's WET report form. 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.

6. **Priority pollutant testing** – Priority pollutants are those parameters listed in **Attachment A** of this permit.
- a. **Screening level testing** - Beginning 60 days after the commencement of the discharge and lasting through four consecutive calendar quarters and every five years thereafter, the permittee shall conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year). It is noted Chapter 530 does not require routine surveillance level priority pollutant testing during the term of this permit.

**SPECIAL CONDITIONS**

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

**Footnotes:**

7. **Analytical chemistry** – Refers to a suite of chemical tests in **Attachment A** of the permit.
  - a. **Screening level testing** – Beginning 60 days after the commencement of the discharge and lasting through four consecutive calendar quarters and every five years thereafter, the permittee shall conduct screening level analytical chemistry testing at a minimum frequency of once per calendar quarter (1/Quarter) for four consecutive calendar quarters.
  - b. **Surveillance level testing** - Surveillance level testing will be established after the permittee has completed the screening level testing requirements of this permit and the Department has conducted a statistical evaluation in accordance with the statistical approach outlined in the 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.).
8. **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. Priority pollutant and analytical chemistry testing shall be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve minimum reporting levels of detection as specified by the Department. See **Attachment A** of this permit for a list of the Department's reporting levels (RLs) of detection.

Priority pollutant and analytical chemistry test results must be submitted to the Department no later than the next DMR required by the permit provided, however, that the permittee may review the toxicity reports for up to 10 business days after receiving the test results from the laboratory before submitting them. The permittee shall evaluate test results being submitted and identify to the Department, possible exceedences of the acute, chronic or human health AWQC as established in Department rule Chapter 584. For the purposes of Discharge Monitoring Report (DMR) reporting, enter a "1" for yes, testing done this monitoring period or "NODI-9" monitoring not required this period.

## **SPECIAL CONDITIONS**

### **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 of 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 of the classification of the receiving waters.
3. The discharge shall not impart color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsafe for the designated uses and characteristics ascribed to their classification.
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. 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 June 12, 2012; 2) the terms and conditions of this permit, and 3) only from Outfall #001A 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), Bypasses, of this permit.

### **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. The licensee shall conduct an Industrial Waste Survey (IWS) at any time a new industrial user proposes to discharge within its jurisdiction, an existing user proposes to make a significant change in its discharge, or, at an alternative minimum, once every permit cycle. The IWS shall identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of the federal Clean Water Act, 40 CFR Part 403 (general pretreatment regulations) or *Pretreatment Program*, 06-096 CMR 528 (last amended March 17, 2008).

## **SPECIAL CONDITIONS**

### **E. TREATMENT PLANT OPERATOR**

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

### **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 waste water 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.
3. For the purposes of this section, adequate notice shall include information on:
  - a. The quality and quantity of waste water introduced to the wastewater collection and treatment system; and
  - b. Any anticipated impact of the change in the quality or quantity of the wastewater to be discharged from the treatment system.

### **G. WET WEATHER FLOW MANAGEMENT PLAN**

**On or before December 31, 2012, (PCS Code 91499)** the permittee shall submit to the Department for review and comment, a written Wet Weather Flow Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall.

The plan shall conform to Department guidelines for such plans and 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**

**On or before December 31, 2012, (PCS Code 91499)** the permittee shall submit to the Department for review and comment, a written comprehensive Operation & Maintenance (O&M) Plan. The plan shall provide a systematic approach by which the permittee shall at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.

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

During the effective period of this permit, the permittee is authorized to receive and introduce into the treatment process or solids handling stream **a daily maximum of 16,500 gallons per day** and not to exceed a **monthly total of 96,000 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. The character and handling of all transported wastes received must be consistent with the information and management plans provided in application materials submitted to the Department.
3. At no time shall the addition of transported wastes cause or contribute to effluent quality violations. Transported wastes may not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility.

**SPECIAL CONDITIONS**

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

Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. Odors and traffic from the handling of transported wastes may not result in adverse impacts to the surrounding community. If any adverse effects exist, the receipt or introduction of transported wastes into the treatment process or solids handling stream shall be suspended until there is no further risk of adverse effects.

4. The permittee shall maintain records for each load of transported wastes in a daily log which shall include at a minimum the following.

- (a) The date;
- (b) The volume of transported wastes received;
- (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.

5. The addition of transported wastes into the treatment process or solids handling stream shall not cause the treatment facility's design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of transported wastes into the treatment process or solids handling stream shall be reduced or terminated in order to eliminate the overload condition.
6. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added shall not be recorded as transported wastes but should be reported in the treatment facility's influent flow.
7. During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current Wet Weather Flow Management Plan approved by the Department that provides for full treatment of transported wastes without adverse impacts.
8. In consultation with the Department, chemical analysis is required prior to receiving transported wastes from new sources that are not of the same nature as wastes previously received. The analysis must be specific to the type of source and designed to identify concentrations of pollutants that may pass through, upset or otherwise interfere with the facility's operation.

**SPECIAL CONDITIONS**

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

9. Access to transported waste receiving facilities may be permitted only during the times specified in the application materials and under the control and supervision of the person responsible for the wastewater treatment facility or his/her designated representative.
10. The authorization 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 Chapter 555 of the Department's rules and the terms and conditions of this permit.

**K. ASSET MANAGEMENT PROGRAM (AMP)**

The permittee shall maintain an AMP in accordance with Department guidance entitled, *Maine Department of Environmental Protection, Clean Water State Revolving Fund (CWSRF) Guidance for Minimum Requirements for an Asset Management Program and Reserve Account In Order to Qualify for CWSRF Principal Forgiveness*, DEPLW1190-2010. The AMP shall be reviewed and updated as necessary at least annually. The AMP 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 31, 2012, (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 D** of this permit for a copy of the certification form.

**L. WASTE WATER FACILITY ENERGY AUDIT**

The permittee shall conduct a comprehensive process energy audit for the waste water 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 31, 2012, (PCS Code 43699)** the permittee shall submit a final report to the Department that contains the findings of the energy audit.

## **SPECIAL CONDITIONS**

### **M. REPAIR AND REPLACEMENT RESERVE ACCOUNT**

**Beginning December 31, 2012**, 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 waste water operation and maintenance budget.

**On or before December 31, 2012**, 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 E** of this permit for a copy of the certification form. The permittee shall attach copies of yearly audit reports to the annual certification forms showing funds in the reserve account for each year for the five years and, if funds were expended, what the funds were used for.

### **N. 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 shall be postmarked by the thirteenth (13<sup>th</sup>) day of the month or hand-delivered to a Department Regional Office such that the DMRs are received by the Department by the fifteenth (15<sup>th</sup>) day of the month following the completed reporting period. A signed copy of the DMR and all other reports required herein shall be submitted, unless otherwise specified, to the Department's facility inspector at:

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

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



## **SPECIAL CONDITIONS**

### **O. REOPENING OF PERMIT FOR MODIFICATIONS**

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

### **P. SEVERABILITY**

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

# **ATTACHMENT A**

## Maine Department of Environmental Protection

## WET and Chemical Specific Data Report Form

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

Facility Name \_\_\_\_\_ MEPDES # \_\_\_\_\_ Facility Representative Signature \_\_\_\_\_  
 Pipe # \_\_\_\_\_ To the best of my knowledge this information is true, accurate and complete.

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

Flow for Day (MGD)<sup>(1)</sup> \_\_\_\_\_ Flow Avg. for Month (MGD)<sup>(2)</sup> \_\_\_\_\_  
 Date Sample Collected \_\_\_\_\_ Date Sample Analyzed \_\_\_\_\_

Laboratory \_\_\_\_\_ Telephone \_\_\_\_\_  
 Address \_\_\_\_\_  
 Lab Contact \_\_\_\_\_ Lab ID # \_\_\_\_\_

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

**MARINE AND ESTUARY VERSION**

Please see the footnotes on the last page.

WHOLE EFFLUENT TOXICITY					Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)	Possible Exceedence <sup>(7)</sup>			
		Effluent Limits, %				WET Result, % Do not enter % sign	Reporting Limit Check	Possible Exceedence <sup>(7)</sup>		
		Acute	Chronic					Acute	Chronic	
	Mysid Shrimp									
	Sea Urchin									
WET CHEMISTRY										
	pH (S.U.) <sup>(9)</sup>				(8)					
	Total Organic Carbon (mg/L)				NA					
	Total Solids (mg/L)				NA					
	Total Suspended Solids (mg/L)				NA					
	Salinity (ppt.)									
ANALYTICAL CHEMISTRY <sup>(3)</sup>										
	Also do these tests on the effluent with WET. Testing on the receiving water is optional	Reporting Limit	Effluent Limits, ug/L				Reporting Limit Check	Possible Exceedence <sup>(7)</sup>		
			Acute <sup>(6)</sup>	Chronic <sup>(6)</sup>	Health <sup>(6)</sup>			Acute	Chronic	Health
	TOTAL RESIDUAL CHLORINE (mg/L) <sup>(9)</sup>	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)				

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

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

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

[illegible]

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

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

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

**Notes:**

- (1) Flow average for day pertains to WET/PP composite sample day.
- (2) Flow average for month is for month in which WET/PP sample was taken.
- (3) Analytical chemistry parameters must be done as part of the WET test chemistry.
- (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

**Effluent Mercury Test Report**

Name of Facility: \_\_\_\_\_

Federal Permit # ME \_\_\_\_\_

Pipe # \_\_\_\_\_

Purpose of this test:

☐

Initial limit determination

☐

Compliance monitoring for: year \_\_\_\_\_ calendar quarter \_\_\_\_\_

☐

Supplemental or extra test

**SAMPLE COLLECTION INFORMATION**

Sampling Date:

mm	dd	yy
----	----	----

Sampling time: \_\_\_\_\_ AM/PM

Sampling Location:

Weather Conditions: \_\_\_\_\_

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

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

Suspended Solids \_\_\_\_\_ mg/L

Sample type:

\_\_\_\_\_ Grab (recommended) or  
\_\_\_\_\_ Composite

**ANALYTICAL RESULT FOR EFFLUENT MERCURY**

Name of Laboratory: \_\_\_\_\_

Date of analysis: \_\_\_\_\_

Result: \_\_\_\_\_ ng/L (PPT)

Please Enter Effluent Limits for your facility

Effluent Limits:

Average = \_\_\_\_\_ ng/L

Maximum = \_\_\_\_\_ ng/L

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

**CERTIFICATION**

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

By: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR



## **ATTACHMENT C**

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

Facility Name \_\_\_\_\_ MEPDES Permit # \_\_\_\_\_  
Pipe # \_\_\_\_\_

Facility Representative \_\_\_\_\_ Signature \_\_\_\_\_

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

Facility Telephone # \_\_\_\_\_ Date Collected \_\_\_\_\_ Date Tested \_\_\_\_\_  
mm/dd/yy mm/dd/yy

Chlorinated? \_\_\_\_\_ Dechlorinated? \_\_\_\_\_

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

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

place \* next to values statistically different from controls

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

Comments \_\_\_\_\_

**Laboratory conducting test**

Company Name \_\_\_\_\_ Company Rep. Name (Printed) \_\_\_\_\_

Mailing Address \_\_\_\_\_ Company Rep. Signature \_\_\_\_\_

City, State, ZIP \_\_\_\_\_ Company Telephone # \_\_\_\_\_

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

## **ATTACHMENT D**

**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 E**

**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  
MAINE WASTE DISCHARGE LICENSE**

**FACT SHEET**

Date: September 5, 2012

PERMIT NUMBER: ME0102865  
WASTE DISCHARGE LICENSE: W009082-6D-A-N

NAME AND ADDRESS OF APPLICANT:

**CITY OF ELLSWORTH  
1 City Hall Plaza  
Ellsworth, Maine 04605-1942**

COUNTY: Waldo

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):

**Bayside Road  
Ellsworth, Maine 04605**

RECEIVING WATER/CLASSIFICATION: Union River/Class SB

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

**Ms. Michelle Beal, City Manager  
Tel: (207) 667-2563  
e-mail: [mbeal@cityofellsworthme.org](mailto:mbeal@cityofellsworthme.org)**

**Mr. Michael Harris, Superintendent  
Tel: (207) 664-4404  
e-mail: [mharris@cityofellsworthme.org](mailto:mharris@cityofellsworthme.org)**

**1. APPLICATION SUMMARY**

- a. Application - The City of Ellsworth (City/permittee hereinafter) has submitted a complete application to the Department for a new combination Maine Pollutant Discharge Elimination System (MEPDES) permit/ Maine Waste Discharge License (WDL) (permit hereinafter). The City is seeking authorization to discharge up to a monthly average flow of 1.65 MGD of secondary treated waste water to Union River, Class SB, in Ellsworth, Maine, from a new waste water treatment facility that is currently under construction. See **Attachment A** of this Fact Sheet for a location map. The City anticipates the new facility to be substantially complete and commence discharging by the end of the calendar year.

## 1. APPLICATION SUMMARY (cont'd)

It is noted the discharge from the new waste water treatment facility will be located approximately 1.1 miles south (down the estuary) from the discharge from the current waste water treatment facility.

The City of Ellsworth's current main waste water treatment facility is regulated via combination MEPDES #ME0100889/WDL W002529 that was issued by the Department on October 29, 2009, for a five-year term. Upon completion of construction of the new waste water treatment facility, the current main waste water treatment facility will be decommissioned and the MEPDES permit/WDL will be terminated.

- b. Source Description: The waste water treatment facility will receive sanitary waste waters from a population of approximately 1,300 residential and commercial users within the City of Ellsworth. The collection system is a separated system approximately 14 miles in length with five (5) pump stations. All five the pump stations have on-site back-up power. The collection system also has a siphon that conveys a portion of the waste waters under the Union River to the Water Street pump station. The Main Pumping Station will serve as the sole means of transporting wastewater to the new Bayside Road Waste Water Treatment Facility (WWTF). The Main Pumping Station is located at the old WWTF site on Water Street. The station was constructed in this location to take advantage of the existing collection system infrastructure.

The Main Pump Station will utilizes a control strategy to allow matching of influent flows so that the wet well contents do not settle while also maintaining a constant flow to the new WWTF that does not alternately stop and start excessively. Maintaining a constant flow from the Main Pump Station will help to reduce the potential for process upsets at the treatment plant. There are no significant industrial sources contributing waste waters to the treatment facility. There are no combined sewer overflows in the collection system.

The facility is seeking authorization to receive up to 16,500 gallons per day (gpd) of transported wastes from local septage haulers. The City has submitted a Transported Waste Management Plan as part of their June 8, 2012, application, which has been reviewed and approved by the Department. Said plan is consistent with the requirements of Department rule Chapter 555, *Application For Addition of Transported Wastes in Wastewater Treatment Facilities*. This permitting action is authorizing for the facility to receive and introduce into the treatment process septage from a daily maximum of up to 16,500 gallons per day (gpd) and not to exceed a monthly total of up to 96,000 gpd. Also see Special Condition J, *Addition of Transported Wastes in Wastewater Treatment Facilities* of this permit.



## 1. APPLICATION SUMMARY (cont'd)

- c. Wastewater Treatment: All waste waters conveyed to the treatment facility will receive secondary treatment as follows;

### **Preliminary Treatment**

The discharge flow from the Main Pumping Station is then transported to the Headworks Building at the Bayside Road WWTF for "Preliminary Treatment". Raw wastewater is pumped from the Main Pump Station to the plant site and screened with a mechanically actuated perforated plate center flow band screen. The screen includes 3 mm perforated openings to capture foreign material in the influent wastewater. The screenings are then washed, dewatered and compacted with a wash press and discharged to a waste container for disposal off site. The preliminary treatment system in the Headworks Building also includes grit removal. Materials in wastewater which are characterized as grit include particles of sand, gravel, mineral matter, coffee grounds, fruit seeds, etc. In the Headworks, grit is removed in an aerated settling tank. The settled grit is transported to a lower sump area of the tank via a cross collector screw auger. The aerated grit tank contains a submersible grit pump with a fluidized sump for transport of grit slurry to a cyclone/classifier for cleaning, washing, and discharge into a container for off-site disposal.

### **Biological Treatment**

Following Preliminary Treatment in the Headworks Building the wastewater flows to the Aeration Tanks for biological treatment. Plug flow conventional activated sludge with internal recirculation and pre-anoxic selectors for Nitrogen management are the heart of the treatment process. Aeration is provided via turbo style centrifugal blowers and fine bubble membrane disc diffusers. Following the Aeration Tanks the wastewater flows to the circular secondary clarifiers. The circular clarifiers provide settling of solid matter in the wastewater. The mechanical mechanisms include spiral rakes for capture of the settled solids. A five pump RAS/WAS manifold for sludge return and waste sludge pumping is also included at the facility. The facility also includes two dedicated sludge holding tanks with floating mixers and diffused coarse bubble aeration.

### **Disinfection**

After the secondary clarifiers the forward flow then goes to the chlorine contact tank (CCT) for disinfection. At the beginning of the tank, clarified effluent is disinfected via a chemical chlorine solution (Sodium Hypochlorite). At the end of the tank, a chemical solution of Sodium Bisulfite is introduced to remove any residual chlorine in the wastewater prior to discharge to the Union River.

## 1. APPLICATION SUMMARY (cont'd)

### Side Stream Systems

The WWTF includes a septage holding and metering system. Septage is metered into the main flow channel upstream of the influent screen in the Headworks Building via diaphragm pumps. A rotary lobe pump is used to pull WAS from the storage tanks and feed the centrifuge dewatering process. Bulk storage of hypochlorite and bisulfite chemicals are provided for the disinfection process. Odor control is provided via a three stage scrubber (for dewatering) and activated carbon (for the headworks and septage areas). See **Attachment B** of this Fact Sheet for a schematic of the new waste water treatment facility.

Final effluent is conveyed for discharge to the Union River via a 24-inch diameter high density polyethylene (HPDE) outfall pipe (Outfall #001). The pipe is located on the eastern edge of the 100-foot wide federal channel limits to a depth of approximately 8.4 feet below mean low water. The end of the outfall pipe is fitted with a diffuser consisting of a 100-foot long 18 inch diameter HPDE manifold with six, 6-inch diameter ports spaced at 20-feet on center intended to enhance mixing of the effluent with the receiving waters.

## 2. CONDITIONS OF PERMITS

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

## 3. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S.A., §469(2) classifies the Union River at the point of discharge as a Class SB waterway. Maine law, 38 M.R.S.A., §465-B(2) contains the classification standards for Class SB waterways as follows

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

### 3. RECEIVING WATER QUALITY STANDARDS (cont'd)

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

*Discharges to Class SB waters may not cause adverse impact to estuarine and marine life in that the receiving waters must be of sufficient quality to support all estuarine and marine species indigenous to the receiving water without detrimental changes in the resident biological community. There may be no new discharge to Class SB waters that would cause closure of open shellfish areas by the Department of Marine Resources. For the purpose of allowing the discharge of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety, the department may find that the discharged effluent will not cause adverse impact to estuarine and marine life as long as the materials and methods used provide protection for nontarget species. When the department issues a license for the discharge of aquatic pesticides authorized under this paragraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website.*

### 4. RECEIVING WATER QUALITY CONDITIONS

Table Category 2 entitled, *Estuarine and Marine Waters Attaining Some Designated Uses - Insufficient Information for Other Uses*, in a document entitled, State of Maine Department of Environmental Protection, 2010 Integrated Water Quality Monitoring and Assessment Report, published by the Department lists the Union River, Patten Bay, Heath Brook, Surry, Ellsworth and Trenton area (DMR Area #40) Class SB, with insufficient data to determine attainment. See **Attachment C** of this Fact Sheet for a map of Area #40. Attainment in this context is in regard to the designated use of harvesting of shellfish. Currently, DMR shellfish harvesting Area #40 is closed to the harvesting of shellfish due to insufficient (limited) ambient water quality data to meet the standards in the National Shellfish Sanitation Program. Therefore, Area #40 remains closed. Compliance with the fecal coliform bacteria limits in this permitting action ensures that the Ellsworth waste water treatment facility will not cause or contribute to the shellfish harvesting closure.

#### 4. RECEIVING WATER QUALITY CONDITIONS (cont'd)

The Maine Department of Marine Resources (DMR) assesses information on shellfish growing areas to ensure that shellfish harvested are safe for consumption. The DMR has authority to close shellfish harvesting areas wherever there is a pollution source, a potential pollution threat, or poor water quality. The DMR traditionally closes shellfish harvesting areas if there are known sources of discharges with unacceptable bacteria levels (instream thresholds established in the National Shellfish Sanitation Program) or maintains shellfish harvesting closure areas due to lack of updated information regarding ambient water quality conditions. In addition, the DMR prohibits shellfish harvesting in the immediate vicinity of all wastewater treatment outfall pipes as a precautionary measure in the event of a failure in the treatment plant's disinfection system. Thus, DMR shellfish harvesting Area #40 is closed to the harvesting of shellfish due to insufficient or limited ambient water quality data to determine that the area meets the standards in the National Shellfish Sanitation Program. The shellfish closure area is identified on the map included as **Attachment C** of this Fact Sheet. The Department is making the determination that compliance with the fecal coliform bacteria and other secondary wastewater treatment limits established in this permitting action ensure that the discharge of secondary treated wastewater from the Ellsworth wastewater treatment facility will not cause or contribute to the failure of the receiving waters to meet the standards of its designated classification.

In addition, all estuarine and marine waters of the State are listed as, "*Category 5-D: Estuarine and Marine Waters Impaired by Legacy Pollutants.*" Impairment in this context refers to the estuarine and marine waters partially supporting the designated use of fishing and harvesting of shellfish due to elevated levels of mercury, PCBs, dioxin, and other persistent bioaccumulating substances in tissues of some fish and in lobster tomalley. Pursuant to Maine law, 38 M.R.S.A. §420(1-B)(B), "*a facility is not in violation of the ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413 subsection 11.*" The Department has established interim monthly average and daily maximum mercury concentration limits for the current waste water treatment facility and the permittee has been in compliance with said limits. See the discussion in section 5(i) of this Fact Sheet.

#### 5. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Flow – This permitting action is establishing a monthly average flow limitation of 1.65 MGD based on information provided by the permittee as to the dry weather design flow of the new waste water treatment facility. The permit also requires the permittee to report the daily maximum flow treated at the facility for each month.
- b. Dilution Factors: Department Regulation Chapter 530, "*Surface Water Toxics Control Program*", §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 determined by the Department to be appropriate for the site conditions.

## 5. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

Using plan and profile information provided by the permittee and the CORMIX model, the Department has determined the dilution factors for the discharge of 1.65 MGD from the waste water treatment facility are as follows:

Acute = 40:1                      Chronic = 51:1                      Harmonic Mean = 153:1<sup>(1)</sup>

Footnote:

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

- c. Biochemical Oxygen Demand (BOD5) & Total Suspended Solids (TSS): - This permitting action is establishing monthly and weekly average BOD5 and TSS best practicable treatment (BPT) concentration limits of 30 mg/L and 45 mg/L respectively, based on secondary treatment requirements as defined in Department rule 06-096 CMR Chapter 525(3)(III). The maximum daily BOD5 and TSS concentration limits of 50 mg/L are based on a Department best professional judgment of BPT.

As for mass limitations, this permitting action establishes monthly average, and weekly average limitations based on a monthly average design criteria of 1.65 MGD. The limitations were derived as follows:

Monthly average:  $(1.65 \text{ MGD})(8.34)(30 \text{ mg/L}) = 412 \text{ lbs/day}$   
Weekly average:  $(1.65 \text{ MGD})(8.34)(45 \text{ mg/L}) = 619 \text{ lbs/day}$   
Daily maximum:  $(1.65 \text{ MGD})(8.34)(50 \text{ mg/L}) = 688 \text{ lbs/day}$

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

- d. Settleable Solids: This permitting action establishes a daily maximum technology-based concentration limit of 0.3 ml/L and a minimum monitoring frequency requirement of once per day for settleable solids. The daily maximum concentration limit of 0.3 ml/L as it is considered by the Department to be BPT for secondary treated sanitary waste water.
- e. Fecal Coliform Bacteria – This permitting action establishes monthly average and daily maximum limits of 15 colonies/100 ml and 50 colonies/100 ml that are based on the Maine Water Classification Program criteria for the receiving waters (including standards in the National Shellfish Sanitation Program) and requires application of the BPT technology. The limitations are in effect on a year-round basis to prevent the closure of Conditionally Approved Area 40C, Union River Bay as depicted on the map in Attachment C of this permit.

## 5. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

- f. Total Residual Chlorine – This permitting action establishes a daily maximum and monthly average technology based concentration limit of 0.3 mg/L and 0.1 mg/L respectively. Limits on total residual chlorine (TRC) are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. The Department imposes the more stringent of the water quality or technology based limits in permitting actions. With the dilution factors of 40:1 (acute) and 51:1 (chronic) end-of-pipe water quality based concentration thresholds may be calculated as follows:

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution	Acute Threshold	Chronic Threshold
Chlorine	0.013 mg/L	0.0075 mg/L	40:1	51:1	0.5 mg/L	0.4 mg/L

Example calculation: Acute –  $0.013 \text{ mg/L} (40) = 0.5 \text{ mg/L}$

To meet the water quality based limits calculated above, the permittee must dechlorinate the effluent prior to discharge. The Department has established daily maximum and monthly average BPT limitations of 0.3 mg/L and 0.1 mg/L respectively for facilities that need to dechlorinate their effluent unless calculated water quality based limits are lower than the BPT limits. In the case of the City, the calculated acute (daily maximum) water quality based threshold of 0.5 mg/L is higher than the BPT limit of 0.3 mg/L, thus the BPT limit of 0.3 mg/L is imposed. For the monthly average, the calculated chronic water quality based threshold of 0.4 mg/L is higher than the BPT limit of 0.1 mg/L, thus the BPT limit of 0.1 mg/L is imposed.

- g. pH Range- This permitting action establishes a BPT pH range limits of 6.0 –9.0 standard units pursuant to Department rule found at Chapter 525(3)(III)(c).
- h. Whole Effluent Toxicity (WET) & Chemical-Specific Testing: Maine law, 38 M.R.S.A., Sections 414-A and 420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department Rules, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants* set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

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

## 5. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

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 water quality criteria as established in Chapter 584.

Chapter 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  $\geq 20:1$  but  $<100:1$ .
- 3) Level III – chronic dilution factor  $\geq 100:1$  but  $<500:1$  or  $>500:1$  and  $Q \geq 1.0$  MGD
- 4) Level IV – chronic dilution  $>500:1$  and  $Q \leq 1.0$  MGD

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

### Screening level testing

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

### Surveillance level testing

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

Department rule Chapter 530(D)(3)(C) states dischargers in Level II may reduce surveillance level testing from once per year (1/Year) to once every other year (1/2 Years) for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedences.

A statistical evaluation conducted on the most current 60 months of WET and analytical chemistry test results indicates there are no WET or analytical chemistry results that exceed or have a reasonable potential to exceed critical ambient water quality thresholds or criteria. Therefore, this permitting action establishes screening level testing

## 5. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

requirements beginning 60 days after the commencement of the discharge and lasting through four consecutive calendar quarters. Surveillance level testing will be established after the permittee has completed the screening level testing requirements of this permit and the Department has conducted a statistical evaluation in accordance with the statistical approach outlined in the 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.).

- i. Mercury: Pursuant to Maine law, 38 M.R.S.A. §420 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL #W002529-5L-B-R (existing main plant waste water treatment facility) by establishing interim monthly average and daily maximum effluent concentration limits of 32.9 parts per trillion (ppt) and 49.3 ppt, respectively, and a minimum monitoring frequency requirement of four tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001. However, effective June 15, 2001, the Maine Legislature enacted Maine law, 38 M.R.S.A. §413, sub-§11 specifying that interim mercury limits and monitoring requirements remain in effect.

Maine law 38 M.R.S.A., §420 1-B,(B)(1) states that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413, subsection 11. A review of the Department's database for the previous 60-month period indicates mercury test results reported have ranged from 5.8 ppt to 17 ppt with an arithmetic mean (n=15) of 9.1 ppt.

- j. Septage/Transported Wastes – The permittee has requested authorization to receive and introduce into the treatment process or solids handling stream a daily maximum of 16,500 gallons per day and a monthly total of 96,000 gallons of transported wastes. Department rule Chapter 555, *Standards For The Addition of Transported Wastes to Wastewater Treatment Facilities*, limits the quantity of septage received at a facility to 1% of the design capacity of treatment facility if the facility utilizes a side stream or storage method of introduction into the influent flow, or 0.5% of the design capacity of the facility if the facility does not utilize the side stream or storage method of introduction into the influent flow. A facility may receive more than 1% of the design capacity on a case-by-case basis. In their application for permit renewal, the permittee has requested the Department approve the daily quantity 16,500 gpd (1%) of transported waste as it utilizes a side stream method of introduction into the influent flow. The permittee has submitted a Transported Waste Management Plan as an exhibit to their 6/8/12 application for a MEPDES permit. The Department has reviewed and approved said plan and determined that under normal operating conditions, the receipt and treatment of 16,500 gpd of transported waste into the facility will not cause or contribute to upset conditions of the treatment process.



## 6. ANTIDegradation - IMPACT ON RECEIVING WATER QUALITY

Maine's anti-degradation policy is included in 38 M.R.S.A., Section 464(4)(F) and addressed in the *Conclusions* section of this permit. Pursuant to the policy, where a new or increased discharge is proposed, the Department shall determine whether the discharge will result in a significant lowering of existing water quality. Increased discharge means a discharge that would add one or more new pollutants to an existing effluent, increase existing levels of pollutants in an effluent, or cause an effluent to exceed one or more of its current licensed discharge flow or effluent limits, after the application of applicable best practicable treatment technology.

In anticipation of the construction of the new waste water treatment facility for the City of Ellsworth, the Department conducted an intense ambient water quality sampling and monitoring program (six days at nine locations) on a 5.6-mile segment of the Union River between head of tide (base of the Ellsworth Dam) and Tupper's Ledge (in Union River Bay) during the summer of 2007. Water quality monitoring included morning and afternoon water column profile measurements (1 meter increments) for dissolved oxygen (DO), temperature and salinity. Morning and afternoon water quality sampling included nutrients, chlorophyll-a and BOD. Sediment samples were also collected as part of the survey to evaluate sediment oxygen demand (SOD). See **Attachment D** of this Fact Sheet for a map of the sampling locations.

In June of 2008, the Department published a report entitled, *Union River Estuary Modeling Report, June 2008*. The executive summary of the report contained the following findings;

- a. Attainment of Class SB DO standards along most portions of the estuary with a few isolated non-attainment readings in the uppermost portions of the estuary below the existing waste water treatment facility, approximately 1.1 miles up the estuary from the discharge from the new waste water treatment facility.
- b. Relatively low chlorophyll-a concentrations indicate the eutrophication and related nutrient interactions are not a significant issue in the estuary.
- c. The Department's water quality model predicts a measureable improvement associated with the relocating the discharge to the new downstream location, and attainment of dissolved oxygen standards for all potential discharge scenarios. SOD has the biggest impact on DO at approximately 0.31 mg/L during critical (neap) tide conditions.
- d. The discharge from the new treatment facility lessens the DO impact on the receiving water by 40% (0.04 mg/L) compared to the DO impact of 0.1 mg/L from the existing treatment facility.
- e. Based on the improved hydraulic conditions at the new outfall location, it is reasonable to expect a far lesser point-source impact to the Union River.

## **6. ANTIDegradation - IMPACT ON RECEIVING WATER QUALITY (cont'd)**

Based on the information provided in the modeling report cited above, the Department has made the determination that the discharge approved by this permit will not result in a significant lowering of water quality. As permitted, the Department has determined the existing and designated water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the Union River to meet standards for Class SB classification.

## **7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY**

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

## **8. PUBLIC COMMENTS**

Public notice of this application was made in the Ellsworth American newspaper on May 10, 2012. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or request a public hearing, pursuant to Chapter 522 of the Department's rules.

## **9. DEPARTMENT CONTACTS**

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

Gregg Wood  
Bureau of Land and Water Quality  
Department of Environmental Protection  
17 State House Station  
Augusta, Maine 04333-0017 Telephone (207) 287-7693  
e-mail: [gregg.wood@maine.gov](mailto:gregg.wood@maine.gov)

## **10. RESPONSE TO COMMENTS**

During the period of September 5, 2012, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department received written comments from the National Marine Fisheries Service (NMFS), the Conservation Law Foundation (CLF), and the Maine Department of Marine Resources (DMR). The Department has prepared responses to those comments as follows:

## 10. RESPONSE TO COMMENTS (cont'd)

**Comment #1: Pesticides** - The NMFS questioned language in the Fact Sheet regarding the discharge of pesticides and requested an explanation on how the Department determines that the pesticide contaminated effluent will not cause adverse effects on federally protected species and describe the materials and methods used to protect them.

**Response #1:** The italicized text of page 5 of the Fact Sheet reads as follows:

*For the purpose of allowing the discharge of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety, the department may find that the discharged effluent will not cause adverse impact to estuarine and marine life as long as the materials and methods used provide protection for nontarget species. When the department issues a license for the discharge of aquatic pesticides authorized under this paragraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website.*

The Fact Sheet is simply citing text from the Class SB classification standards found in Maine law, 38 M.R.S.A., §465-B(2). This permit is not authorizing the discharge of aquatic pesticides from the City of Ellsworth's new waste water treatment facility. Therefore, there is no determination required by the Department regarding potential adverse effects on federally protected species.

**Comment #2: Flow limitation** - The NMFS is requesting the Department describe the impetus behind the substantial increase in the permit flow limit from 0.85 MGD to 1.65 MGD.

**Response #2:** The flow limit established in discharge permits is based on the facility's design capacity. It is standard practice for permittees and consulting engineers to establish the design capacity of a facility after taking into consideration projected growth over 20 years into the future as well as wet weather flows associated with their sanitary sewer collection systems. In the case of the City of Ellsworth, there was a history of flows received at the former treatment facility that were bypassing secondary treatment as the facility did not have sufficient treatment capacity to provide a secondary level of treatment for all flows received at the facility. All flows received at the new facility will receive a secondary level of treatment thereby eliminating bypasses of untreated or partially treated waste waters and improving ambient water quality in the Union River and Union River Bay.

**Comment #3: Toxics testing frequency** - The NMFS does not believe the permittee should be afforded the reduction in surveillance level whole effluent toxicity (WET) and analytical chemistry testing because it does not meet the 60-month performance record under Department rule Chapter 530(D)(3)(C).

## 10. RESPONSE TO COMMENTS (cont'd)

**Response #3:** The Department has not granted a reduction in the surveillance level testing in the draft permit. The permit has been drafted such that the surveillance level testing monitoring frequency will be established after the conclusion of the screening level testing required in the first 18 months of the permit. The Department did not establish the routine surveillance level WET and analytical testing requirements in the draft permit as a statistical evaluation on the previous 60 months of WET and analytical chemistry derived at the former "Main" waste water treatment facility indicates there are no tests results that exceed or have a reasonable potential to exceed ambient water quality criteria. Therefore, the permittee would have qualified for the surveillance level reduced testing requirements in Chapter 530 if the permit for the "Main" plant was being renewed. The Department has no reason to believe the characteristics of the waste water received at the new waste water treatment facility are any different than the characteristics of the waste water received and treated at the former waste water treatment facility. Therefore, the WET and analytical chemistry testing requirements remain unchanged in the final permit.

**Comment #4: Nitrogen** - The CLF has stated that chlorophyll *a* measures phosphorus loading and does not understand why the Department chose to test for phosphorus rather than nitrogen in 2007 and why the new permit does not establish ammonia limitations as was the case with the permit for the former "Main" plant.

**Response #4:** Chlorophyll *a* does not measure phosphorus loading to a receiving water. Chlorophyll *a* is the measure of the concentration of algae in a receiving water. CLF is correct in stating nitrogen is the limiting nutrient in an estuarine/marine environment. The Department conducted extensive ambient monitoring of nitrogen compounds in the 2007 water quality survey. The Department measured concentrations of total kjeldahl nitrogen (TKN), ammonia (NH<sub>3</sub>-N), nitrate nitrogen (NO<sub>2</sub>) and nitrate nitrogen (NO<sub>3</sub>) at nine sampling station in the Union River as part of the 2007 survey as well as in the discharge from the former "main" plant. Sampling for the nitrogen compounds was necessary to determine the potential impacts to changes in chlorophyll *a* levels which in turn would potentially have an impact on dissolved oxygen levels in the receiving water. Page 17 of a report entitled Union River Estuary Modeling Report, June 2008 prepared by the Department contains the results of the nitrogen monitoring conducted during the survey. The report concludes that based on the ambient water quality sampling and modeling, the discharge of nitrogen compounds from the new waste water treatment facility will not cause or contribute to non-attainment of water quality standards.

## 10. RESPONSE TO COMMENTS (cont'd)

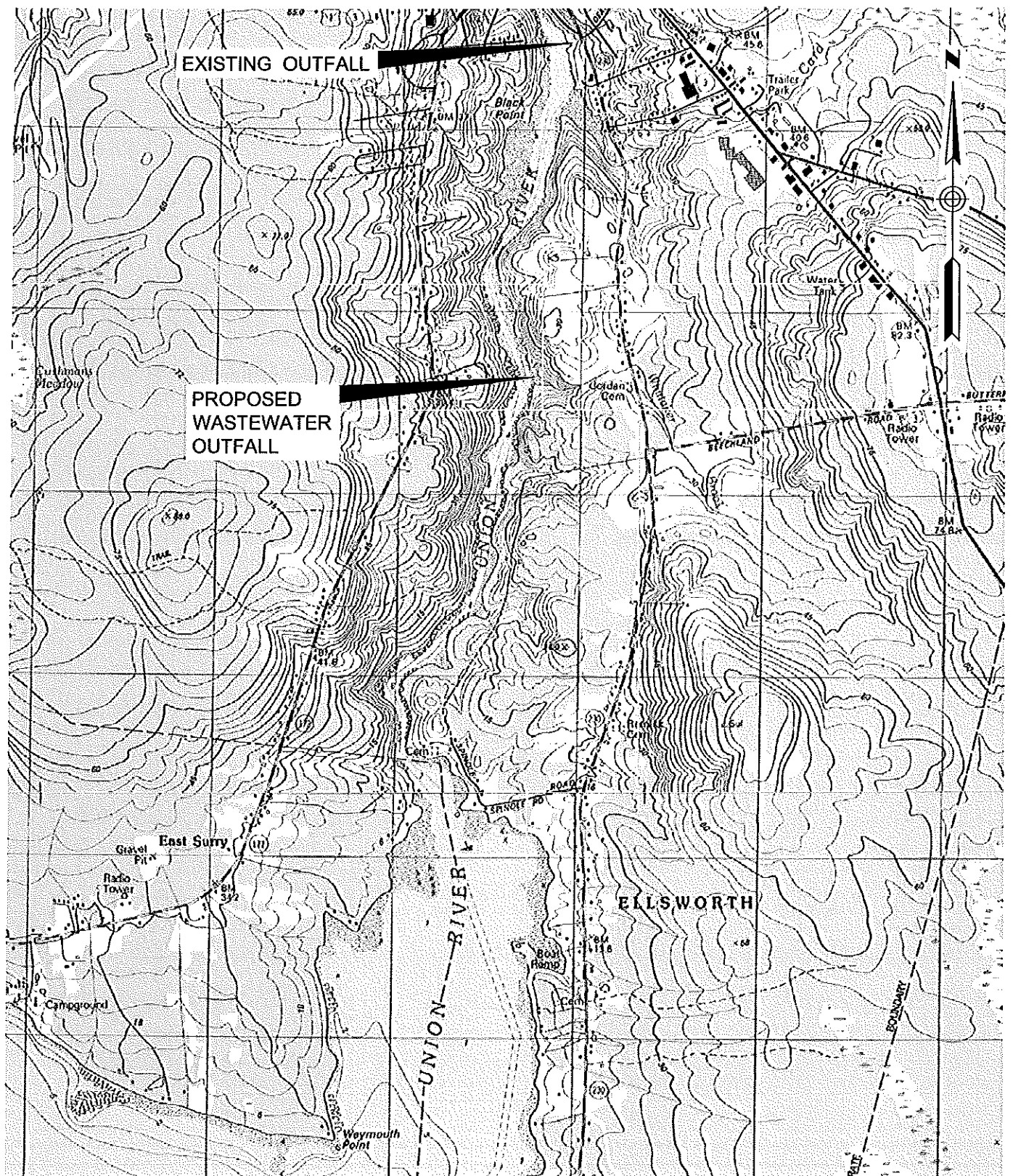
As for ammonia limitations, the 2009 MEPDES permit for the "Main" plant established water quality based mass and concentration limitations for ammonia based on a statistical evaluation of analytical chemistry results on file at the Department that indicated a test result of 21.6 mg/L on 6/10/08 had a reasonable potential to exceed the chronic ambient water quality criteria (AWQC) for ammonia. The limitations had no connection in protecting for the potential for increases in chlorophyll *a* levels or the impact to dissolved oxygen levels in the Union River or estuary. An updated statistical evaluation on the ammonia results on file at the Department does not indicate the discharge exceeds or has a reasonable potential to exceed applicable AWQC for ammonia. Therefore, limitations for ammonia are not justified and the final permit remains unchanged.

**Comment #5 – Disinfection** – The NMFS, CLF and DMR all questioned the Department's proposal to only require seasonal disinfection (May 15 – September 30). DMR has stated the Conditionally Approved Area 40C- Union River Bay as delineated on a map of Pollution Area No. 40, Attachment C of this Fact Sheet, will need be to closed if the new waste water treatment facility is not required to disinfect the discharge on a year-round basis. If the area is closed, the commenters believe this action will result in a violation of Maine law 38 M.R.S.A., §465-B(2) that states in part "*There may be no new discharge to Class SB waters that would cause closure of open shellfish areas by the Department of Marine Resources.*"

**Response #5** – The Department concurs that if the DMR closes the Conditional Area, the permit will violate water quality standards. The increase in the flow limitation from 0.85 MGD in the previous permit to 1.65 MGD in this permit constitutes a new discharge of 0.80 MGD. Therefore, the permit has been revised to require year-round disinfection upon issuance of the permit.

It is noted the Department and the City of Ellsworth believe there may be sufficient dilution in the receiving water at the line between the Restricted Area and Conditionally Approved Area such that the Conditionally Approved Area would not need to be closed if the waste water treatment facility is not disinfecting the discharge. To conservatively protect the designated use of propagation and harvesting of shellfish, the DMR has stated that by default, it will close the Conditionally Approved area unless the permittee disinfects on a year-round basis or the Department and or the permittee provides additional monitoring data and or calculations to indicate water quality standards will be met without disinfection and the USDA and DMR concur with the results. Until then, the final permit is requiring year-round disinfection.

# **ATTACHMENT A**



2500' 0 2500' 5000'

BAR SCALE

1" = 2500'

CHECK GRAPHIC SCALE BEFORE USING

SOURCE:

U.S.G.S. TOPOGRAPHIC QUARANGLES, ELLSWORTH, MAINE DATED 1981  
AND NEWBURY NECK, MAINE DATED 1981, AT 1:24,000



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COMMITMENT & INTEGRITY DRIVE RESULTS

## SITE LOCATION PLAN

DESIGNED BY: KMC  
DRAWN BY: JOE

CHECKED BY: PJP  
21340001-U001.dwg

CITY OF ELLSWORTH, MAINE

ELLSWORTH WWTP  
OUTFALL LOCATIONS

JOB NO: 213400  
DATE: NOV. 2009  
SCALE: AS NOTED

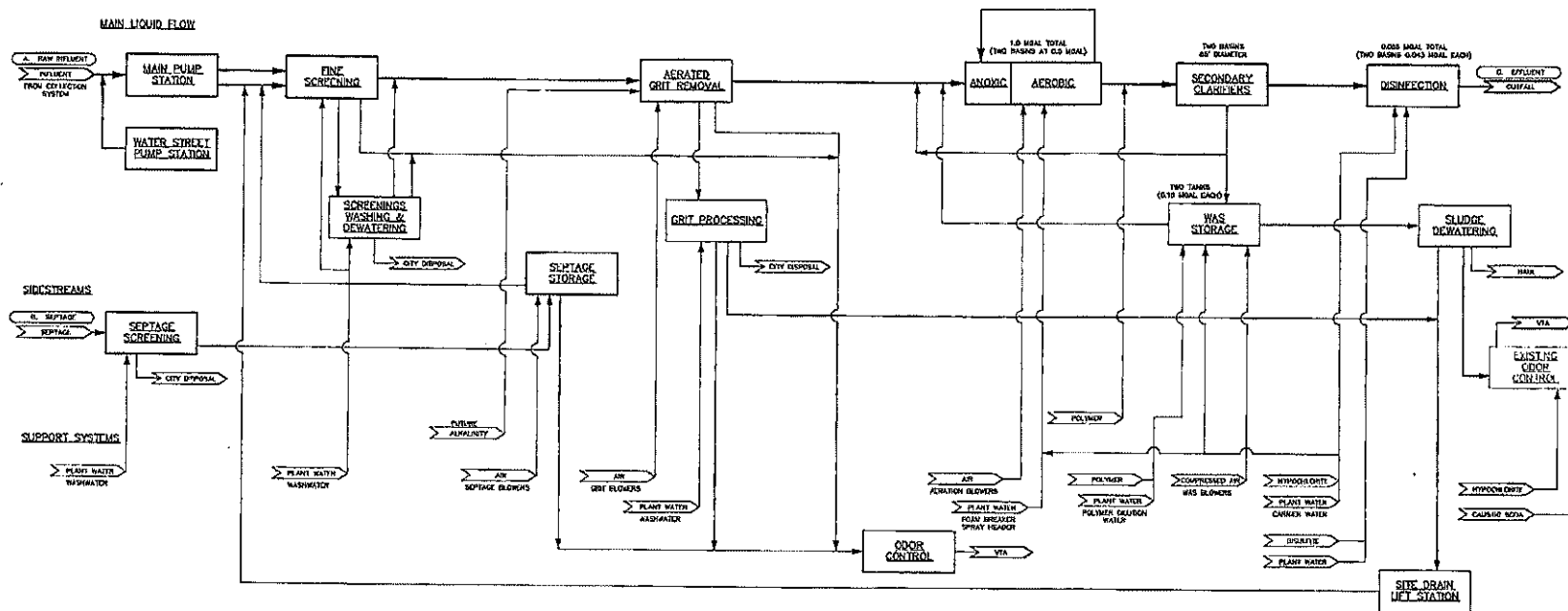
FIGURE 1

# **ATTACHMENT B**



DESIGN FLOWS AND LOADINGS				
PARAMETER/REF. REFERENCE	DESIGN FLOW (MGD, (GPD))	BOQ (MG/L, (POUNDS/DAY))	TDS (MG/L, (POUNDS/DAY))	
A. RAIN IMPACT	DESG 1.3 (1.75) MAX: 1.85 (1.94) WQF: 4.1 (2.74) PEF: 8.1 (5.33)	AVG 2.0 (2.66) MAX DES: 2.38 (1.93) MAX WQF: 120 (4.94)	TDS 230 (2.01) MAX DES: 181 (2.62) MAX WQF: 506 (3.62)	
B. EFFLUENT	DESG 0.0032 (1.22) 0-100 GPD	AVG 5,000 (133)	AVG 16,000 (400)	
C. EFFLUENT		AVG < 30 [-]	AVG < 30 [-]	

CURRENT FLOWS AND LOADINGS			
PARAMETER/NO REFERENCE	CURRENT FLOW (MGD) (CPM)	MGD (POUNDS/DAY)	TSS (POUNDS/DAY)
A RAW EFFLUENT	QF1 0.218 [340] WQF 0.73 [507] WQF 2.08 [1,491] PWF 24.9 [2,718]	AVG 1,042 MAX MONTH 1,320 MAX DAY 1,740	AVG 783 MAX MONTH 975 MAX DAY 1,374



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[illegible]

### PROCESS & INSTRUMENTATION DIAGRAM BLOCK FLOW DIAGRAM

CITY OF ELLSWORTH, MAINE

DO NOT WRITE  
DATE: NOVEMBER 2010  
SCALE: AS NOTED  
SHEET: 100 OF 100

P-002

## **ATTACHMENT C**



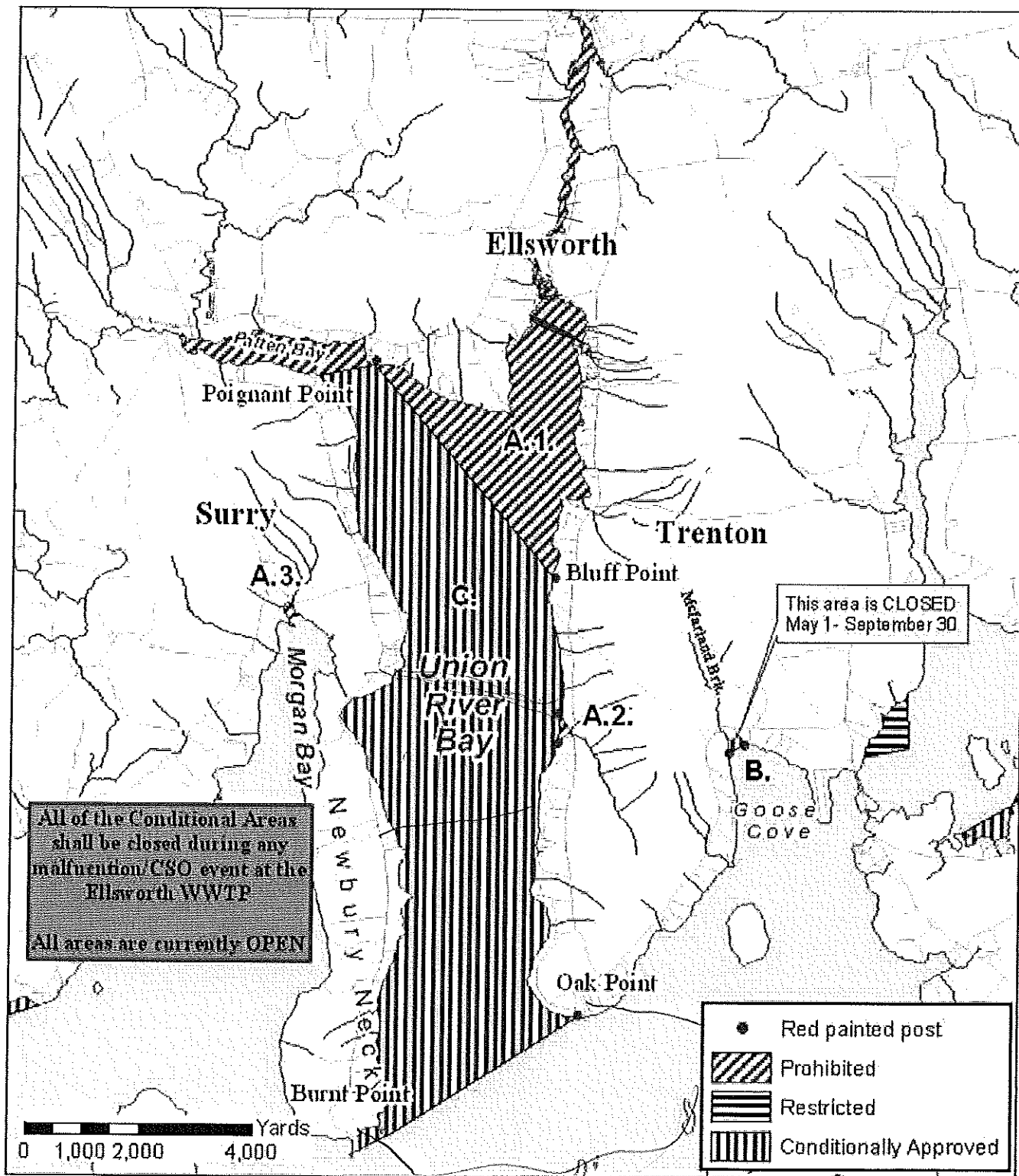
# Maine Department of Marine Resources

## Pollution Area No. 40

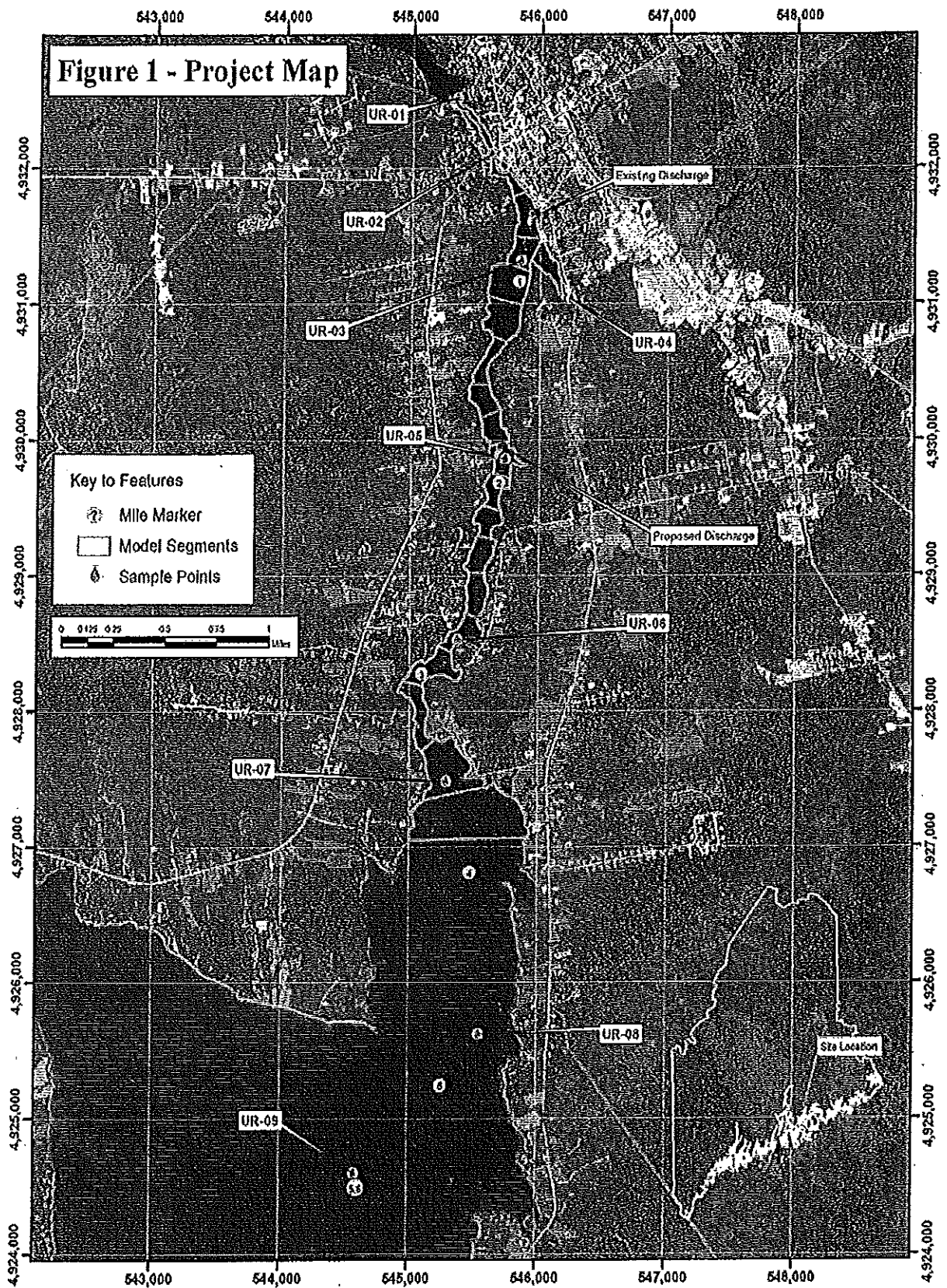
Northern Morgan Bay, Union River Bay, Patten Bay, Heath Brook, Goose Cove  
(Towns of Surry, Ellsworth, Trenton)



08/30/12



## **ATTACHMENT D**



MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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### A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

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

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

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

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

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

## **B. OPERATION AND MAINTENANCE OF FACILITIES**

### **1. General facility requirements.**

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



# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

### **5. Bypasses.**

#### (a) Definitions.

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

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

#### (c) Notice.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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- (ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D(1)(f), below. (24-hour notice).
- (d) Prohibition of bypass.
  - (i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
    - (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    - (C) The permittee submitted notices as required under paragraph (c) of this section.
  - (ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (d)(i) of this section.

6. Upsets.

- (a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
  - (ii) The permitted facility was at the time being properly operated; and
  - (iii) The permittee submitted notice of the upset as required in paragraph D(1)(f), below. (24 hour notice).
  - (iv) The permittee complied with any remedial measures required under paragraph B(4).
- (d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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**C. MONITORING AND RECORDS.**

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

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

**3. Monitoring and records.**

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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**D. REPORTING REQUIREMENTS**

**1. Reporting requirements.**

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

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

- (A) Any unanticipated bypass which exceeds any effluent limitation in the permit.

- (B) Any upset which exceeds any effluent limitation in the permit.

- (C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

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

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

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

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

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

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

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

- (i) One hundred micrograms per liter (100 ug/l);

- (ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

- (iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or

- (iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

### 5. Publicly owned treatment works.

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

## E. OTHER REQUIREMENTS

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

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

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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

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

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

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

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

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

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

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

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

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

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

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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**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.



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

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

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

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

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

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

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

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

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



# DEP INFORMATION SHEET

## Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-2811

### SUMMARY

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

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

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

### I. ADMINISTRATIVE APPEALS TO THE BOARD

#### **LEGAL REFERENCES**

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

#### **HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD**

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

#### **HOW TO SUBMIT AN APPEAL TO THE BOARD**

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

#### **WHAT YOUR APPEAL PAPERWORK MUST CONTAIN**

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

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

#### **OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD**

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

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

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

## **II. JUDICIAL APPEALS**

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

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

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

### **ADDITIONAL INFORMATION**

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

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**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.**

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