STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

December 28, 2009

Via Certified Mail Return Receipt #7006 2150 0000 7488 1605

Mr. Dale Abernethy, Town Manager
Town of Castine
P.O. Box 204
67 Court Street
Castine, ME 04421

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101192
Maine Waste Discharge License (WDL) Application #W002623-6C-D-R
Final Permit/License-Town of Castine

Dear Mr. Abernethy:

Enclosed please find a copy of your **final** Maine MEPDES Permit/WDL which was approved by the Department of Environmental Protection. Please read the license and its attached conditions carefully. You must follow the conditions in the 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 this matter, please feel free to contact me at (207) 287-7658 or at phyllis.a.rand@maine.gov.

Sincerely,

Phyllis Arnold Rand

Phyllis Arnold Rand
Division of Water Quality Management
Bureau of Land and Water Quality

Enclosure

cc: Clarissa Trasko, DEP/EMRO
Sandy Mojica, USEPA
Doug Koopman, USEPA
Lori Mitchell, DMU
Annaleis Hafford, Olver & Assoc.

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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF CASTINE	)	MAINE POLLUTANT DISCHARGE
CASTINE, HANCOCK COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
ME0101192	)	WASTE DISCHARGE LICENSE
W002623-6C-D-R **APPROVAL**	)	**RENEWAL**

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, et. seq. and Maine Law 38 M.R.S.A., Section 414-A et seq., and applicable regulations, the Department of Environmental Protection (Department hereinafter) has considered the application of the TOWN OF CASTINE, with its supportive data, agency review comments, and other related material on file and finds the following facts:

APPLICATION SUMMARY

The Town of Castine ("permittee") has applied for a renewal of combination Waste Discharge License (WDL) # W002623-5L-B-R/ MEPDES Permit # ME0101192 ("permit") and is requesting approval to receive and treat transported wastes and boat pumpout wastewater from the Town of Castine, Maine. The previous permit was issued on December 22, 2004 and expired on December 22, 2009. The 12/22/04 permit authorized the monthly average discharge of up to 0.126 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works to the tidewaters of Castine Harbor, Class SB, in Castine, Maine.

PERMIT SUMMARY

Tier I of this permitting action is <u>similar to</u> the previous permitting action in that it is:

1. Carrying forward the requirement for removal of a minimum of 85% of BOD5 and TSS.

2. Carrying forward the settleable solids technology based daily maximum concentration limit of 0.3 mL/L.

3. Carrying forward the daily maximum technology based concentration limit for total residual chlorine.

4. Carrying forward the technology based pH limits.

5. Carrying forward the requirement to maintain an up-to-date Wet Weather Flow Management Plan and Operations and Maintenance Plan for the facility.

PERMIT SUMMARY (cont'd)

6. Carrying forward the quarterly monitoring frequency requirement for total copper.

7. Carrying forward the priority pollutant screening level monitoring frequency of 1/Year.

8. Carrying forward the analytical chemistry screening level monitoring frequency of 1/Quarter.

9. Carrying forward the WET screening level monitoring frequency for the mysid shrimp (*Mysidopsis bahia*) and sea urchin (*Arbacia punctulata*) of one per year (1/Year).

10. Carrying forward the mysid shrimp WET limitation and surveillance level monitoring frequency of 1/Year.

11. Carrying forward the 2/Year monitoring requirement for mercury.

12. Carrying forward the mass limitation for total copper.

Tier I of this permitting action is <u>different from</u> the previous permitting action in that it is:

13. Revising the monthly average, weekly average and daily maximum technology based mass limits for BOD5 and TSS.

14. Revising the total copper concentration limitation based on Department rule 06-096 CMR 530(3)(D)(1).

15. Revising the monthly average discharge flow limitation from 0.126 MGD to 0.2 MGD.

16. Establishing quarterly monitoring requirements for total zinc.

17. Establishing quarterly monitoring requirements for ammonia nitrogen.

18. Eliminating the 4/10/06 permit modification monitoring requirement for total silver.

19. Establishing a requirement to file an annual certification with the Department for dischargers having waived or reduced WET testing requirements.

20. Revising the pH minimum monitoring frequency from 1/Day to 5/Week.

21. Establishing a compliance schedule for the elimination of WET and toxics exceedences.

PERMIT SUMMARY (cont'd)

Tier II is <u>different from</u> Tier I of this permitting action in that it is:

22. Revising the daily maximum technology based concentration limitation for total residual chlorine.

23. Revising the fecal coliform monitoring frequency from year-round to seasonal (May 15 – Sept 30).

24. Eliminating the WET effluent limit for the mysid shrimp.

25. Eliminating the monitoring requirement for total zinc.

26. Eliminating the monitoring requirement for total copper.

27. Eliminating the monitoring requirement for ammonia nitrogen.

28. Revising the acute dilution factor from 1:1 to 46:1.

29. Revising the chronic dilution factor from 148:1 to 200:1.

30. Revising the harmonic mean dilution factor from 444:1 to 600:1.

31. Establishing a total residual chlorine monthly average limitation of 0.1 mg/L.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated December 28, 2009, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

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

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

3. The provisions of the State's antidegradation policy, 38 MRSA Section 464(4)(F), will be met, in that:

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

    b. Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;

CONCLUSIONS (cont'd)

c. The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

d. Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and,

e. Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

4. The discharges will be subject to effluent limitations that require application of best practicable treatment.

ACTION

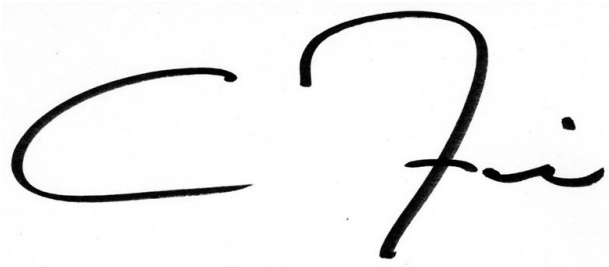
THEREFORE, the Department APPROVES the above noted application of the TOWN OF CASTINE to discharge up to a monthly average flow of **0.2 MILLION GALLONS PER DAY** of secondary treated wastewater (which includes transported wastes and boat pumpout wastewater) from a publicly owned treatment works to the tidewaters of Castine Harbor, Class SB, in Castine, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits," revised July 1, 2002, copy attached.

2. The attached Special Conditions, including any effluent limitations and monitoring requirements.

3. This permit expires five (5) years from the date of signature.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES



This permit has been digitally signed by Andrew C. Fisk on behalf of Commissioner David P. Littell. It is digitally signed pursuant to authority under 10 M.R.S.A. § 9418. It has been filed with the Board of Environmental Protection as of the signature date
2009.12.29 09:12:23 -05'00'

Date of initial receipt of application: August 5, 2009
Date of application acceptance: August 7, 2009

This Order prepared by PHYLLIS A.RAND, BUREAU OF LAND & WATER QUALITY
ME0101192 2009

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS- Outfall #001A

1. During the period beginning the effective date of the permit, the permittee is authorized to discharge secondary treated wastewater from **Outfall #001A** to the tidewaters of Castine, Class SB. Such treated wastewater discharges shall be limited and monitored by the permittee as specified below.

Tier I – Prior to Outfall Extension

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow *[50050]*	0. 2 MGD *[03]*	---	Report MGD *[03]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
BOD_5 *[00310]*	50 lbs/day *[26]*	75 lbs/day *[26]*	83 lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
BOD_5 Percent Removal[(1)] *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
TSS *[00530]*	50 lbs/day *[26]*	75 lbs/day *[26]*	83 lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
TSS Percent Removal[(1)] *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 mL/L *[25]*	1/Day *[01/01]*	Grab *[GR]*
Fecal Coliform Bacteria[(2)] *(Year round)* *[31633]*	---	---	---	15/100 mL[(3)] *[13]*	---	50/100 mL *[13]*	1/Week *[01/07]*	Grab *[GR]*
Total Residual Chlorine[(4)] *[50060]*	---	---	---	---	---	0.013 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
pH *[00400]*	---	---	---	---	---	6.0-9.0 S.U. *[12]*	5/Week *[05/07]*	Grab *[GR]*

SPECIAL CONDITIONS

A. 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS- Outfall #001A (cont'd)

Tier I – Prior to Outfall Extension

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Copper (Total) *[01042]*	---	---	0.0061 lbs/day *[26]*	---	---	11.6 ug/L *[28]*	1/Quarter *[01/90]*	Composite *[24]*
Zinc (Total) (8) *[01092]*	---	---	Report lbs/day *[26]*	---	---	Report ug/L *[28]*	1/Quarter *[01/90]*	Composite *[24]*
Zinc (Total) (9) *[01092]*	---	---	0.16 lbs/day *[26]*	---	---	190 ug/L *[28]*	1/Quarter *[01/90]*	Composite *[24]*
Ammonia (8) Nitrogen *[61574]*	---	---	Report lbs/day *[26]*	---	---	Report ug/L *[28]*	1/Quarter *[01/90]*	Composite *[24]*
Ammonia (9) Nitrogen *[61574]*	---	---	11 lbs/day *[26]*	---	---	13,400 ug/L *[28]*	1/Quarter *[01/90]*	Composite *[24]*

The italicized numeric values bracketed in the table above are code numbers that Department personnel utilized to code the monthly Discharge Monitoring Reports (DMR's). FOOTNOTES: See Pages 11 through 14 of this permit for applicable footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS- Outfall #001A (cont'd)

2. *SURVEILLANCE LEVEL* – Beginning upon issuance of this permit and lasting through 12 months prior to permit expiration:

Tier I – Prior to Outfall Extension

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity[5] **Acute – NOEL** *Mysidopsis bahia* (Mysid Shrimp) *[TDM3E]*	---	---	---	100 % *[23]*	1/Year *[01/YR]*	Composite *[24]*

3. *SCREENING LEVEL* - Beginning 12 months prior to expiration of this permit or in the fifth year since the last screening test, whichever is sooner:

Tier I – Prior to Outfall Extension

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity[5] **Acute – NOEL** *Mysidopsis bahia* (Mysid Shrimp) *[TDM3E]*	---	---	---	100 % *[23]*	1/Year *[01/YR]*	Composite *[24]*
Chronic – NOEL *Arbacia punctulata* (Sea Urchin) *[TBH3A]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Composite *[24]*
Analytical chemistry[6] *[51477]*	---	---	---	Report ug/L *[28]*	1/Quarter *[01/90]*	Composite/Grab *[24]*
Priority Pollutants [7] *[50008]*	---	---	---	Report ug/L *[28]*	1/Year *[01/YR]*	Composite/Grab *[24]*

The italicized numeric values bracketed in the table above are code numbers that Department personnel utilized to code the monthly Discharge Monitoring Reports (DMR's). **FOOTNOTES:** See Pages 11 through 14 of this permit for applicable footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS- Outfall #001A (cont'd)

1. During the period beginning the effective date of the permit, the permittee is authorized to discharge secondary treated wastewater from **Outfall #001A** to the tidewaters of Castine, Class SB. Such treated wastewater discharges shall be limited and monitored by the permittee as specified below. **Tier II – Following Completion of Outfall Extension**

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow *[50050]*	0. 2 MGD *[03]*	---	Report MGD *[03]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
BOD_5 *[00310]*	50 lbs/day *[26]*	75 lbs/day *[26]*	83 lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
BOD_5 Percent Removal(1) *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
TSS *[00530]*	50 lbs/day *[26]*	75 lbs/day *[26]*	83 lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
TSS Percent Removal(1) *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 mL/L *[25]*	1/Day *[01/01]*	Grab *[GR]*
Fecal Coliform Bacteria(2) *(May 15 – Sept 30) [31633]*	---	---	---	15/100 mL(3) *[13]*	---	50/100 mL *[13]*	1/Week *[01/07]*	Grab *[GR]*
Total Residual Chlorine(4) *[50060]*	---	---	---	0.1 mg/L *[19]*	---	0.3 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
pH *[00400]*	---	---	---	---	---	6.0-9.0 S.U. *[12]*	5/Week *[05/07]*	Grab *[GR]*

The italicized numeric values bracketed in the table above are code numbers that Department personnel utilized to code the monthly Discharge Monitoring Reports (DMR's). FOOTNOTES: See Pages 11 through 14 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

2. *SCREENING LEVEL* - Beginning 12 months prior to expiration of this permit or in the fifth year since the last screening test, whichever is sooner:

Tier II – Following Completion of Outfall Extension

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity[5] **Acute – NOEL** *Mysidopsis bahia* (Mysid Shrimp) *[TDM3E]*	---	---	---	Report% *[23]*	1/Year *[01/YR]*	Composite *[24]*
Chronic – NOEL *Arbacia punctulata* (Sea Urchin) *[TBH3A]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Composite *[24]*
Analytical chemistry[6] *[51477]*	---	---	---	Report ug/L *[28]*	1/Quarter *[01/90]*	Composite/Grab *[24]*
Priority Pollutants [7] *[50008]*	---	---	---	Report ug/L *[28]*	1/Year *[01/YR]*	Composite/Grab *[24]*

The italicized numeric values bracketed in the table above are code numbers that Department personnel utilized to code the monthly Discharge Monitoring Reports (DMR's). FOOTNOTES: See Pages 11 through 14 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES:

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(s) must be reviewed and 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 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 (RL's) specified by the Department or as specified by other approved test methods. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the detection limit achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL is not acceptable and will be rejected by the Department. For mass, if the analytical result is reported as <Y or if a detectable result is less than a RL, report a <X lbs/day, where X is the parameter specific limitation established in the permit. See **Attachment A** of this permit for a list of the Department's RL's.

1. **Percent Removal –** The permittee shall maintain a minimum of 85 percent removal of both BOD5 and TSS. The percent removal shall be based on a monthly average calculation using influent and effluent concentrations. The percent removal shall be waived when the monthly average influent concentration is less than 200 mg/L. For instances when this occurs, the facility shall report "*NODI-9"* on the monthly Discharge Monitoring Report (DMR).

2. **Fecal coliform – *Tier I*-** Limits are year-round. ***Tier II*-** Limits are seasonal and apply between May 15 and September 30 of each calendar year. The Department reserves the right to require disinfection on a year-round basis to protect the health and welfare of the public.

SPECIAL CONDITIONS

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

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

4. **Total residual chlorine (TRC) limits and monitoring requirements** – Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine based compounds are being used to disinfect the discharge. Compliance with the daily maximum TRC limitation will be based on the Department's Reporting Level (RL) of detection of 50 ug/L (0.05 mg/L). All analytical test results shall be reported to the Department including results which are detected below the RL of 0.05 mg/L. It is noted the Discharge Monitoring Reports for ***Tier I*** will be coded with the TRC numeric value of 0.05 mg/L such that detectable results reported below the RL will not be considered a violation of the permit.

5. **Whole Effluent Toxicity Testing -** Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic receiving water concentrations of 100 % and 0.68 %, respectively [***Tier I***], or the critical acute and chronic receiving water concentrations of 2.2 % and 0.5 %, respectively [***Tier II***]) which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points. Acute tests shall be conducted on the mysid shrimp (*Mysidopsis bahia*) and chronic tests shall be conducted on the sea urchin (*Arbacia punctulata*). The critical acute and chronic thresholds were derived as the mathematical inverses of the applicable acute and chronic dilution factors of 1:1 and 148:1, respectively (***Tier I)*** or the mathematical inverses of the applicable acute and chronic dilution factors of 46:1 and 200:1, respectively (***Tier II***). See **Attachment A** of this permit for the Department's form for reporting WET concentration thresholds.

   a. ***Tier I:*** **Beginning upon issuance of this permit and lasting through 12 months prior to expiration of the permit**, the permittee shall conduct surveillance-level WET testing. Acute tests shall be conducted once every year (1/Year) on the mysid shrimp (*Mysidopsis bahia*) during different calendar quarters. ***Tier II:*** No surveillance level WET testing required.

   b. ***Tier I and Tier II:*** **Beginning 12 months prior to expiration of the permit or in the fifth year since the last screening test, which ever is sooner,** the permittee shall conduct screening-level WET testing once per year. Acute tests shall be conducted on the mysid shrimp (*Mysidopsis bahia*). Chronic tests shall be conducted on the sea urchin (*Arbacia punctulata*).

SPECIAL CONDITIONS

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

WET test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee 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 USEPA methods manuals.

a. Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, Fourth Edition, October 2002, EPA-821-R-02-013.

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.

The permittee is also required to analyze the effluent for the nine (9) parameters specified in the WET chemistry section, and the twelve (12) parameters specified in the analytical chemistry section of the form in Attachment A of this permit each time a WET test is performed.

6. **Analytical Chemistry** – Pursuant to 06-096 CMR 530(2)(C)(4), refers to a suite of chemical tests that include ammonia nitrogen (as N), total aluminum, total arsenic, total cadmium, total chromium, total copper, free cyanide (amenable to chlorination), total lead, total nickel, total silver, total zinc and total residual chlorine.

7. **Priority Pollutant Testing –** Priority pollutant testing refers to analysis for levels of priority pollutants listed in Department rule 06-096 CMR Chapter 525 Section 4.VI.

   a. **Screening-level testing – Beginning 12 months prior to expiration of the permit or in the fifth year since the last screening test, which ever is sooner**, the permittee shall conduct priority pollutant testing at a minimum frequency of once per year.

   b. **Surveillance-level priority pollutant testing** is not required pursuant to Department rule 06-096 CMR Chapter 530 Section 2.D.

8. Beginning the effective date of this permit, the permittee shall conduct quarterly sampling and report the results to the Department on the monthly Discharge Monitoring Report (DMR).

9. The effective date of the monitoring requirements is based on the outcome of the Schedule of Compliance established in Special Condition M of this permit. This permit will be reopened to establish the effective date per Special Condition P of this permit.

SPECIAL CONDITIONS

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

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

Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department, possible exceedences of the acute, chronic or human health AWQC as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005). For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "NODI-9" monitoring not required this period.

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time which would impair the usages designated by the classification of the receiving waters.

2. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated by the classification of the receiving waters.

3. The discharges shall not cause visible discoloration or turbidity in the receiving waters which would impair the usages designated by the classification of the receiving waters.

4. Notwithstanding specific conditions of this permit the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

C. DISINFECTION

If chlorination is used as a means of disinfection, an approved chlorine contact tank providing the proper detention time consistent with good engineering practice must be utilized, followed by a dechlorination system if the total residual chlorine (TRC) cannot be met by dissipation in the detention tank. The TRC in the effluent shall at no time cause any demonstrable harm to aquatic life in the receiving waters. The dose of chlorine applied shall be sufficient to leave a TRC concentration that will effectively reduce bacteria to levels below those specified in Special Condition A, *"Effluent Limitations and Monitoring Requirements"*, of this permit.

SPECIAL CONDITIONS

D. TREATMENT PLANT OPERATOR

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

E. 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.

F. UNAUTHORIZED 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 8/07/09; 2) the terms and conditions of this permit; and 3) only from Outfall #001. Discharges of waste water from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5)(*Bypass*) of this permit.

G. NOTIFICATION REQUIREMENT

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

1. Any introduction of pollutants into the waste water collection and treatment system from an indirect discharger in a primary industrial category discharging process waste water; and

2. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system by a source introducing pollutants into the system at the time of permit issuance. For the purposes of this section, notice regarding substantial change shall include information on:

   (a) the quality and quantity of waste water introduced to the waste water collection and treatment system; and
   (b) any anticipated impact caused by the change in the quantity or quality of the waste water to be discharged from the treatment system.

3. **In the case of the permittee, the Department shall consider the *Tier I* effluent limitations in effect upon issuance of this permit and until the Department is notified, in writing, of the completion of the outfall extension project.**

SPECIAL CONDITIONS

H. WET WEATHER FLOW MANAGEMENT PLAN

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

Within 90 days of completion of new and or substantial upgrades of the waste water treatment facility, the permittee shall submit to the Department for review and approval, a new or revised Wet Weather Management Plan which conforms to Department guidelines for such plans. The revised plan shall include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events. **The permittee shall review their plan annually** and record any necessary changes to keep the plan up to date.

I. OPERATION & MAINTENANCE (O&M) PLAN

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

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

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

J. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

During the effective period of this permit, the permittee is authorized to **receive** and **introduce** up to a maximum of **10,000 gallons per year** of transported wastes into the treatment process or solids handling stream, 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

SPECIAL CONDITIONS

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

constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.

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

3. At no time shall the addition of transported wastes cause or contribute to effluent quality violations. Transported wastes may not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility. Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. Odors and traffic from the handling of transported wastes may not result in adverse impacts to the surrounding community. If any adverse effects exist, the receipt or introduction of transported wastes into the treatment process or solids handling stream shall be suspended until there is no further risk of adverse effects.

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

   (a) The date;
   (b) The volume of transported wastes received;
   (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 facilities design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of transported wastes into the treatment process or solids handling stream shall be reduced or terminated in order to eliminate the overload condition.

6. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added shall not be recorded as transported wastes but should be reported in the treatment facility's influent flow.

SPECIAL CONDITIONS

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

7. During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current Wet Weather Flow Management Plan approved by the Department pursuant to Special Condition H that provides for full treatment of transported wastes without adverse impacts.

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

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

10. The authorization in the Special Condition is subject to annual review and, with notice to the permittee and other interested parties of record, may be suspended or reduced by the Department as necessary to ensure full compliance with Chapter 555 of the Department's rules (last amended on February 5, 2009) and the terms and conditions of this permit.

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

This permitting action establishes reduced surveillance level testing for WET and analytical chemistry testing. **On or before December 31st of each year** of the effective term of this permit ***[PCS Code 95799]***, the permittee shall provide the Department with statements describing the following:

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

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

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

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

SPECIAL CONDITIONS

L. TOXICITY REDUCTION EVALUATION

On or before December 31, 2009 the permittee is required to submit a Toxicity Reduction Evaluation Report that addresses the alleviation or mitigation of exceedences of all known water quality standards including total copper, mysid shrimp WET and total zinc.

M. SCHEDULE OF COMPLIANCE

On or before April 1, 2010 *[PCS code 95799]*, the permittee shall notify the Department of the Town of Castine's voters' decision on the Outfall Extension Project.

If the permittee receives voter approval of the Outfall Extension Project:

1. **On or before May 1, 2010** *[PCS code 95799]*, the permittee shall submit to the Department a Scope of Work and Schedule for the Outfall Extension Project.

If the permittee does not receive voter approval of the Outfall Extension Project:

2. **On or before May 1, 2011** *[PCS code 95799]*, the permittee shall submit to the Department a Scope of Work and Schedule for Funding and Completion of the Outfall Extension Project.

On or before December 31, 2011 *[PCS code 95799]*, the permittee shall complete construction of the Outfall Extension Project.

N. MERCURY

All mercury sampling (2/Year) 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 1631, 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.

SPECIAL CONDITIONS

O. MONITORING AND REPORTING

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

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

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

P. 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 anytime and with notice to the permittee, modify this permit to; 1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded, 2) require additional effluent and or ambient water quality monitoring if results on file are inconclusive; or 3) change monitoring requirements or limitations based on new information.

Q. SEVERABILITY

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

ATTACHMENT A

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WHOLE EFFLUENT TOXICITY REPORT
MARINE WATERS

Facility Name _____ MEPDES Permit # _____

Pipe # _____

Facility Representative _____ Signature _____

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

Facility Telephone # _____ Date Collected _____ Date Tested _____

mm/dd/yy mm/dd/yy

Chlorinated? _____ Dechlorinated? _____

Results **% effluent**

	mysid shrimp	**sea urchin**
A-NOEL		
C-NOEL		

Effluent Limitations

A-NOEL	
C-NOEL	

Data summary

	mysid shrimp	**sea urchin**
	% survival	**% fertilized**
QC standard	**>90**	**>70**
lab control		
receiving water control		
conc. 1 (%)		
conc. 2 (%)		
conc. 3 (%)		
conc. 4 (%)		
conc. 5 (%)		
conc. 6 (%)		
stat test used		

place * next to values statistically different from controls

Salinity Adjustment

brine	
sea salt	
other	

Reference toxicant

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

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

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

ATTACHMENT B

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

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

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

Flow for Day (MGD)[1] _____ **Flow Avg. for Month (MGD)[2]** _____

Date Sample Collected _____ Date Sample Analyzed _____

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

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

MARINE AND ESTUARY VERSION

Please see the footnotes on the last page.

			Effluent Limits, %			Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)		Possible Exceedence [7]		
			Acute	Chronic			WET Result, % Do not enter % sign	Reporting Limit Check	Acute	Chronic	
	WHOLE EFFLUENT TOXICITY										
	Mysid Shrimp										
	Sea Urchin										
	WET CHEMISTRY										
	pH (S.U.) (9)					(8)					
	Total Organic Carbon (mg/L)					NA					
	Total Solids (mg/L)					NA					
	Total Suspended Solids (mg/L)					NA					
	Salinity (ppt.)										
	ANALYTICAL CHEMISTRY [3]										
	Also do these tests on the effluent with WET. Testing on the receiving water is optional	Reporting Limit	Effluent Limits, ug/L Acute[6]	Chronic[6]	Health[6]			Reporting Limit Check	Possible Exceedence [7] Acute	Chronic	Health
	TOTAL RESIDUAL CHLORINE (mg/L) (9)	0.05				NA					
	AMMONIA	NA				(8)					
M	ALUMINUM	NA				(8)					
M	ARSENIC	5				(8)					
M	CADMIUM	1				(8)					
M	CHROMIUM	10				(8)					
M	COPPER	3				(8)					
M	CYANIDE	5				(8)					
M	LEAD	3				(8)					
M	NICKEL	5				(8)					
M	SILVER	1				(8)					
M	ZINC	5				(8)					

Maine Department of Environmental Protection
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	PRIORITY POLLUTANTS [4]										
			Effluent Limits					Reporting Limit Check	**Possible Exceedence** [7]		
		Reporting Limit	Acute[6]	Chronic[6]	Health[6]				Acute	Chronic	Health
M	ANTIMONY	5									
M	BERYLLIUM	2									
M	MERCURY (5)	0.2									
M	SELENIUM	5									
M	THALLIUM	4									
A	2,4,6-TRICHLOROPHENOL	3									
A	2,4-DICHLOROPHENOL	5									
A	2,4-DIMETHYLPHENOL	5									
A	2,4-DINITROPHENOL	45									
A	2-CHLOROPHENOL	5									
A	2-NITROPHENOL	5									
A	4,6 DINITRO-O-CRESOL (2-Methyl-4,6-dinitrophenol)	25									
A	4-NITROPHENOL	20									
A	P-CHLORO-M-CRESOL (3-methyl-4-chlorophenol)+B80	5									
A	PENTACHLOROPHENOL	20									
A	PHENOL	5									
BN	1,2,4-TRICHLOROBENZENE	5									
BN	1,2-(O)DICHLOROBENZENE	5									
BN	1,2-DIPHENYLHYDRAZINE	10									
BN	1,3-(M)DICHLOROBENZENE	5									
BN	1,4-(P)DICHLOROBENZENE	5									
BN	2,4-DINITROTOLUENE	6									
BN	2,6-DINITROTOLUENE	5									
BN	2-CHLORONAPHTHALENE	5									
BN	3,3'-DICHLOROBENZIDINE	16.5									
BN	3,4-BENZO(B)FLUORANTHENE	5									
BN	4-BROMOPHENYLPHENYL ETHER	2									
BN	4-CHLOROPHENYL PHENYL ETHER	5									
BN	ACENAPHTHENE	5									
BN	ACENAPHTHYLENE	5									
BN	ANTHRACENE	5									
BN	BENZIDINE	45									
BN	BENZO(A)ANTHRACENE	8									
BN	BENZO(A)PYRENE	3									
BN	BENZO(G,H,I)PERYLENE	5									
BN	BENZO(K)FLUORANTHENE	3									
BN	BIS(2-CHLOROETHOXY)METHANE	5									
BN	BIS(2-CHLOROETHYL)ETHER	6									
BN	BIS(2-CHLOROISOPROPYL)ETHER	6									
BN	BIS(2-ETHYLHEXYL)PHTHALATE	3									
BN	BUTYLBENZYL PHTHALATE	5									
BN	CHRYSENE	3									
BN	DI-N-BUTYL PHTHALATE	5									
BN	DI-N-OCTYL PHTHALATE	5									
BN	DIBENZO(A,H)ANTHRACENE	5									
BN	DIETHYL PHTHALATE	5									
BN	DIMETHYL PHTHALATE	5									

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

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

Maine Department of Environmental Protection

Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____

Pipe # _____

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

SAMPLE COLLECTION INFORMATION

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

Sampling Location:

Weather Conditions: _____

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

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

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

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

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

Please Enter Effluent Limits for your facility

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

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

CERTIFICATION

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

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE LICENSE

FACT SHEET

December 28, 2009

MEPDES PERMIT: **ME0101192**
WASTE DISCHARGE LICENSE: **W002623-6C-D-R**

NAME AND ADDRESS OF APPLICANT:

TOWN OF CASTINE
Mr. Dale Abernethy, Town Manager
67 Court Street
P.O. Box 204
Castine, Maine 04421

COUNTY: **Hancock**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

Town of Castine
Castine, ME 04421

RECEIVING WATER / CLASSIFICATION: **Tidewaters of Castine Harbor / Class SB**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Dale Abernethy, Town Manager**
(207) 326-4502
dale@castine.me.us

1. APPLICATION SUMMARY

a. Application: The Town of Castine ("permittee") has applied for a renewal of combination Waste Discharge License (WDL) # W002623-5L-B-R/ MEPDES Permit # ME0101192 ("permit") and is requesting approval to receive and treat transported wastes and boat pumpout wastewater from the Town of Castine, Maine. The previous permit was issued on December 22, 2004 and expired on December 22, 2009. The 12/22/04 permit authorized the monthly average discharge of up to 0.126 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works to the tidewaters of Castine Harbor, Class SB, in Castine, Maine.

1. APPLICATION SUMMARY (cont'd)

b. Source Description: The Town of Castine operates a municipal wastewater collection and treatment system that processes sewage generated by approximately 1,100 full-time residents, 400 seasonal residents and tourists, a small hospital, a local elementary school, several retail and small commercial establishments and approximately 500 students and staff at the Maine Maritime Academy. The collection system is approximately 5.5 miles in length and has no combined sewer overflows. As a result of upgrades at the wastewater treatment facility, the Town is requesting Department approval to receive and treat up to a maximum of 10,000 gallons per year of transported wastes and up to 2,500 gallons per year of boat pumpout wastewater from the Castine Town Dock.

c. Wastewater Treatment: The permittee recently completed a major upgrade, increasing their monthly average design flow from 0.126 MGD to 0.2 MGD and a new peak hourly flow capacity of 1.0 MGD. The facility consists of a headworks grinder and a bypass barscreen which can be used when the grinder is taken offline for repairs. Following the headworks grinder, the influent is conveyed to a 7,100 gallon anoxic selector. Flows from the selector are then conveyed to a 97,000 gallon aeration basin fitted with coarse-bubble diffusers. Following aeration, the mixed liquor is conveyed to two 55,000 gallon secondary clarifiers. Secondary clarifier effluent is disinfected with sodium hypochlorite in a 10,000 gallon chlorine contact tank. The effluent is dechlorinated using sodium bisulfite and then discharged to the tidewaters of Castine Harbor via a 12-inch pipe which has nine feet of water over the crown of the pipe at mean tide and is exposed at mean low water. See **Attachment A** of this Fact Sheet for a schematic of the wastewater treatment process.

In accordance with the permittee's Toxicity Reduction Evaluation (TRE) Plan approved by the Department on May 2, 2008, the permittee will submit a TRE Report, due to the Department in December 2009, that addresses the mitigation or alleviation of the permittee's exceedences of ambient water quality standards. This report will evaluate extending and submerging the outfall pipe at all times. Upon completion, the new outfall location will change the acute dilution factor from 1:1 to 46:1 and the chronic dilution factor from 148:1 to 200:1 based on CORMIX modeling utilizing a 165 linear foot outfall extension. This permitting action addresses the permit limits prior to (***Tier I***) and upon completion (***Tier II***) of the outfall pipe extension project.

2. PERMIT SUMMARY

a. **Tier I of this permitting action is <u>similar to</u> the previous permitting action in that it is:**

1. Carrying forward the requirement for removal of a minimum of 85% of BOD5 and TSS.

2. Carrying forward the settleable solids technology based daily maximum concentration limit of 0.3 mL/L.

2. PERMIT SUMMARY (cont'd)

3. Carrying forward the daily maximum technology based concentration limit for total residual chlorine.

4. Carrying forward the technology based pH limits.

5. Carrying forward the requirement to maintain an up-to-date Wet Weather Flow Management Plan and Operations and Maintenance Plan for the facility.

6. Carrying forward the quarterly monitoring frequency requirement for total copper.

7. Carrying forward the priority pollutant screening level monitoring frequency of 1/Year.

8. Carrying forward the analytical chemistry screening level monitoring frequency of 1/Quarter.

9. Carrying forward the WET screening level monitoring frequency for the mysid shrimp (*Mysidopsis bahia*) and sea urchin (*Arbacia punctulata*) of one per year (1/Year).

10. Carrying forward the mysid shrimp WET limitation and surveillance level monitoring frequency of 1/Year.

11. Carrying forward the 2/Year monitoring requirement for mercury.

12. Carrying forward the mass limitation for total copper.

Tier I of this permitting action is <u>different from</u> the previous permitting action in that it is:

13. Revising the monthly average, weekly average and daily maximum technology based mass limits for BOD5 and TSS.

14. Revising the total copper concentration limitation based on Department rule 06-096 CMR 530(3)(D)(1).

15. Revising the monthly average discharge flow limitation from 0.126 MGD to 0.2 MGD.

16. Establishing quarterly monitoring requirements for total zinc.

17. Establishing quarterly monitoring requirements for ammonia nitrogen.

18. Eliminating the 4/10/06 permit modification monitoring requirement for total silver.

2. PERMIT SUMMARY (cont'd)

19. Establishing a requirement to file an annual certification with the Department for dischargers having waived or reduced WET testing requirements.

20. Revising the pH minimum monitoring frequency from 1/Day to 5/Week.

21. Establishing a compliance schedule for the elimination of WET and toxics exceedences.

Tier II is <u>different from</u> Tier I of this permitting action in that it is:

22. Revising the daily maximum technology based concentration limitation for total residual chlorine.

23. Revising the fecal coliform monitoring frequency from year-round to seasonal (May 15 – September 30).

24. Eliminating the WET effluent limit for the mysid shrimp.

25. Eliminating the monitoring requirement for total zinc.

26. Eliminating the monitoring requirement for total copper.

27. Eliminating the monitoring requirement for ammonia nitrogen.

28. Revising the acute dilution factor from 1:1 to 46:1.

29. Revising the chronic dilution factor from 148:1 to 200:1.

30. Revising the harmonic mean dilution factor from 444:1 to 600:1.

31. Establishing a total residual chlorine monthly average limitation of 0.1 mg/L.

b. <u>Facility History:</u> This section provides a summary of significant licensing, permitting and enforcement actions that have been completed for the permittee:

June 27, 1986 – The EPA issued NPDES permit #ME0101192 for five-year term.

July 3, 1991 – The EPA issued a letter to the Town indicating EPA had received the Town's application for the NPDES permit renewal on 5/7/91 and that it was deemed complete for processing. The NPDES permit has not been reissued as of the date of this permitting action.

November 30, 1999 – The Department issued WDL #W002623-5L-A-R for a five-year term.

2. PERMIT SUMMARY (cont'd)

May 23, 2000 – The Department administratively modified the 11/30/99 WDL by establishing interim mean and maximum technology based concentration limitations of 13.5 ng/L and 20.2 ng/L, respectively for mercury. It is noted the limitations have not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit as limitations and monitoring requirements have been subject to numerous modifications in recent years. However, the interim limitations remain in effect and enforceable and any modifications to the limits and or monitoring requirements will be formalized outside of this permitting document.

December 22, 2004 – The Department issued WDL #W002623-5L-B-R/MEPDES #ME0101192 for a five-year term.

March 12, 2008 – The Department issued a minor revision for the 12/22/04 WDL/MEPDES permit that established daily maximum water quality based mass and concentration limits for copper, an acute WET limit for the mysid shrimp and a requirement for submittal of a Toxicity Reduction Evaluation Plan for the elimination of AWQC exceedences associated with total copper and mysid shrimp.

May 2, 2008 – The Department approved the permittee's Toxicity Reduction Evaluation Plan which outlines a strategy to identify the source(s) and action items to be implemented to mitigate or eliminate exceedences of ambient water quality criteria associated with copper and the acute toxicity associated with the mysid shrimp.

August 7, 2009 – The permittee submitted a complete and timely application for permit renewal.

3. CONDITIONS OF PERMITS

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

4. RECEIVING WATER QUALITY STANDARDS

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

5. RECEIVING WATER QUALITY CONDITIONS

In the *2008 Integrated Water Quality Report* published by the Department pursuant to Section 305(b) of the Federal Water Pollution Control Act, the tidewaters of Castine are listed in a table entitled, *Category 2, Estuarine And Marine Waters Attaining Some Designated Uses With Insufficient Information for Other Uses*. Attainment in this context is in regard to the designated use of harvesting of shellfish. Currently, the Maine Department of Marine Resources (MeDMR) lists Area # 36/Waterbody ID #722-26 (Penobscot & Bagaduce Rivers in Castine-Penobscot) of the receiving water as closed to the harvesting of shellfish due to overboard discharges. Compliance with the fecal coliform bacteria limits in this permitting action ensures that the discharge from the permittee will not cause or contribute to the shellfish harvesting closure. The shellfish closure area is on the map included as Fact Sheet **Attachment B**.

Table Category 5-D of the *"Estuarine and Marine Waters Impaired by Legacy Pollutants"* in the *2008 Integrated Water Quality Report* lists all estuarine and marine waters as partially supporting fishing (shellfish consumption) due to elevated levels of PCB's and other persistent, bioaccumulating substances in lobster tomalley. The Department is not aware of any information that indicates the permittee is discharging persistent or bioaccumulating substances that cause or contribute to the non-attainment.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Dilution Factors: Department Regulation Chapter 530, *Surface Water Toxics Control Program*, §D(3)(b) 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 or CORMIX. The below dilution factors are based on CORMIX methodology.

With a permitted flow of 0.2 MGD and the location and configuration of the outfall structure, the Department has established dilution factors for the permittee as follows:

*Dilutions Prior to Outfall Extension – **TIER I***

Acute = 1:1 Chronic = 148:1 Harmonic Mean = 444:1[(1)]

*Dilutions Following Completion of Outfall Extension – **TIER II***

Acute = 46:1 Chronic = 200:1 Harmonic Mean = 600:1[(1)]

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

Footnote:

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

b. Flow: This permitting action is revising the monthly average discharge flow limitation from 0.126 MGD to 0.2 MGD for Outfall #001A based on facility upgrades since the last permitting action.

A review of the monthly DMR data for the period August 2005 – August 2009 indicates the following:

Flow

Value	Limit (MGD)	Range (MGD)	Average (MGD)	Number of DMR's
Monthly Average	0.126	0.049 – 0.187	0.109	46
Daily Maximum	Report	0.080 – 0.481	0.245	46

c. Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS): This permitting action is carrying forward monthly and weekly average BOD_5 and TSS best practicable treatment (BPT) concentration limits of 30 mg/L and 45 mg/L, respectively, that are based on secondary treatment requirements as defined in Department rule Chapter 525(3)(III). This permitting action is carrying forward daily maximum BOD_5 and TSS concentration limits of 50 mg/L based on a Department best professional judgment (BPJ) of BPT.

The monthly average, weekly average and daily maximum technology-based mass limitations for BOD_5 and TSS are being revised in this permitting action and are based on a monthly average flow of 0.2 MGD.

The mass limits were derived as follows:

Monthly average: (0.2 MGD)(8.34)(30 mg/L) = 50 lbs/day
Weekly average: (0.2 MGD)(8.34)(45 mg/L) = 75 lbs/day
Daily Maximum: (0.2 MGD)(8.34)(50 mg/L) = 83 lbs/day

This permitting action is carrying forward the requirements of 85% removal for BOD_5 and TSS pursuant to Department rule 06-096 CMR 525(3)(III)(a&b)(3).

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

A review of the DMR data for the period August 2005 – August 2009 indicates the monthly average and daily maximum mass and concentration values have been reported as follows:

BOD_5 Mass

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)	Number of DMR's
Monthly Average	32	4 – 51	13	46
Daily Maximum	53	5 – 110	21	46

BOD_5 Concentration

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)	Number of DMR's
Monthly Average	30	1 – 28	13	46
Daily Maximum	50	3 – 38	18	46

TSS mass

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)	Number of DMR's
Monthly Average	32	1 – 52	7	46
Daily Maximum	53	1 – 132	14	46

TSS concentration

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)	Number of DMR's
Monthly Average	30	3 – 32	8	46
Daily Maximum	50	3 – 70	13	46

This permitting action is carrying forward the BOD_5 and TSS monitoring frequency requirements of once per week (1/week**)**.

d. Settleable Solids: This permitting action is carrying forward a daily maximum settleable solids concentration limit of 0.3 mL/L, which is considered by the Department as BPT for secondary treated wastewater.

A review of the DMR data for the period August 2005 – August 2009 indicates the daily maximum settleable solids values have been reported as follows:

Settleable Solids

Value	Limit (mL/L)	Range (mL/L)	Average (mL/L)	Number of DMR's
Daily Maximum	0.3	<0.1 – >40	2.0	46

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

For calculation purposes, settleable solids results reported as "less than" or "greater than" were considered present at the detection limit.

This permitting action is carrying forward the settleable solids minimum monitoring frequency of 1/Day based upon Department guidance for facilities discharging between 0.1 – 0.5 MGD.

e. Fecal coliform bacteria: This permitting action is carrying forward the fecal coliform monthly average (geometric mean) and daily maximum (instantaneous) water quality-based concentration limits of 15 colonies/100 mL and 50 colonies/100 mL, respectively, which are consistent with the National Shellfish Sanitation Program.

*Limitations Prior to Outfall Extension – **TIER I***

Tier I of this permitting action is carrying forward the year-round fecal coliform minimum monitoring requirement of once per week (1/Week) from the previous permitting action based on Department guidance for facilities with flows between 0.1 – 0.5 MGD.

*Limitations Following Completion of Outfall Extension – **TIER II***

Tier II of this permitting action is revising the fecal coliform monitoring requirement from yearly (Tier I) to seasonal (May 15 – September 30). Tier II of this permitting action is carrying forward the fecal coliform minimum monitoring requirement of once per week based on Department guidance for facilities with flows between 0.1 – 0.5 MGD.

A review of the monthly DMR data for the period August 2005 – August 2009 indicates the monthly average and daily maximum fecal coliform values have been reported as follows:

Fecal coliform bacteria

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)	Number of DMR's
Monthly Average	15	1 – 14	6	46
Daily Maximum	50	2 – 84	23	46

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

f. Total Residual Chlorine (TRC): Limits on TRC are specified to ensure that ambient water quality standards are maintained and that BPT is being applied to the discharge. Department licensing/permitting actions impose the more stringent of either a water quality-based or BPT limit. End-of-pipe water quality-based concentration thresholds may be calculated as follows:

*Limitations Prior to Outfall Extension – **TIER I***

			Calculated	
Acute (A) Criterion	Chronic (C) Criterion	A & C Dilution Factors	Acute Limit	Chronic Limit
0.013 mg/L	0.0075 mg/L	1:1 (A) 148:1 (C)	0.013 mg/L	1.11 mg/L

Example, TRC Acute: (0.013 mg/L)(1) = 0.013 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. The Department has established a daily maximum BPT limitation of 0.3 mg/L for facilities that need to dechlorinate their effluent unless calculated water quality based limits are lower than 0.3 mg/L. In the case of Castine, the calculated water quality based limit is lower than 0.3 mg/L, thus, the daily maximum water quality based limit of 0.013 mg/L is being carried forward in this permitting action.

In April of 1992, the EPA's Region 1 Quality Assurance Office established a Minimum Level (ML) of detection of 0.05 mg/L (50 ug/L) for TRC. This permitting action is carrying forward the daily maximum water quality based limitation for TRC that is below the ML. It is noted an acute dilution factor of greater than or equal to 3.8:1 and a chronic dilution of greater than or equal to 6.7:1 are the thresholds that will result in a permit limitation of greater than or equal to EPA's ML of 0.050 mg/L (50 ug/L). As a result, there may be times at or about mean low tides when the discharge, after reasonable opportunity for mixing with the receiving water, contains non-detectable levels of TRC that exceed AWQC. The permittee is conducting a Toxicity Reduction Evaluation Plan that, based on an 165 linear foot outfall extension, will provide 13 feet of cover during mean low water, thereby alleviating exposure of the outfall pipe at mean low water and increasing the acute dilution factor to 46:1.

Tier I of this permitting action is carrying forward a year-round TRC minimum monitoring frequency of 1/Day based on Department guidance for facilities with design flows between 0.1 – 0.5 MGD.

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

*Limitations Following Completion of Outfall Extension – **TIER II***

Acute (A) Criterion	Chronic (C) Criterion	A & C Dilution Factors	Calculated Acute Limit	Calculated Chronic Limit
0.013 mg/L	0.0075 mg/L	46:1 (A) 200:1 (C)	0.6 mg/L	1.5 mg/L

Example, TRC Acute: (0.013 mg/L)(46) = 0.6 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that need to dechlorinate the discharge to meet water quality based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. In the case of the permittee, the calculated daily maximum water quality based limit is 0.6 mg/L; therefore, this permitting action is establishing the more stringent daily maximum TRC limit of 0.3 mg/L in Tier II of this permitting action. The BPT-based monthly average TRC standard of 0.1 mg/L is more stringent than the water quality-based threshold of 1.5 mg/L calculated above and is therefore being established in this permitting action.

A review of the DMR data for the period August 2005 – August 2009 indicates the daily maximum TRC values have been reported as follows:

Total residual chlorine

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)	Number of DMR's
Daily Maximum	0.013	*	*	46

*The permittee's reported values were below EPA's 0.050 mg/L minimum level of detection.

Tier II of this permitting action is carrying forward the minimum TRC monitoring frequency of 1/Day based on Department guidance for facilities with design flows between 0.1 – 0.5 MGD.

g. pH: This permitting action is carrying forward the pH range limitation of 6.0 – 9.0 standard units found in Department rule Chapter 525(3)(III) which is considered BPT. A review of the DMR data for the period August 2005 – August 2009 (# of DMR's = 45) indicates the daily maximum pH values have been reported as 6.8 – 7.7 standard units. Based on the permittee's excellent compliance record for pH, this permitting action is revising the minimum pH monitoring frequency from 1/Day to five per week (5/Week) based on Department guidance.

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

h. Whole Effluent Toxicity (WET) and Chemical Specific Testing – Maine law, 38 M.R.S.A., Sections 414-A and 420, prohibits the discharge of effluent containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. *Surface Water Toxics Control Program,* 06-096 CMR 530 (effective October 9, 2005), and *Surface Water Quality Criteria for Toxic Pollutants,* 06-096 CMR 584 (effective October 9, 2005), set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

WET, priority pollutant and analytical chemistry testing as required by 06-096 CMR 530, is included in this permit in order to fully characterize the effluent. This permit also provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity test results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment and receiving water characteristics.

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

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

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

06-096 CMR 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 falls into the Level III frequency category as the facility has a chronic dilution factor of 200:1. 06-096 CMR 530(2)(D)(1) specifies that default surveillance- and screening-level testing requirements are as follows:

Surveillance-level testing

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

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

Screening-level testing

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

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

WET Test Evaluation

On September 24, 2009, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department in accordance with the statistical approach in Chapter 530. The 9/24/09 WET statistical evaluation indicates the discharge from the permittee's wastewater treatment facility does not exceed nor has the reasonable potential to exceed the acute or chronic water quality thresholds for the sea urchin. The statistical evaluation indicates the discharge exceeded the acute water quality threshold for the mysid shrimp (20% on 8/27/06, 60% on 10/27/08). The permittee is developing a Toxicity Reduction Evaluation Report, due to the Department in December 2009, that explains how they will mitigate or alleviate conditions related to the acute exceedences of the AWQC for the mysid shrimp.

*Limitations Prior to Outfall Extension – **TIER I***

This permitting action is carrying forward the mysid shrimp WET acute permit limit of 100% from the previous permitting action. This permitting action is establishing a compliance schedule for the elimination of exceedences of the WET acute AWQC for the mysid shrimp. The critical WET acute and chronic thresholds of 100% and 0.68%, respectively, were derived as the mathematical inverses of the applicable acute and chronic dilution factors of 1:1 and 148:1, respectively.

06-096 CMR 530(2)(D)(3)(b) states in part, "*Dischargers in Level III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E).*" Based on the results of the 9/24/09 statistical evaluation, the permittee qualifies for the 06-096 CMR 530(2)(D)(3)(b) reduction for sea urchin WET testing.

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

A summary of WET testing requirements is as follows:

Tier I*:* Beginning upon issuance of this permit and lasting through 12 months prior to permit expiration:

Surveillance-level testing

Level	WET Testing
III	1/Year for the mysid shrimp Sea urchin-none

Tier I*:* Beginning 12 months prior to expiration of this permit or in the fifth year since the last screening test, whichever is sooner:

Screening-level testing

Level	WET Testing
III	1 per year for the mysid shrimp 1 per year for the sea urchin

Limitations Following Completion of Outfall Extension – ***TIER II***

This permitting action is establishing the WET critical acute and chronic thresholds of 2.2% and 0.5%, respectively. The acute and chronic thresholds were derived as the mathematical inverses of the applicable acute and chronic dilution factors of 46:1 and 200:1, respectively.

Department rule 06-096 CMR 530(2)(D)(3)(b) states in part, "*Dischargers in Level III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E).*"

Based on a statistical analysis of the permittee's reasonable potential to exceed the WET AWQC following completion of the outfall extension project, this permitting action is eliminating the mysid shrimp effluent limits. Further, based on results of the 9/24/09 statistical evaluation, the permittee qualifies for the 06-096 CMR 530(2)(D)(3)(b) reduction for surveillance level WET testing for the sea urchin and mysid shrimp.

A summary of WET testing requirements is as follows:

Tier II*:* Beginning 12 months prior to expiration of this permit or in the fifth year since the last screening test, whichever is sooner:

Screening-level testing

Level	WET Testing
III	1 per year for the mysid shrimp 1 per year for the sea urchin

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

Chapter 530 §(2)(D) states:

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

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

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

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

Special Condition K, *06-096 CMR 530 (2)(D)(4) Certification,* of this permitting action requires the permittee to file an annual certification with the Department.

i. Analytical Chemistry and Priority Pollutant Testing Evaluation

Monitoring frequencies for analytical chemistry and priority pollutant testing established in this permitting action are based on the 06-096 CMR 530 rule. Department rule 06-096 CMR 530(D)(3)(b) states in part, "*Dischargers in Level III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E).*"

Statistical analyses of the permittee's effluent data over the most recent 60 months indicates the permittee had one test result (9.1 mg/L on 8/07/06) that has the reasonable potential to exceed the acute water quality criteria for ammonia nitrogen, five results (3.0 ug/L on 10/23/05, 16 ug/L on 8/27/06, 9.0 ug/L on 1/22/07, 21 ug/L on 10/27/08, 11 ug/L on 4/28/09) that have the reasonable potential to exceed the acute water quality criteria for total copper, one result (22 ug/L on 2/18/09) that exceeded the acute water quality criteria for total copper, five results (50 ug/L on 10/23/05, 52 ug/L on 8/07/06, 68 ug/L on 1/22/07, 181 ug/L on 2/18/09, 54 ug/L on 4/28/09) that have a reasonable potential to exceed the acute water quality criteria for total zinc and one result (132 ug/L on 2/18/09) that exceeded the acute water quality criteria for total zinc.

The permittee is evaluating an outfall extension project as part of their approved Toxicity Reduction Evaluation (TRE) Plan to alleviate conditions related to AWQC exceedences. In a letter to the Department dated October 19, 2009, the permittee stated the TRE Report due to the Department in December 2009 will address all known water quality standard concerns. This permitting action is establishing a compliance schedule for the elimination of exceedences of the AWQC for total zinc, total copper and ammonia nitrogen.

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

The mass limitation for total copper, when based on an increase in the facility's monthly average design flow from 0.126 MGD to 0.2 MGD, equals 0.01 lbs/day. The 9/24/09 statistical evaluation shows that at the mass limitation of 0.0061 lbs/ day established in the minor permit modification dated March 12, 2008, the permittee exceeded the acute water quality criteria for total copper. Therefore, this permitting action is carrying forward the mass limitation and quarterly monitoring requirement for total copper established in the 3/12/08 minor modification. This permitting action is revising the total copper concentration limitation based on Department rule 06-096 CMR 530(3)(D)(1). This permitting action is establishing quarterly monitoring requirements and effluent limitations for total zinc and ammonia nitrogen.

Chapter 530 §(3)(D) states *"Expression of effluent limits. Where the need for effluent limits has been determined, limits derived from acute water quality criteria must be expressed as daily maximum values. Limits derived from chronic or human health criteria must be expressed as monthly average values."*

Given the results of the 9/24/09 statistical evaluation, the end-of-pipe (EOP) daily limitations for total copper, total zinc and ammonia nitrogen were derived as follows:

Total Copper:

Acute AWQC(1) = 5.78 ug/L
Acute dilution factor = 1:1

EOP(2) concentration, acute = [Dilution factor x 0.75 x AWQC] + [0.25 x AWQC]
EOP concentration, acute = [1 x 0.75 x 5.78 ug/L] + [0.25 x 5.78 ug/L] = 5.78 ug/L
EOP daily maximum, acute = $\frac{(5.78\ ug/L)(8.34\ lbs/gal)(0.126\ MGD)}{1000\ ug/mg}$ = 0.0061 lbs/day

Total Zinc:

Acute AWQC(1) = 95 ug/L
Acute dilution factor = 1:1

EOP(2) concentration, acute = [Dilution factor x 0.75 x AWQC] + [0.25 x AWQC]
EOP concentration, acute = [1 x 0.75 x 95 ug/L] + [0.25 x 95 ug/L] = 95 ug/L
EOP daily maximum, acute = $\frac{(95\ ug/L)(8.34\ lbs/gal)(0.2\ MGD)}{1000\ ug/mg}$ = 0.16 lbs/day

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

Ammonia Nitrogen:

Acute AWQC[(1)] = 6700 ug/L (year-round)
Acute dilution factor = 1:1

EOP[(2)] concentration, acute = [Dilution factor x 0.75 x AWQC] + [0.25 x AWQC]
EOP concentration, acute = [1 x 0.75 x 6700 ug/L] + [0.25 x 6700 ug/L] = 6700 ug/L
EOP daily maximum, acute = $\frac{(6700 \text{ ug/L})(8.34 \text{ lbs/gal})(0.2 \text{ MGD})}{1000 \text{ ug/mg}}$ = 11 lbs/day

Footnotes:

(1) Based on 06-096 CMR 584 AWQC.
(2) End-of-pipe

Department rule 06-096 CMR 530(3)(D)(1) states, *"for specific chemicals, effluent limits must be expressed in total quantity that may be discharged and in effluent concentration. In establishing concentration, the Department may increase allowable values to reflect actual flows that are lower than permitted flows and/or provide opportunities for flow reductions and pollution prevention provided water quality criteria are not exceeded."* Based on said provisions, the Department is making a best professional judgment that the water quality-based concentration threshold for the parameters listed above be increased by a factor of 2.0 so as not to penalize the permittee for operating at flows less than the permitted flow.

A summary of the water quality based limits for toxic pollutants established in this permit are as follows:

Parameter	Daily Maximum	Daily Maximum
Copper	0.0061 lbs/day	11.6 ug/L
Zinc	0.16 lbs/day	190 ug/L
Ammonia	11 lbs/day	13,400 ug/L

The 60-month statistical evaluation resulted in no acute or chronic water quality violations for total silver. Therefore, this permitting action is eliminating the monitoring requirements for total silver established in the 4/10/06 permit modification.

As for the remaining parameters tested to-date, the statistical evaluation indicates there were no exceedences or reasonable potential to exceed AWQC. 06-096 CMR 530(D)(3)(b) states in part, "*Dischargers in Level III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E).*" With the exception of total zinc, total copper and ammonia nitrogen, the permittee qualifies for the waiver in priority pollutant and analytical chemistry testing.

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

With the exception of total copper, total zinc and ammonia nitrogen, this permitting action is establishing ***Tier I*** surveillance-level analytical testing requirements as follows:

Beginning upon issuance of this permit and lasting through 12 months prior to permit expiration:

Tier I

Surveillance-level testing

Level	Priority pollutant testing	Analytical chemistry
III	None required	None required

Department rule Chapter 530 (2)(D)(1) specifies that screening-level testing is to be established for analytical chemistry and priority pollutant testing requirements as follows:

Beginning 12 months prior to expiration of this permit or in the fifth year since the last screening test, whichever is sooner:

Tier I

Screening-level testing

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

In the event future statistical evaluations demonstrate that the AWQC exceedences or the reasonable potential to exceed AWQC are no longer applicable for ammonia, copper or zinc, or that the result(s) in question fall outside the 60-month evaluation period, this permit may be reopened pursuant to Special Condition O, *Reopening of Permit For Modifications*, of this permit to remove the limitation(s) and/or reduce the monitoring requirement(s).

Limitations After Outfall Extension – ***TIER II***

Based on a statistical analysis of the permittee's reasonable potential to exceed the AWQC following completion of the outfall extension project, this permitting action is eliminating the effluent limits and monitoring requirements for total zinc, total copper and ammonia nitrogen.

As for the remaining parameters tested to-date, the statistical evaluation indicates there were no exceedences or reasonable potential to exceed AWQC. 06-096 CMR 530(D)(3)(b) states in part, "*Dischargers in Level III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E).*"

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

This permitting action is establishing ***Tier II*** surveillance-level analytical testing requirements as follows:

Beginning upon issuance of this permit and lasting through 12 months prior to permit expiration:

Tier II

Surveillance-level testing

Level	Priority pollutant testing	Analytical chemistry
III	None required	None required

Department rule Chapter 530 (2)(D)(1) specifies that screening-level testing is to be established for analytical chemistry and priority pollutant testing requirements as follows:

Beginning 12 months prior to expiration of this permit or in the fifth year since the last screening test, whichever is sooner:

Tier II

Screening-level testing

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

As with WET testing, Chapter 530 (2)(D) requires an annual certification to qualify for reduced testing. Special Condition K, *Chapter 530 (2)(D)(4) Certification*, of this permitting action requires the permittee to file an annual certification with the Department.

j. Mercury: May 23, 2000 – Pursuant to *Certain deposits and discharges prohibited*, Maine law, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001), the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL #W002623-5L-A-R by establishing interim monthly average and daily maximum effluent concentration limits of 13.5 parts per trillion (ppt) and 20.2 ppt, respectively, and a minimum monitoring frequency requirement of two (2) tests per year for mercury. It is noted the limitations have not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit as limitations and monitoring frequencies are regulated separately through 38 M.R.S.A.§ 413 and 06-096 CMR 519. However, the interim limitations remain in effect and enforceable and any modifications to the limits and or monitoring requirements will be formalized outside of this permitting document.

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

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 period October 2004 through the present indicates mercury test results reported have ranged from 1.7 ppt to 54.0 ppt with an arithmetic mean (number of DMR's =15) of 7.0 ppt.

k. Transported Wastes – This permitting action is authorizing the permittee to receive and introduce up to a maximum of 10,000 gallons per year of transported wastes into the wastewater treatment process or solids handling stream. Department rule Chapter 555, *Standards For The Addition of Transported Wastes to Wastewater Treatment Facilities*, limits the quantity of transported wastes received at a facility to 1% of the design capacity of the 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. The permittee does not have storage capability and therefore is limited to 0.5% of the design capacity of the facility. With a design capacity of 0.2 MGD, 10,000 gallons per year represents 0.01 % of said capacity.

The Department has determined that under normal operating conditions, the receipt and treatment of 10,000 gallons per year of transported wastes to the facility will not cause or contribute to upset conditions of the treatment process.

7. ANTI-BACKSLIDING

Federal regulation 40 CFR, §122(l) contains the criteria for what is often referred to as the anti-backsliding provisions of the Federal Water Pollution Control Act (Clean Water Act). In general, the regulation states that except for provisions specified in the regulation, effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards or conditions in the previous permit. Applicable exceptions include (1) material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation and (2) information is available which was not available at the time of the permit issuance (other than revised regulations, guidance or test methods) and which would justify the application of less stringent effluent limitations at the time of permit issuance.

This permitting action is establishing less stringent mass limitations for BOD5 and TSS in Tier I than in the previous permitting action based on upgrades resulting in an increase in the facility's monthly average design flow. This permitting action is establishing less stringent effluent limits for total residual chlorine in Tier II than in Tier I of this permitting action based on revised dilution factors resulting from the extension of the facility's outfall pipe. The Department has made the determination that authorizing these less stringent limitations

7. ANTI-BACKSLIDING (cont'd)

will not cause or contribute to failure of the receiving water to meet its classification standards.

8. ANTI-DEGREDATION - 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.

Tier I of this permitting action revises previously established effluent limitations for BOD5 and TSS. Tier II of this permitting action revises previously established Tier I effluent limitations for total copper, total zinc, ammonia nitrogen, mysid shrimp whole effluent toxicity and total residual chlorine. The rationale for these actions is contained in Section 6 of this Fact Sheet. Based on the information provided in the referenced section, 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 tidewaters of Castine Harbor to meet standards for Class SB classification.

9. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

10. PUBLIC COMMENTS

Public notice of this application was made in the *Castine Patriot* newspaper on or about August 5, 2009. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

11. DEPARTMENT CONTACTS

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

Phyllis A. Rand
Division of Water Quality management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017
Telephone: (207) 287-7658 email: Phyllis.A.Rand@maine.gov

12. RESPONSE TO COMMENTS

During the period of November 23, 2009 through the issuance date of the permit/license, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit to be issued to the Town of Castine for the proposed discharge. The Department received comments on the draft permit from the Town of Castine (permittee) in a letter to the Department dated December 18, 2009. The comments and Department responses are as follows:

Comment #1: *Effluent Limitations and Monitoring Requirements, page 7 of 20: We appreciate the improvements made to the zinc and ammonia-nitrogen water quality monitoring requirements. However, we are requesting that Table (A.1) be clarified to clearly indicate that the quarterly testing requirement for zinc and ammonia nitrogen is "Report Only" and the limits listed on the table do not apply until December 31, 2011. Additionally, the footnotes for Table (A.1), located on page 13 of 20, should also be clarified to indicate that the limits for zinc and ammonia-nitrogen only apply after December 31, 2011.*

Response #1: The permit footnote referenced in Comment #1 (Footnote #9) states, "The effective date of the monitoring requirements is based on the outcome of the Schedule of Compliance established in Special Condition M of this permit. This permit will be reopened to establish the effective date per Special Condition P of this permit." The Department considers this existing wording appropriate as the zinc and ammonia nitrogen limits will take effect based upon the completion date of the Outfall Extension Project, on **or before** December 31, 2011.

Response #1 addendum: The draft permit stated the Department determined that establishing water quality based concentration limits by back-calculating from mass limits was deemed to no longer be appropriate. Therefore, the draft permit did not establish concentration limits for total zinc or ammonia nitrogen, and eliminated the existing concentration limit for total copper. The Department erred in making this determination as Department rule 06-096 CMR 530(3)(D)(1) states, *"for specific chemicals, effluent limits must be expressed in total quantity that may be discharged* ***and in effluent concentration****."*

12. RESPONSE TO COMMENTS (cont'd)

(bold added for emphasis). Therefore, the Department is re-instituting concentration limits for total copper and establishing concentration limits for total zinc and ammonia nitrogen as explained in Section 6, "Effluent Limitations and Monitoring Requirements," of the Fact Sheet.

Comment #2: *Final Effluent Chlorination Limit (Permit page 9 of 20; Fact Sheet page 11 of 21): As you are aware, we have concerns over the application of the DEP's Best Practice Treatment (BPT) policy for chlorine limits where facilities utilize dechlorination chemicals such as sodium bisulfite. We do not have an issue with the establishment of the daily maximum BPT limitation of 1.0 mg/l. However, the remainder of the BPT developed by the DEP appears to be arbitrary. Once the Town completes the outfall pipe extension, the effluent will have an acute dilution factor of 46:1 and a chronic dilution factor of 200:1. These dilution factors provide the following chlorine levels based on EPA's Water Quality Standards (WQS's):*

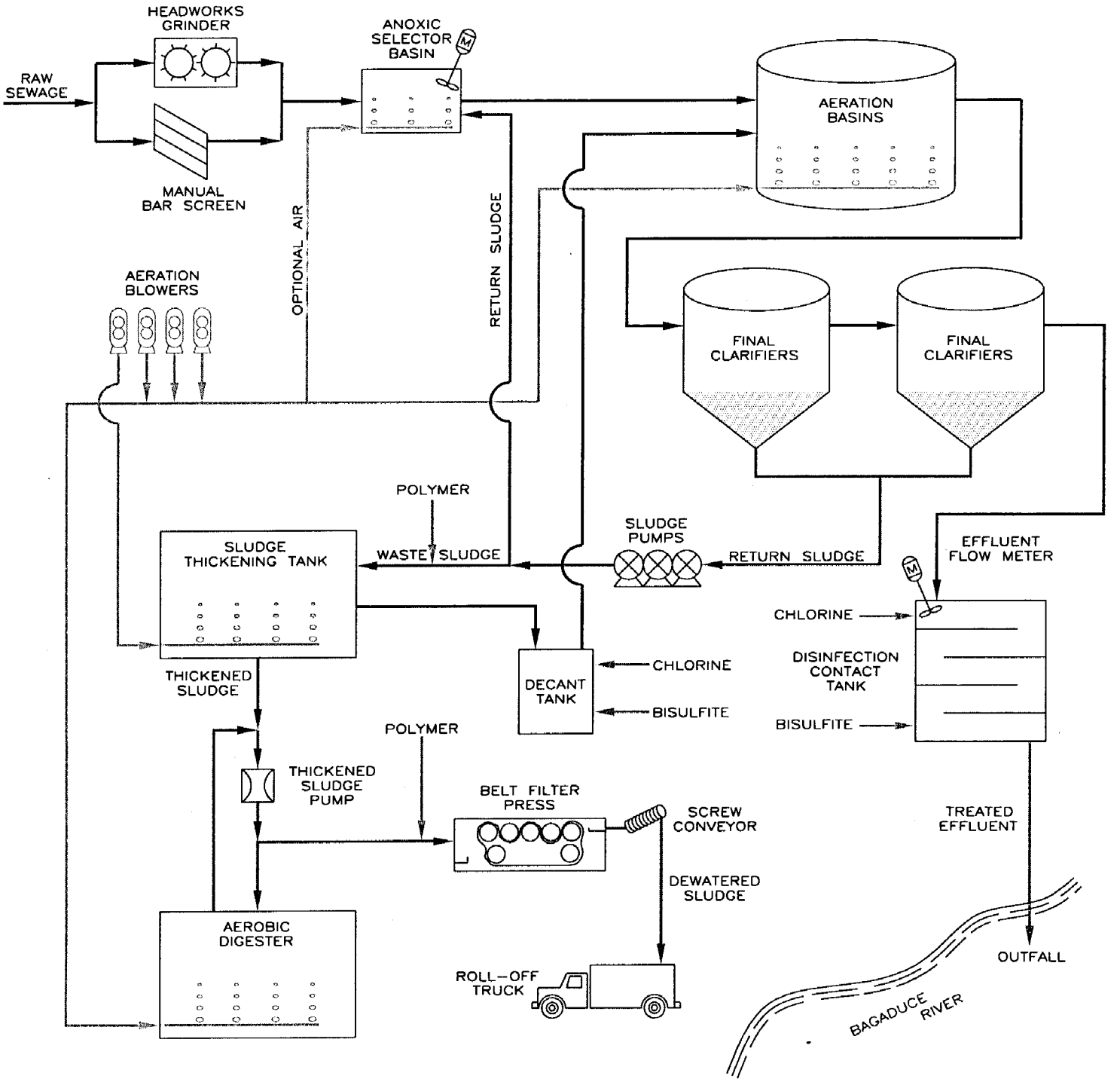
Daily Maximum (Acute) (0.0013 ppm)(46) = 0.6 ppm
Monthly Average (Chronic) (0.0075 ppm)(200) = 1.5 ppm

The calculated daily maximum effluent standard is 0.6 ppm for chlorine residual based on WQS's. Since the calculated acute limit is less than 0.8 ppm, the DEP has decreased the daily maximum chlorine concentration down to 0.3 ppm. This is based on DEP's BPT policy which requires that when dechlorination chemicals are utilized, the plant should be able to meet 0.3 ppm when sodium bisulfite is added. For this same reason, the monthly average was reduced from 1.5 ppm to 0.1 ppm.

We are requesting a copy of the DEP's BPT guidance so we can review it prior to the issuance of this permit. The Town would like the flexibility of the higher limits which are still protective of aquatic life but also provide a greater degree of assurance for compliance. The Town is requesting that the effluent chlorine values be revised to 0.6 ppm daily maximum and 1.0 ppm monthly average.

Response: The Department's BPJ of BPT for total residual chlorine is a long-standing policy that the Department has utilized for the past 20 years. The permittee is welcome to submit a request to the Division Director for reconsideration of this policy.

ATTACHMENT A



CASTINE POLLUTION
CONTROL FACILITY

PROCESS FLOW SCHEMATIC

FIGURE 1

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

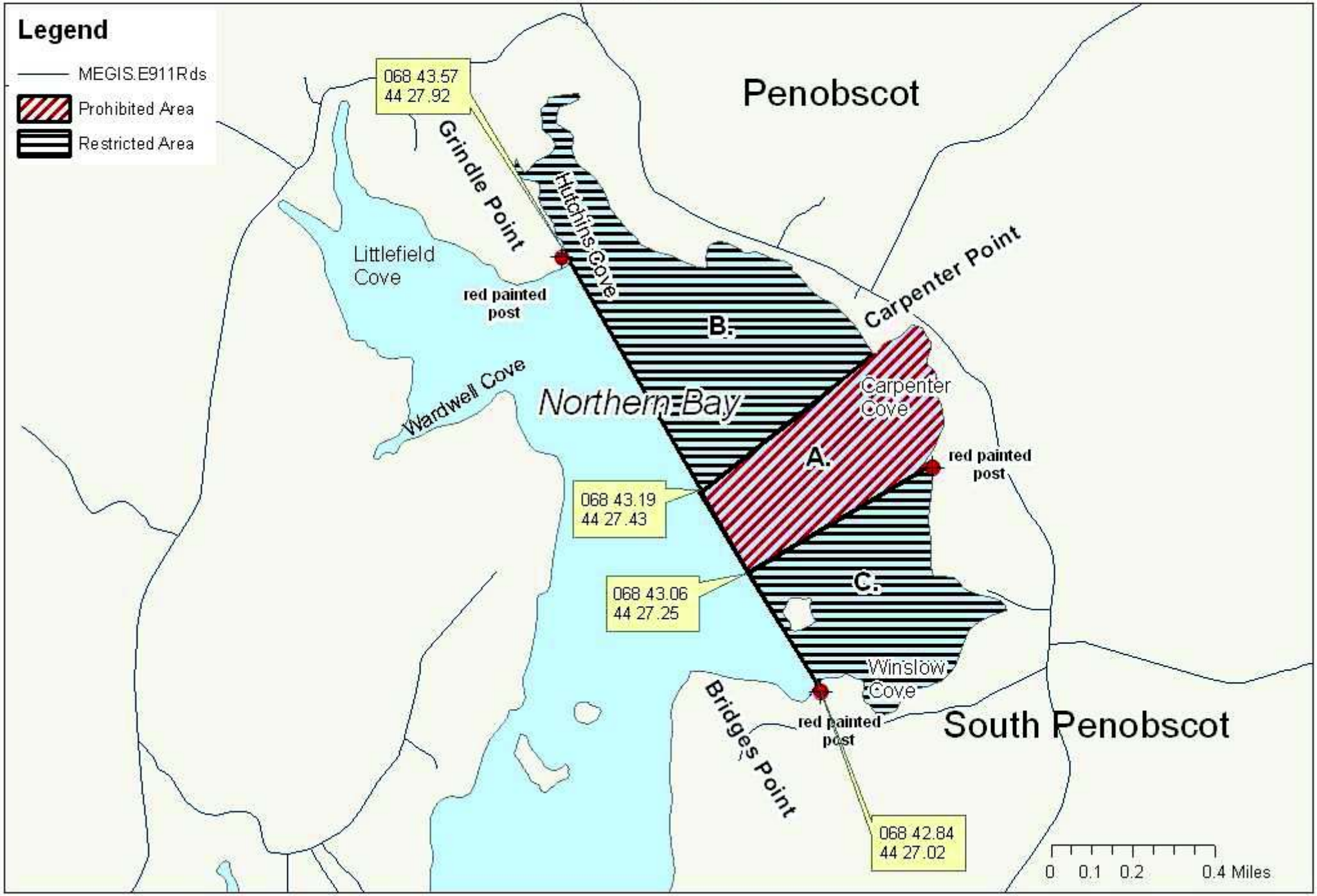
ATTACHMENT B

Maine Department of Marine Resources

Pollution Area No. 36-A

Northern Bay (Penobscot)

08.13.09



ATTACHMENT C

Species	Test	Test Result %	Sample Date
MYSID SHRIMP	A_NOEL	100	10/23/2005
MYSID SHRIMP	LC50	>100	10/23/2005
SEA URCHIN	C_NOEL	4.2	10/23/2005
MYSID SHRIMP	A_NOEL	20.0	08/07/2006
MYSID SHRIMP	A_NOEL	>100	01/22/2007
MYSID SHRIMP	A_NOEL	60	10/27/2008

ATTACHMENT D

PP Data for "Hits" Only

CASTINE

CASTINE HARBOR

AMMONIA

No MDL

	Conc, ug/l	MDL	Sample Date	Date Entered
	100.000000	NS	10/23/2005	02/06/2006
	2100.00000	NS	10/27/2008	04/03/2009
	2200.00000	NS	02/18/2009	06/22/2009
	4000.00000	NS	01/22/2007	05/11/2007
	9100.00000	NS	08/07/2006	01/09/2007
	12600.0000	NS	04/28/2009	08/05/2009

ARSENIC

MDL = 5 ug/l

	Conc, ug/l	MDL	Sample Date	Date Entered
	4.000000	OK	10/23/2005	01/17/2006
<	1.000000	OK	01/22/2007	05/11/2007
<	2.000000	OK	02/18/2009	06/22/2009
<	2.000000	OK	04/28/2009	08/05/2009

CHLOROFORM

MDL = 5.0 ug/l

	Conc, ug/l	MDL	Sample Date	Date Entered
	10.000000	OK	10/23/2005	01/17/2006

COPPER

MDL = 3 ug/l

	Conc, ug/l	MDL	Sample Date	Date Entered
	3.000000	OK	10/23/2005	01/17/2006
	9.000000	OK	01/22/2007	05/11/2007
	11.000000	OK	04/28/2009	08/05/2009
	16.000000	OK	08/07/2006	01/09/2007
	21.000000	OK	10/27/2008	04/03/2009
	22.000000	OK	02/18/2009	06/22/2009

DICHLOROBROMOMETHANE

MDL = 3.0 ug/l

	Conc, ug/l	MDL	Sample Date	Date Entered
	4.000000	OK	10/23/2005	01/17/2006

SELENIUM

MDL = 5 ug/l

	Conc, ug/l	MDL	Sample Date	Date Entered
	2.000000	OK	10/23/2005	01/17/2006

TOLUENE

MDL = 5.0 ug/l

	Conc, ug/l	MDL	Sample Date	Date Entered
	1.000000	OK	10/23/2005	01/17/2006

ZINC

MDL = 5.0 ug/l

	Conc, ug/l	MDL	Sample Date	Date Entered
	50.000000	OK	10/23/2005	01/17/2006
	52.000000	OK	08/07/2006	01/09/2007
	54.000000	OK	04/28/2009	08/05/2009
	68.000000	OK	01/22/2007	09/03/2009
	132.000000	OK	02/18/2009	06/22/2009
	181.000000	OK	10/27/2008	04/03/2009

Sample Date: 10/23/2005
Plant flows provided

Total Tests:	130	mon.(MGD)= 0.187
Missing Compounds:	1	day(MGD)= 0.300
Tests With High DL:	0	

M = 0 V = 0 A = 0

BN = 0 P = 0 other = 0

CONTENTS

A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

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

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

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

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

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

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

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

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

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

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

5. Bypasses.

(a) Definitions.

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

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

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

(c) Notice.

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

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

(d) Prohibition of bypass.

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

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

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

6. Upsets.

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

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

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

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

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

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

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

(c) Records of monitoring information shall include:

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

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

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

D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

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

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

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

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

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

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

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

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

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

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

(f) Twenty-four hour reporting.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

5. Publicly owned treatment works.

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

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

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

E. OTHER REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

DEP INFORMATION SHEET

Appealing a Commissioner's Licensing Decision

Dated: May 2004 **Contact: (207) 287-2811**

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner: (1) in an administrative process before the Board of Environmental Protection (Board); or (2) in a judicial process before Maine's Superior Court. This INFORMATION SHEET, in conjunction with consulting statutory and regulatory provisions referred to herein, can help aggrieved persons with understanding their rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

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

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

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

HOW TO SUBMIT AN APPEAL TO THE BOARD

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

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

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

1. *Aggrieved Status*. Standing to maintain an appeal requires the appellant to show they are particularly injured by the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.

5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.

6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.

7. *New or additional evidence to be offered.* The Board may allow new or additional evidence as part of an appeal only when the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or show that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2, Section 24(B)(5).

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license file is public information made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.

2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.

3. *The filing of an appeal does not operate as a stay to any decision.* An applicant proceeding with a project pending the outcome of an appeal runs the risk of the decision being reversed or modified as a result of the appeal.

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

The Board will formally acknowledge initiation of the appeals procedure, including the name of the DEP project manager assigned to the specific appeal, within 15 days of receiving a timely filing. The notice of appeal, all materials accepted by the Board Chair as additional evidence, and any materials submitted in response to the appeal will be sent to Board members along with a briefing and recommendation from DEP staff. Parties filing appeals and interested persons are notified in advance of the final date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision. The Board will notify parties to an appeal and interested persons of its decision.

II. APPEALS TO MAINE SUPERIOR COURT

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

ADDITIONAL INFORMATION

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

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