



STATE OF MAINE  
Department of Environmental Protection

Paul R. LePage  
GOVERNOR

Patricia W. Aho  
COMMISSIONER

January 10, 2013

Mr. James Leighton, Superintendent  
Limestone Water & Sewer District  
6 Water Company Road  
P.O. Box 544  
Limestone, Maine 04750

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0102849  
Maine Waste Discharge License (WDL) Application # W-006654-6D-I-M  
**Minor Revision**

Dear Mr. Leighton:

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'G. Wood'.

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

Enc.

cc: William Sheehan, DEP/NMRO  
Sandy Mojica, USEPA

AUGUSTA  
17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0017  
(207) 287-3901 FAX: (207) 287-3435  
RAY BLDG., HOSPITAL ST.  
web site: [www.maine.gov/dep](http://www.maine.gov/dep)

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

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

PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04769-2094  
(207) 764-6477 FAX: (207) 764-1507



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

**DEPARTMENT ORDER**

**IN THE MATTER OF**

LIMESTONE WATER & SEWER DISTRICT ) MAINE POLLUTANT DISCHARGE  
PUBLICLY OWNED TREATMENT WORKS ) ELIMINATION SYSTEM PERMIT  
CARIBOU, AROOSTOOK COUNTY, MAINE ) AND  
ME0102849 ) WASTE DISCHARGE LICENSE  
W006654-6D-I-M ) APPROVAL ) MINOR REVISION

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 is initiating a minor revision of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0102849/Maine Waste Discharge License (WDL) #W006654-5L-F-R (permit hereinafter) issued on March 11, 2009, and a subsequent modification, MEPDES permit #ME0102849/WDL #W006654-6D-H-M, dated December 20, 2011, issued to the LIMESTONE WATER & SEWER DISTRICT. With its supportive data, AGENCY review comments, and other related material on file, the Department FINDS THE FOLLOWING FACTS:

**MINOR REVISION SUMMARY**

The March 11, 2009, permit authorized the discharge to the Little Madawaska River, Class B, in Caribou, Maine. During the summer of 2011, the LWSD completed the construction of a 7-mile long outfall pipe from a pump station it owns and operates in the Town of Limestone to a sewer manhole along the Aroostook River in Caribou. The manhole structure combines the effluent flow from the LWSD facility and effluent flow from the Caribou Utility District's (CUD) waste water treatment facility and the combined effluent is discharged to the Aroostook River, Class C, via the final outfall pipe for the CUD. On December 20, 2011, the MEPDES permit was modified to authorize the discharge to the Aroostook River.

The Fact Sheet of the December 20, 2011, minor revision contained the following italicized text;

*Given the LWSD discharge is now being conveyed to the Aroostook River with multiple facilities discharging to the same river, a new statistical evaluation will be conducted during the first calendar quarter of 2012. The Department is currently reviewing all the discharge data for all facilities in the Aroostook River watershed in preparation for the new evaluation. Therefore, until the new evaluation is conducted, the monthly average water quality based mass and concentration limits for inorganic arsenic and bis(2ethylhexyl)phthalate are being carried forward in this permit modification. If the new statistical evaluation determines there*

**MINOR REVISION SUMMARY (cont'd)**

*are other pollutants that exceed or have a reasonable potential to exceed applicable ambient water quality criteria or revised limits need to be calculated for inorganic arsenic and bis(2ethylhexyl)phthalate, this permit modification will be reopened pursuant to Special Condition O, Reopening of Permit For Modifications, of the March 11, 2009, permit to establish applicable limits.*

An up-to-date statistical evaluation for the Aroostook River watershed was conducted on November 19, 2012. This minor revision is being issued to establish water quality based limitations for toxic pollutants that exceed or have a reasonable potential to exceed applicable ambient water quality criteria (AWQC) established in Department rule, 06-096 CMR, Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*. More specifically, this permit;

1. Establishes monthly average water quality based mass limits for total aluminum, inorganic arsenic, bis(2-ethylhexyl)phthalate, total copper and total zinc as test results in the most current 60 months of data indicates there is a reasonable potential to exceed applicable AWQC.
2. Establishes daily maximum water quality based mass limits for total copper and total zinc as test results in the most current 60 months of data indicates there is a reasonable potential to exceed applicable AWQC.
3. Incorporates the average and maximum concentration limits for total mercury. The limits were originally established in a permit modification issued on May 23, 2000, to the Loring Development Authority, the owner and operator of the waste water treatment facility at the time.

## CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated January 9, 2013, and subject to the Conditions listed below, the Department makes the following conclusions:

For discharge of secondary treated waste waters from the waste water treatment facility:

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

**ACTION**

THEREFORE, the Department APPROVES the minor revision of MEPDES permit #ME0102849/WDL W006654-5L-F-R, issued by the Department on March 11, 2009, and subsequently modified on December 20, 2011, to establish limitations for toxic pollutants that exceed or have a reasonable potential to exceed applicable AWQC established in Department rule, 06-096 CMR, Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*. The discharges shall be 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 to MEPDES permit #ME0102849/WDL #W006654-5L-F-R, issued by the Department on March 11, 2009.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. All terms and conditions of MEPDES permit #ME0102849/WDL #W006654-5L-F-R, issued by the Department on March 11, 2009, and subsequently revised on December 20, 2011, not modified by this permitting action remain in effect and enforceable.
4. This permit modification becomes effective upon signature and expires on March 11, 2014, concurrent with #ME0102849/WDL #W006654-5L-F-R, issued by the Department on March 11, 2009. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of the this permit, the terms and conditions of the this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S.A. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (effective April 1, 2003)].

**ACTION (cont'd)**

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

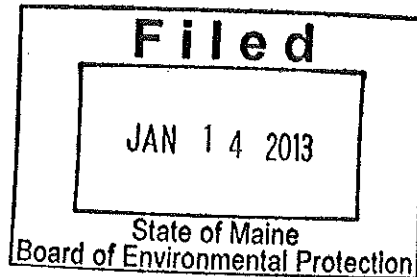
DONE AND DATED AT AUGUSTA, MAINE, THIS 14<sup>th</sup> DAY OF JANUARY, 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Keelan  
For Patricia W. Ahb, Commissioner

Date of initial receipt of application \_\_\_\_\_ September 17, 2012 \_\_\_\_\_.

Date of application acceptance \_\_\_\_\_ September 17, 2012 \_\_\_\_\_.



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

This Order prepared by Gregg Wood, BUREAU OF LAND & WATER QUALITY

**SPECIAL CONDITIONS**

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Aluminum (total) <i>[01105]</i>	3.2 lbs/day <i>[26]</i>	---	---	Report ug/L <i>[28]</i>	---	---	2/Year <i>[02/YR]</i>	24-Hr. Composite <i>[24]</i>
Arsenic (total) <sup>(6)</sup> <i>[01002]</i> (Upon permit issuance)	Report lbs/day <i>[26]</i>	---	---	Report ug/L <i>[28]</i>	---	---	1/Year <i>[01/YR]</i>	24-Hr. Composite <i>[24]</i>
Arsenic (Inorganic) <sup>(7)</sup> <i>[01252]</i> (Upon EPA test method approval)	0.0034 lbs/day <i>[26]</i>	---	---	Report ug/L <i>[28]</i>	---	---	1/Year <i>[01/YR]</i>	24-Hr. Composite <i>[24]</i>
Bis(2-ethylhexyl)phthalate <i>[39100]</i>	1.9 lbs/day <i>[26]</i>	---	---	Report ug/L <i>[28]</i>	---	---	2/Year <i>[02/YR]</i>	24-Hr. Composite <i>[24]</i>
Copper (total) <i>[01042]</i>	0.29 lbs/day <i>[26]</i>	---	0.33 lbs/day <i>[26]</i>	Report ug/L <i>[28]</i>	---	Report ug/L <i>[28]</i>	2/Year <i>[02/YR]</i>	24-Hr. Composite <i>[24]</i>
Mercury (total) <sup>(10)</sup> <i>[01051]</i>	---	---	---	4.6 ng/L <i>[3M]</i>	---	6.9 ng/L <i>[3M]</i>	1/Year <i>[01/YR]</i>	24-Hr. Composite <i>[24]</i>
Zinc (total) <i>[01042]</i>	0.68 lbs/day <i>[26]</i>	---	0.57 lbs/day <i>[26]</i>	Report ug/L <i>[28]</i>	---	Report ug/L <i>[28]</i>	2/Year <i>[02/YR]</i>	24-Hr. Composite <i>[24]</i>

**Footnotes:** For footnotes #6 and #7, see MEPDES permit modification #ME0102849/WDL W0066534-6D-H-M issued on December 20, 2011.

10. **Mercury** - All mercury sampling required by this permit or required to determine compliance with interim limitations established pursuant to Department rule Chapter 519, shall be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis shall be conducted in accordance with EPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See **Attachment A** of this minor revision for a Department report form for mercury test results. The limitation in the monthly average column in table Special Condition A of this permit is defined as the arithmetic mean of all the mercury tests ever conducted for the facility utilizing sampling Methods 1669 and analysis Method 1631E.

# ATTACHMENT A



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: 

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 Sampling time: \_\_\_\_\_ AM/PM  
mm dd yy

Sampling Location: \_\_\_\_\_

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

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

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

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

**ANALYTICAL RESULT FOR EFFLUENT MERCURY**

Name of Laboratory: \_\_\_\_\_  
Date of analysis: \_\_\_\_\_ Result: \_\_\_\_\_ ng/L (PPT)

Please Enter Effluent Limits for your facility

Effluent Limits: Average = \_\_\_\_\_ ng/L Maximum = \_\_\_\_\_ ng/L

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

**CERTIFICATION**

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

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

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

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

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

**FACT SHEET**

**DATE: January 10, 2013**

**PERMIT NUMBER: ME0102849**  
**WASTE DISCHARGE LICENSE: W006654-6D-I-M**

**NAME AND ADDRESS OF APPLICANT:**

**LIMESTONE WATER & SEWER DISTRICT  
6 Water Company Road  
P.O. Box 544  
Limestone, Maine 04750**

**COUNTY: Aroostook**

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

**363 Grimes Road  
Caribou, Maine**

**RECEIVING WATER/CLASSIFICATION: Aroostook River/Class C**

**COGNIZANT OFFICIAL AND TELEPHONE NUMBER: Mr. James Leighton, Superintendent  
(207) 325-4788  
e-mail: [lwsd@maine.rr.com](mailto:lwsd@maine.rr.com)**

**1. MINOR REVISION SUMMARY**

The Department of Environmental Protection is initiating a minor revision of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0102849/Maine Waste Discharge License (WDL) #W006654-5L-F-R (permit hereinafter) issued on March 11, 2009, and a subsequent modification, MEPDES permit #ME0102849/WDL #W006654-6D-H-M, dated December 20, 2011, issued to the Limestone Water & Sewer District.

The March 11, 2009, permit authorized the discharge to the Little Madawaska River, Class B, in Caribou, Maine. During the summer of 2011, the LWSD completed the construction of a 7-mile long outfall pipe from a pump station it owns and operates in the Town of Limestone to a sewer manhole along the Aroostook River in Caribou. The manhole structure combines the effluent flow from the LWSD facility and effluent flow from the Caribou Utility District's (CUD) waste water treatment facility and the combined effluent is discharged to the Aroostook River, Class C, via the final outfall pipe for the CUD. On December 20, 2011, the MEPDES permit was modified to authorize the discharge to the Aroostook River.

## 1. MINOR REVISION SUMMARY (cont'd)

A new statistical evaluation for the Aroostook River watershed was conducted on November 19, 2012 (Report ID 486). This minor revision is being issued to establish water quality based limitations for toxic pollutants that exceed or have a reasonable potential to exceed applicable ambient water quality criteria (AWQC) established in Department rule, 06-096 CMR, Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*. More specifically, this permit;

- a. Establishes monthly average water quality based mass limits for total aluminum, inorganic arsenic, bis(2-ethylhexyl)phthalate, total copper and total zinc as test results in the most current 60 months of data indicates there is a reasonable potential to exceed applicable AWQC.
- b. Establishes daily maximum water quality based mass limits for total copper and total zinc as test results in the most current 60 months of data indicates there is a reasonable potential to exceed applicable AWQC.
- c. Incorporates the average and maximum concentration limits for total mercury. The limits were originally established in a permit modification issued on May 23, 2000, to the Loring Development Authority, the owner and operator of the waste water treatment facility at the time.

## 2. CONDITIONS OF PERMIT

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

## 3. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S.A., Section 467(C)(1)(f) classifies the Aroostook River at the point of discharge as Class C waters. Maine law, 38 M.R.S.A., §465(4) establishes the classification standards for Class C waters as follows:

- A. *Class C waters must be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as a habitat for fish and other aquatic life.*

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

*B. The dissolved oxygen content of Class C water may be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained. In order to provide additional protection for the growth of indigenous fish, the following standards apply.*

*(1) The 30-day average dissolved oxygen criterion of a Class C water is 6.5 parts per million using a temperature of 22 degrees centigrade or the ambient temperature of the water body, whichever is less, if:*

*(a) A license or water quality certificate other than a general permit was issued prior to March 16, 2004 for the Class C water and was not based on a 6.5 parts per million 30-day average dissolved oxygen criterion; or*

*(b) A discharge or a hydropower project was in existence on March 16, 2005 and required but did not have a license or water quality certificate other than a general permit for the Class C water. This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004.*

*(2) In Class C waters not governed by subparagraph (1), dissolved oxygen may not be less than 6.5 parts per million as a 30-day average based upon a temperature of 24 degrees centigrade or the ambient temperature of the water body, whichever is less. This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004. The department may negotiate and enter into agreements with licensees and water quality certificate holders in order to provide further protection for the growth of indigenous fish. Agreements entered into under this paragraph are enforceable as department orders according to the provisions of sections 347-A to 349.*

*Between May 15th and September 30th, the number of Escherichia coli bacteria of human and domestic animal origin in Class C waters may not exceed a geometric mean of 126 per 100 milliliters or an instantaneous level of 236 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures. The board shall adopt rules governing the procedure for designation of spawning areas. Those rules must include provision for periodic review of designated spawning areas and consultation with affected persons prior to designation of a stretch of water as a spawning area.*

*C. Discharges to Class C waters may cause some changes to aquatic life, except that the receiving waters must be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community. This paragraph does not apply to aquatic pesticide or chemical discharges approved by the department and conducted by the department, the Department of Inland Fisheries and Wildlife or an agent of either agency for the purpose of restoring biological communities affected by an invasive species.*

#### 4. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2010 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists all of Maine's fresh waters as, "Category 4-A: Waters Impaired With Impaired Use, TMDL Completed, waters Impaired by Atmospheric Deposition of Mercury. The report states the impairment is caused by atmospheric deposition of mercury; a regional scale TMDL has been approved. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, The Maine Department of Health and Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources.

Pursuant to Maine law, 38 M.R.S.A. §420(1-B)(B), "a facility is not in violation of the ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413 subsection 11." The Department established interim monthly average and daily maximum mercury concentration limits for the LWSD (formerly Loring Development Authority) which have not been exceeded to date. See page 18 of this Fact Sheet for a more in-depth discussion on mercury.

As permitted, the Department has no information at this time that the discharge from the LWSD will cause or contribute to the failure of the receiving water to meet the designated uses of its assigned classification.

#### 5. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Dilution Factors: Dilution factors associated with the monthly average dry weather design criterion for the facility of 1.71 MGD were derived in accordance with Department rule, 06-096 CMR, Chapter 530 Section 4.A Surface Water Toxics Control Program and were calculated as follows:

$$\text{Acute: } 1Q_{10} = 147.5 \text{ cfs} \quad \Rightarrow \frac{(147.5 \text{ cfs})(0.6464) + 1.25^{(1)} \text{ MGD}}{1.25 \text{ MGD}} = 77:1$$

$$\text{Chronic: } 7Q_{10} = 173.5 \text{ cfs} \quad \Rightarrow \frac{(173.5 \text{ cfs})(0.6464) + 1.25 \text{ MGD}}{1.25 \text{ MGD}} = 91:1$$

$$\text{Harmonic Mean} = 520.5 \text{ cfs}^{(2)} \quad \Rightarrow \frac{(520.5 \text{ cfs})(0.6464) + 1.25 \text{ MGD}}{1.25 \text{ MGD}} = 273:1$$

The Department has determined that the outfall structure associated with the LWSD's discharge provides complete and rapid mixing of the effluent with the receiving waters.

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

### Footnotes:

(1) Design capacity of the LWSD waste water treatment facility.

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

- b. Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing: Maine law, 38 M.R.S.A., §414-A and §420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department rule, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program* sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

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

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

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

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

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

**Screening level testing** – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement.

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

**Surveillance level testing** – Beginning upon issuance of the permit and lasting through 24 months prior to permit expiration (years 1-3 of the permit) and commencing again 12 months prior to permit expiration and lasting through permit expiration (year 5 of the permit).

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

Department rule Chapter 530(1)(D)(3)(c) states in part, *“Dischargers in Level II may reduce surveillance testing to one WET or specific chemical series every other year provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E).”*

Chapter 530(3)(E) states *“For effluent monitoring data and the variability of the pollutant in the effluent, the Department shall apply the statistical approach in Section 3.3.2 and Table 3-2 of USEPA's "Technical Support Document for Water Quality-Based Toxics Control" (USEPA Publication 505/2-90-001, March, 1991, EPA, Office of Water, Washington, D.C.) to data to determine whether water-quality based effluent limits must be included in a waste discharge license. Where it is determined through this approach that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedence of water quality criteria, appropriate water quality-based limits must be established in any licensing action.”*

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

**WET evaluation**

On 12/18/12, the Department conducted a statistical evaluation on the most recent 60 months of WET data (see **Attachment A** of this Fact Sheet) that indicates that the discharge does not exceed or have a reasonable potential (RP) to exceed the acute or chronic critical ambient water quality criteria (AWQC) thresholds (1.3% and 1.1% – mathematical inverse of the acute dilution factor 77:1 and the chronic dilution factor 91:1).

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

Given the absence of exceedences or reasonable potential to exceed critical WET thresholds, the permittee meets the reduced surveillance level monitoring frequency criteria found at Department rule Chapter 530(1)(D)(3). Therefore, this minor revision is carrying forward the reduced surveillance level monitoring frequency for both the water flea and the brook trout to once every other year (1/2 years) established in the December 20, 2011, permit modification. As for screening level testing beginning 12 months prior to the expiration date of the permit, this minor revision is also carrying forward the monitoring frequency of 2/Year established in the December 20, 2011, permit modification pursuant to 06-096 CMR Chapter 530.

The March 11, 2009, permit contained Special Condition K, *Chapter 530(2)(D)(4) Certification*, as required by Department rule Chapter 530(2)(D)(4) for a facility being granted reduced testing requirements.

### Chemical specific evaluation

The March 11, 2009, permit established monthly average water quality based mass and concentration limits for inorganic arsenic and bis(2ethylhexyl)phthalate based on the fact the discharge was to the Little Madawaska River and the LWSD was the only facility discharging to the Little Madawaska. The limits were derived based on a statistical evaluation conducted on March 9, 2009, on the previous 60 months of data submitted to the Department. The limitations were carried forward in the December 20, 2011, minor revision.

The Fact Sheet of the December 20, 2011 minor revision of the permit stated "*Given the LWSD discharge is now being conveyed to the Aroostook River with multiple facilities discharging to the river, a new statistical evaluation will be conducted during the first calendar quarter of 2012. The Department is currently reviewing all the discharge data for all facilities in the Aroostook River watershed in preparation for the new evaluation. Therefore, until the new evaluation is conducted, the monthly average water quality based mass and concentration limits for inorganic arsenic and bis(2ethylhexyl)phthalate are being carried forward in this permit modification. If the new statistical evaluation determines there are other pollutants that exceed or have a reasonable potential to exceed applicable ambient water quality criteria or revised limits need to be calculated for inorganic arsenic and bis(2ethylhexyl)phthalate, this permit modification will be reopened pursuant to Special Condition O, Reopening of Permit For Modifications, of the March 11, 2009, permit to establish applicable limits.*"

Chapter 530 (promulgated on October 12, 2005) §4(C), states "*The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions. The Department shall use the same general methods as those in section 4(D) to determine background concentrations. For pollutants not listed by the Department, an assumed*



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

*concentration of 10% of the applicable water quality criteria must be used in calculations.*" At the time of the March 11, 2009 permit, the Department had limited information on the background levels of metals in the water column in the Little Madawaska River in the vicinity of the permittee's outfall. Therefore, a default background concentration of 10% of the applicable water quality criteria was used in the calculations of the permit limits. Now that the discharge has been relocated to the Aroostook River, a background concentration of 10% will also be utilized in the new statistical evaluation as the Department has limited information on the background levels of metals in the water column in the Aroostook River in the vicinity of the permittee's outfall.

In a letter dated September 21, 2000, to the Department, the Presque Isle Sewer District (PISD) submitted eight and a half years (1990-1999) of quarterly test results (by season) of the background hardness of Presque Isle Stream in an effort have the Department consider a site specific hardness for hardness dependent metals. The arithmetic mean of the seasonal data points are as follows: Winter (62 mg/L), Spring (34 mg/L), Summer (66 mg/L) and Fall (40 mg/L). The Department took the data submitted by the PISD into consideration and made the determination that for hardness dependent metals, the applicable acute hardness for Presque Isle Stream at the point of discharge is 33 mg/L and the chronic hardness is 40 mg/L, and applicable limits for hardness dependent metals were established in PISD's September 30, 2002, MEPDES permit.

The Department has made a best professional judgment that the hardness data for Presque Isle Stream is a conservative assumption for the background hardness in the Aroostook River and is therefore being utilized for establishing limits for hardness dependent metals for dischargers in the Aroostook River watershed. Because only one hardness value can be entered into the Department DETOX program for statistically evaluating chemical specific test results and establishing limitations for pollutant that have a reasonable potential or exceed AWQC, the Department is utilizing a watershed hardness value of 37 mg/L. The value is the arithmetic mean of the acute and chronic hardness values established for PISD's September 30, 2002, MEPDES permit.

Chapter 530 4(E), states "*In allocating assimilative capacity for toxic pollutants, the Department shall hold a portion of the total capacity in an unallocated reserve to allow for new or changed discharges and non-point source contributions. The unallocated reserve must be reviewed and restored as necessary at intervals of not more than five years. The water quality reserve must be not less than 15% of the total assimilative quantity.*" Therefore, the Department reserved 15% of the applicable water quality criteria in the calculations of permit limits in the March 11, 2009.

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

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

Chapter 530 §4(F) states in part *“Where there is more than one discharge into the same fresh or estuarine receiving water or watershed, the Department shall consider the cumulative effects of those discharges when determining the need for and establishment of the level of effluent limits. The Department shall calculate the total allowable discharge quantity for specific pollutants, less the water quality reserve and background concentration, necessary to achieve or maintain water quality criteria at all points of discharge, and in the entire watershed. The total allowable discharge quantity for pollutants must be allocated consistent with the following principles.*

*Evaluations must be done for individual pollutants of concern in each watershed or segment to assure that water quality criteria are met at all points in the watershed and, if appropriate, within tributaries of a larger river.*

*The total assimilative capacity, less the water quality reserve and background concentration, may be allocated among the discharges according to the past discharge quantities for each as a percentage of the total quantity of discharges, or another comparable method appropriate for a specific situation and pollutant. Past discharges of pollutants must be determined using the average concentration discharged during the past five years and the facility's licensed flow.*

On December 18, 2012, the Department conducted statistical evaluations based on 15% of the ambient water quality criteria reserve being withheld (Report ID 422) and 0% of the reserve of the criteria being withheld (Report ID 489) to determine if the unallocated assimilative capacity would avoid an exceedance or avoid a reasonable potential to exceed applicable ambient water quality criteria for toxic pollutants. Report ID 489 indicates Fort Fairfield no longer has a reasonable potential to exceed the chronic ambient water quality criteria for ammonia or copper. Therefore, the department is utilizing the full 15% of the unallocated assimilative capacity in the statistical evaluation when establishing limits for toxic pollutants in waste discharge licenses for facilities in the Aroostook River watershed.

*The amount of allowable discharge quantity may be no more than the past discharge quantity calculated using the statistical approach referred to in section 3(E) [Section 3.3.2 and Table 3-2 of USEPA's "Technical Support Document for Water Quality-Based Toxics Control"] of the rule, but in no event may allocations cause the water quality reserve amount to fall below the minimum referred to in 4(E) [15% of the total assimilative capacity]. Any difference between the total allowable discharge quantity and that allocated to existing dischargers must be added to the reserve.*

Chapter 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. With regard to concentration limits, the Department may review past and projected flows and set limits to reflect proper operation of the treatment facilities that will keep the discharge of pollutants to the minimum level practicable.”* However, in May 2012,

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

Maine law 38 M.R.S.A. §464, ¶¶ K was enacted which reads as follows, "*Unless otherwise required by an applicable effluent limitation guideline adopted by the department, any limitations for metals in a waste discharge license may be expressed only as mass-based limits.*"

According to the 12/18/12 statistical evaluation (Report ID #489), the pollutants of concern for the LWSD (aluminum, arsenic, bis(2-ethylhexyl)phthalate, copper, and zinc – see **Attachment B** of this Fact Sheet) are to be limited based on the segment allocation method. See **Attachment C** of this Fact Sheet for Department guidance that establishes protocols for establishing waste load allocations. The guidance states that the most protective of water quality becomes the facility's allocation.

### Segment allocation methodology

#### **Historical Average:**

For the segment allocation methodology, the historical average quantity (mass) for each pollutant of concern for each facility is calculated utilizing the arithmetic mean of the concentrated values reported for each pollutant, a conversion factor of 8.34 lbs/gallon and the monthly average permit limit for flow. The historical mass discharged for each pollutant for each facility is mathematically summed to determine the total mass discharged for each pollutant in the watershed. Based on the individual dischargers historical average each discharger is assigned a percentage of the whole which is then utilized to determine the percent of the segment allocation for each pollutant for each facility. For the permittee's facility, historical averages for the pollutants of concern were calculated as follows:

#### Aluminum

##### Mass limits

Mean concentration (n=3) = 94 ug/L or 0.094 mg/L

Design flow = 1.25 MGD

Historical average mass = (0.094 mg/L)(8.34)(1.25 MGD) = 0.98 lbs/day

The 12/18/12 statistical evaluation indicates the historical average mass of aluminum discharged by the permittee's facility is 3.96% of the aluminum discharged by the facilities on the Aroostook River and its tributaries. Therefore, the permittee's segment allocation for aluminum is calculated as 3.96% of the chronic assimilative capacity of the river at Fort Fairfield, the most downstream facility on the Aroostook River. The Department has calculated a chronic assimilative capacity 80.2 lbs/day of aluminum at Fort Fairfield, the most downstream discharger on the Aroostook River. The chronic assimilative capacity (AC) at Fort Fairfield was calculated based on 90% of the applicable AWQC (taking into consideration the 10% reduction to account for background, 0% reduction for reserve, totaling 10%) and the critical low flow (7Q10 = 190.1 cfs). The calculation for aluminum is as follows:

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

**Segment allocation methodology**

**Chronic:**

7Q10 @ Fort Fairfield = 190.1 cfs or 122.9 MGD  
AWQC = 87 ug/L (not hardness dependent)  
87 ug/L(0.90) = 78.3 ug/L or 0.0783 mg/L

$$\text{Chronic AC} = (122.9 \text{ MGD})(8.34 \text{ lbs/gal})(0.0783 \text{ mg/L}) = 80.3 \text{ lbs/day}$$

Therefore, the mass segment allocation for aluminum for the permittee can be calculated as follows:

$$\text{Monthly average: (Chronic assimilative capacity mass)(\% of total aluminum discharged)} \\ (80.3 \text{ lbs/day})(0.0396) = 3.2 \text{ lbs/day}$$

**Arsenic (inorganic)**

**Mass limits**

Mean concentration (n=14) = 2.7 ug/L or 0.0027 mg/L  
Design flow = 1.25 MGD  
Historical average mass = (0.000268 mg/L)(8.34)(1.25 MGD) = 0.028 lbs/day

The 12/18/12 statistical evaluation indicates the historical average mass of arsenic discharged by the permittee's facility is 10.24% of the arsenic discharged by the facilities on the Aroostook River and its tributaries. Therefore, the permittee's segment allocation for arsenic is calculated as 10.24% of the harmonic mean assimilative capacity of the river at Fort Fairfield, the most downstream facility on the Aroostook River. The Department has calculated a human health (water & organisms) assimilative capacity 0.0333 lbs/day of arsenic at Fort Fairfield, the most downstream discharger on the Aroostook River. The human health assimilative capacity (AC) at Fort Fairfield was calculated based on 90% of the applicable AWQC (taking into consideration the 10% reduction to account for background, 0% reduction for reserve, totaling 10%), critical low flow (harmonic mean = 571.5 cfs). The calculations for arsenic are as follows:

**Chronic:**

HM @ Fort Fairfield = 571.5 cfs or 369.4 MGD  
AWQC = 0.012 ug/L (not hardness dependent)  
0.012 ug/L(0.90) = 0.0108 ug/L or 0.0000108 mg/L

$$\text{HM AC} = (369.4 \text{ MGD})(8.34 \text{ lbs/gal})(0.0000108 \text{ mg/L}) = 0.0333 \text{ lbs/day}$$

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

### Segment allocation methodology

Therefore, the mass segment allocation for arsenic for the permittee can be calculated as follows:

Monthly average (harmonic mean) mass limitation for arsenic is calculated as follows:

Monthly average: (Harmonic mean assimilative capacity mass)(% of total arsenic discharged)  
 $(0.0333 \text{ lbs/day})(0.1024) = 0.0034 \text{ lbs/day}$

### Concentration

Monthly average concentration for inorganic arsenic;

$\frac{0.0034 \text{ lbs/day}}{(1.25 \text{ MGD})(8.34 \text{ lbs/gal.})} = 0.00033 \text{ mg/L or } 0.33 \text{ ug/L}$

Department rule Chapter 530 (C)(6) states:

*All chemical testing must be carried out by approved methods that permit detection of a pollutant at existing levels in the discharge or that achieve detection levels as specified by the Department. When chemical testing results are reported as less than, or detected below the Department's specified detection limits, those results will be considered as not being present for the purposes of determining exceedences of water quality criteria.*

The USEPA has not approved a test method for inorganic arsenic as of the date of issuance of this permit. Therefore, there is no way for the permittee to formally demonstrate compliance with the monthly average water quality based mass and concentration limits for inorganic arsenic established in this permitting action. Therefore, beginning upon issuance of this permit an lasting through the date in which the USEPA approves a test method for inorganic arsenic the permittee is being required to monitor for total arsenic. Once a test method is approved, the Department will notify the permittee in writing and the limitations and monitoring requirements for inorganic arsenic become effective thereafter.

As of the date of this permitting action, the Department has limited data on the percentage of inorganic arsenic (approximately 50%) in total arsenic test results. Based on a literature search conducted by the Department, the inorganic fraction can range from 1% - 99% depending on the source of the arsenic. Generally speaking, ground water supplies derived from bedrockwells will likely tend to have higher fractions of inorganic arsenic ( $\text{As}^{+3}$ -arsenite and/or  $\text{As}^{+5}$ - arsenate) than one may find in a food processing facility where the inorganic fraction is low and the organic fraction (arsenobetaine, arsenoribosides) is high. Until the Department and the regulated community in Maine develop a larger database to establish statistically defensible ratios of inorganic and organic fractions in total arsenic test results, the Department is making a rebuttable presumption that the effluent contains a ratio of 50% inorganic arsenic and 50% organic arsenic in total arsenic results.

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

### Segment allocation methodology

Being that the only approved test methods for compliance with arsenic limits established in permits is for total arsenic, the Department converted the water quality based end-of pipe monthly average concentration value of 0.33 ug/L for inorganic arsenic calculated on the previous page of this Fact Sheet into an equivalent total arsenic threshold (assuming 50% of the total arsenic is inorganic arsenic). This results in a total arsenic end-of-pipe monthly average concentration threshold of 0.6 ug/L. The calculation is as follows:

$$\frac{0.33 \text{ ug/L inorganic arsenic}}{0.5 \text{ ug/L inorganic arsenic} / 1.0 \text{ ug/L total arsenic}} = 0.7 \text{ ug/L total arsenic}$$

Therefore, a total arsenic value greater than 0.7 ug/L is potentially exceeding the water quality based end-of pipe monthly average concentration value of 0.33 ug/L for inorganic arsenic. Only the results greater than the total arsenic threshold of 0.7 ug/L will be considered a potential exceedence of the inorganic limit of 0.33 ug/L. It is noted the Department's current RL for total arsenic is 5.0 ug/L.

If a test result is determined to be a potential exceedence, the permittee shall submit a toxicity reduction evaluation (TRE) to the Department for review and approval within 45 days of receiving the test result of concern from the laboratory. Contact the Department's compliance inspector for a copy of the Department's December 2007 guidance on conducting a TRE for arsenic.

Maine law, 38 M.R.S.A., §414-A(2), Schedules of Compliance states "*Within the terms and conditions of a license, the department may establish a schedule of compliance for a final effluent limitation based on a water quality standard adopted after July 1, 1977. When a final effluent limitation is based on new or more stringent technology-based treatment requirements, the department may establish a schedule of compliance consistent with the time limitations permitted for compliance under the Federal Water Pollution Control Act, Public Law 92-500, as amended. A schedule of compliance may include interim and final dates for attainment of specific standards necessary to carry out the purposes of this subchapter and must be as short as possible, based on consideration of the technological, economic and environmental impact of the steps necessary to attain those standards.*" Special Condition N, *Schedule of Compliance – Inorganic Arsenic*, of the March 11, 2009, permit established a schedule as follows:

*Beginning upon issuance of this permit modification and lasting through a date on which the USEPA approves a test method for inorganic arsenic, the limitations and monitoring requirements for inorganic are not in effect. During this time frame, the permittee is required by Special Condition A, Effluent Limitations and Monitoring Requirements, of this permit to conduct 1/Year sampling and analysis for total arsenic.*

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

### Segment allocation methodology

*Upon receiving written notification by the Department that a test method for inorganic arsenic has been approved by the USEPA, the limitations and monitoring requirements for inorganic arsenic become effective and enforceable and the permittee is relieved of their obligation to sample and analyze for total arsenic.*

The schedule of compliance reserves the final date for compliance with the limit for inorganic arsenic. This reservation stems from the fact the EPA has no schedule for approving a test method for inorganic arsenic nor does the Department have any authority to require the EPA to do so. Therefore, the Department considers the aforementioned schedule for inorganic arsenic to be as short as possible given the technological (or lack thereof) issue of not being able to sample and analyze for inorganic arsenic with an approved method.

Department rule Chapter 523, Waste Discharge License Conditions, § Section 7, *Schedules of Compliance* sub-§3, *Interim dates*, states in part, "if a permit establishes a schedule of compliance which exceeds 1 year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.

- (i) *The time between interim dates shall not exceed 1 year, except that in the case of a schedule for compliance with standards for sewage sludge use and disposal, the time between interim dates shall not exceed six months.*
- (ii) *If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than 1 year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.*

Special Condition A, *Effluent Limitations and Monitoring Requirements*, of this permit requires that beginning upon issuance of this permit and lasting through USEPA approval of a test method for inorganic arsenic, the permittee shall conduct 1/Year monitoring (equivalent to the routine surveillance level monitoring frequency) for total arsenic. Should the test method approval for inorganic arsenic extend more than one year from the date of the issuance of this permit the sampling and analysis for total arsenic will serve to satisfy the interim requirements specified by Department rule, Chapter 523, *Waste Discharge License Conditions*, Section 7, *Schedules of Compliance*, Sub-section 3, *Interim dates*.

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

### Segment allocation methodology

#### Bis(2-ethylhexyl)phthalate

##### Mass limits

Mean concentration (n=14) = 14.4 ug/L or 0.0144 mg/L

Design flow = 1.25 MGD

Historical average mass = (0.0148 mg/L)(8.34)(1.25 MGD) = 0.15 lbs/day

The 12/18/12 statistical evaluation indicates the historical average mass of arsenic discharged by the permittee's facility is 86.75% of the bis(2-ethylhexyl)phthalate discharged by the facilities on the Aroostook River and its tributaries. Therefore, the permittee's segment allocation for bis(2-ethylhexyl)phthalate is calculated as 86.75% of the harmonic mean assimilative capacity of the river at Fort Fairfield, the most downstream facility on the Aroostook River. The Department has calculated a human health (water & organisms) assimilative capacity 2.2 lbs/day of bis(2-ethylhexyl)phthalate at Fort Fairfield, the most downstream discharger on the Aroostook River. The human health assimilative capacity (AC) at Fort Fairfield was calculated based on 90% of the applicable AWQC (taking into consideration the 10% reduction to account for background, 0% reduction for reserve, totaling 10%), critical low flow (harmonic mean = 571.5 cfs). The calculations for bis(2-ethylhexyl)phthalate are as follows:

##### Chronic:

HM @ Fort Fairfield = 571.5 cfs or 369.4 MGD

AWQC = 0.8 ug/L (not hardness dependent)

0.8 ug/L(0.90) = 0.72 ug/L or 0.00072 mg/L

HM AC = (369.4 MGD)(8.34 lbs/gal)(0.00072 mg/L) = 2.2 lbs/day

Therefore, the mass segment allocation for bis(2-ethylhexyl)phthalate for the permittee can be calculated as follows:

Monthly average (harmonic mean) mass limitation for bis(2-ethylhexyl)phthalate is calculated as follows:

Monthly average: (Harmonic mean assimilative capacity mass)(% of total bis discharged)  
(2.2 lbs/day)(0.8675) = 1.9 lbs/day



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

### Segment allocation methodology

#### Copper

##### Mass limits

Mean concentration (n=3) = 7.5 ug/L or 0.0075 mg/L

Design flow = 1.25 MGD

Historical average mass = (0.0075 mg/L)(8.34)(1.25 MGD) = 0.785 lbs/day

The 12/18/12 statistical evaluation indicates the historical average mass of copper discharged by the permittee's facility is 7.86% of the copper discharged by the facilities on the Aroostook River and its tributaries. The Department has calculated an acute assimilative capacity of 4.23 lbs/day and a chronic assimilative capacity 3.68 lbs/day of copper at Fort Fairfield, the most downstream discharger on the Aroostook River. The acute and chronic assimilative capacities (AC) at Fort Fairfield were calculated based on 90% of the applicable AWQC (taking into consideration the 10% reduction to account for background, 0% reduction for reserve, totaling 10%), critical low flows (1Q10 = 158.9 cfs, 7Q10 = 190.1 cfs). The calculations for copper are as follows:

##### Acute:

1Q10 @ Fort Fairfield = 158.9 cfs or 102.7 MGD

AWQC = 5.49 ug/L (based on hardness of 37 mg/L)

5.49 ug/L(0.90) = 4.94 ug/L or 0.00494 mg/L

Acute AC = (102.7 MGD)(8.34 lbs/gal)(0.00494 mg/L) = 4.23 lbs/day

##### Chronic:

7Q10 @ Fort Fairfield = 190.1 cfs or 122.9 MGD

AWQC = 3.99 ug/L (based on hardness of 37 mg/L)

3.99 ug/L(0.90) = 3.59 ug/L or 0.00359 mg/L

Chronic AC = (122.9 MGD)(8.34 lbs/gal)(0.00359 mg/L) = 3.68 lbs/day

Therefore, the mass segment allocations for copper for the permittee can be calculated as follows:

Daily maximum: (Acute assimilative capacity mass)(% of total copper discharged)  
(4.23 lbs/day)(0.0786) = **0.33 lbs/day**

Monthly average: (Chronic assimilative capacity mass)(% of total copper discharged)  
(3.68 lbs/day)(0.0786) = **0.29 lbs/day**

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

**Segment allocation methodology**

**Zinc**

**Mass limits**

Mean concentration (n=2) = 17.8 ug/L or 0.0178 mg/L

Design flow = 1.25 MGD

Historical average mass = (0.0178 mg/L)(8.34)(1.25 MGD) = 0.186 lbs/day

The 12/18/12 statistical evaluation indicates the historical average mass of zinc discharged by the permittee's facility is 1.44% of the zinc discharged by the facilities on the Aroostook River and its tributaries. The Department has calculated an acute assimilative capacity of 39.74 lbs/day and a chronic assimilative capacity 47.56 lbs/day of zinc at Fort Fairfield, the most downstream discharger on the Aroostook River. The acute and chronic assimilative capacities (AC) at Fort Fairfield were calculated based on 90% of the applicable AWQC (taking into consideration the 10% reduction to account for background, 0% reduction for reserve, totaling 10%), critical low flows (1Q10 = 158.9 cfs, 7Q10 = 190.1 cfs). The calculations for zinc are as follows:

**Acute:**

1Q10 @ Fort Fairfield = 158.9 cfs or 102.7 MGD

AWQC = 51.6 ug/L (based on hardness of 37 mg/L)

51.6 ug/L(0.90) = 46.4 ug/L or 0.0464 mg/L

Acute AC = (102.7 MGD)(8.34 lbs/gal)(0.0464 mg/L) = 39.74 lbs/day

**Chronic:**

7Q10 @ Fort Fairfield = 190.1 cfs or 122.9 MGD

AWQC = 51.6 ug/L (based on hardness of 37 mg/L)

51.6 ug/L(0.90) = 46.4 ug/L or 0.0464 mg/L

Chronic AC = (122.9 MGD)(8.34 lbs/gal)(0.0464 mg/L) = 47.56 lbs/day

Therefore, the mass segment allocations for zinc for the permittee can be calculated as follows:

Daily maximum: (Acute assimilative capacity mass)(% of total zinc discharged)  
(39.74 lbs/day)(0.0144) = **0.57 lbs/day**

Monthly average: (Chronic assimilative capacity mass)(% of total zinc discharged)  
(47.56 lbs/day)(0.0144) = **0.68 lbs/day**

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

Chapter 530 does not establish monitoring frequencies for parameters that exceed or have a reasonable potential to exceed AWQC. Monitoring frequencies are established on case-by-case basis given the timing, severity and frequency of occurrences of the exceedences or reasonable potential to exceed applicable critical water quality thresholds. Therefore, this permitting action is making a best professional judgment to establish the monitoring frequencies for the parameters of concern at the routine surveillance level frequency of 2/Year specified in Chapter 530.

As for the remaining chemical specific parameters tested to date, none of the test results in the 60-month evaluation period exceed or have a reasonable potential to exceed applicable acute, chronic or human health AWQC. Therefore, this permitting action is carrying forward the waived surveillance level reporting and monitoring frequency for analytical chemistry and priority pollutant testing. As with reduced WET testing, the permittee must file an annual certification with the Department pursuant to Chapter 530 §2(D)(4) and Special Condition J, *06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing* of the December 20, 2011, permit modification.

Beginning 24 months prior to the expiration date of the permit and lasting through 12 months prior to permit expiration (year 4 of the term of the permit), and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee shall conduct routine screening level analytical chemistry testing at 1/Quarter and priority pollutant testing of 1/Year.

**Mercury:** Pursuant to Maine law, 38 M.R.S.A. §420 and Department rule, 06-096 CMR 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W006654 (formerly Loring Development Authority) by establishing interim average and maximum effluent concentration limits of 4.6 parts per trillion (ppt) and 6.9 ppt, respectively, and a minimum monitoring frequency requirement of four tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001. However, effective June 15, 2001, the Maine Legislature enacted Maine law, 38 M.R.S.A. § 413, sub- §11, specifying that interim mercury limits and monitoring requirements remain in effect. On September 28, 2011, the Maine Legislature enacted, *Certain deposits and discharges prohibited*, 38 M.R.S.A § 420 sub-§ 1-B(F), allowing the Department to reduce mercury monitoring frequencies to once per year for facilities that maintain at least five (5) years of mercury testing data. The permittee has met the data requirement, therefore, this permitting action is revising the minimum mercury monitoring frequency from 4/Year to 1/Year. A review of the Department's database for the period March, 2009 – November 2011 (#DMRs=12) indicates mercury test results have ranged from 1.5 ppt to 3.4 ppt with an arithmetic mean of 5.1 ppt.

## 6. DEPARTMENT CONTACTS

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

Gregg Wood  
Division of Water Quality Management  
Bureau of Land & Water Quality  
Department of Environmental Protection  
17 State House Station  
Augusta, Maine 04333-0017 Telephone: (207) 287-7693 Fax: (207) 287-3435  
e-mail: [gregg.wood@maine.gov](mailto:gregg.wood@maine.gov)

# ATTACHMENT A

11/21/2012

WET TEST REPORT

Data for tests conducted for the period

21/Nov/2007 - 21/Nov/2012



GREATER LIMESTONE WTF

NPDES= ME010284

Effluent Limit: Acute (%) = 1.762

Chronic (%) = 1.502

Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	100	03/01/2011	1.762		
TROUT	A_NOEL	100	07/24/2012	1.762		
TROUT	C_NOEL	100	03/01/2011	1.502		
TROUT	C_NOEL	100	07/24/2012	1.502		
WATER FLEA	A_NOEL	100	03/01/2011	1.762		
WATER FLEA	A_NOEL	100	07/24/2012	1.762		
WATER FLEA	C_NOEL	100	03/01/2011	1.502		
WATER FLEA	C_NOEL	100	07/24/2012	1.502		

# ATTACHMENT B

11/21/2012

## PRIORITY POLLUTANT DATA SUMMARY

Date Range: 21/Nov/2007 - 21/Nov/2012



Facility Name: GREATER LIMESTONE WTF

NPDES: ME0102849

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
01/06/2009	0.50	0.62	1	1	0	0	0	0	0	F	0
06/03/2009	0.78	1.17	22	10	0	1	0	11	0	F	0
08/10/2009	0.42	0.55	2	1	0	1	0	0	0	F	0
10/13/2009	0.70	0.57	22	10	0	1	0	11	0	F	0
02/22/2010	0.49	0.54	2	1	0	1	0	0	0	F	0
06/08/2010	0.75	0.83	2	1	0	1	0	0	0	F	0
09/06/2010	0.86	0.69	2	1	0	1	0	0	0	F	0
11/16/2010	1.24	1.26	1	1	0	0	0	0	0	F	0
02/14/2011	0.46	0.50	2	1	0	1	0	0	0	F	0
04/25/2011	1.42	1.53	2	1	0	1	0	0	0	F	0
08/15/2011	2.38	1.90	2	1	0	1	0	0	0	F	0
11/28/2011	0.76	0.71	1	1	0	0	0	0	0	F	0
11/29/2011	1.24	1.00	1	0	0	1	0	0	0	F	0

## Key:

A = Acid      O = Others      P = Pesticides  
 BN = Base Neutral      M = Metals      V = Volatiles



Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
01/09/2012	0.73	0.74	1	0	0	1	0	0	0	F	0
05/14/2012	1.25	1.38	2	1	0	1	0	0	0	F	0
06/25/2012	1.16	1.19	1	0	0	1	0	0	0	F	0
07/09/2012	0.92	0.96	1	0	0	1	0	0	0	F	0
07/24/2012	0.92	0.75	21	10	0	0	0	11	0	F	0

**Key:**

A = Acid                      O = Others                      P = Pesticides  
 BN = Base Neutral    M = Metals                      V = Volatiles

11/21/2012

## FACILITY CHEMICAL DATA REPORT

Data Date Range: 21/Nov/2007 - 21/Nov/2012



Facility name: GREATER LIMESTONE WTF

Permit Number: ME0102849

Parameter: ALUMINUM

Test date	Result (ug/l)	Lsthan
06/03/2009	20.000	Y
10/13/2009	15.000	N
07/24/2012	258.000	N

Parameter: ARSENIC

Test date	Result (ug/l)	Lsthan
01/06/2009	2.000	N
06/03/2009	7.000	N
08/10/2009	1.000	Y
10/13/2009	1.000	Y
02/22/2010	1.000	Y
06/08/2010	1.000	N
09/06/2010	1.000	Y
11/16/2010	1.000	Y
02/14/2011	1.000	Y
04/25/2011	1.000	Y
08/15/2011	1.000	Y
11/28/2011	1.000	Y
05/14/2012	1.000	Y
07/24/2012	5.000	Y

Parameter: BIS(2-ETHYLHEXYL)PHTH.

Test date	Result (ug/l)	Lsthan
06/03/2009	2.000	Y
08/10/2009	2.000	Y
10/13/2009	2.000	Y
02/22/2010	2.000	Y
06/08/2010	2.000	Y
09/06/2010	2.000	Y
02/14/2011	3.000	Y
04/25/2011	3.000	Y
08/15/2011	5.000	N
11/29/2011	2.000	N
01/09/2012	2.000	Y
05/14/2012	96.000	N
06/25/2012	49.000	N
07/09/2012	42.000	N

Parameter: COPPER

Test date	Result (ug/l)	Lsthan
06/03/2009	3.000	Y
10/13/2009	5.000	N
07/24/2012	16.100	N

Parameter: ZINC

Test date	Result (ug/l)	Lsthan
06/03/2009	9.000	N
10/13/2009	8.000	N
07/24/2012	36.500	N

11/21/2012

MERCURY REPORT - Clean Test Only

Data Date Range: 21/Nov/2000-21/Nov/2012



Facility: GREATER LIMESTONE WTF

Permit Number: ME0102849

Max (ug/l): 0.0034

Average (ug/l): 0.0023

Sample Date	Result (ug/l)	Lsthan	Clean
03/17/2009	0.003100	N	T
06/03/2009	0.002200	N	T
08/10/2009	0.001800	N	T
10/13/2009	0.001900	N	T
02/23/2010	0.001600	N	T
06/09/2010	0.003380	N	T
09/07/2010	0.002410	N	T
11/17/2010	0.001500	N	T
02/15/2011	0.002100	N	T
04/26/2011	0.002600	N	T
08/16/2011	0.003100	N	T
11/28/2011	0.001700	N	T

# ATTACHMENT C

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

DATE: October 2008

TO: Interested Parties

FROM: Dennis Merrill, DEP

SUBJECT: DEP's system for evaluating toxicity from multiple discharges

\*\*\*\*\*

Following the requirements of DEP's rules, Chapter 530, section 4(F), the Department is evaluating discharges of toxic pollutants into a freshwater river system in order to prevent cumulative impacts from multiple discharges. This is being through the use of a computer program known internally as "DeTox". The enclosed package of information is intended to introduce you to this system.

Briefly, the DeTox program evaluates each wastewater facility within a watershed in three different ways in order to characterize its effluent: 1) the facility's past history of discharges, 2) its potential toxicity at the point of discharge on an individual basis, and 3) the facility's contribution to cumulative toxicity within a river segment in conjunction with other facilities. The value that is most protective of water quality becomes the value that is held in the DeTox system as an allocation for the specific facility and pollutant.

The system is not static and uses a five-year "rolling" data window. This means that, over time, old test results drop off and newer ones are added. The intent of this process is to maintain current, uniform facility data to estimate contributions to a river's total allowable pollutant loading prior to each permit renewal.

Many facilities are required to do only a relatively small amount of pollutant testing on their effluent. This means, statistically, the fewer tests done, the greater the possibility of effluent limits being necessary based on the facility's small amount of data. To avoid this situation, most facilities, especially those with low dilution factors, should consider conducting more than the minimum number of tests required by the rules.

Attached you will find three documents with additional information on the DeTox system:

- Methods for evaluating the effects of multiple discharges of toxic pollutants
- Working definitions of terms used in the DeTox system
- Reviewing DeTox Reports
- Prototype facility and pollutant reports

If you have questions as you review these, please do not hesitate to contact me at [Dennis.L.Merrill@maine.gov](mailto:Dennis.L.Merrill@maine.gov) or 287-7788.

Maine Department of Environmental Protection

Methods for evaluating the effects of multiple discharges of toxic pollutants.

Reference: DEP Rules, Chapter 530, section 4(F)

To evaluate discharges of toxic pollutants into a freshwater river system and prevent cumulative impacts from multiple discharges, DEP uses a computer program called "DeTox" that functions as a mathematical evaluation tool.

It uses physical information about discharge sources and river conditions on file with the Department, established water quality criteria and reported effluent test information to perform these evaluations. Each toxic pollutant and associated water quality criterion for acute, chronic and/or human health effects is evaluated separately.

Each facility in a river drainage area has an assigned position code. This "address" is used to locate the facility on the river segment and in relation to other facilities and tributary streams. All calculations are performed in pounds per day to allow analysis on a mass balance. Pollutants are considered to be conservative in that once in the receiving water they will not easily degrade and have the potential to accumulate.

The process begins with establishing an assimilative capacity for each pollutant and water quality criterion at the most downstream point in the river segment. This calculation includes set-aside amounts for background and reserve quantities and assumed values for receiving water pH, temperature and hardness. The resulting amount of assimilative capacity is available for allocation among facilities on the river.

Each facility is evaluated to characterize its past discharge quantities. The historical discharge, in pounds per day, is figured using the average reported concentration and the facility's permitted flow. As has been past practice, a reasonable potential (RP) factor is used as a tool to estimate the largest discharge that may occur with a certain degree of statistical certainty. The RP factor is multiplied by the historical average to determine an allocation based on past discharges. The RP factor is also multiplied by the single highest test to obtain a maximum day estimate. Finally, the direct average without RP adjustment is used to determine the facility's percent contribution to the river segment in comparison to the sum of all discharges of the pollutant. This percent multiplied by the total assimilative capacity becomes the facility's discharge allocation used in evaluations of the segment loadings.

Additionally, individual facility discharges are evaluated as single sources, as they have been in the past to determine if local conditions are more limiting than a segment evaluation.

With all of this information, facilities are evaluated in three ways. The methods are:

1. The facility's past history. This is the average quantity discharged during the past five years multiplied by the applicable RP factor. This method is often the basis for an allocation when the discharge quantity is relatively small in comparison to the water quality based allocation.
2. An individual evaluation. This assumes no other discharge sources are present and the allowable quantity is the total available assimilative capacity. This method may be used when a local condition such as river flow at the point of discharge is the limiting factor.
3. A segment wide evaluation. This involves allocating the available assimilative capacity within a river segment based on a facility's percent of total past discharges. This method would be used when multiple discharges of the same pollutant to the same segment and the available assimilative capacity is relatively limited.

The value that is most protective of water quality becomes the facility's allocation that is held in the system for the specific facility and pollutant. It is important to note that the method used for allocation is facility and pollutant specific and different facilities on the same segment for the same pollutant can have different methods used depending on their individual situations.

Discharge amounts are always allocated to all facilities having a history of discharging a particular pollutant. This does not mean that effluent limits will be established in a permit. Limits are only needed when past discharge amounts suggest a reasonable potential to exceed a water quality based allocation, either on an individual or segment basis. Similar to past practices for single discharge evaluations, the single highest test value is multiplied by a RP factor and if product is greater than the water quality allowance, an effluent limit is established. It is important to remember an allocation is "banking" some assimilative capacity for a facility even if effluent limits are not needed.

Evaluations are also done for each tributary segment with the sum of discharge quantities in tributaries becoming a "point source" to the next most significant segment. In cases where a facility does not use all of its assimilative capacity, usually due to a more limiting individual water quality criterion, the unused quantity is rolled downstream and made available to other facilities.

The system is not static and uses a five-year rolling data window. Over time, old tests drop off and newer ones are added on. These changes cause the allocations and the need for effluent limits to shift over time to remain current with present conditions. The intent is to update a facility's data and relative contribution to a river's total assimilative capacity prior to each permit renewal. Many facilities are required to do only minimal testing to characterize their effluents. This creates a greater degree of statistical uncertainty about the true long-term quantities. Accordingly, with fewer tests the RP factor will be larger and result in a greater possibility of effluent limits being necessary. To avoid this situation, most facilities, especially those with relatively low dilution factors, are encouraged to conduct more than a minimum number of tests. It is generally to a facility's long-term benefit to have more tests on file since their RP factor will be reduced.

## Maine Department of Environmental Protection

### Working Definitions of Terms Used in the DeTox System.

*Allocation.* The amount of pollutant loading set aside for a facility. Separate amounts are set for each *water quality criterion*. Each pollutant having a history of being discharged will receive an allocation, but not all allocations become *effluent limits*. Allocation may be made in three ways: *historical allocation*, *individual allocation* or *segment allocation*.

*Assimilative capacity.* The amount of a pollutant that river segment can safely accept from point source discharges. It is determined for the most downstream point in a river segment using the *water quality criterion* and river flow. Separate capacities are set for acute, chronic and human health criteria as applicable for each pollutant. Calculation of this capacity includes factors for *reserve* and *background* amounts.

*Background.* A concentration of a pollutant that is assumed to be present in a receiving water but not attributable to discharges. By rule, this is set as a rebuttable presumption at 10% of the applicable *water quality criterion*.

*Effluent limit.* A numeric limit in a discharge permit specifically restricting the amount of a pollutant that may be discharged. An effluent limit is set only when the highest discharge, including an adjustment for *reasonable potential*, is greater than a facility's water quality based *allocation* for a pollutant.

*Historical allocation (or RP history).* One of three ways of developing an *allocation*. The facility's average history of discharges, in pounds at design flow, is multiplied by the appropriate *reasonable potential* factor. An allocation using this method does not become an *effluent limit*.

*Historical discharge percentage.* For each pollutant, the average discharge concentration for each facility in a segment is multiplied by the permitted flow (without including a *reasonable potential* factor). The amounts for all facilities are added together and a percent of the total is figured for each facility. When a facility has no detectable concentrations, that pollutant is assumed to be not present and it receives no percentage.

*Individual allocation.* One of three ways of developing an *allocation*. The facility's single highest discharge on record multiplied by the appropriate *reasonable potential* factor is compared to a water quality based quantity with an assumption that the facility is the only point source to that receiving water. If the RP-adjusted amount is larger, the water quality amount may become an *effluent limit*.

*Less than.* A qualification on a laboratory report indicating the concentration of a pollutant was below a certain concentration. Such a result is evaluated as being one half of the Department's reporting limit in most calculations.



*Reasonable potential (RP).* A statistical method to determine the highest amount of a pollutant likely to be present at any time based on the available test results. The method produces a value or RP factor that is multiplied by test results. The method relies on an EPA guidance document, and considers the coefficient of variation and the number of tests. Generally, the fewer number of tests, the higher the RP factor.

*Reserve.* An assumed concentration of a pollutant that set aside to account for non-point source of a pollutant and to allow new discharges of a pollutant. By rule this is set at 15% of the applicable *water quality criterion*.

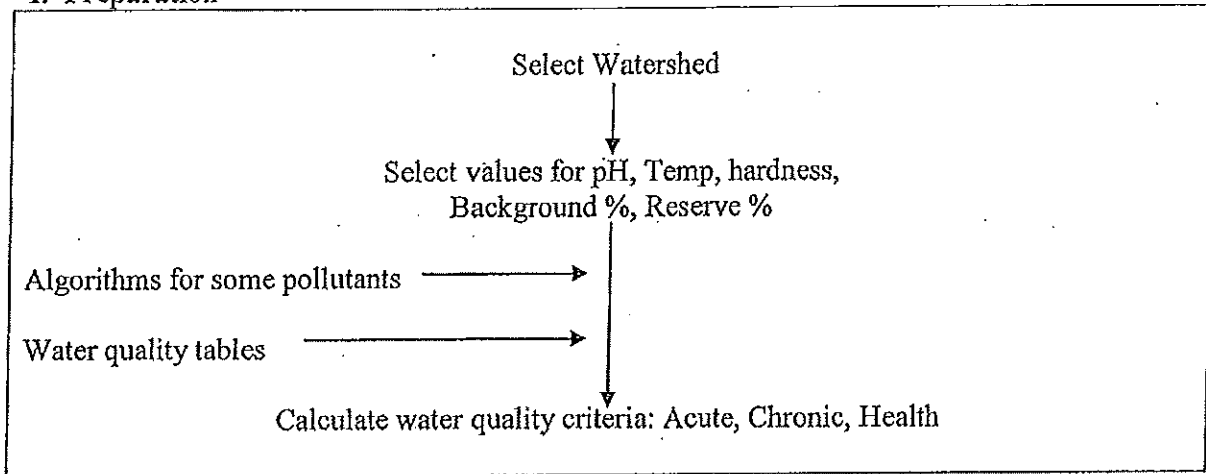
*Segment allocation.* One of three ways of developing an *allocation*. The amount is set by multiplying a facility's *historical discharge percentage* for a specific pollutant by the *assimilative capacity* for that pollutant and criterion. A facility will have different allocation percentages for each pollutant. This amount may become an *effluent limit*.

*Tributary.* A stream flowing into a larger one. A total pollutant load is set by adding the all facilities *allocations* on the tributary and treating this totaled amount as a "point source" to the next larger segment.

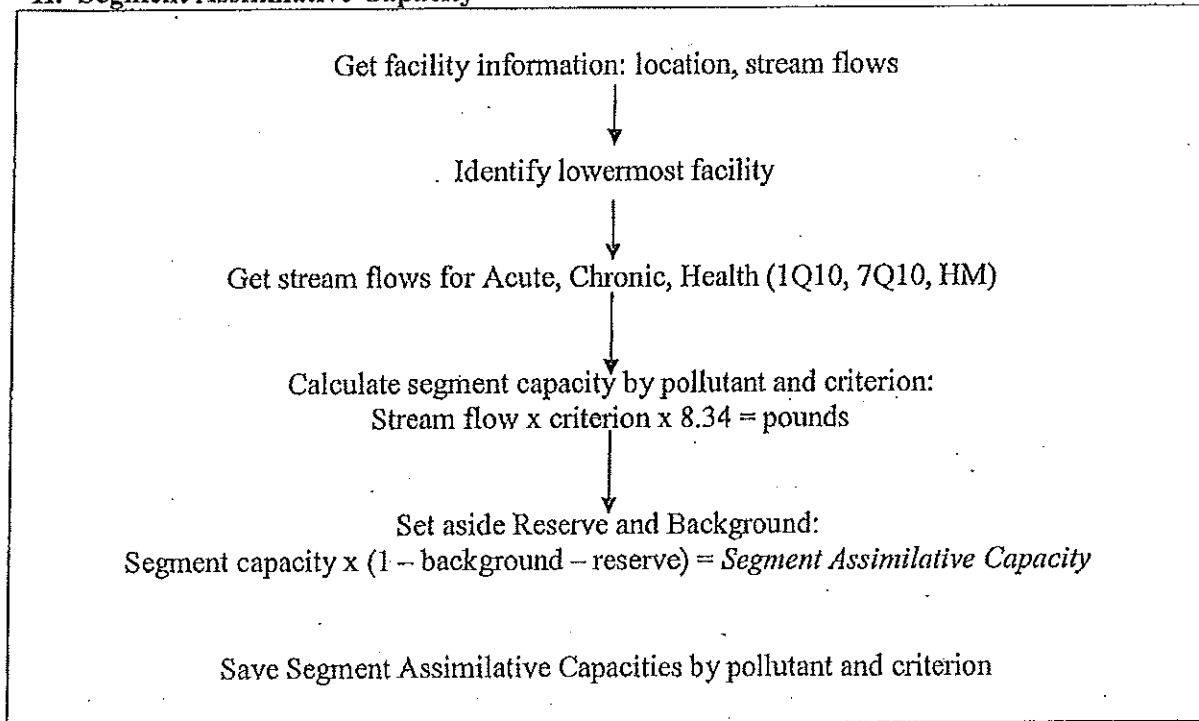
*Water quality criteria.* Standards for acceptable in-stream or ambient levels of pollutants. These are established in the Department's Chapter 584 and are expressed as concentrations in ug/L. There may be separate standards for acute and chronic protection aquatic life and/or human health. Each criterion becomes a separate standard. Different stream flows are used in the calculation of each.

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

**I. Preparation**

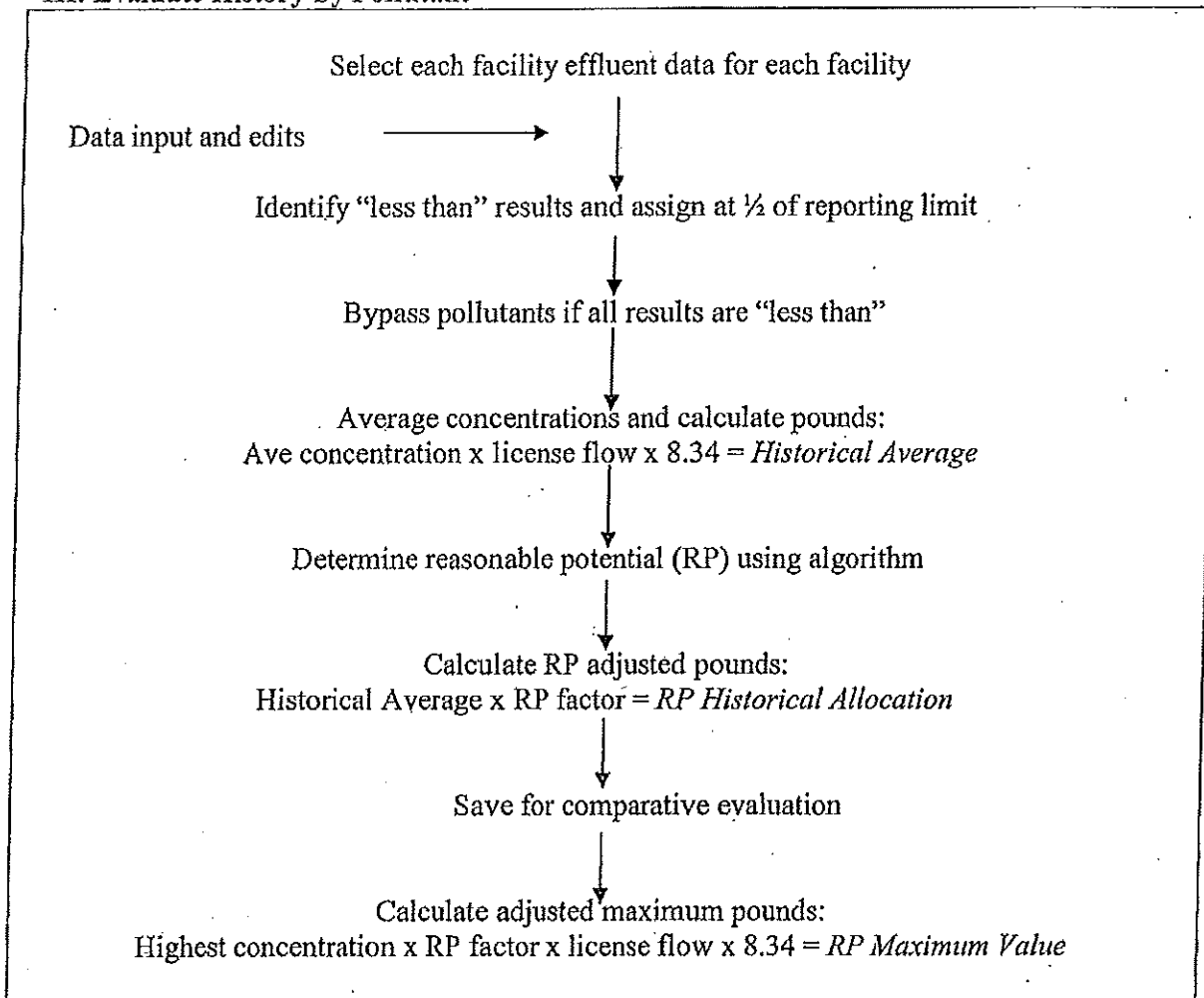


**II. Segment Assimilative Capacity**

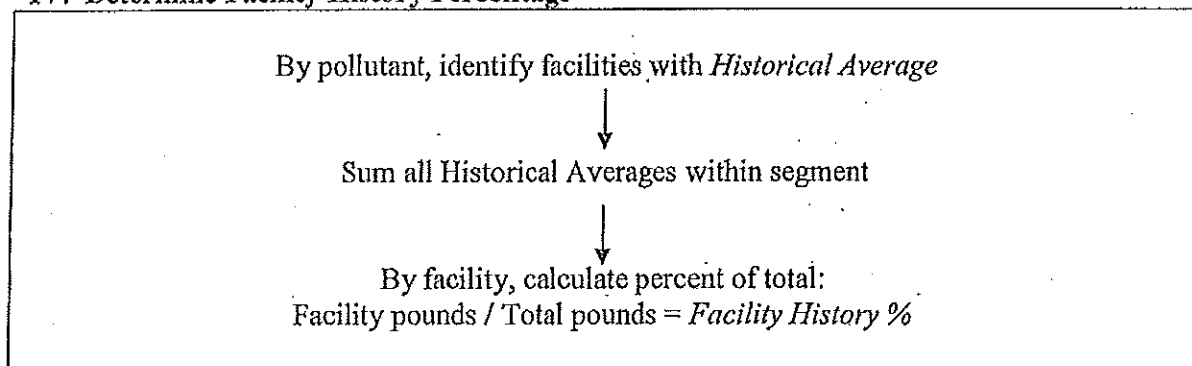


Maine Department of Environmental Protection  
General Processing Steps in "DeTox"

III. Evaluate History by Pollutant

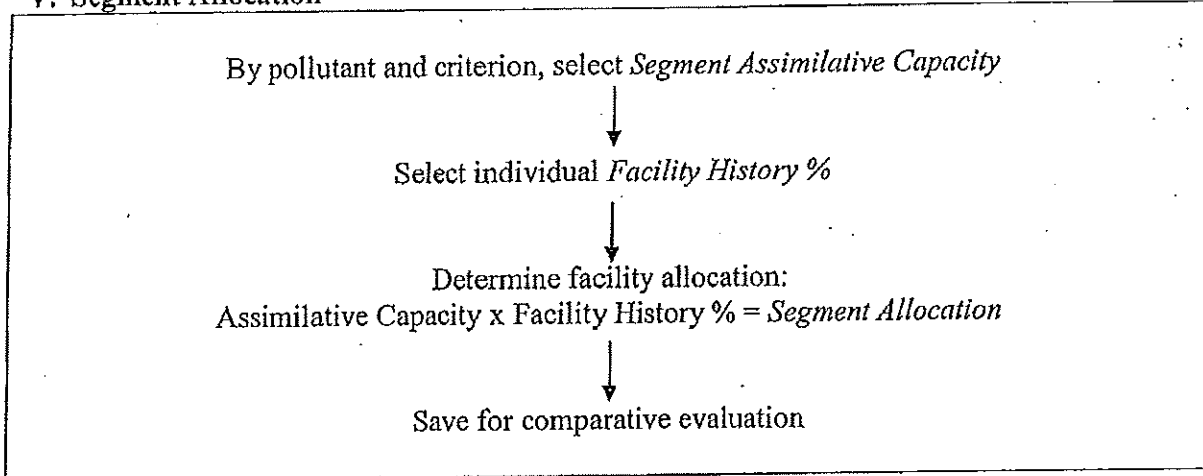


IV. Determine Facility History Percentage

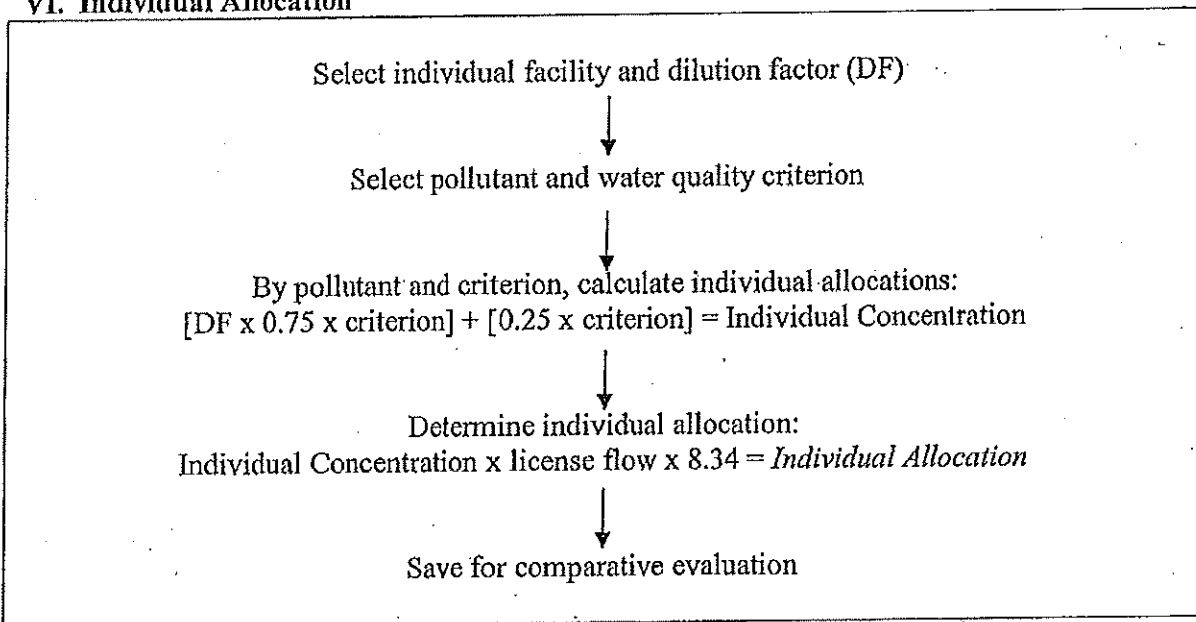


Maine Department of Environmental Protection  
General Processing Steps in "DeTox"

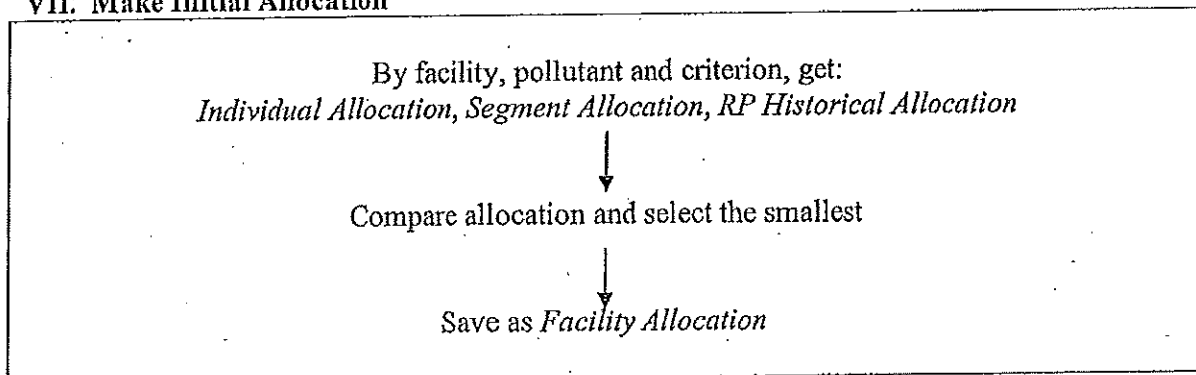
**V. Segment Allocation**



**VI. Individual Allocation**

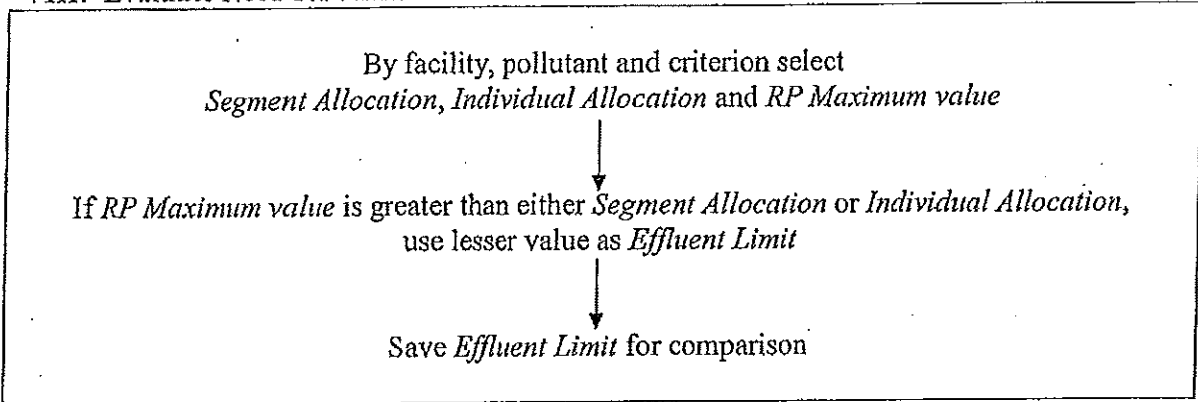


**VII. Make Initial Allocation**

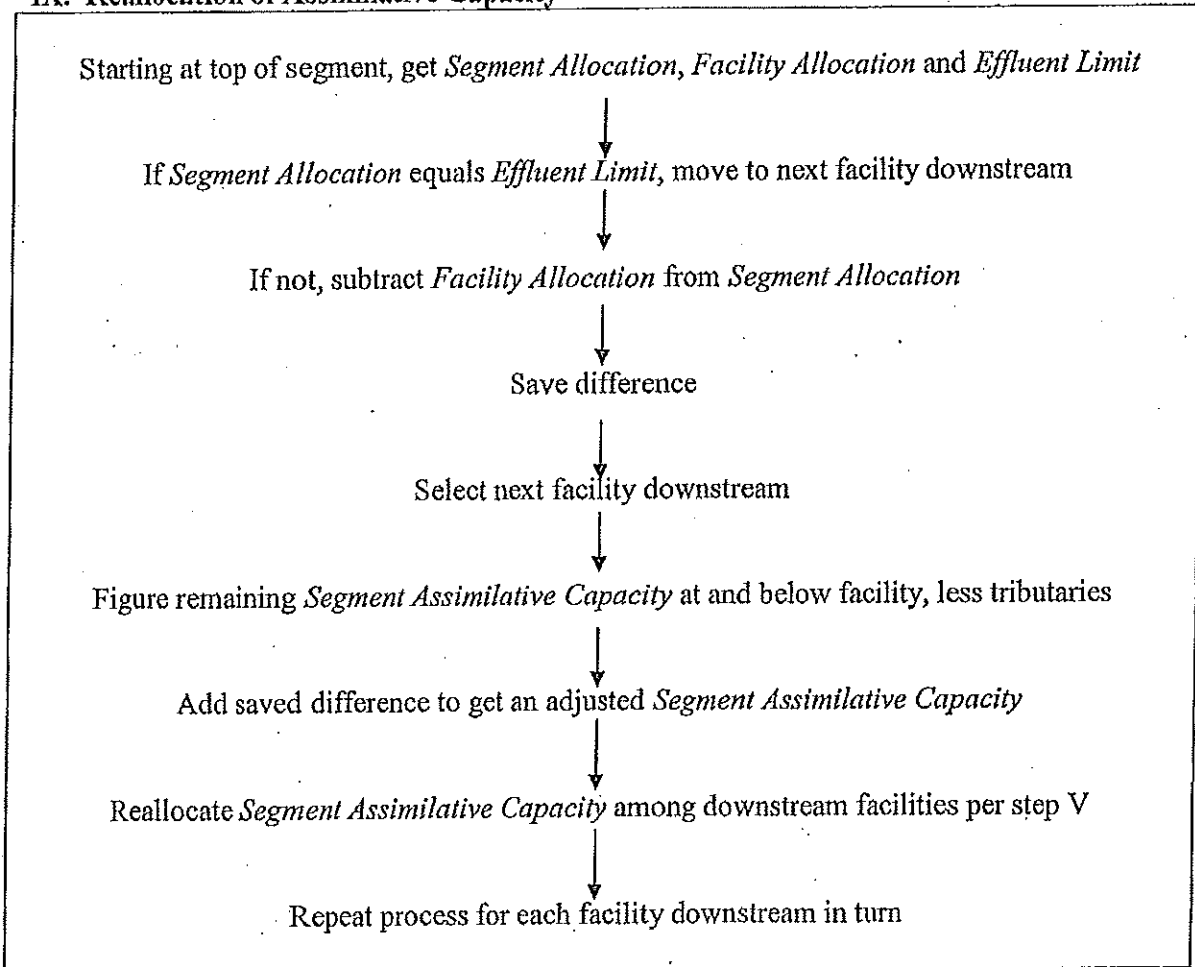


Maine Department of Environmental Protection  
General Processing Steps in "DeTox"

**VIII. Evaluate Need for Effluent Limits**



**IX. Reallocation of Assimilative Capacity**





# DEP INFORMATION SHEET

## Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-2811

### SUMMARY

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

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

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

### I. ADMINISTRATIVE APPEALS TO THE BOARD

#### LEGAL REFERENCES

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

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

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

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

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

#### WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

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

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

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

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

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

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

## **II. JUDICIAL APPEALS**

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

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

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

### **ADDITIONAL INFORMATION**

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

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

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