



STATE OF MAINE
Department of Environmental Protection

JOHN ELIAS BALDACCI
GOVERNOR

David P. Littell
COMMISSIONER

June 11, 2010

Mr. Alan Thibeault, Director of Campus Planning
Mr. Phil Yund, Director, Marine Science Center
University of New England Marine Science and Research Center
11 Hills Beach Road
Biddeford, ME 04005
athibeault@une.edu
pyund@une.edu

**RE: *Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0110434
Maine Waste Discharge License (WDL) Application #W008109-6F-C-R
FINALIZED MEPDES Permit/WDL***

Dear Mr. Thibeault and Mr. Yund:

Enclosed, please find a copy of your **final** MEPDES permit and Maine WDL, which was approved by the Department of Environmental Protection. Please read the permit/license and its attached conditions carefully. You must follow the conditions in the 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."

Sincerely,

Bill Hinkel
Division of Water Quality Management
Bureau of Land and Water Quality
bill.hinkel@maine.gov
ph: 207-485-2281

Enc.

cc: Fred Gallant, DEP Sandy Mojica, USEPA File #W8109

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

DEPARTMENT ORDER

IN THE MATTER OF

UNIVERSITY OF NEW ENGLAND) MAINE POLLUTANT DISCHARGE
BIDDEFORD, YORK COUNTY, MAINE) ELIMINATION SYSTEM PERMIT
MARINE SCIENCE AND RESEARCH CENTER) AND
#ME0110434) WASTE DISCHARGE LICENSE
#W008109-6F-C-R) **APPROVAL**) **RENEWAL**

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

APPLICATION SUMMARY

The UNE has applied to the Department for renewal of Waste Discharge License (WDL) #W008109-5Q-B-R/ Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0110434, which was issued on December 2, 2004, and expired on December 2, 2009. The 12/2/04 permit authorized the daily maximum discharge of up to 0.72 million gallons per day (MGD) of treated wastewaters associated with UNE's Marine Science and Research Center to the Saco River, Class SC, in Biddeford, Maine.

PERMIT SUMMARY

This permitting action is substantially similar to the 12/2/04 permitting action in that it is:

1. Carrying forward the daily maximum discharge flow limitation of 0.72 MGD and the monthly average discharge flow reporting requirement;
2. Carrying forward the water quality-based daily maximum limitation of 0.13 mg/L for total residual chlorine (TRC); and
3. Carrying forward special conditions for therapeutic agents and disinfecting/sanitizing agents (Special Conditions G and H, respectively).

PERMIT SUMMARY (cont'd)

This permitting action is significantly different from the 12/2/04 permitting action in that it is:

1. Eliminating the marine mammal and sea turtle and laboratory animal biomass limitations and monitoring requirements;
2. Eliminating the daily maximum mass limitation and all monitoring and reporting requirements for biochemical oxygen demand (BOD₅);
3. Establishing performance-based monthly average and daily maximum concentration and mass limitations for total suspended solids (TSS);
4. Eliminating the monthly average and daily maximum fecal coliform bacteria monitoring and reporting requirements;
5. Establishing a technology-based, monthly average concentration limit for TRC;
6. Revising the upper range of the pH range limitation from 8.5 SU to 9.0 SU; and
7. Revising the minimum monitoring frequency requirements for TSS and pH.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated June 11, 2010, and subject to the Conditions listed below, the Department makes the following conclusions:

1. The discharge, either individually or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either individually or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
3. The provisions of the State's antidegradation policy, *Classification of Maine waters*, 38 M.R.S.A. § 464(4)(F), will be met, in that:
 - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
 - (c) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharge will be subject to effluent limitations that require application of best practicable treatment as defined in 38 M.R.S.A. § 414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the above noted application of the UNIVERSITY OF NEW ENGLAND to discharge a daily maximum of up to 0.72 million gallons per day (MGD) of treated wastewater associated with a marine science and research center to the Saco River, Class SC, in Biddeford, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

1. *Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits*, revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. The expiration date of this permit is five (5) years from the date of signature below.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: November 4, 2009
Date of application acceptance: November 5, 2009

This Order prepared by William F. Hinkel, BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **treated wastewater associated with a marine science and research center via Outfall #001A** to the Saco River. Such discharges shall be limited and monitored by the permittee as specified below⁽¹⁾:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
	as specified	as specified	as specified	as specified	as specified	as specified	as specified	as specified
Flow <i>[50050]</i>	Report <i>[03]</i>	---	0.72 MGD <i>[03]</i>	---	---	---	1/Week <i>[01/07]</i>	Measure <i>[MS]</i>
TSS <i>[00530]</i>	39 lbs./day <i>[26]</i>	---	51 lbs./day <i>[26]</i>	13 mg/L <i>[19]</i>	---	31 mg/L <i>[19]</i>	2/Month <i>[02/30]</i>	Composite <i>[24]</i>
Total Residual Chlorine ⁽²⁾ <i>[50060]</i>	---	---	---	0.1 mg/L <i>[19]</i>	---	0.13 mg/L <i>[19]</i>	5/Week <i>[05/07]</i>	Grab <i>[GR]</i>
pH <i>[00400]</i>	---	---	---	---	---	6.0-9.0 SU <i>[12]</i>	2/Month <i>[02/30]</i>	Grab <i>[GR]</i>

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

FOOTNOTES: See Page 6 of this permit for the applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES:

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

All analytical test results shall be reported to the Department including results which are detected below the respective reporting limits (RLs) specified by the Department or as specified by other approved test methods. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the detection limit achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL is not acceptable and will be rejected by the Department. For mass, if the analytical result is reported as <Y or if a detectable result is less than a RL, report a <X lbs/day, where X is the parameter specific limitation established in the permit.

2. **TRC Monitoring** – Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine based compounds may be present in the final effluent. The permittee shall utilize approved test methods that are capable of bracketing the limitation of 0.1 mg/L. For instances when the facility is not using chlorine-based compounds in such a manner that residual chlorine may be present in the final effluent, the facility shall report "NODI-9" or "N9" for this parameter on the monthly DMR.

SPECIAL CONDITIONS

B. NARRATIVE EFFLUENT LIMITATIONS

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

C. MONITORING AND REPORTING

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

Department of Environmental Protection
Southern Maine Regional Office
Bureau of Land & Water Quality
Division of Water Quality Management
312 Canco Road
Portland, ME 04103

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

SPECIAL CONDITIONS

D. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only: 1) in accordance with the permittee's General Application for Waste Discharge License, accepted for processing on November 5, 2009; 2) in accordance with the terms and conditions of this permit; and 3) via Outfall #001A. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

E. NOTIFICATION REQUIREMENTS

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

1. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system by a source introducing pollutants to the system at the time of permit issuance.

For the purposes of this section, adequate notice shall include information on:

- a. The quality and quantity of waste water introduced to the waste water collection and treatment system; and
- b. Any anticipated impact of the change in the quantity or quality of the waste water to be discharged from the treatment system.

F. OPERATIONS AND MAINTENANCE (O&M) PLAN

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

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

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

SPECIAL CONDITIONS

G. THERAPEUTIC AGENTS

All medicated feeds, drugs, and other fish or mammal therapeutants shall be registered with USEPA as appropriate, approved by the US Food and Drug Administration (USFDA), and applied according to USFDA accepted guidelines. Further, records of all such materials used are to be maintained at the facility for a period of five years. Records shall contain the date applied, concentration and mass of therapeutic agents applied per day.

H. DISINFECTING/SANITIZING AGENTS

Records of all disinfectants and/or sanitizing agents used that have the potential to enter the waste-stream or receiving water, their volumes and concentrations as used and concentrations at the point of discharge, shall be maintained at the facility for a period of five years. All footbath wastes shall be disposed of through the UNE wastewater treatment plant or by other approved methods, but shall not be discharged into the UNE MSRC facility's waste-stream or otherwise to the receiving waters.

I. REOPENING OF PERMIT FOR MODIFICATION

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

J. SEVERABILITY

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

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

FACT SHEET

DATE: JUNE 11, 2010

**MEPDES PERMIT NUMBER: #ME0110434
WASTE DISCHARGE LICENSE: #W008109-6F-C-R**

NAME AND ADDRESS OF APPLICANT:

**UNIVERSITY OF NEW ENGLAND
11 HILLS BEACH ROAD
BIDDEFORD, MAINE 04005**

COUNTY: YORK

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**UNE MARINE SCIENCE AND RESEARCH CENTER
11 HILLS BEACH ROAD
BIDDEFORD, MAINE 04005**

RECEIVING WATER / CLASSIFICATION: SACO RIVER / CLASS SC

**COGNIZANT OFFICIAL AND TELEPHONE NUMBER: MR. PHIL YUND
pyund@une.edu
(207) 602-2440**

1. APPLICATION SUMMARY

- a. Application: The University of New England (UNE) has applied to the Department of Environmental Protection (Department) for renewal of Waste Discharge License (WDL) #W008109-5Q-B-R/ Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0110434, which was issued on December 2, 2004, and expired on December 2, 2009. The 12/2/04 permit authorized the daily maximum discharge of up to 0.72 million gallons per day (MGD) of treated wastewaters associated with UNE's Marine Science and Research Center to the Saco River, Class SC, in Biddeford, Maine.

2. PERMIT SUMMARY

- a. Terms and Conditions **This permitting action is similar to the 12/2/04 permitting action in that it is:**
 1. Carrying forward the daily maximum discharge flow limitation of 0.72 MGD and the monthly average discharge flow reporting requirement;
 2. Carrying forward the water quality-based daily maximum limitation of 0.13 mg/L for total residual chlorine (TRC); and
 3. Carrying forward special conditions for therapeutic agents and disinfecting/sanitizing agents (Special Conditions G and H, respectively).

This permitting action is different from the 12/2/04 permitting action in that it is:

1. Eliminating the marine mammal and sea turtle and laboratory animal biomass limitations;
2. Eliminating the daily maximum mass limitation and all monitoring and reporting requirements for biochemical oxygen demand (BOD₅);
3. Establishing performance-based monthly average and daily maximum concentration and mass limitations for total suspended solids (TSS);
4. Eliminating the monthly average and daily maximum fecal coliform bacteria monitoring and reporting requirements;
5. Establishing a technology-based, monthly average concentration limit for TRC;
6. Revising the upper range of the pH range limitation from 8.5 SU to 9.0 SU; and
7. Revising the minimum monitoring frequency requirements for TSS and pH.

2. PERMIT SUMMARY (cont'd)

- b. History: This section provides a summary of recent, relevant licensing/permitting actions that have been completed for the UNE Marine Science and Research Center's (MSRC) wastewater facility.

August 11, 2000 – USEPA accepted UNE's application for a NPDES permit for the MSRC wastewater discharge as complete. USEPA assigned the application #ME0036226, but did not issue a permit prior to delegation of the NPDES program to Maine.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permit program in Maine, excluding areas of special interest to Maine Indian Tribes. From that point forward, the program has been referred to as the MEPDES program, and MEPDES permit #ME0110434 has been utilized as the primary reference number for UNE's MSRC wastewater facility.

December 2, 2004 – The Department issued WDL #W008109-5Q-B-R/ MEPDES Permit #ME0110434 to the UNE for a five-year term. The 12/2/04 permit superseded WDL #W008109-5Q-A-N issued on June 27, 2000.

November 4, 2009 – The UNE submitted a timely and complete General Application to the Department for renewal of the 12/2/04 MEPDES permit. The application was accepted for processing on November 5, 2009, and was assigned WDL #W008109-6F-C-R / MEPDES #ME0110434.

- c. Source Description: UNE's Marine Science and Research Center was constructed in 2001 and provides classroom and laboratory spaces for the study of marine biology, a seawater system to support live marine animals, and rehabilitation facilities for the temporary holding of marine mammals and sea turtles. A map showing the location of the facility and receiving water is included as Attachment A of this fact sheet. The facility has a running flow-through seawater system, drawing salt water in from the Saco River. Treatment of influent water is provided through settling of natural solids and detritus followed by filtration using bag filters made of plankton netting. Additional water treatment can be provided through placement of 10-micron disk and mesh filters, if necessary. All materials captured on the head tank water filters are disposed of at the UNE wastewater treatment plant pursuant to MEDEP permit #W1319, and not through the UNE Marine Science and Research Center waste stream. Water used for marine mammal pools is chlorinated to maintain an in-pool concentration of approximately 0.3 to 0.4 mg/L.
- d. Wastewater Treatment: Animal wastes from dry areas of the facility and from the bottom of animal pools is collected and disposed of via UNE's large wastewater treatment plant licensed under #W1319. Water in the marine animal pools is exchanged, dechlorinated with sodium bisulfite, and discharged into the full UNE MSRC wastewater flow after an average of approximately 60-90 minutes, with no additional effluent treatment. Final effluent is conveyed for discharge to the Saco River via a 16-inch diameter outfall pipe designated as Outfall #001A, located approximately 640 feet west of the two intake pipes, 115 feet beyond mean high water, in a depth of 8 feet at mean low water conditions on the Saco River.

3. CONDITIONS OF PERMITS

Conditions of licenses, 38 M.R.S.A. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S.A. § 420 and 06-096 CMR 530 require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classifications of estuarine and marine waters, 38 M.R.S.A. § 469(8)(A)(1) classifies the Saco River at the point of discharge as a Class SC waterway. *Standards for classification of estuarine and marine waters*, 38 M.R.S.A. § 465-B(3) describes the standards for Class SC waters.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2008 Integrated Water Quality Monitoring and Assessment Report, (Report) prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists relevant segments of the of the Saco River as “*Category 5-A: Estuarine and Marine Waters Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)*.” Impairment in this context refers to toxicity from copper from point sources. The Department has no information that this discharge from UNE causes or contributes to non-attainment due to elevated copper levels. The 2008 Report also lists the Saco River as, “*Category 5-B-1: Estuarine and Maine Waters Impaired only by Bacteria (TMDL Required)*.” The 2008 Report specifies that sewerage treatment plant outfalls, storm water runoff and non-point source pollution may all be contributing to this impairment. On September 28, 2009, the USEPA approved the Department’s *Maine Statewide Bacteria TMDL (Total Maximum Daily Loads)*, dated August 2009, for fresh, marine and estuarine waters impaired by bacteria. The City of Saco and the City of Biddeford have both developed combined sewer overflow (CSO) Master Plans, which have been approved by the Department and USEPA, that contain schedules consisting of various projects to mitigate, eliminate and or provide treatment for wet weather flows that are currently being discharged untreated to the Saco River via the CSO outfalls associated with the two publicly owned treatment works. 38 M.R.S.A. § 465-B(3) specifies that the standards for enterococcus bacteria are based on human and domestic animal origin. The Department is making a best professional judgment determination in this permitting action that UNE’s Science and Research Center does not discharge bacteria of human or domestic animal origin and therefore does not cause or contribute to the non-attainment status of the Saco River Estuary.

Therefore, this permitting action is eliminating the monthly average and daily maximum monitoring and reporting requirements for fecal coliform bacteria.

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

In addition, all estuarine and marine waters of the State are listed as, “*Category 5-D: Estuarine and Maine Waters Impaired by Legacy Pollutants.*” Impairment in this context refers to the estuarine and marine waters partially supporting the designated use of fishing and harvesting of shellfish due to elevated levels of mercury, PCBs, dioxin, and other persistent bioaccumulating substances in tissues of some fish and in lobster tomalley. The Department has no information that the discharge from UNE causes or contributes to this non-attainment status.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Flow: The previous permitting action established, and this permitting action is carrying forward, a daily maximum discharge flow limitation of 0.72 MGD for Outfall #001A, which is considered representative of effluent flows for the facility. This permitting action is carrying forward a monthly average discharge flow reporting requirement to assist in compliance evaluations.

A summary of the discharge flow data as reported on the Discharge Monitoring Reports (DMRs) submitted to the Department for Outfall #001A for the period January 2005 through September 2009 is as follows:

Discharge Flow	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average	0.07 MGD	0.603 MGD	0.17 MGD	57
Daily Maximum	0.13 MGD	0.69 MGD	0.25 MGD	57

- b. Dilution Factors: 06-096 CMR 530(4)(A)(2)(a) states that, “*For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model.*” Based on the configuration of Outfall #001A and a discharge flow limitation of 0.72 MGD, dilution factors associated with the discharge are as follows:

Acute = 10:1

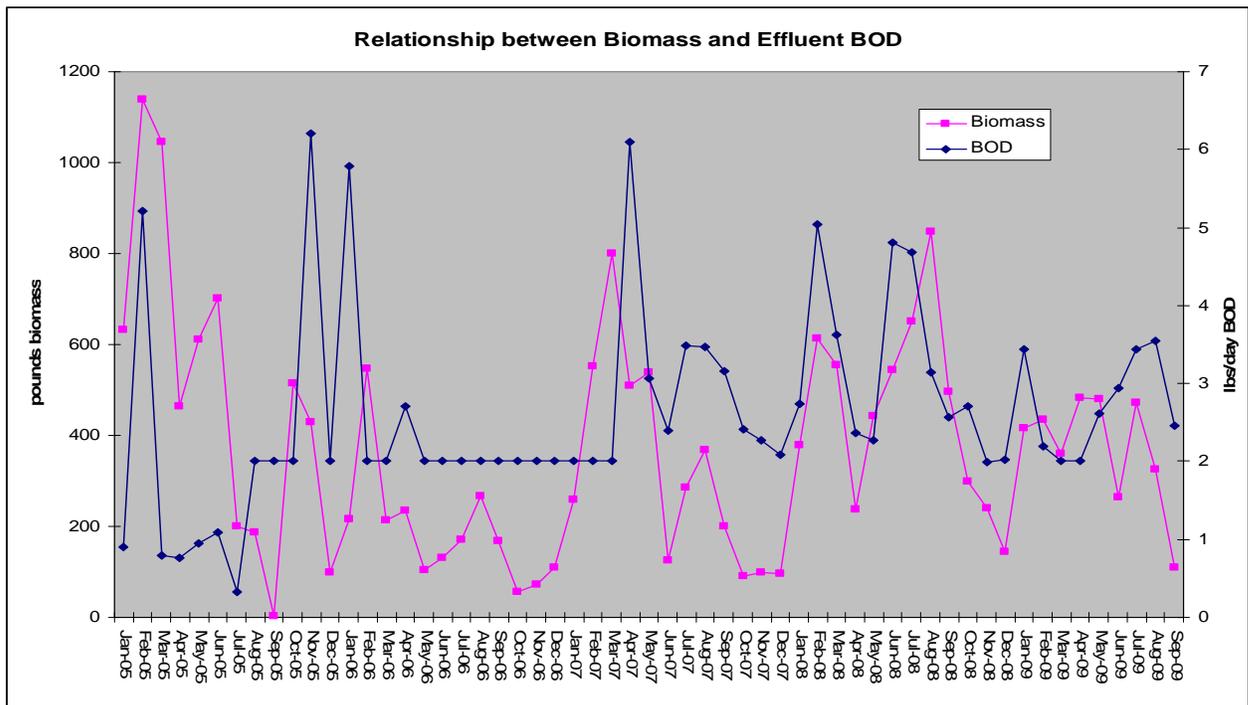
Chronic = 36:1

Harmonic mean¹ = 108:1

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

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

c. Biochemical Oxygen Demand (BOD₅): The previous permitting action carried forward from the initial WDL issued on June 27, 2000, a daily maximum mass limitation of 10 lbs./day and a monthly average mass reporting requirement for BOD₅. The 12/2/04 MEPDES permit stated that the limit was based on a negotiated value in consideration of anticipated effluent levels. The previous permitting action additionally established monthly average and daily maximum concentration reporting requirements based on Department best professional judgment. The 6/27/00 WDL and 12/2/04 licensing actions established daily maximum limitations for marine mammal biomass and laboratory animal biomass for the purpose of correlating biomass to effluent BOD₅ and adjusting limits as necessary.



A summary of the effluent BOD₅ data as reported on the Discharge Monitoring Reports (DMRs) submitted to the Department for Outfall #001A for the period January 2005 through September 2009 is as follows:

BOD ₅	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average	0.32 lbs./day	6.2 lbs./day	2.6 lbs./day	57
	0.2 mg/L	3.89 mg/L	2 mg/L	57
Daily Maximum	1.05 lbs./day	16.96 lbs./day	3.5 lbs./day	57
	1 mg/L	9.6 mg/L	2.5 mg/L	57

A review of the biomass and effluent BOD₅ data summarized above reveals that the monthly average effluent BOD₅ load was 5.1 lbs./day at the time when UNE experienced the highest (marine animal) biomass of 1,138 lbs. (February 2005). The Department is making a best professional judgment determination that the discharge levels of BOD₅ associated with this facility, even at the facility's maximum biomass capacity, are not significant and further

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

monitoring is not warranted. **Therefore, this permitting action is eliminating the numeric limitations and all monitoring and reporting requirements for effluent BOD₅.**

Additionally, this permitting action is eliminating the daily maximum limits and monitoring requirements for mammal and sea turtle biomass and laboratory animal biomass as UNE has submitted adequate data for these metrics to be used in statistical evaluations.

- d. Total Suspended Solids (TSS): The previous permitting action carried forward from the initial WDL issued on June 27, 2000, daily maximum and monthly average effluent concentration reporting requirements, and established corresponding mass reporting requirements for TSS. The basis for these reporting requirements is the same as for BOD₅ discussed above.

A summary of the effluent TSS data as reported on the DMRs submitted to the Department for Outfall #001A for the period January 2005 through September 2009 is as follows:

TSS	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average	0.73 lbs./day	126.68 lbs./day	16 lbs./day	57
	1.76 mg/L	33.5 mg/L	10 mg/L	57
Daily Maximum	1.54 lbs./day	127.7 lbs./day	23 lbs./day	57
	2 mg/L	71 mg/L	15 mg/L	57

The Department is making a best professional judgment determination that the effluent TSS associated with this facility **should continue to be monitored and should be limited based on past facility performance to ensure that the discharge receives best practicable treatment.** Therefore, **this permitting action is establishing monthly average and daily maximum effluent concentration and mass limits for TSS** using the 95th and 99th percentile confidence intervals of the data summarized above. This results in monthly average concentration and mass limits of 39 lbs./day and 13 mg/L, respectively, and daily maximum concentration and mass limits of 51 lbs./day and 31 mg/L, respectively, for TSS. This permitting action is revising the minimum monitoring frequency requirement from once per week to twice per month based on best professional judgment in consideration of the data on record.

- e. Fecal Coliform Bacteria: The previous permitting action established year-round monthly average and daily maximum fecal coliform bacteria concentration reporting requirements to assist in evaluating the impact of this discharge on receiving water quality. As discussed in Section 5 of this Fact Sheet, the Department is making a determination in this permitting action that the UNE facility does not cause or contribute to the non-attainment status of the receiving water. Sources contributing to the copper and bacteria non-attainment conditions in the fresh, estuarine and marine reaches of the Saco River are controlled through effluent limitations and conditions established in other individual MEPDES permits and through the Overboard Discharge Elimination program.

Therefore, this permitting action is eliminating the monthly average and daily maximum monitoring and reporting requirements for fecal coliform bacteria.

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

- f. Total Residual Chlorine (TRC): The previous permitting action established a water quality-based daily maximum concentration limit of 0.13 mg/L for TRC. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department licensing/permitting actions impose the more stringent of either the water quality-based or technology-based based limits.

With acute and chronic dilution factors associated with the discharge, water quality-based concentration thresholds for the discharge may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	A & C Dilution Factors	Calculated	
			Acute EOP Threshold	Chronic EOP Threshold
0.013 mg/L	0.0075 mg/L	10:1 (A) 36:1 (C)	0.13 mg/L	0.27 mg/L

The Department has established a daily maximum BPT limitation for TRC of 1.0 mg/L for facilities that utilize and discharge wastewater containing elemental chlorine or chlorine-based compounds. For facilities that need to dechlorinate the discharge to meet water quality based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. UNE dechlorinates the effluent prior to discharge.

The daily maximum, water quality-based threshold of 0.13 mg/L is more stringent than the technology-based threshold of 0.3 mg/L and is therefore being carried forward in this permitting action. The monthly average, technology-based threshold of 0.1 mg/L is more stringent than water quality-based threshold of 0.27 mg/L and is being established in this permitting action.

A summary of the effluent TRC data as reported on the Discharge Monitoring Reports (DMRs) submitted to the Department for Outfall #001A for the period January 2005 through September 2009 is as follows:

TRC	Minimum	Maximum	Arithmetic Mean	# DMRs
Daily Maximum	0.05 mg/L	>2.5 mg/L	0.15 mg/L	56

This permitting action is carrying forward the minimum monitoring frequency of five times per week for TRC based on best professional judgment.

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

- g. **pH:** The previous permitting action established a pH limit of 6.0 – 8.5 standard units (SU). **The Department considers a pH range of 6.0 – 9.0 SU to be best practicable treatment and this permitting action is revising the range limitation accordingly.** This permitting action is carrying forward the minimum monitoring frequency of twice per week based on a Department best professional judgment.

A summary of pH data as reported on the monthly DMRs for the period of January 2005 through September 2009 (# DMRs = 57) indicates the effluent pH has ranged from 6.87 SU to 8.49 SU. Based on the 100% compliance record associated with the long-term data, this permitting action is revising the minimum monitoring frequency requirement from once per week to twice per month.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

8. PUBLIC COMMENTS

Public notice of this application was made in the *Journal Tribune* newspaper on or about November 8, 2009. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

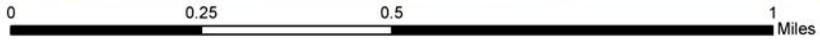
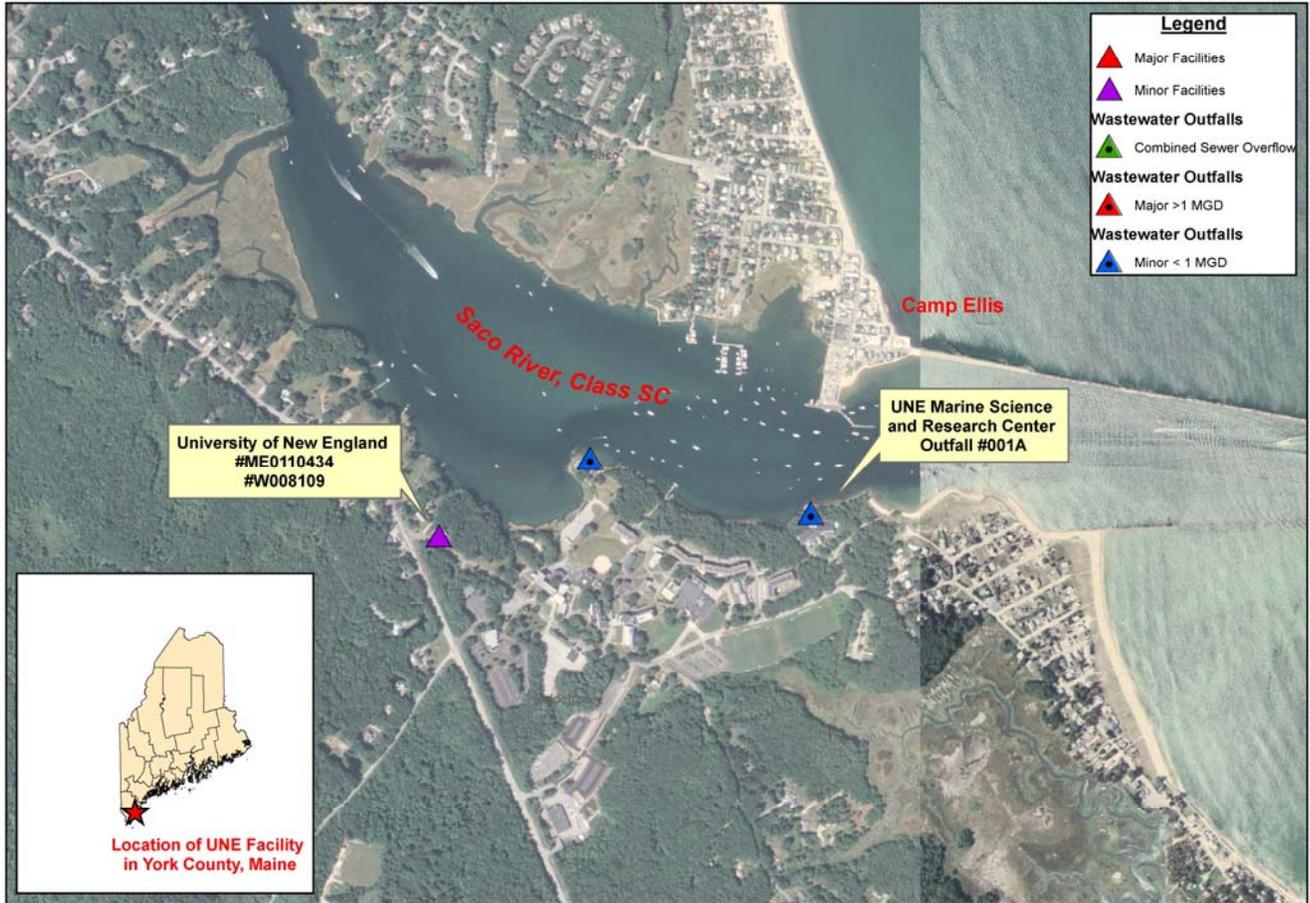
Additional information concerning this permitting action may be obtained from, and written comments sent to:

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

10. RESPONSE TO COMMENTS

During the period of March 24, 2010 through April 23, 2010, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit to be issued to UNE. The Department did not receive significant comments on the draft permit; therefore, a response to comments was not prepared.

ATTACHMENT A



University of New England Marine Science and Research Center at Biddeford, Maine



Map created by Maine DEP
November 2009





DEP INFORMATION SHEET

Appealing a Commissioner's Licensing Decision

Dated: May 2004

Contact: (207) 287-2811

SUMMARY

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

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

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

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

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

HOW TO SUBMIT AN APPEAL TO THE BOARD

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

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

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

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

5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
7. *New or additional evidence to be offered.* The Board may allow new or additional evidence as part of an appeal only when the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or show that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2, Section 24(B)(5).

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

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

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

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

II. APPEALS TO MAINE SUPERIOR COURT

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

ADDITIONAL INFORMATION

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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A. GENERAL PROVISIONS

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

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

- (a) They are not
 - (i) Designated as toxic or hazardous under the provisions of Sections 307 and 311, respectively, of the Federal Water Pollution Control Act; Title 38, Section 420, Maine Revised Statutes; or other applicable State Law; or
 - (ii) Known to be hazardous or toxic by the licensee.
- (b) The discharge of such materials will not violate applicable water quality standards.

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

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

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

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

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

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

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

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

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

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

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

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

B. OPERATION AND MAINTENANCE OF FACILITIES

1. General facility requirements.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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

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

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

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

5. Bypasses.

- (a) Definitions.
 - (i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
 - (ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.
- (c) Notice.
 - (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

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

6. Upsets.

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

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C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

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STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

5. Publicly owned treatment works.

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

E. OTHER REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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