



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

January 19, 2007

Calais School Department
Attn: James Underwood
32 Blue Devil Hill
Calais, ME 04619

RE: **Final Permit** Maine Waste Discharge License (WDL) W002375-5E-C-R
Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0102765

Dear Mr. Underwood:

Enclosed please find a copy of your final MEPDES permit/Maine WDL that 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.

At the recommendation of Annaleis Hafford of Olver Associates, we are reducing the monitoring frequency for settleable solids, total residual chlorine, and pH to once monthly for the months of July and August only. We are also extending your date to submit an updated Operation & Maintenance (O&M) Plan to December 31, 2007.

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 your license, please feel free to call me at 287-3901.

Sincerely,

Michael Demarest
Division of Water Quality Management
Bureau of Land and Water Quality

Enc. Final License

Cc: Annaleis Hafford, Senior Process Engineer, Olver Associates
Christopher P. Johnson, DEP/SMRO
Sandy Lao, USEPA

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

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) 764-0477 FAX: (207) 760-3143



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

DEPARTMENT ORDER

IN THE MATTER OF

CALAIS SCHOOL DEPARTMENT)	MAINE POLLUTANT DISCHARGE
CALAIS, WASHINGTON COUNTY)	ELIMINATION SYSTEM PERMIT
OVERBOARD DISCHARGE)	AND
#ME0102765)	WASTE DISCHARGE LICENSE
#W002375-5E-C-R APPROVAL)	RENEWAL

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, §1251, *et seq.*, and Maine law, 38 M.R.S.A., §414-A *et seq.*, and applicable regulations, the Maine Department of Environmental Protection (Department) has considered the application of CALAIS SCHOOL DEPARTMENT (CSD), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The CSD has applied to the Department for a renewal of Waste Discharge Conditional Permit (WDCP) #W002375-ZC-B-R, which was issued on December 14, 1995 and expired on December 14, 2005. WDCP #W002375-ZC-B-R approved the discharge of up to 13,000 gallons per day (gpd) of secondary treated wastewater from the Calais High School wastewater treatment facility to the St. Croix River, Class SC, in Calais, Maine. Historic discharge monitoring results have been maintained in the national Permit Compliance System (PCS) database under PCS #MEU502375.

On January 12, 2001, the Department received authorization from the U.S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine. From that point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) permit program and permit #ME0102765 (new MEPDES permit number) will be utilized as the primary reference number for this facility.

PERMIT SUMMARY

This permitting action is similar to the 12/14/95 licensing action in that it is:

1. Carrying forward the daily maximum discharge flow limitation of 13,000 gpd;
2. Carrying forward the monthly average and daily maximum technology-based concentration limits for biochemical oxygen demand (BOD₅) and total suspended solids (TSS);
3. Carrying forward the monthly average technology-based concentration limits for fecal coliform; and
4. Carrying forward the daily maximum technology-based concentration limitation for total residual chlorine (TRC) of 1.0 mg/L.

This permitting action is different than the 12/14/95 licensing action in that it is:

1. Replacing the Permit Compliance System (PCS) tracking number of MEU502375 with a new MEPDES permit number of ME0102765;
2. Establishing technology-based monthly average and daily maximum mass limits for BOD₅ and TSS;
3. Establishing technology-based weekly average concentration and mass limits for BOD₅ and TSS;
4. Establishing a requirement of a minimum of 85% removal of the BOD₅ and TSS;
5. Establishing a daily maximum technology-based limit of 0.3 ml/L for settleable solids;
6. Revising the pH range limitation to 6.0 – 9.0 standard units;
7. Reducing the monitoring frequency for settleable solids, TRC and pH to once monthly for July and August only; and
8. Establishing a requirement to develop, submit to the Department for review and comment, and maintain an Operations and Maintenance (O&M) plan for the facility.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated January 18, 2007, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with State law.
3. The provisions of the State's antidegradation policy, 38 M.R.S.A. §464(4)(F), will be met, in that:
 - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
 - (c) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The 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).
5. The overboard discharge system was in continuing existence for the 12 months preceding June 1, 1987.
6. A subsurface wastewater disposal system could not be installed in compliance with the Maine Subsurface Waste Water Disposal Rules at the time the renewal application was accepted by the Department.
7. A publicly owned sewer line is not located on or abutting land owned or controlled by the permittee or is not available for the permittee's use.
8. The discharge is not located within the boundaries of a sanitary district or sewer district.

ACTION

THEREFORE, the Department APPROVES the above noted application of the CALAIS SCHOOL DEPARTMENT to discharge a daily maximum flow of up to 13,000 gallons per day of secondary treated sanitary wastewater to the St. Croix River, Class SC, in Calais, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

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

DONE AND DATED AT AUGUSTA, MAINE, THIS 22nd DAY OF January, 2007.

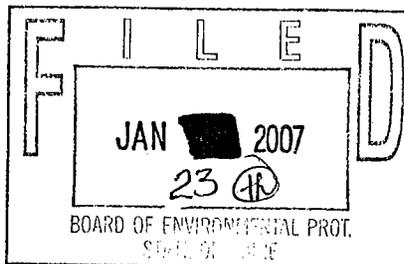
DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: 

DAVID P. LITTELL, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: June 1, 2006
Date of application acceptance: June 13, 2006



Date filed with Board of Environmental Protection _____

SPECIAL CONDITION

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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

Effluent Characteristic	Discharge Limitations					Monitoring Requirements			Minimum Sample Type as specified
	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Measurement Frequency as specified	
Flow [50050]	Report GPD [07]	--	13,000 GPD [07]	--	--	--	1/Month [01/30]	1/Month [01/30]	Estimated [ES]
BOD ₅ [00310]	3.3 lbs./day [26]	4.9 lbs./day [26]	5.4 lbs./day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	1/Month [01/30]	1/Month [01/30]	Grab [GR]
BOD ₅ Percent Removal ⁽²⁾ [81010]	---	---	---	85% [23]	---	---	1/Month [01/30]	1/Month [01/30]	Calculate [CA]
TSS [00530]	3.3 lbs./day [26]	4.9 lbs./day [26]	5.4 lbs./day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	1/Month [01/30]	1/Month [01/30]	Grab [GR]
TSS Percent Removal ⁽²⁾ [81011]	---	---	---	85% [23]	---	---	1/Month [01/30]	1/Month [01/30]	Calculate [CA]
Settleable Solids [00545] September - June July - August	--	--	--	--	--	0.3 ml/L [25] 0.3 ml/L [25]	1/Week [01/07] 1/Month [01/30]	1/Week [01/07] 1/Month [01/30]	Grab [GR]
Fecal Coliform Bacteria ⁽³⁾ [31616] May 15-Sept. 30 Total Residual	--	--	--	15/100 ml ⁽⁴⁾ [13]	--	50/100 ml [13]	1/Month [01/30]	1/Month [01/30]	Grab [GR]
Chlorine ⁽⁵⁾ [50060] September - June July - August	--	--	--	--	--	1.0 mg/L [19] 1.0 mg/L [19]	3/Week [03/07] 1/Month [01/30]	3/Week [03/07] 1/Month [01/30]	Grab [GR]
pH [00400] September - June July - August	--	--	--	--	--	6.0 - 9.0 SU [12] 6.0 - 9.0 SU [12]	3/Week [03/07] 1/Month [01/30]	3/Week [03/07] 1/Month [01/30]	Grab [GR]

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

FOOTNOTES: See page 6 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES:

1. **Sampling** – Sampling and analysis must be conducted in accordance with; a) methods approved by 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.

All detectable 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. **Percent Removal** – The facility shall maintain a minimum of 85% removal of both biochemical oxygen demand and total suspended solids for all flows receiving secondary treatment. The percent removal shall be calculated based on assumed BOD5 and TSS influent values of 286 mg/L and actual effluent concentration values, unless otherwise specified by the Department in writing.
3. **Bacteria Limits** – Fecal coliform bacteria limits and monitoring requirements are seasonal and apply between May 15 and September 30 of each year. The Department reserves the right to require year-round disinfection to protect the health, safety and welfare of the public.
4. **Bacteria Reporting** – The monthly average fecal coliform bacteria limitation is a geometric mean limitation and sample results shall be reported as such.
5. **TRC Monitoring** – Monitoring for TRC is only required when elemental chlorine or chlorine-based compounds are in use for effluent disinfection.

B. ANNUAL DISCHARGE FEES

Pursuant to Maine law, 38 M.R.S.A. §353-B, the permittee is required to pay an applicable annual fee for discharges authorized by this permit. Failure to pay an annual fee within 30 days of the billing date is sufficient grounds for revocation of the license permit or privilege under Maine law, 38 M.R.S.A. §341-D, subsection 3.

C. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time that 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 impart color, taste, turbidity, toxicity, radioactivity or other properties that cause those waters to be unsuitable for the designated uses and characteristics ascribed to their class.
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.

D. DISINFECTION

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

E. TREATMENT PLANT OPERATOR

The treatment facility must be operated by a person holding a minimum of a **Grade II** certificate (or Maine Registered Professional Engineer) pursuant to Title 32 M.R.S.A. §4171 *et seq.* All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

F. MONITORING AND REPORTING

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

Overboard Discharge Inspector
Department of Environmental Protection
Bureau of Land and Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333-0017

G. NOTIFICATION REQUIREMENT

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

1. Any substantial change or proposed change in the volume or character of pollutants being introduced into the wastewater collection and treatment system. For the purposes of this section, notice regarding substantial change shall include information on:
 - (a) the quality and quantity of wastewater introduced to the wastewater collection and treatment system; and
 - (b) any anticipated impact caused by the change in the quantity or quality of the wastewater to be discharged from the treatment system.

SPECIAL CONDITIONS

H. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from Outfall #001A. Discharges of wastewater from any other point source are not authorized under this permit, but shall be reported in accordance with Standard Condition B(5), *Bypasses* of this permit.

Under the provisions of Maine law, 38 M.R.S.A. sub§ 464.4.A.(6), discharges of a volume or quantity of wastewater that were not licensed as of June 1, 1987 are prohibited by this permit. Increases in the volume or quantity of wastewater discharged are not authorized by this permit.

I. CONNECTION TO MUNICIPAL SEWER

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.

J. SITE EVALUATION FOR TRANSFERRED AND RENEWED PERMITS

Prior to permit transfer or transfer of the property occupying the permitted overboard discharge system or renewal of this permit, a site evaluation must be performed by a licensed site evaluator with experience in designing systems for the replacement of overboard discharge systems if one has not been conducted in the previous five years. The Department may not grant approval for permit transfer if the site evaluation concludes that a non-discharging wastewater disposal system designed in compliance with the Maine Subsurface Waste Water Disposal Rules administered by the Maine Department of Health and Human Services, Division of Health Engineering can be installed as a replacement system for the overboard discharge.

K. OPERATION & MAINTENANCE (O&M) PLAN

On or before December 31, 2007, the permittee shall submit to the Department a current written comprehensive Operation & Maintenance (O&M) Plan [*PCS Code 09699*]. The plan shall provide a systematic approach by which the permittee shall at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.

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

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

SPECIAL CONDITIONS

L. REOPENING OF PERMIT FOR MODIFICATIONS

Upon evaluation of the tests results or monitoring requirements specified in Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at any time and with notice to the permittee, modify this permit to: (1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded; (2) require additional effluent or ambient water quality monitoring if results on file are inconclusive; (3) change monitoring requirements or limitations based on new information; or (4) require elimination of the discharge where an alternative form of wastewater disposal is feasible.

M. 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 will remain in full force and effect, and shall be construed and enforced in all respects 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: **JANUARY 19, 2007**

MEPDES PERMIT: #ME0102765
WASTE DISCHARGE LICENSE: #W002375-5E-C-R

NAME AND ADDRESS OF APPLICANT:

**CALAIS SCHOOL DEPARTMENT
ATTN: JAMES A. UNDERWOOD, SUPT. OF SCHOOLS
32 BLUE DEVIL HILL ROAD
CALAIS, MAINE 04619**

COUNTY: **WASHINGTON**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**CALAIS HIGH SCHOOL
32 BLUE DEVIL HILL ROAD
CALAIS, MAINE 04619**

RECEIVING WATER/CLASSIFICATION: **ST. CROIX RIVER, CLASS SC**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **OLVER ASSOCIATES, INC.
ATTN: ANNALEIS HAFFORD
(207) 223-2232**

1. APPLICATION SUMMARY

Application: The Calais School Department (CSD) has applied to the Department of Environmental Protection (Department) for a renewal of Waste Discharge Conditional Permit (WDCP) #W002375-ZC-B-R, which was issued on December 14, 1995 and expired on December 14, 2005. WDCP #W002375-ZC-B-R approved the discharge of up to 13,000 gallons per day (gpd) of secondary treated wastewater from the Calais High School wastewater treatment facility to the St. Croix River, Class SC, in Calais, Maine.

2. PERMIT SUMMARY

- a. Regulatory: On January 12, 2001, the Department received authorization from the U.S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine. From that point forward, the program has been referred to as the MEPDES permit program and #ME0102765 (new MEPDES permit number) will be utilized as the primary reference number for the Calais High School wastewater treatment facility.

2. PERMIT SUMMARY (continued)

b. Terms and Conditions:

This permitting action is similar to the 12/14/95 licensing action in that it is:

1. Carrying forward the daily maximum discharge flow limitation of 13,000 gpd;
2. Carrying forward the monthly average and daily maximum technology-based concentration limits for biochemical oxygen demand (BOD₅) and total suspended solids (TSS);
3. Carrying forward the monthly average technology based concentration limits for fecal coliform; and
4. Carrying forward the daily maximum technology-based concentration limitation for total residual chlorine (TRC) of 1.0 mg/L.

This permitting action is different than the 12/14/95 licensing action in that it is:

1. Replacing the Permit Compliance System (PCS) tracking number of MEU502375 with a new MEPDES permit number of #ME0102765.
2. Establishing technology-based monthly average and daily maximum mass limits for BOD₅ and TSS;
3. Establishing technology-based weekly average concentration and mass limits for BOD₅ and TSS;
4. Establishing a requirement of a minimum of 85% removal of the BOD₅ and TSS;
5. Establishing a daily maximum technology-based limit of 0.3 ml/L for settleable solids;
6. Revising the pH range limitation to 6.0 – 9.0 standard units;
7. Revising the minimum monitoring frequency for BOD₅, TSS, settleable solids, TRC and pH (for July - August only); and
8. Establishing a requirement to develop and submit to the Department for review and comment an Operations and Maintenance (O&M) plan for the facility.

c. History: The most current/relevant regulatory actions regarding the discharge from the facility include:

April 8, 1993 – The EPA issued NPDES permit MEU502375 to the CSD. MEU502375 lapsed on April 8, 1998.

December 14, 1995 - The Department issued Waste Discharge Conditional Permit (WDCP) #W002375-ZC-B-R for a ten-year term, and authorized the discharge of up to 13,000 gpd of secondary treated wastewater to the St. Croix River. The 12/14/95 licensing action superseded Waste Discharge License #W002375-58-A-N issued on August 9, 1983.

June 1, 2006 – The CSD submitted an application to the Department for renewal of the 12/14/95 WDCP. The Department accepted the application for processing on June 2, 2006. As part of their application, the CSD submitted a copy of a site evaluation report prepared by Dean Bradshaw, P.E. of Dennysville, Maine, and for the CSD facility. The report concludes that a subsurface wastewater disposal system cannot be installed on the CSD property due to the presence of poor soils and setback requirements.

d. Source Description: Sanitary wastewaters are generated from Calais High School which serves a maximum of 356 students and 42 staff. A map created by the Department showing the location of the facility and receiving water is included as Attachment A of this Fact Sheet.

2. PERMIT SUMMARY (cont'd)

- e. Wastewater Treatment: The wastewater currently receives primary treatment from a 13,000-gallon septic tank and secondary treatment from a 16,000 square foot sand filter bed with chlorine disinfection. The treated wastewater is discharged into the receiving waterbody via a six-inch diameter outfall pipe shared with Washington County Technical Center. The outfall pipe has approximately two feet of water over the crown of the pipe at mean low water.

3. CONDITIONS OF PERMITS

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

4. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S.A., Section 469.7.B.1, classifies the St. Croix River at the point of discharge as Class SC waters. Maine law, 38 M.R.S.A., Section 465-B(2) describes the classification standards for Class SC waters.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2004 Integrated Water Quality Monitoring and Assessment Report, prepared pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists waterbody #702-4 (including DMR Legal Notice Closed Area C-62) in a table entitled, *Category 5B-1: Estuarine and Marine Waters Impaired only by Bacteria (TMDL Required)*. The report lists potential sources contributing to the impairment, including overboard discharge systems, sewerage treatment facilities, and non-point source pollution.

The Maine Department of Marine Resources (DMR) assesses information on shellfish growing areas to ensure that shellfish harvested are safe for consumption. The DMR has authority to close shellfish harvesting areas wherever there is a pollution source, a potential pollution threat, or poor water quality.

The DMR traditionally closes shellfish harvesting areas if there are known sources of discharges with unacceptable bacteria levels (in-stream thresholds established in the National Shellfish Sanitation Program) or maintains shellfish harvesting closure areas due to lack of updated information regarding ambient water quality conditions. In addition, the DMR prohibits shellfish harvesting in the immediate vicinity of all wastewater treatment outfall pipes as a precautionary measure in the event of a failure in the treatment plant's disinfection system. Thus, shellfish harvesting area #C-62 is closed to the harvesting of shellfish due to poor water quality. The Department is making the determination that compliance with the fecal coliform bacteria and other secondary wastewater treatment limits ensure that the discharge of secondary treated wastewater from the CSD will not cause or contribute to the failure of the receiving waters to meet the standards of its designated classification.

6. COMPLIANCE

The overboard discharge treatment system has been inspected by the Department ten times in the past five years. The treatment system was found to comply with the inspection criteria eight of the ten inspections, with absent chlorine as the cited infraction. Submitted Discharge Monitoring Reports show two violations of TRC limits in the five-year period between September 2000 and May 2006.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- a. Best Practicable Treatment (BPT) - Overboard discharges may be permitted only where no technologically proven alternative exists. Overboard discharge treatment systems must be capable of meeting secondary treatment standards as described in CMR Chapter 525, Section 3 and Chapter 596 section 9, unless the Department finds that alternate limits are appropriate. After accepting a renewal application as complete for processing, the Department shall approve an overboard waste discharge license only if all of the following criteria are met.
- (1) A publicly owned sewer line is not located on or abutting land owned or controlled by the applicant or is not available for the applicant's use.
 - (2) A subsurface wastewater disposal system cannot be installed in compliance with the Subsurface Rules, 10-144 CMR 241, on land owned or controlled by the applicant.
 - (3) The discharge is not located within the boundaries of a sanitary or sewer district and the district has not agreed to service and maintain a holding tank at an annual fee that does not exceed those fees charged to other similar users of the district's services who are physically connected to the sewers of the district.
 - (4) For a school such as the CSD facility, the volume or quantity of wastewater that is discharged does not exceed;
 - (a) the limit imposed by the previous license
 - (b) the actual or estimated flow at the time of current application if a license volume increase is necessary.
 - (5) The receiving water is not:
 - (a) A Class GPA, AA, A, or SA water;
 - (b) A tributary to Class GPA water; or
 - (c) A waterbody with a drainage area of less than 10 square miles,
 - (6) The discharge meets the requirements of *Maine's Pollution Control Laws* 38 M.R.S.A. §414-A, and *Maine's Water Classification Laws* 38 M.R.S.A. §§ 464 to 469.
 - (7) The discharge receives best practicable treatment consistent with requirements in Section 9 of Department rule Chapter 596.
- b. Flow: The previous licensing action established a daily maximum flow limitation of 13,000 gpd, which is being carried forward in this permitting action as it remains representative of the design flow for the treatment system.
- c. Dilution: Department rule, 06-096 CMR Chapter 530 Section 4.A.2.a, *Surface Water Toxics Control Program*, 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 limit of 13,000 gpd, dilution factors associated with the discharge are as follows:

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

Acute = 127.9:1

Chronic = 38,000:1

Harmonic mean¹ = 114,000:1

- d. Biochemical Oxygen Demand (BOD₅) & Total Suspended Solids (TSS): The previous licensing established monthly average technology-based concentration limits of 30 mg/L for BOD₅ and TSS based on the secondary treatment requirements as defined in Department rule Chapter 525(3)(III), and daily maximum concentration limits of 50 mg/L based on a Department best professional judgment of BPT. The monthly average and daily maximum concentration limits are being carried forward in this permitting action. This permitting action is establishing weekly average technology-based concentration limits of 45 mg/L based on the secondary treatment requirements as defined in Department rule Chapter 525(3)(III).

Department rule 06-096 CMR Chapter 523(6)(f) states that all pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass. With a monthly average discharge flow limit of 13,000 GPD (0.013 million gallons per day, MGD), this permitting action is establishing monthly average, weekly average and daily maximum technology-based mass limits for BOD₅ and TSS, which were derived as follows:

Monthly Average Mass Limit: $(30 \text{ mg/L})(8.34 \text{ lbs./gallon})(0.013 \text{ MGD}) = 3.3 \text{ lbs./day}$

Weekly Average Mass Limit: $(45 \text{ mg/L})(8.34 \text{ lbs./day})(0.013 \text{ MGD}) = 4.9 \text{ lbs./day}$

Daily Maximum Mass Limit: $(50 \text{ mg/L})(8.34 \text{ lbs./day})(0.013 \text{ MGD}) = 5.4 \text{ lbs./day}$

This permitting action is also establishing a new requirement for a minimum of 85% removal of BOD₅ and TSS pursuant to Chapter 525(3)(III)(a)(3) and (b)(3) of the Department's rules. The Calais High School wastewater treatment system does not contain an influent sampling location that is representative of raw wastewater conditions. According to the USEPA's Onsite Wastewater Treatment Systems Manual, dated February 2002, table 3-7 entitled "Constituent Mass Loadings and Concentrations in Typical Residential Wastewater" high end range of values, influent values for BOD₅ and TSS may be assumed to be 286 mg/L. Therefore, this permitting action authorizes CSD to assume an influent BOD₅ and TSS concentration value of 286 mg/L for purposes of calculating the monthly percent removal value until such time that the infrastructure is modified or replaced such that collection of a representative raw influent sample is practical.

This permitting action is revising the minimum monitoring frequency requirement of once every two months to once per month based on the monthly requirement to demonstrate 85 percent removal of BOD₅ and TSS.

- e. Settleable Solids: The previous license neither limited nor required measurement of this parameter. The Department has determined that a daily maximum concentration limit of 0.3 ml/L, which is being established in this permitting action, provides sufficient information to assess whether the treatment facility is providing BPT. This permitting action is establishing a minimum monitoring frequency requirement of once per week for settleable solids based on a Department best professional judgment determination of the minimum level of monitoring necessary to determine compliance with this new limit. The monitoring frequency is being reduced to once monthly based on BPT per month in July and August because the school is closed for the summer.
- f. Fecal Coliform Bacteria -The previous licensing action established a daily limitation of 15 colonies/100 ml. In 1998, the Department reevaluated the fecal coliform bacteria limitations it was establishing in licenses for discharges to marine and estuarine waters. The Department determined that new water quality based limitations of 15 colonies/100 ml as a monthly average

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 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.

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

(geometric mean) and 50 colonies/100 ml were to be established in licensing/permitting actions thereafter to promote consistency with the National Shellfish Sanitation Program. Therefore, this permitting action is establishing said water quality-based limitations.

This permitting action is carrying forward the minimum monitoring frequency requirement of once per month (1/Month) during the period between May 15 and September 30 for fecal coliform bacteria based on a Department BPJ determination of the appropriate monitoring frequency for this treatment system.

- g. Total Residual Chlorine (TRC): Limits for TRC are specified to ensure that ambient water quality standards are maintained and that BPT is being applied to the discharge. The previous licensing action established a monthly average technology-based limitation of 1.0 mg/L. The Department imposes the more stringent of the water quality or technology based limits in licensing/permitting actions. End-of-pipe water quality based concentration thresholds may be calculated as follows:

Parameter	Acute Criterion	x Acute Dilution Factor	= Acute Daily Max Threshold
Chlorine	0.013 mg/L	x 127.9:1	= 1.7 mg/L
Parameter	Chronic Criterion	x Chronic Dilution Factor	= Chronic Daily Max Threshold
Chlorine	0.0075mg/L	x 38,000:1	= 285 mg/L

The daily maximum technology-based limit of 1.0 mg/L is more stringent than the water quality-based thresholds and is therefore being carried forward in this permitting action. This permitting action is carrying forward the minimum monitoring frequency requirement of three times per week based on Department guidance for overboard discharge (OBD) systems permitted to discharge between 10,000 and 19,999 GPD. The monitoring frequency is being reduced to once per month in July and August because the school is in recess for the summer.

TRC monitoring is required any time chlorine-based compounds are in use for effluent disinfection. For instances when the permittee has not utilized chlorine-based compounds for effluent disinfection for an entire reporting period, the permittee shall report "NODI-9" for this parameter on the monthly Discharge Monitoring Report.

- h. pH: The previous licensing action established a pH range limitation of 6.0 - 8.5 standard units, but did not specify a monitoring frequency requirement. This permitting action is revising the pH range limit to 6.0 - 9.0 standard units pursuant to a new Department rule found at Chapter 525(3)(III)(c). This permitting action is establishing a minimum monitoring frequency requirement of three times per week based on Department guidance for overboard discharge (OBD) systems permitted to discharge between 10,000 and 19,999 GPD. The monitoring frequency is being reduced to once per month in July and August because the school is in recess for the summer.
- i. 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* (toxics rule) 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.

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

The previous licensing action neither established nor addressed WET or priority pollutant testing requirements of the toxics rule. Chapter 530 Section (2)(A) specifies the dischargers subject to the rule as, *“all licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedences of narrative or numerical water quality criteria.”*

Chapter 530(2)(A) specifies the criteria for exemption of certain discharges from toxics testing as follows:

- (1) *Discharges from individual discharge points licensed to discharge less than 50,000 gallons per day of solely domestic wastewater and with a chronic dilution factor of at least 50 to 1, provided no holding tank wastes containing chemicals are accepted by the facility;*
- (2) *Discharges from residential overboard discharge systems; or*
- (3) *Discharges from combined sewer overflow discharge points, provided the owner of the sewerage system is conducting or participating in a discharge abatement program.*

The CSD is permitted to discharge up to 13,000 gpd of solely domestic wastewater and has a chronic dilution factor of 38,000:1. Therefore, the facility qualifies for an exemption from toxics testing and this permitting action is not establishing toxics testing requirements.

8. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

9. PUBLIC COMMENTS

Public notice of this application was made in the *Calais Advertiser* newspaper on or about June 1, 2006. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

10. DEPARTMENT CONTACTS

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

Michael Demarest
Division of Water Quality Management
Bureau of Land and Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017

Telephone: (207) 287-6301

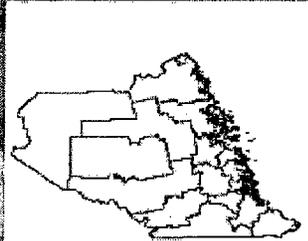
E-mail: michael.demarest@maine.gov

11. RESPONSE TO COMMENTS

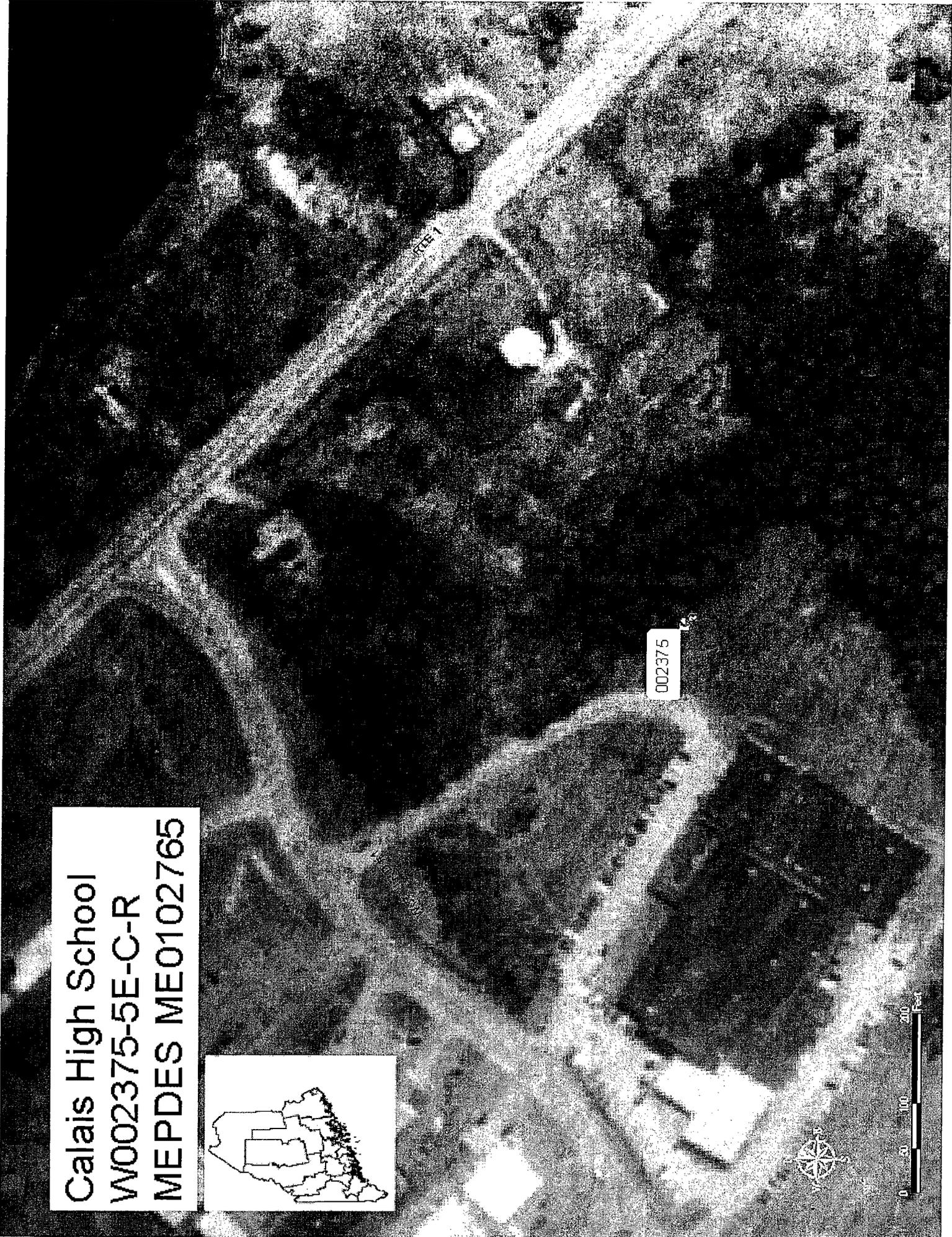
During the period of October 22, 2006 through November 22, 2006, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit to be issued to Calais School Department for the proposed discharge. The Department received no significant comments on the proposed draft permit; therefore, a response to comments was not prepared.

Attachment A

Calais High School
W002375-5E-C-R
MEPDES ME0102765



002375



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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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.

