



STATE OF MAINE
Department of Environmental Protection

Paul R. LePage
GOVERNOR

Patricia W. Aho
COMMISSIONER

June 12, 2012

Mr. Jonathan Carman
Contract Operator
J.M.C. Wastewater Services
P.O. Box 397
Unity, ME 04988

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101150
Maine Waste Discharge License (WDL) Application #W000478-6C-E-R
Final MEPDES Permit

Dear Mr. Carman:

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.*"

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

Sincerely,

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

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

Enc.

cc: Denise Behr, DEP/CMRO
Sandy Mojica, USEPA



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

DEPARTMENT ORDER

IN THE MATTER OF

UNITY UTILITIES DISTRICT)	MAINE POLLUTANT DISCHARGE
UNITY, WALDO COUNTY)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS)	AND
ME0101150)	WASTE DISCHARGE LICENSE
W000478-6C-E-R)	RENEWAL
APPROVAL)	

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 hereinafter) has considered the application of the UNITY UTILITIES DISTRICT (UUD/permittee hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The UUD has submitted a timely and complete application to the Department for a renewal of Waste Discharge License (WDL) W000478-5L-D-R / Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101150, which was issued on July 27, 2007, for a five-year term. The MEPDES permit authorized the monthly average discharge of up to 0.5 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to Twenty-Five Mile Stream, Class B, in Unity, Maine.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the previous permit except that this permit is;

- 1) Eliminating the daily maximum water quality based mass and concentration limits for total copper and total zinc given results for said parameters in the most current 60 months do not exceed or have a reasonable potential to exceed applicable ambient water quality criteria.
- 2) Reducing the monitoring frequency for settleable solids from 5/Week to 1/Week.
- 3) Incorporating the interim numeric average and maximum technology based concentration limitations for total mercury into the permit that were originally established in an administrative permit modification issued on June 1, 2000.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated May 7, 2012, and subject to the Conditions listed below, the Department makes the following conclusions:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
3. The provisions of the State's antidegradation policy, *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 natural resource, that water quality will be maintained and protected;
 - (c) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing 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 UNITY UTILITIES DISTRICT to discharge a monthly average flow of up to 0.5 million gallons per day of secondary treated municipal wastewater to the Twenty-Five Mile Stream, Class B, in Unity, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

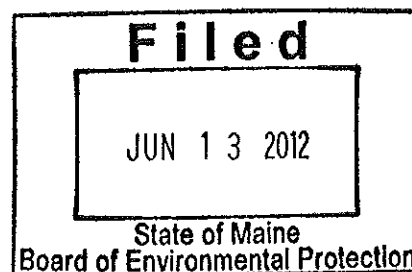
1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits" revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of the this permit, the terms and conditions of the this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [Maine Administrative Procedure Act, 5 M.R.S.A. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (effective April 1, 2003)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS 12th DAY OF June, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Kuhn
For Patricia W. Aho, Commissioner



Date of initial receipt of application: May 1, 2012
Date of application acceptance: May 3, 2012

Date filed with Board of Environmental Protection _____

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

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Between the period of March 16 through December 15 of each year when the dilution factor associated with the discharge is at least 100:1 or between the period of December 16 through March 15 when the dilution factor associated with the discharge is at least 150:1, the permittee is authorized to discharge **secondary treated municipal wastewater via Outfall #001A** to Twenty-Five Mile Stream⁽¹⁾. There shall be no discharge from Outfall #001A when the flow in Twenty-Five Mile Stream is less than 15 cubic feet per second at the point of discharge. Such discharges shall be limited and monitored by the permittee as specified below⁽²⁾:

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>
Flow [50050]	0.5 MGD [03]	---	Report MGD [03]	---	---	---	Daily When Discharging [WH/DS]	Recorder [RC]
BOD ₅ [00310]	125 lbs./day [26]	188 lbs./day [26]	209 lbs./day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	1/Week [01/07]	24-Hour Composite ⁽³⁾ [24]
BOD ₅ Percent Removal ⁽³⁾ [81010]	---	---	---	85% [23]	---	---	---	---
TSS [00530]	125 lbs./day [26]	188 lbs./day [26]	209 lbs./day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	1/Week [01/07]	24-Hour Composite ⁽³⁾ [24]
TSS Percent Removal ⁽³⁾ [81011]	---	---	---	85% [23]	---	---	---	---
Settleable Solids [00545]	---	---	---	---	---	0.3 ml/L [25]	1/Week [01/07]	Grab [GR]
<i>E. coli</i> Bacteria ⁽⁴⁾ (May 15 – Sept. 30) [31633]	---	---	---	64/100 ml ⁽⁵⁾ [13]	---	427/100 ml [13]	1/Week [01/07]	Grab [GR]
Total Residual Chlorine ⁽⁶⁾ [50060]	---	---	---	---	---	1.0 mg/L [19]	5/Week [05/07]	Grab [GR]
Mercury (Total) ⁽⁷⁾ [71900]	---	---	---	4.5 ng/L [3M]	---	6.8 ng/L [3M]	1/Year [01/YR]	Grab [GR]
pH [00400]	---	---	---	---	---	6.0 – 9.0 SU ⁽⁸⁾ [12]	5/Week [05/07]	Grab [GR]

Footnotes: See Pages 7 through 10 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

2. Whole effluent toxicity, analytical chemistry and priority pollutant testing requirements.

SCREENING LEVEL - Beginning 24 months (Year 4) prior to permit expiration and lasting through 12 months prior to permit expiration and every five years thereafter.

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type ⁽³⁾
Whole Effluent Toxicity ⁽⁹⁾						
<u>Acute – NOEL</u>						
<i>Ceriodaphnia dubia</i> (Water flea) [TDA3B]	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
<i>Salvelinus fontinalis</i> (Brook trout) [TDA6F]	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
<u>Chronic – NOEL</u>						
<i>Ceriodaphnia dubia</i> (Water flea) [TBP3B]	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
<i>Salvelinus fontinalis</i> (Brook trout) [TBQ6F]	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Analytical Chemistry ^(10,12) [51477]	---	---	---	Report ug/L [28]	1/Quarter [01/QQ]	Composite/Grab [24]
Priority Pollutant ^(11,12) [50008]	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/Grab [24]

Footnotes: See Pages 7 through 10 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

Footnotes:

1. **Minimum Dilution Required for Discharge** – The permittee is not authorized to discharge wastewater between the period of March 16 through December 15 of each year when the dilution factor associated with the discharge is less than 100:1 or between the period of December 16 through March 15 when the dilution factor associated with the discharge is less than 150:1. There shall be no discharge from Outfall #001A when the flow in Twenty-Five Mile Stream is less than 15 cubic feet per second at the point of discharge. Effluent dilution ratios shall be calculated by the permittee prior to commencing discharge each day using the following formula:

$$\text{Dilution Ratio} = \frac{[(0.6464)(Q_s) + Q_e]}{Q_e}$$

Where,

Q_s = stream flow in cfs as measured with a survey rod at the reference mark consisting of a lag bolt set in the upstream concrete bridge railing by the U.S. Geological Survey; and

Q_e = effluent flow in units of MGD.

2. **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 for wastewater by the State of Maine's Department of Human Services. Samples that are sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 or laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000).

All analytical test results shall be reported to the Department including results which are detected below the respective reporting limits (RLs) specified by the Department or as specified by other approved test methods. See **Attachment A** of this permit for a list of the Department's RLs. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the RL achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL or reporting an estimated value ("J" flagged) is not acceptable and will be rejected by the Department. Reporting analytical data and its use in calculations must follow established Department guidelines specified in this permit or in available Department guidance documents.

SPECIAL CONDITIONS

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

Footnotes:

3. **Percent Removal** – The treatment facility shall maintain a minimum of 85 percent removal of both biochemical oxygen demand (BOD₅) and total suspended solids (TSS) for all flows receiving secondary treatment during all months that the facility discharges. Compliance with the limitation shall be based on a twelve-month rolling average. Calendar monthly average percent removal values shall be calculated based on influent and effluent concentrations. For the purposes of this permitting action, the twelve-month rolling average calculation is based on the most recent twelve-month period. The percent removal shall be calculated based on an assumed influent concentration value of 286 mg/L or measured influent and effluent concentration values. Percent removal limitations are not applicable if a measured influent used to calculate the removal is <200 mg/L. The permittee shall enter “NODI-9” on the monthly Discharge Monitoring Report (DMR) and on the “49” form when the twelve-month rolling average calculation for BOD₅ and TSS for the month is less than 200 mg/L.
4. **Bacteria Limits** – *E. coli* bacteria limits and monitoring requirements are seasonal and apply between May 15 and September 30 of each year. The Department reserves the right to impose year-round bacteria limitations to protect the health, safety and welfare of the public.
5. **Bacteria Reporting** – The monthly average *E. coli* bacteria limitation is a geometric mean limitation and sample results shall be reported as such.
6. **TRC Monitoring** –Monitoring for TRC is only required when elemental chlorine or chlorine-based compounds are in use for effluent disinfection. For instances when a facility has not disinfected with chlorine-based compounds for an entire reporting period, the facility shall report “NODI-9” for this parameter on the monthly DMR. The permittee shall utilize approved test methods that are capable of bracketing the TRC limitation in this permit.
7. **Mercury** - All mercury sampling required by this permit or required to determine compliance with interim limitations established pursuant to Department rule Chapter 519, shall be conducted in accordance with EPA’s “clean sampling techniques” found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis shall be conducted in accordance with EPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See **Attachment B** for a Department report form for mercury test results.

SPECIAL CONDITIONS

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

Footnotes:

8. **pH Range Limitation** – The pH value of the effluent shall not be lower than 6.0 SU nor higher than 9.0 SU at any time unless these limitations are exceeded due to natural causes. The permittee shall provide oral notification of any exceedence within 24 hours from the time the permittee becomes aware of the circumstances and shall submit a written explanation of the exceedence within 5 days of the time the permittee becomes aware of the circumstances.
9. **Whole effluent toxicity (WET) testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 1.0%), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points. The critical acute and chronic thresholds were derived as the mathematical inverse of the applicable acute and chronic dilution factors of 100:1.
 - a. **Screening level testing** – Beginning 24 months (Year 4) prior to permit expiration and lasting through 12 months prior to permit expiration and every five years thereafter, the permittee shall conduct screening level WET testing at a minimum frequency of once per year for the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*).
 - b. **Surveillance level testing** - Waived for this facility pursuant to 06-096 CMR 530.

WET test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 1.0 %.

Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following USEPA methods manuals.

- a. Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, Fourth Edition, October 2002, EPA-821-R-02-013.
- b. Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002, EPA-821-R-02-012.

SPECIAL CONDITIONS

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

Footnotes:

Results of WET tests shall be reported on the "Whole Effluent Toxicity Report – Fresh Waters" form included as **Attachment C** of this permit each time a WET test is performed. The permittee is required to analyze the effluent for the analytical chemistry parameters specified on the "WET and Chemical Specific Data Report Form" form included as **Attachment A** of this permit each time a WET test is performed.

10. **Analytical chemistry** – Refers to a suite of chemicals in **Attachment A** of this permit.

- a. **Screening level testing** – Beginning 24 months (year 4) prior to permit expiration and lasting through 12 months prior to permit expiration and every five years thereafter, the permittee shall conduct analytical chemistry testing at a minimum frequency of once per calendar quarter for four consecutive calendar quarters.
- b. **Surveillance level testing** - Waived for this facility pursuant to 06-096 CMR 530

11. **Priority pollutant testing** – Refers to a suite of chemicals in **Attachment A** of this permit

- a. **Screening level testing** - Beginning 24 months (Year 4) prior to permit expiration and lasting through 12 months prior to permit expiration and every five years thereafter, the permittee shall conduct screening level priority pollutant testing at a minimum frequency of once per year.
- b. **Surveillance level testing** - Not required pursuant to 06-096 CMR 530.

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

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

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 for 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 for 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 for 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. TREATMENT PLANT OPERATOR

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

D. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on May 3, 2012; 2) the terms and conditions of this permit; and 3) only from 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. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the waste water collection and treatment system by a non-domestic source (user) shall not pass through or interfere with the operation of the treatment system. The licensee shall conduct an Industrial Waste Survey (IWS) at any time a new industrial user proposes to discharge within its jurisdiction, an existing user proposes to make a significant change in its discharge, or at an alternative minimum, once every license cycle. The IWS shall identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of CWA, 40 CFR Part 403, or 06-096 CMR Chapter 528 Pretreatment Program.

SPECIAL CONDITIONS

F. NOTIFICATION REQUIREMENTS

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

1. Any introduction of pollutants into the waste water collection and treatment system from an indirect discharger in a primary industrial category discharging process waste water; and
2. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system by a source introducing pollutants to the system at the time of permit issuance.
3. 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.

G. 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 EPA personnel upon request.

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

SPECIAL CONDITIONS

H. WET WEATHER MANAGEMENT PLAN

The treatment facility staff shall maintain a Wet Weather Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall. A specific objective of the plan shall be to maximize the volume of wastewater receiving secondary treatment under all operating conditions. The revised plan shall include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events.

Once the Wet Weather Management Plan has been approved, the permittee shall review their plan at least annually and record any necessary changes to keep the plan up to date. The Department may require review and update of the plan as it is determined to be necessary.

I. STREAM FLOW MONITORING/DILUTION

When the treatment facility is discharging, the flow in Twenty-Five Mile Stream shall be monitored daily, and the dilution of the effluent in the receiving water shall be calculated daily. Copies of the stream flow monitoring data and the effluent dilution data shall be submitted monthly with the Discharge Monitoring Report (DMR). Also, the permittee shall keep copies of the stream flow monitoring data and effluent dilution data on file for a period of at least five years.

The stream flow shall be measured with a survey rod at the reference mark consisting of a lag bolt set in the upstream concrete bridge railing by the United States Geological Survey (USGS).

The UUD contracts with the United States Geological Survey (USGS) to calibrate the rating table used in calculating the stream flow. Annually, the USGS conducts 2-3 low flow measurements at the site of interest and runs levels to verify the stability of the control points. **Within 30 days of any proposed modifications to this procedure, the permittee shall notify the Department and receive approval before implementing any proposed modifications.** The permittee shall retain copies of the stream gage rating table calibrations for a period of at least 3 years.

SPECIAL CONDITIONS

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

By December 31 of each calendar year, the permittee shall provide the Department with a certification describing any of the following that have occurred since the effective date of this permit [*PCS Code 95799*]: See Attachment E of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

- (a) Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;
- (b) Changes in the operation of the treatment works that may increase the toxicity of the discharge; and
- (c) Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge.

In addition, in the comments section of the certification form, the permittee shall provide the Department with statements describing;

- (d) Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge.
- (e) Increases in the type or volume of hauled wastes accepted by the facility.

The Department reserves the right to reinstate annual (surveillance level) testing or other toxicity testing if new information becomes available that indicates the discharge may cause or have a reasonable potential to cause exceedences of ambient water quality criteria/thresholds.

K. 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.

SPECIAL CONDITIONS

L. SEVERABILITY

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

ATTACHMENT A

Maine Department of Environmental Protection

WET and Chemical Specific Data Report Form

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

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

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

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

Date Sample Collected _____ Date Sample Analyzed _____

Laboratory _____ Telephone _____
 Address _____

Last Revision - April 25, 2012

Lab Contact _____ Lab ID # _____

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

FRESH WATER VERSION

Please see the footnotes on the last page.

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

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

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

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

[illegible]

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

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

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

Notes:

- (1) Flow average for day pertains to WET/PP composite sample day.
- (2) Flow average for month is for month in which WET/PP sample was taken.
- (3) Analytical chemistry parameters must be done as part of the WET test chemistry.
- (4) Priority Pollutants should be reported in micrograms per liter (ug/L).
- (5) Mercury is often reported in nanograms per liter (ng/L) by the contract laboratory, so be sure to convert to micrograms per liter on this spreadsheet.
- (6) Effluent Limits are calculated based on dilution factor, background allocation (10%) and water quality reserves (15% - to allow for new or changed discharges or non-point sources).
- (7) Possible Exceedence determinations are done for a single sample only on a mass basis using the actual pounds discharged. This analysis does not consider watershed wide allocations for fresh water discharges.
- (8) These tests are optional for the receiving water. However, where possible samples of the receiving water should be preserved and saved for the duration of the WET test. In the event of questions about the receiving water's possible effect on the WET results, chemistry tests should then be conducted.
- (9) pH and Total Residual Chlorine must be conducted at the time of sample collection. Tests for Total Residual Chlorine need be conducted only when an effluent has been chlorinated or residual chlorine is believed to be present for any other reason.

Comments:

ATTACHMENT B

Maine Department of Environmental Protection

Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____
Pipe # _____

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

SAMPLE COLLECTION INFORMATION

Sampling Date:	<input type="text"/>	<input type="text"/>	<input type="text"/>	Sampling time:	<input type="text"/>	AM/PM
	mm	dd	yy			
Sampling Location:						
Weather Conditions:						
Please describe any unusual conditions with the influent or at the facility during or preceding the time of sample collection:						
Optional test - not required but recommended where possible to allow for the most meaningful evaluation of mercury results:						
Suspended Solids	<input type="text"/>	mg/L	Sample type:	<input type="text"/>	Grab (recommended) or Composite	
				<input type="text"/>		

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory:		_____
Date of analysis:	_____	Result: <input type="text"/> ng/L (PPT)
Please Enter Effluent Limits for your facility		
Effluent Limits:	Average = <input type="text"/> ng/L	Maximum = <input type="text"/> ng/L
Please attach any remarks or comments from the laboratory that may have a bearing on the results or their interpretation. If duplicate samples were taken at the same time please report the average.		

CERTIFICATION

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

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT C

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

Facility Name _____ MEPDES Permit # _____

Facility Representative _____ Signature _____

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

Facility Telephone # _____ Date Collected _____ Date Tested _____

mm/dd/yy

mm/dd/yy

Chlorinated? _____ Dechlorinated? _____

Results	% effluent		Effluent Limitations	
	water flea	trout	A-NOEL	C-NOEL
A-NOEL				
C-NOEL				

Data summary	water flea			trout		
	% survival		no. young	% survival		final weight (mg)
QC standard	A>90	C>80	>15/female	A>90	C>80	> 2% increase
lab control						
receiving water control						
conc. 1 (%)						
conc. 2 (%)						
conc. 3 (%)						
conc. 4 (%)						
conc. 5 (%)						
conc. 6 (%)						
stat test used						

place * next to values statistically different from controls

for trout show final wt and % incr for both controls

Reference toxicant	water flea		trout	
	A-NOEL	C-NOEL	A-NOEL	C-NOEL
toxicant / date				
limits (mg/L)				
results (mg/L)				

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

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

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

FACT SHEET

DATE: May 7, 2012

**PERMIT NUMBER: ME0101150
WASTE DISCHARGE LICENSE: W000478-6C-E-R**

NAME AND ADDRESS OF APPLICANT:

**UNITY UTILITIES DISTRICT
P.O. Box 231
Unity, Maine 04988**

COUNTY: Waldo County

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

**Prairie Road
Unity, Maine 04988**

RECEIVING WATER/CLASSIFICATION: Twenty-Five Mile Stream/Class B

**COGNIZANT OFFICIAL AND TELEPHONE NUMBER: Mr. Jon Carman
J.M.C. Wastewater Services
(207) 948-3228
e-mail: joncarman@uninet.net**

1. APPLICATION SUMMARY

- a. Application: The Unity Utility District (UUD/permittee hereinafter) has applied to the Department for a renewal of Waste Discharge License (WDL) W000478-5L-D-R / Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101150 (permit hereinafter), which was issued on July 27, 2007, for a five-year term. The MEPDES permit authorized the monthly average discharge of up to 0.5 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to Twenty-Five Mile Stream, Class B, in Unity, Maine.

1. APPLICATION SUMMARY (cont'd)

- b. Source Description: The UUD commenced operation in 1974 to serve residential and light commercial wastewater generated by customers in the village area of Unity, Maine. The facility currently serves approximately 1,260 users. The wastewater collection system consists of about 13,000 feet of plastic coated cement truss pipe of diameters ranging from eight to twelve inches and three pumping stations. There are no industrial users connected to the treatment system and no combined sewer overflow (CSO) points associated with the system. The UUD has not requested nor is authorized to accept septage wastes for treatment at the facility. A map showing the location of the treatment facility and receiving water is included as **Attachment A** of this Fact Sheet.
- c. Waste Water Treatment: The Quaker Hill Pump Station with a reported design capacity of 290,000 gallons per day (GPD) conveys wastewater from Unity College and a few homes in the area by about 550 linear feet of six inch diameter force main under Sandy Stream to a gravity sewer on western Main Street. The Main Street collection system and the remaining sewer collection systems collect residential and commercial waste water which flows by gravity to the School Street Pump Station located on School Street next to the Sandy Stream. The School Street Pump Station, with a reported design capacity of about 860,000 GPD, includes a small headworks area consisting of a grit removal trap and a comminutor, and is the location of influent monitoring. From here the wastewater is pumped through approximately 1,500 linear feet of force main to two clay-lined wastewater stabilization ponds located off the Prairie Road in Unity. Each of the two stabilization ponds has an area of 12.5 acres and a measured depth of two to nine feet with an average overall depth of six feet. Each pond is designed and constructed to have a minimum of three feet of freeboard. The water/air interface along the dikes is protected against erosion by bituminous concrete structural panels with the remainder of the dike faces covered by grass vegetation. The remainder of each dike is reported to be constructed of an eight foot wide impervious clay core that extends several feet below the bottom of each lagoon. The total estimated volume of each pond is 24.5 million gallons for a total treatment volume of 49 million gallons. While the two ponds can be run in parallel, the ponds are routinely operated in series. A chlorine contact chamber is located after the lagoons but is not typically employed in the treatment process as effluent is not discharged during the period when seasonal bacteria limits are in effect.

Final effluent flow is measured with an ultrasonic device in a 15-foot stilling well and two v-notch weirs before being conveyed for discharge to Twenty-Five Mile Stream via a 15-inch diameter outfall pipe.

Waste sludge has not been removed from the lagoons since commencing operation. Approximately 38 years worth of sludge is in the ponds. Sludge testing was done in November 2006, with results indicating that the arsenic level was 21 mg/kg. The sludge was tested again in December 2011 with total arsenic levels in Lagoon #1 and Lagoon #2 at 39.7 mg/kg and 8.3 mg/kg respectively.

A wastewater treatment schematic for the UUD is included as **Attachment B** of this Fact Sheet.

2. PERMIT SUMMARY

- a. Terms and Conditions: This permitting action is carrying forward all the terms and conditions of the previous permit except that this permit is;
- 1) Eliminating the daily maximum water quality based mass and concentration limits for total copper and total zinc given results for said parameters in the most current 60 months do not exceed or have a reasonable potential to exceed applicable ambient water quality criteria.
 - 2) Reducing the monitoring frequency for settleable solids from 5/Week to 1/Week.
 - 3) Incorporating the interim numeric average and maximum technology based concentration limitations for total mercury into the permit that were originally established in an administrative permit modification issued on June 1, 2000.
- b. History: This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the UUD.

December 31, 1986 – The U.S. Environmental Protection Agency (USEPA) issued a renewal of National Pollutant Discharge Elimination System (NPDES) permit #ME0101150 to the UUD. The 12/31/86 permit superseded the NPDES permits issued to the UUD by the USEPA on April 12, 1979 (earliest NPDES permit on file with the Department).

June 1, 2000 – Pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001), the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL #W000478-59-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 4.5 parts per trillion (ppt) and 6.8 ppt, respectively, and a minimum monitoring frequency requirement of 4 tests per year for mercury

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 Maine Pollutant Discharge Elimination System program.

August 13, 2002 – The Department issued WDL #W000478-5L-C-R / MEPDES permit #ME0101150 to the UUD for a five-year term. The 8/13/2002 permit superseded WDL #W000478-59-B-R issued on December 16, 1996, and WDL #W000478-59-A-R issued on June 4, 1985 (earliest Order on file with the Department).

2. PERMIT SUMMARY (cont'd)

February 14, 2003 – The Department issued a letter to the UUD thereby administratively modifying the 8/13/2002 MEPDES permit to revise the sample type for BOD₅, TSS, WET and chemical-specific testing from 24-hour composite to grab.

April 10, 2006 – The Department modified the 8/13/2002 permit to incorporate testing requirements of 06-096 CMR 530.

July 27, 2007 – The Department issued combination MEPDES permit #ME0101150/WDL W000478-5L-D-R for a five-year term.

May 1, 2012 – The UUD submitted a timely and complete General Application to the Department for renewal of the 8/13/2002 MEPDES permit. The application was accepted for processing on June 8, 2007 and was assigned WDL # W000478-5L-D-R / MEPDES #ME0101150.

3. CONDITIONS OF PERMIT

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

Classification of major river basins, 38 M.R.S.A. § 467(14)(H)(2) classifies Twenty-Five Mile Stream at the point of discharge as Class B waters. *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465(4) describes the standards for Class B waters as follows;

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

The dissolved oxygen content of Class B waters may not be less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration may not be less than 9.5 parts per million and the 1-day minimum dissolved oxygen concentration may not be less than 8.0 parts per million in identified fish spawning areas. Between May 15th and September 30th, the number of

4. RECEIVING WATER QUALITY STANDARDS

Escherichia coli bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 64 per 100 milliliters or an instantaneous level of 236 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures.

Discharges to Class B waters may not cause adverse impact to aquatic life in that the receiving waters must be of sufficient quality to support all aquatic species indigenous to the receiving water without detrimental changes in the resident biological community.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2010 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists 137.0 miles of Twenty-Five Mile Stream and its tributaries (Hydrologic Unit Code #ME0103000309 / Waterbody ID #326R) as, "Category 2: Rivers and Streams Attaining Some Designated Uses – Insufficient Information for Other Uses." The Report lists all of Maine's fresh waters as, "Category 4-A: Rivers and Streams with Impaired Use, TMDL Completed, Waters Impaired by Atmospheric Deposition of Mercury." . The report states the impairment is caused by atmospheric deposition of mercury; a regional scale TMDL has been approved. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, The Maine Department of Health and Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources. Pursuant to 38 M.R.S.A. § 420(1-B) (B), "a facility is not in violation of the ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413 subsection 11." The Department has established interim mercury limits for this facility. See the discussion in section 6(h) of this Fact Sheet.

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

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average flow limitation of 0.5 MGD based on the design capacity of the facility, and a daily maximum discharge flow reporting requirement.

A summary of the discharge data as reported on the monthly Discharge Monitoring Reports (DMRs) for the period January 2009 – January 2012 is as follows:

Flow (DMRs = 9)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	0.500	0.165 – 0.436	0.365
Daily maximum	Report	0.165 – 0.658	0.547

- b. Dilution Factors: The following effluent discharge conditions are carried forward from the previous permit:
- 1) There shall be no discharge from Outfall 001A when the flow in the Twenty-Five Mile Stream is less than 15 cubic feet per second.
 - 2) During the period March 16 through December 15 the discharge shall be managed such that the dilution of the discharge in the receiving water is equal to or greater than 100:1.
 - 3) During the period December 16 through March 15 the discharge shall be managed such that the dilution of the discharge in the receiving water is equal to or greater than 150:1. This requirement of a dilution of 150:1 is due to the problems associated with accurately measuring the stream flow when it is covered with ice.

06-096 CMR 530(4)(A) states, *"With a non-continuous discharge (such as a lagoon which can be impounded or a continuous discharge prohibited from discharging under specified conditions), the dilution factors can be based on a guaranteed minimum stream flow or tidal stage below which a discharge will not occur. The discharger must submit a request for a license modification that reflects a different minimum stream flow. If the Department approves an alternate stream flow, the license must include a monitoring and reporting requirement, and must include an accurate means of measuring stream flow that is calibrated annually."*

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

Below is a table of required stream flows for a given discharge to achieve the minimum dilutions of 100:1 and 150:1:

Discharge		At 100:1 Dilution: Required Stream flow		At 150:1 Dilution: Required Stream flow	
cfs	MGD	cfs	MGD	cfs	MGD
0.100	0.065	15.00	9.69	15.00	9.69
0.150	0.098	15.00	9.69	23.35	14.60
0.155	0.1	15.32	9.90	23.10	14.90
0.232	0.15	22.97	14.85	34.57	22.35
0.309	0.2	30.64	19.80	46.04	29.80
0.387	0.25	38.31	24.75	57.66	37.25
0.464	0.3	45.94	29.70	69.14	44.7
0.541	0.35	53.56	34.65	80.61	52.15
0.619	0.4	61.28	39.60	92.23	59.6
0.696	0.45	68.90	44.55	103.70	67.05
0.774	0.5	76.63	49.50	115.33	74.5

The permittee has guaranteed a minimum dilution factor of 100:1 associated with the discharge based on the stream flow and controlled effluent discharge. Therefore, this permitting action is utilizing acute and chronic dilution factors of 100:1 for purposes of calculating water quality-based thresholds. The Department is making a best professional judgment that this manner of establishing applicable dilution factors for this facility is consistent with the provisions of 06-096 CMR 530.

- c. Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS): The previous permitting action established, and this permitting action is carrying forward, monthly average and weekly average technology-based concentration limits of 30 mg/L and 45 mg/L, respectively, for BOD₅ and TSS based on the secondary treatment requirements specified at *Effluent Guidelines and Standards*, 06-096 CMR 525(3)(III) (effective January 12, 2001), and a daily maximum concentration limit of 50 mg/L, which is based on BPJ of BPT for secondary treated municipal wastewater. This permitting action is carrying forward a minimum monitoring frequency requirement of once per week for BOD₅ and TSS based on Department guidance.

BOD₅ & TSS

Monthly Average Mass Limit: (30 mg/L)(8.34 lbs./gallon)(0.5 MGD) = 125 lbs./day

Weekly Average Mass Limit: (45 mg/L)(8.34 lbs./gallon)(0.5 MGD) = 188 lbs./day

Daily Maximum Mass Limit: (50 mg/L)(8.34 lbs./gallon)(0.5 MGD) = 209 lbs./day

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

This permitting action is carrying forward a 30-day average percent removal requirement of 85 percent for BOD₅ and TSS as required pursuant to 06-096 CMR 525(3)(III)(a&b)(3). Compliance with the limitation shall be based on a twelve-month rolling average. The percent removal shall be calculated based on an assumed influent concentration value of 286 mg/L or measured effluent concentration values.

A summary of the discharge data as reported on the monthly DMRs for the period January 2009 – January 2012 is as follows:

BOD mass (DMRs = 7)

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	125	12 – 54	29
Weekly Average	188	13 – 67	34
Daily Maximum	209	13 – 67	34

BOD concentration (DMRs = 7)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	4 – 16	10
Weekly Average	45	6 – 17	11
Daily Maximum	50	6 – 17	11

TSS mass (DMRs = 7)

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	125	23 – 91	47
Weekly Average	188	31 - 109	59
Daily Maximum	209	31 - 109	59

TSS concentration (DMRs = 7)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	8 – 26	17
Weekly Average	45	9 - 29	20
Daily Maximum	50	9 - 29	20

BOD % Removal (DMRs=7)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	95 - 98	96

TSS % Removal (DMRs=7)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	93 – 97	94

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

- d. Settleable Solids – The previous permitting established, and this permitting action carrying forward, a daily maximum concentration limit of 0.3 ml/L, which is considered a best practicable treatment limitation (BPT) for secondary treated wastewater.

Settleable solids (n=7)

Value	Limit (ml/L)	Range (mg/L)	Average (mg/L)
Daily Maximum	0.3	<0.1 - <0.1	n/a

Being that settleable solids has not been detected at the facility in the previous three-year period, this permitting action is reducing the monitoring frequency to 1/Week to be consistent with the monitoring frequency for BOD and TSS.

- e. Escherichia coli bacteria: The previous permitting action established, and this permitting action carrying forward, seasonal (May 15-September 30 of each year) monthly average and daily maximum *E. coli* bacteria concentration limits of 64 colonies/100 ml and 427 colonies/100 ml, respectively, based on the State's Water Classification Program criteria for Class B waters. Subsequent to issuance of the previous permit, the State Legislature adopted more stringent AWQC for *E. coli* bacteria. The newer criteria for Class B waste are 64 colonies/100 ml as a monthly average and 236 colonies/100 ml as a daily maximum. The Department has made the determination that after taking into consider the dilution associated with the discharge, the daily maximum BPT limit established in the previous permitting action is protective of the newer AWQC for bacteria. Therefore, this permitting action is carrying the monthly average limitation of 64 colonies/100 ml and carrying forward the daily maximum limitation of 427 colonies/100 mL.

A review of the monthly DMR data for the period May 2009 – September 2011 indicates *E. coli* bacteria values have been reported as follows:

E. coli bacteria (DMRs = 8)

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	64	No data*	n/a
Daily Maximum	427	No data*	n/a

There is no data for *E. coli* bacteria as the facility did not discharge between the time frame in which bacteria limits are applicable, May 15 – September 30.

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

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

- f. Total Residual Chlorine (TRC): The previous permitting action established a technology-based daily maximum concentration limit of 1.0 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 a water quality-based or BPT based limit.

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

Acute (A) Criterion	Chronic (C) Criterion	A & C Dilution Factors	Calculated	
			Acute Threshold	Chronic Threshold
0.019 mg/L	0.011 mg/L	100:1 (A) 100:1 (C)	1.9 mg/L	1.1 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. The daily maximum BPT-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.

A review of the monthly DMR data for the period May 2009 – September 2011 indicates TRC values have been reported as follows:

TRC (DMRs = 8)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	No data*	n/a

There is no data for TRC as the facility did not discharge between the time frame in which bacteria limits are applicable, May 15 – September 30.

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

- g. pH: The previous permitting action established, and this permitting action is carrying forward, a technology-based pH limit of 6.0 – 9.0 standard units, which is based on 06-096 CMR 525(3)(III), and a minimum monitoring frequency requirement of once per day for pH based on Department guidance. The pH value of the effluent shall not be lower than 6.0 SU nor higher than 9.0 SU at any time unless these limitations are exceeded due to natural causes. The permittee shall provide oral notification of any exceedence within 24 hours from the time the permittee becomes aware of the circumstances and shall submit a written explanation of the exceedence within 5 days of the time the permittee becomes aware of the circumstances.

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

A review of the monthly DMR data for the period January 2009 – December 2011 indicates pH values have been reported as follows:

pH (DMRs = 8)

Value	Limit (su)	Minimum (su)	Maximum (su)
Range	6.0 – 9.0	6.8	8.9

- h. Mercury: Pursuant to Maine law, 38 M.R.S.A. §420 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee on June 1, 2000, thereby administratively modifying WDL # W000478-59-B-R by establishing interim average and maximum effluent concentration limits of 4.5 parts per trillion (ppt) and 6.8 ppt, respectively, and a minimum monitoring frequency requirement of four tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001. However, effective June 15, 2001, the Maine Legislature enacted Maine law, 38 M.R.S.A. §413, sub-§11 specifying that interim mercury limits and monitoring requirements remain in effect.

Maine law 38 M.R.S.A., §420 (B)(1) states that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413, subsection 11. A review of the Department's database for the period December 2006 through the present (n=9) indicates the permittee has been in compliance with the interim limits for mercury as the results have ranged from 1.0 ppt to 1.5 ppt with an arithmetic mean of 1.1 ppt.

On February 6, 2012, the Department issued a minor revision of the WDL that reduced the monitoring frequency for mercury from 4/Year to 1/Year pursuant to Maine law, 38M.R.S.A., sub-§1-B[F]. The 1/Year monitoring frequency is being carried forward in this permitting action.

- 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* sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of

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

surface waters are maintained and protected and narrative and numeric water quality criteria are met. Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

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

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

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

Department rule Chapter 530 (1)(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the Chapter 530 criteria, the permittee's facility falls into the Level III frequency category as the facility has a chronic dilution factor of $\geq 100:1$ but $<500:1$. Chapter 530(1)(D)(1) specifies that routine screening and surveillance level testing requirements are as follows:

Screening level testing – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration and every five years thereafter.

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

Surveillance level testing – Beginning upon issuance of the permit and lasting through 12 months prior to permit expiration.

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

A review of the data on file with the Department indicates that to date, the permittee has fulfilled the WET and chemical-specific testing requirements of Chapter 530. See **Attachment C** of this Fact Sheet for a summary of the WET test results and **Attachment D** of this Fact Sheet for a summary of the chemical-specific test dates.

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

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

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

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

WET evaluation

On 5/3/12, the Department conducted a statistical evaluation on the most recent 60 months of WET data that indicates that the discharge does not exceed or have a reasonable potential (RP) to exceed the acute or chronic critical ambient water quality thresholds (1.0% – mathematical inverse of the acute and the chronic dilution factor of 100:1).

Given the absence of exceedences or reasonable potential to exceed critical WET thresholds, the permittee meets the surveillance level monitoring frequency waiver criteria found at Department rule Chapter 530(D)(3)(b). Therefore, this permit is establishing a requirement for the permittee to only conduct screening level testing for both the water flea and the brook trout that shall be conducted in the 24-month period (Year 4) prior to the expiration date of this permit and every five years thereafter.

In accordance with Department rule Chapter 530(2)(D)(4) and Special Condition J, 06-096 CMR 530(2)(D)(4) *Statement For Reduced/Waived Toxics Testing* of this permit, the permittee must annually submit to the Department a written statement evaluating its current status for each of the conditions listed.

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

Chemical evaluation

Chapter 530 (promulgated on October 12, 2005) §4(C), states *"The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions. The Department shall use the same general methods as those in section 4(D) to determine concentration of 10% of the applicable water quality criteria must be used in calculations."* The Department has no information on the background levels of metals in the water column in the Twenty Five Mile stream in the vicinity of the permittee's outfall. Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

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

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

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

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

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

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

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

Chapter 530 §(3)(D)(1) states "For specific chemicals, effluent limits must be expressed in total quantity that may be discharged and in effluent concentration. In establishing concentration, the Department may increase allowable values to reflect actual flows that are lower than permitted flows and/or provide opportunities for flow reductions and pollution prevention provided water quality criteria are not exceeded. With regard to concentration limits, the Department may review past and projected flows and set limits to reflect proper operation of the treatment facilities that will keep the discharge of pollutants to the minimum level practicable."

Twenty Five Mile Stream is a tributary to the Kennebec River. For the segment allocation methodology, the historical average quantity (mass) for each pollutant of concern for each facility is calculated utilizing the arithmetic mean of the concentrated values reported for each pollutant, a conversion factor of 8.34 lbs/gallon and the monthly average permit limit for flow. The historical mass discharged for each pollutant for each facility is mathematically summed to determine the total mass discharged for each pollutant in the watershed. Based on the individual dischargers historical average each discharger is assigned a percentage of the whole which is then utilized to determine the percent of the segment allocation for each pollutant for each facility.

The 5/3/12 statistical evaluation indicates the UUD facility has not discharged pollutants the exceed or have a reasonable potential to exceed applicable ambient water quality criteria. Therefore, the UUD qualifies for the monitoring frequency reduction for surveillance level testing. As a result, only screening level testing for analytical chemistry and priority pollutant testing is required by this permit. Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration, and every five years thereafter, the permittee shall conduct analytical chemistry testing at a frequency of 4/Year and priority pollutant testing at a frequency of 1/Year.

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

As with WET testing, Chapter 530(2)(D)(4) and Special Condition J, *06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing* of this permit, the permittee must annually submit to the Department a written statement evaluating its current status for each of the conditions listed.

- j. Total phosphorus – The facility has not been conducting total phosphorus testing to date however the USEPA requested the Department evaluate the relative risk to the receiving water as a result of the discharge of phosphorus. Assuming a discharge concentration of 2.5 mg/L (2,500 ug/L) (typical from POTWs), a critical ambient water quality (AWQ) threshold of 35 ug/L, and a background concentration of total phosphorus of 10% (3.5 ug/L) of the critical AWQ threshold, the discharge from the Unity facility does not have a reasonable potential to exceed the threshold based on the following:

$$35 \text{ ug/L} - 3.5 \text{ ug/L} = 32.5 \text{ ug/L}$$

$$\frac{2,500 \text{ ug/L}}{100:1 \text{ dilution}} = 25 \text{ ug/L}$$

25 ug/L < 32.5 ug/L, therefore there is no reasonable potential to exceed the critical AWQ threshold. As a result, no permit limit for total phosphorus is being established in this permit.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

8. PUBLIC COMMENTS

Public notice of this application was made in the *Waterville Sentinel* newspaper on or about April 5, 2012. 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:

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

10. RESPONSE TO COMMENTS

During the period of May 7, 2012, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department received a verbal comment from the USEPA on Thursday, May 31st. No comments were received from the permittee, state agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the permit. Therefore, the Department has not prepared a Response to Comments.

Comment #1: The USEPA requested the Department evaluate the reasonable potential for the discharge of total phosphorus to cause or contribute to algal blooms in Twenty Five Mile stream.

Response #1: The facility has not been conducting total phosphorus testing to date. However, the Department has numerous total phosphorus data results for municipally owned treatment works throughout the State. Assuming a discharge concentration of 2.5 mg/L (2,500 ug/L) (typical from POTWs), a critical ambient water quality (AWQ) threshold of 35 ug/L, and a background concentration of total phosphorus of 10% (3.5 ug/L) of the critical AWQ threshold, the discharge from the Unity facility does not have a reasonable potential to exceed the threshold based on the following calculation:

Critical AWQ: $35 \text{ ug/L} - 3.5 \text{ ug/L} = 32.5 \text{ ug/L}$

Instream concentration after dilution: $\frac{2,500 \text{ ug/L}}{100:1 \text{ dilution}} = 25 \text{ ug/L}$

$25 \text{ ug/L} < 32.5 \text{ ug/L}$, therefore there is no reasonable potential to exceed the critical AWQ threshold. As a result, no permit limit for total phosphorus is being established in this permit.

ATTACHMENT A

Unity Utilities District

Treatment Facility
and Lagoons

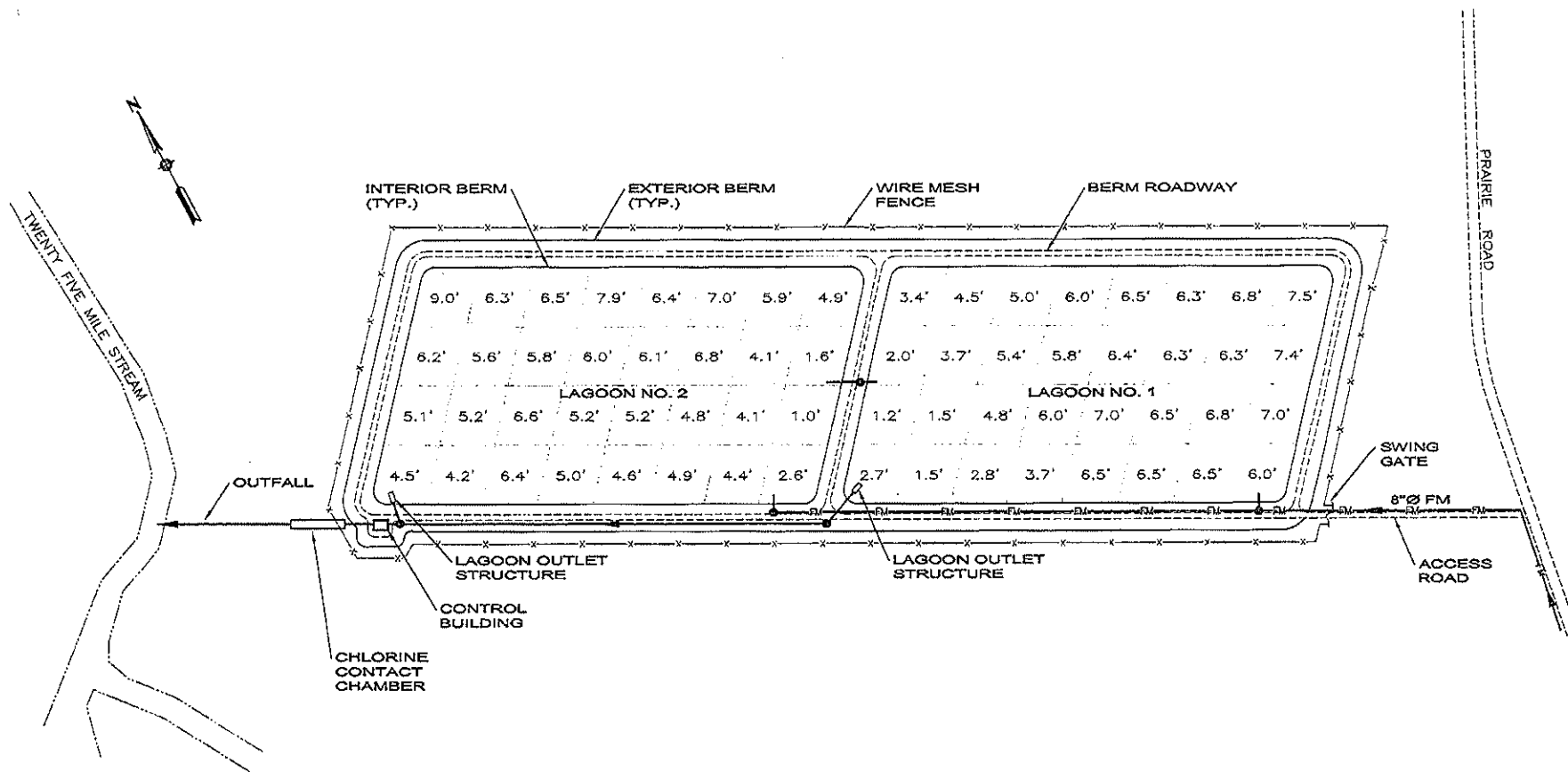
- Waste Water Pipe
- Forced Waste Water Main
- Waste Water Pump Station
- Private Waste Water Pump Station
- Waste Water Control Structure



Map Created by: K. Spigel, 2012

0 0.125 0.25 0.5 0.75 1 Miles

ATTACHMENT B



UNITY UTILITIES DISTRICT
UNITY, MAINE
LAGOON CONFIGURATION AND DEPTH PLAN

FIGURE 1
OLVER ASSOCIATES INC.
ENVIRONMENTAL ENGINEERS
200 MAIN STREET WINTERPORT, MAINE

ATTACHMENT C

5/3/2012

WET TEST REPORT

Data for tests conducted for the period

03/May/2007 - 03/May/2012



UNITY

NPDES= ME010115

Effluent Limit: Acute (%) = 1.000

Chronic (%) = 1.000

Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	100	05/06/2007	1.000		
TROUT	A_NOEL	100	11/06/2011	1.000		
TROUT	C_NOEL	100	05/06/2007	1.000		
TROUT	C_NOEL	100	11/06/2011	1.000		
WATER FLEA	A_NOEL	100	05/06/2007	1.000		
WATER FLEA	A_NOEL	100	11/06/2011	1.000		
WATER FLEA	C_NOEL	100	05/06/2007	1.000		
WATER FLEA	C_NOEL	100	11/06/2011	1.000		

ATTACHMENT D

5/3/2012

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 03/May/2007-03/May/2012



Facility Name: UNITY

NPDES: ME0101150

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
05/06/2007	0.36	0.41	21	10	0	0	0	11	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
11/30/2007	0.46	0.53	1	1	0	0	0	0	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
10/31/2008	0.38	0.52	1	1	0	0	0	0	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
11/30/2009	0.44	0.53	1	1	0	0	0	0	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
04/30/2010	0.43	0.50	1	1	0	0	0	0	0	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
11/06/2011	0.33	0.35	106	14	26	46	0	9	11	F	0
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
01/08/2012	0.17	0.17	7	0	0	0	7	0	0	F	0

Key:

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

ATTACHMENT E

CHAPTER 530(2)(D)(4) CERTIFICATION

MEPDES# _____ Facility Name _____

Since the effective date of your permit have there been:	NO	YES (Describe in Comments)
1. changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may Increase the toxicity of the discharge?		
2. changes in the operation of the treatment works that may Increase the toxicity of the discharge?		
3. changes in industrial manufacturing processes contributing wastewater to the treatment works that may Increase the toxicity of the discharge?		

COMMENTS:

Name(print) _____

Signature _____ Date _____

This document must be signed by the permittee or their legal representative.

This form may be used to meet the requirements of Chap 530(2)(D)(4). This Chapter requires all dischargers having waived or reduced Toxic testing to file a statement with the Department describing changes to the waste being contributed to their system as outlined above. As an alternative the discharger may submit a signed letter containing the same information.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

B. OPERATION AND MAINTENANCE OF FACILITIES

1. General facility requirements.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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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.



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-2811

SUMMARY

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

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

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

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

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

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

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

HOW TO SUBMIT AN APPEAL TO THE BOARD

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

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

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

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

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

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

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

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

II. JUDICIAL APPEALS

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

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

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

ADDITIONAL INFORMATION

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

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.
