



PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION



PAUL MERCER
COMMISSIONER

June 1, 2016

Mr. Justin Futia
Superintendent
Wilton Waste Water Treatment Facility
158 Weld Road
Wilton, ME. 04294
e-mail: wiltonwasw@yahoo.com

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101915
Maine Waste Discharge License (WDL) Application #W002365-6C-L-R
Final Permit

Dear Mr. Futia:

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL **renewal** which was approved by the Department of Environmental Protection. Please read this permit/license renewal and its attached conditions carefully. You must follow the conditions in the order to satisfy the requirements of law.

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,

Gregg Wood
Division of Water Quality Management
Bureau of Water Quality

Enc.

cc: Beth DeHaas, DEP/CMRO
Sandy Mojica, USEPA

Lori Mitchell, DEP/CMRO
Marelyn Vega, USEPA

Olga Vergara, USEPA

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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF WILTON)	MAINE POLLUTANT DISCHARGE
PUBLICLY OWNED TREATMENT WORKS)	ELIMINATION SYSTEM PERMIT
WILTON, FRANKLIN COUNTY, MAINE)	AND
ME0101915)	WASTE DISCHARGE LICENSE
W002365-6C-L-R)	RENEWAL
APPROVAL)	

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, *et. seq.* and *Conditions of Licenses*, 38 M.R.S.A., Section 414-A *et seq.*, and applicable regulations, the Department of Environmental Protection (Department hereinafter) has considered the application of the TOWN OF WILTON (Town/permittee hereinafter) with its supportive data, agency review comments, and other related material on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The Town has submitted a timely and complete application to the Department to renew combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0101915/Waste Discharge License (WDL) #W002365-6C-E-R (permit hereinafter) which was issued on June 22, 2011, for a five-year term. The 6/22/11, permit authorized the discharge of up to a monthly average flow of 0.45 million gallons per day (MGD) of secondary treated sanitary waste waters to Wilson Stream, Class C, in Wilton, Maine.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the June 22, 2011, permitting action except that this permit is :

1. Incorporating the average and maximum interim concentration limitations for mercury that were originally established in a May 2000 permit modification.
2. Establishing less stringent monthly average water quality based mass limitations for total copper and total lead given the results of an updated statistical evaluation pursuant to 06-096 CMR Chapter 530.

PERMIT SUMMARY (cont'd)

3. Eliminating the daily maximum mass and concentration for total copper as the updated statistical evaluation indicates the discharge no longer has a reasonable potential to exceed the acute AWQC for total copper.
4. Eliminating the concentration limits for total copper and total lead pursuant to Maine law 38 M.R.S.A. §464, ¶¶ K which states "*Unless otherwise required by an applicable effluent limitation guideline adopted by the department, any limitations for metals in a waste discharge license may be expressed only as mass-based limits.*"
5. Eliminating the acute and chronic water quality based whole effluent toxicity (WET) limits for the water flea and the brook trout as the updated statistical evaluation indicates the discharge no longer has a reasonable potential to exceed the critical acute or chronic thresholds for either test species.
6. Reducing the surveillance level testing frequency for both WET species as well as analytical chemistry pursuant to the updated statistical evaluation indicating the facility qualifies for a monitoring frequency reduction pursuant to 06-096 CMR Chapter 530.
7. Eliminating the waiver to achieve 85% removal for biochemical oxygen demand (BOD) and total suspended solids (TSS) when the monthly average influent concentration is less than 200 mg/L as there was no legal basis to grant such a waiver.
8. Reducing the monitoring frequency requirements for BOD and TSS from 1/Week to 2/Month based on statistical evaluation of the data for the most current 46 months and USEPA and Department guidance.
9. Establishing a monthly average water quality based mass limit for total phosphorus as calculations indicate the discharge exceeds the USEPA Gold Book goal of 0.100 mg/L for total phosphorus.
10. Establishing a schedule of compliance for the seasonal monthly average water quality based mass limit for total phosphorus as the facility is unable to comply with said limit upon permit issuance.
11. Requiring the permittee to conduct an Industrial Waste Survey (IWS) any time a new industrial user proposes to discharge within the facilities jurisdiction, or once every permit cycle pursuant to Special Condition D of this permit.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated April 25, 2016, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

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

ACTION

THEREFORE, the Department APPROVES the application of the TOWN OF WILTON, to discharge up to a monthly average flow of 0.45 million gallons per day (MGD) of secondary treated waste waters to Wilson Stream, Class C, in Wilton, Maine. The discharges shall be subject to the attached conditions and all applicable standards and regulations including:

1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits," revised July 1, 2002, copy attached.
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 thereafter. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of 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) (amended October 19, 2015)].

DONE AND DATED AT AUGUSTA, MAINE, THIS 1st DAY OF June 2016.

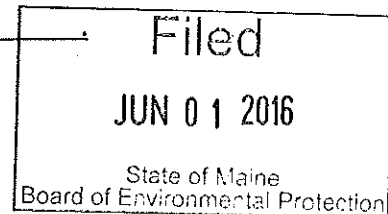
COMMISSIONER OF ENVIRONMENTAL PROTECTION

BY: Melanie L. G. for
Paul Mercer, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application March 1, 2016

Date of application acceptance March 2, 2016



Date filed with Board of Environmental Protection _____

This Order prepared by GREGG WOOD, BUREAU OF WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge **secondary treated waste waters** to Wilson Stream. Such treated waste water discharges shall be limited and monitored by the permittee as specified below.

OUTFALL #001

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow [50050]	0.45 MGD [03]	---	Report (MGD) [03]	---	---	---	Continuous [99/99]	Recorder [RC]
Biochemical Oxygen Demand (BOD ₅) [00310]	113 lbs/Day [26]	169 lbs/Day [26]	188 lbs/Day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Month ⁽¹⁾ [02/30]	Composite [24]
BOD ₅ % Removal ⁽²⁾ [81010]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]
Total Suspended Solids (TSS) [00530]	113 lbs/Day [26]	169 lbs/Day [26]	188 lbs/Day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Month ⁽¹⁾ [02/30]	Composite [24]
TSS % Removal ⁽²⁾ [81011]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]
Settleable Solids [00545]	---	---	---	---	---	0.3 ml/L [25]	3/Week [03/07]	Grab [GR]
<i>E. coli</i> Bacteria ⁽³⁾ [31633] (May 15 – September 30)	---	---	---	126/100 ml ⁽⁴⁾ [13]	---	949/100 ml [13]	1/Week [01/07]	Grab [GR]
Total Residual Chlorine ⁽⁵⁾ [50060]	---	---	---	0.1 mg/L [19]	---	0.22 mg/L [19]	1/Day [01/01]	Grab [GR]
pH [00400]	---	---	---	---	---	6.0-9.0 SU [12]	5/Week [05/07]	Grab [GR]

SPECIAL CONDITIONS

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

OUTFALL #001

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	<u>Monthly Average</u> as specified	<u>Weekly Average</u> as specified	<u>Daily Maximum</u> as specified	<u>Monthly Average</u> as specified	<u>Weekly Average</u> as specified	<u>Daily Maximum</u> as specified	<u>Measurement Frequency</u> as specified	<u>Sample Type</u> as specified
Copper (Total) [01042]	0.095 lbs/Day [26]	---	---	Report ug/L [28]	---	---	1/Quarter [01/90]	Composite [24]
Lead (Total) [01051]	0.016 lbs/Day [26]	---	---	Report ug/L [28]	---	---	1/Quarter [01/90]	Composite [24]
Mercury (Total) ⁽⁶⁾ [71900]	---	---	---	27.2 ng/L [3M]	---	40.8 ng/L [3M]	1/Year [01/YR]	Grab [GR]
Phosphorus (Total) ⁽⁷⁾ (June 1 – September 30) Beginning June 1, 2018 and lasting thru September 30, 2020 [00665]	Report lbs/day [26]	---	Report lbs/day [26]	Report mg/L [19]	--	Report mg/L [19]	1/Week [01/07]	Composite [24]
Phosphorus (Total) ⁽⁷⁾ (June 1 – September 30) Beginning June 1, 2021 [00665]	4.0 lbs/day [26]	---	Report lbs/day [26]	Report mg/L [19]	--	Report mg/L [19]	1/Week [01/07]	Composite [24]

SPECIAL CONDITIONS

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

SURVEILLANCE LEVEL TESTING – Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit).

	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
<u>Whole Effluent Toxicity (WET)</u> ⁽⁸⁾						
<u>A-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>C-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 ^(9,11) [51168]	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/Grab [24/GR]

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

	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
<u>Whole Effluent Toxicity (WET)</u> ⁽⁸⁾						
<u>A-NOEL</u>						
<i>Ceriodaphnia dubia</i> (Water flea) [TDA3B]	---	---	---	Report % [23]	1/Quarter [01/90]	Composite [24]
<i>Salvelinus fontinalis</i> (Brook trout) [TDA6F]	---	---	---	Report % [23]	1/Quarter [01/90]	Composite [24]
<u>C-NOEL</u>						
<i>Ceriodaphnia dubia</i> (Water flea) [TBP3B]	---	---	---	Report % [23]	1/Quarter [01/90]	Composite [24]
<i>Salvelinus fontinalis</i> (Brook trout) [TBQ6F]	---	---	---	Report % [23]	1/Quarter [01/90]	Composite [24]
Analytical Chemistry ^(9,11) [51168]	---	---	---	Report ug/L [28]	1/Quarter [01/90]	Composite/Grab [24/GR]
Priority pollutant ^(10,11) [50008]	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/Grab [24/GR]

SPECIAL CONDITIONS

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

Footnotes:

Sampling Locations:

Influent sampling for BOD₅ and TSS must be sampled at the head-end of the screw pumps.

Effluent sampling for all parameters must be conducted at the end of the chlorine contact chamber when disinfecting the effluent and collected at the parshall flume when not disinfecting the effluent.

Any change in sampling location(s) must be reviewed and approved by the Department in writing.

Sampling – Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for waste water. Samples that are sent to a POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. §413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (effective April 1, 2010). 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 this permit, all of the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

1. **2/Month** – There must be at least ten (10) days between sampling events.
2. **Percent removal** - The treatment facility must maintain a minimum of 85 percent removal of both BOD₅ and TSS. The percent removal shall be based on a monthly average calculation using influent and effluent concentrations.
3. ***E. coli* bacteria** - Limits are seasonal and apply between May 15 and September 30 of each calendar year. The Department reserves the right to require disinfection on a year-round basis to protect the health and welfare of the public.
4. ***E. coli* bacteria** – The monthly average limitation is a geometric mean limitation and must be calculated and reported as such.

SPECIAL CONDITIONS

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

Footnotes:

5. **Total Residual Chlorine (TRC)** – Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine based compounds are being used to disinfect the discharge. The permittee must utilize approved test methods that are capable of bracketing the TRC limitation in this permit.
6. **Mercury** – The permittee must conduct all mercury sampling required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the USEPA's "clean sampling techniques" found in USEPA Method 1669, *Sampling Ambient Water For Trace Metals At USEPA Water Quality Criteria Levels*. All mercury analysis must be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry*. See Attachment A for a Department report form for mercury test results. Compliance with the monthly average limitation established in Special Condition A.1 of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.
7. **Total phosphorus** - See Attachment B of this permit for the Departments protocol for sample collection and analysis.
8. **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 8.5%), 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 or 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 11.8:1.
 - a. **Surveillance level testing** - Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee must conduct surveillance level WET testing. Acute and chronic tests must be conducted on the the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*) at a frequency of 1/Year. Tests must be conducted in different calendar quarters of each year such that at least one test is conducted in all four quarters of the calendar year during the term of the permit.

SPECIAL CONDITIONS

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

Footnotes:

- b. **Screening level testing** -Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level WET testing at a minimum frequency of once per calendar quarter (1/Quarter) for four consecutive calendar quarters. Acute and chronic tests must be conducted on the water flea (Ceriodaphnia dubia) and the brook trout (Salvelinus fontinalis).

Once received by the permittee, 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 laboratory reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 8.5%.

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 as modified by Department protocol for salmonids. See **Attachment C** of this permit for the Department protocol.

- a. U.S. Environmental Protection Agency. 2002. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, 5th ed. USEPA 821-R-02-012. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the acute method manual).
- b. U.S. Environmental Protection Agency. 2002. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, 4th ed. USEPA 821-R-02-013. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the freshwater chronic method manual).

Results of WET tests must be reported on the "Whole Effluent Toxicity Report Fresh Waters" form included as **Attachment D** 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 E** of this permit each time a WET test is performed.

SPECIAL CONDITIONS

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

Footnotes:

9. **Analytical chemistry** – Refers to a suite of chemical tests in **Attachment E** of the permit.
 - a. **Surveillance level testing** – Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit) the permittee must conduct analytical chemistry testing at a minimum frequency of once per year (1/Year). Total copper and total lead are to be monitored on a 1/Quarter basis. Tests are to be conducted in a different calendar quarter of each year such that a test is conducted in all four calendar quarters during the term of the permit.
 - b. **Screening level testing** – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct analytical chemistry testing at a minimum frequency of once per calendar quarter (1/Quarter) for four consecutive calendar quarters.
10. **Priority pollutant testing** – Refers to those pollutants listed under “Priority Pollutants” on the form included as **Attachment E** of this permit.
 - a. **Surveillance level testing** – Not required pursuant to 06-096 CMR Chapter 530.
 - b. **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year).

SPECIAL CONDITIONS

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

Footnotes:

- 11. Priority Pollutant and Analytical Chemistry Testing** – This testing must 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 must be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve minimum reporting levels of detection as specified by the Department.

Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the laboratory reports for up to 10 business days of their availability before submitting them. The permittee must 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 (last amended July 29, 2012). For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "N9" monitoring not required this period.

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent must 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 must 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 discharges must 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.

SPECIAL CONDITIONS

C. TREATMENT PLANT OPERATOR

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

D. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the wastewater collection and treatment system by a non-domestic source (user) must not pass through or interfere with the operation of the treatment system. The permittee must conduct an Industrial Waste Survey (IWS) 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 permit cycle and submit the results to the Department. The IWS must 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 the federal Clean Water Act, 40 CFR Part 403 (general pretreatment regulations) or *Pretreatment Program*, 06-096 CMR 528 (last amended March 17, 2008). Guidance for conducting an IWS may be obtained from the Department compliance inspector assigned to the permittee's facility.

E. NOTIFICATION REQUIREMENT

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

1. Any introduction of pollutants into the waste water collection and treatment system from an indirect discharger in a primary industrial category discharging process waste water; and
2. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system by a source introducing pollutants into the system at the time of permit issuance. For the purposes of this section, notice regarding substantial change shall include information on:
 - (a) the quality and quantity of waste water introduced to the waste water collection and treatment system; and
 - (b) any anticipated impact caused by the change in the quantity or quality of the waste water to be discharged from the treatment system.

SPECIAL CONDITIONS

F. WET WEATHER FLOW MANAGEMENT PLAN

The permittee must maintain a current written Wet Weather Management Plan to direct the staff on how to operate the facility effectively during periods of high flow and maximize the volume of waste water receiving secondary treatment under all operating conditions. 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. The plan must 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 for use during the events. **The permittee must review their plan annually and record any necessary changes to keep the plan up to date.**

G. OPERATION & MAINTENANCE (O&M) PLAN

The permittee must maintain a current written comprehensive Operation & Maintenance (O&M) Plan. The plan must provide a systematic approach by which the permittee must 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 must evaluate and modify the O&M Plan including site plan(s) and schematic(s) for the wastewater treatment facility to ensure that it is up-to-date. The O&M Plan must be kept on-site at all times and made available to Department and other regulatory personnel upon request.

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

H. 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 March 2, 2016; 2) the terms and conditions of this permit; and 3) only from Outfall #001. Discharges of wastewater from any other point source(s) are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), *Twenty four hour reporting*, of this permit.

SPECIAL CONDITIONS

I. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

During the effective period of this permit, the permittee is authorized to introduce into the treatment process or solids handling stream a **daily maximum of 2,000 gallons per day and 5,000 gallons per week** of transported wastes, subject to the following terms and conditions.

1. "Transported wastes" means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.
2. The character and handling of all transported wastes received must be consistent with the information and management plans provided in application materials submitted to the Department.
3. At no time shall the addition of transported wastes cause or contribute to effluent quality violations. Transported wastes may not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility.

Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. Odors and traffic from the handling of transported wastes may not result in adverse impacts to the surrounding community. If any adverse effects exist, the receipt or introduction of transported wastes into the treatment process or solids handling stream must be suspended until there is no further risk of adverse effects.

4. The permittee must maintain records for each load of transported wastes in a daily log which shall include at a minimum the following.
 - (a) The date;
 - (b) The volume of transported wastes received;
 - (c) The source of the transported wastes;
 - (d) The person transporting the transported wastes;
 - (e) The results of inspections or testing conducted;
 - (f) The volumes of transported wastes added to each treatment stream; and
 - (g) The information in (a) through (d) for any transported wastes refused for acceptance.

These records must be maintained at the treatment facility for a minimum of five years.

SPECIAL CONDITIONS

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

5. The addition of transported wastes into the treatment process or solids handling stream shall not cause the treatment facility's design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of transported wastes into the treatment process or solids handling stream must be reduced or terminated in order to eliminate the overload condition.
6. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added shall not be recorded as transported wastes but should be reported in the treatment facility's influent flow.
7. During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current Wet Weather Flow Management Plan approved by the Department that provides for full treatment of transported wastes without adverse impacts.
8. In consultation with the Department, chemical analysis is required prior to receiving transported wastes from new sources that are not of the same nature as wastes previously received. The analysis must be specific to the type of source and designed to identify concentrations of pollutants that may pass through, upset or otherwise interfere with the facility's operation.
9. Access to transported waste receiving facilities may be permitted only during the times specified in the application materials and under the control and supervision of the person responsible for the wastewater treatment facility or his/her designated representative.
10. This authorization to receive and treat transported wastes is subject to annual review and, with notice to the permittee and other interested parties of record, may be suspended or reduced by the Department as necessary to ensure full compliance with 06-096 CMR Chapter 555 of the Department's rules and the terms and conditions of this permit.

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 must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit *[ICIS Code 75305]*: See Attachment F 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.
- (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 require other appropriate 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. MONITORING AND REPORTING

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

Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333

SPECIAL CONDITIONS

K. MONITORING AND REPORTING (cont'd)

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

L. REPAIR AND REPLACEMENT RESERVE ACCOUNT

Beginning September 21, 2016, and annually thereafter and lasting through September 21, 2018, the permittee must fund a Repair and Replacement Reserve Account in accordance with Department guidance entitled *Maine Department of Environmental Protection, Clean Water State Revolving Fund (CWSRF) Guidance for Minimum Requirements for an Asset Management Program and Reserve Account In Order to Qualify for CWSRF Principal Forgiveness*, DEPLW1190C-2014, in the amount recommended in the permittee's Asset Management Plan or at a minimum of 2% of the permittee's total yearly waste water operation and maintenance budget each year.

On or before September 21, 2016, and lasting through September 21, 2018, (ICIS Code 59499) the permittee must submit the last three certifications to the Department indicating a Repair and Replacement Reserve Account has been fully funded as required above. See **Attachment F** of this permit for a copy of the certification form. The permittee must attach copies of yearly budget reports to the annual certification forms showing funds deposited in the reserve account for each year, the end of year account balance and, if funds were expended, what the funds were used for. This requirement to annually fund a Repair And Replacement Reserve Account will sunset upon receipt of the final certification by the Department (on or before September 21, 2018).

SPECIAL CONDITIONS

M. ASSET MANAGEMENT PROGRAM (AMP)

The permittee must maintain a current written AMP in accordance with Department guidance entitled, *Maine Department of Environmental Protection, Clean Water State Revolving Fund (CWSRF) Guidance for Minimum Requirements for an Asset Management Program and Reserve Account In Order to Qualify for CWSRF Principal Forgiveness*, DEPLW1190C-2014. The AMP must be reviewed and updated as necessary at least annually. The AMP must be kept on-site at the permittee's office and made available to Department staff for review during normal business hours. This requirement to maintain a current written AMP will sunset upon receipt of the final certification by the Department (on or before September 21, 2018).

N. SCHEDULE OF COMPLIANCE – TOTAL PHOSPHORUS

Seasonally (June 1 – September 30) of each year beginning June 1, 2018, and lasting through September 30, 2020, the permittee shall conduct effluent testing for total phosphorus at a frequency of 1/Week. The permittee is required to report the monthly average and daily maximum mass and concentration discharged during this time period on the applicable monthly Discharge Monitoring Reports (DMRs).

On or before September 1, 2019, (ICIS code 50008), the permittee shall submit a report to the Department for review that summarizes the total phosphorus monitoring conducted for the period April 2018 – April 2019 and if necessary, provide a scope or work and schedule to come into compliance with the monthly average water quality based limitation of 4.0 lbs/day for total phosphorus specified in Special Condition A of this permit.

On or before July 1, 2020 and on or before December 31, 2020, (ICIS code CS010) the permittee shall submit progress reports to the Department for review on efforts made to come into compliance with the monthly average water quality based limitation of 4.0 lbs/day for total phosphorus specified in Special Condition A of this permit.

Beginning June 1, 2021, the permittee must be in compliance with the monthly average water quality based limitation of 4.0 lbs/day for total phosphorus specified in Special Condition A of this permit.

O. WILSON STREAM FLOW

The Town of Wilton must make every reasonable effort, within its capacity, to operate the Wilson Pond dam such that a minimum stream flow of 7.5 cfs is maintained in Wilson Stream at all times. The Town must notify the Department as soon as possible if the minimum stream flow of 7.5 cfs cannot be maintained for any reason.

SPECIAL CONDITIONS

P. REOPENING OF PERMIT FOR MODIFICATIONS

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

Q. 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

Effluent Mercury Test Report

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

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

SAMPLE COLLECTION INFORMATION

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

ANALYTICAL RESULT FOR EFFLUENT MERCURY

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

CERTIFICATION

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

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT B

Protocol for Total Phosphorus Sample Collection and Analysis for Waste Water Effluent

Approved Analytical Methods: EPA 200.7 (Rev. 44), 365.1 (Rev. 2.0), (Lachat), 365.3, 365.4; SM 3120 B, 4500-P B.5, 4500-P E, 4500-P F, 4500-P G, 4500-P H; ASTM D515-88(A), D515-88(B); USGS I-4471-97, I-4600-85, I-4610-91; OMAAOAC 973.55, 973.56 (laboratory must be certified for any method performed)

Sample Collection: The Maine DEP is requesting that total phosphorus analysis be conducted on composite effluent samples, unless a facility's Permit specifically designates grab sampling for this parameter. Facilities can use individual collection bottles or a single jug made out of glass or polyethylene. Bottles and/or jugs should be cleaned prior to each use with dilute HCL. This cleaning should be followed by several rinses with distilled water. Commercially purchased, pre-cleaned sample containers are an acceptable alternative. The sampler hoses should be cleaned, as needed.

Sample Preservation: During compositing the sample must be at 0-6 degrees C (without freezing). If the sample is being sent to a commercial laboratory or analysis cannot be performed the day of collection then the sample must be preserved using H_2SO_4 to obtain a sample pH of <2 and refrigerated at 0-6 degrees C (without freezing). The holding time for a preserved sample is 28 days.

Note: Ideally, Total P samples are preserved as described above. However, if a facility is using a commercial laboratory then that laboratory may choose to add acid to the sample once it arrives at the laboratory. The Maine DEP will accept results that use either of these preservation methods.

Laboratory QA/QC: Laboratories must follow the appropriate QA/QC procedures that are described in each of the approved methods.

Sampling QA/QC: If a composite sample is being collected using an automated sampler, then once per month run a blank on the composite sampler. Automatically, draw distilled water into the sample jug using the sample collection line. Let this water set in the jug for 24 hours and then analyze for total phosphorus. Preserve this sample as described above.

ATTACHMENT C

Salmonid Survival and Growth Test

The Salmonid survival and growth test must follow the procedures for the fathead minnow larval survival and growth tests detailed in USEPA's freshwater acute and chronic methods manuals with the following Department modifications:

Species - Brook Trout, *Salvelinus fontinalis*, or other salmonid approved by the Department.

Age - Less than six months old for the first test each year and less than twelve months for subsequent tests.

Size - The largest fish must not be greater than 150% of the smallest.

Loading Rate - < 0.5 g/l/day

Feeding rate - 5% of body weight 3 times daily (15%/day)

Temperature - $12^{\circ} \pm 1^{\circ}\text{C}$

Dissolved Oxygen - 6.5 mg/l, aeration if needed with large bubbles (> 1 mm diameter) at a rate of <100/min

Dilution Water - Receiving water upstream of discharge (or other ambient water approved by the Department)

Dilution Series - A minimum of 5 effluent concentrations (including the instream waste concentrations bracketing acute and chronic dilutions calculated pursuant to Section D); a receiving water control; and control of known suitable water quality

Duration - Acute = 48 hours
- Chronic = 10 days minimum

Test acceptability - Acute = minimum of 90% survival in 2 days
- Chronic = minimum of 80% survival in 10 days; minimum growth of 20 mg/gm/d dry weight in controls, (individual fish weighed, dried at 100°C to constant weight and weighed to 3 significant figures)

ATTACHMENT D

**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)
		A>90	C>80	>15/female	A>90	C>80	> 2% increase
QC standard							
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."

ATTACHMENT E

**Maine Department of Environmental Protection
WET and Chem**

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) **f**

Flow for Day (MGD)⁽¹⁾ _____ Flow Avg. for Month (MGD)⁽²⁾ _____
Date Sample Collected _____ Date Sample Analyzed _____

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

Last Revision - July 1, 2015

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⁾									
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				Possible Exceedence ⁽⁷⁾	
				Acute ⁽⁵⁾ Chronic ⁽⁶⁾ Health ⁽⁵⁾				Acute Chronic Health	
TOTAL RESIDUAL CHLORINE (mg/L) ⁽⁹⁾		0.05				NA			
AMMONIA		NA				(8)			
ALUMINUM		NA				(8)			
ARSENIC		5				(8)			
CADMIUM		1				(8)			
CHROMIUM		10				(8)			
COPPER		3				(8)			
CYANIDE, TOTAL		5				(8)			
CYANIDE, AVAILABLE ^(3a)		5				(8)			
LEAD		3				(8)			
NICKEL		5				(8)			
SILVER		1				(8)			
ZINC		5				(8)			

Maine Department of Environmental Protection
WET and Chem

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 ⁽⁵⁾	Chronic ⁽⁵⁾	Health ⁽⁶⁾		Acute	Chronic	Health
M	ANTIMONY	5							
M	BERYLLIUM	2							
M	MERCURY (G)	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 Chem

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									
V	TETRACHLOROETHYLENE (Perchloroethylene or Tetrachloroethene)	5									
V	TOLUENE	5									
V	TRICHLOROETHYLENE (Trichloroethene)	3									
V	VINYL CHLORIDE	5									

Notes:

(1) Flow average for day pertains to WET/PP composite sample day.

(2) Flow average for month is for month in which WET/PP sample was taken.

(3) Analytical chemistry parameters must be done as part of the WET test chemistry.

(3a) Cyanide, Available (Cyanide Amenable to Chlorination) is not an analytical chemistry parameter, but may be required by certain discharge permits.

(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 F

CLEAN WATER STATE REVOLVING FUND
REPAIR AND REPLACEMENT RESERVE ACCOUNT
CERTIFICATION

I _____ representing the _____
(print name of cognizant official) (print name of permittee)

hereby certify to the Maine Department of Environmental Protection that as of (end of fiscal year
date) _____ (date)

a *Clean Water State Revolving Fund (CWSRF) Repair and Replacement Reserve Account* has been established and is fully funded in accordance with Department Guidance entitled, *Maine Department of Environmental Protection, Clean Water State Revolving Fund (CWSRF) Guidance for Minimum Requirements for an Asset Management Program and Reserve Account In Order to Qualify for CWSRF Principal Forgiveness*, DEPLW1190C-2014; and

That our total yearly wastewater operation and maintenance budget for the previous fiscal year was \$ _____; and

That the amount recommended in our asset management plan, or as a minimum, 2% of our total yearly wastewater operation and maintenance budget was \$ _____; and

That \$ _____ was deposited to the Repair and Replacement Reserve Account last fiscal year; and

That \$ _____ was expended from this account last fiscal year in accordance with the Department Guidance; and

That the current end of fiscal year balance of the Repair and Replacement Reserve Account is \$ _____.

Signature _____

Date _____

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.

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

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

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STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

AND

MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Date: April 25, 2016

PERMIT NUMBER: ME0101915
LICENSE NUMBER: W002365-6C-L-R

NAME AND ADDRESS OF APPLICANT:

**TOWN OF WILTON
158 Weld Road
Wilton, Maine 04294**

COUNTY: Franklin County

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**Davis Street
Wilton, Maine 04294**

RECEIVING WATER/CLASSIFICATION: Wilson Stream/Class C

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: Mr. Justin Futia
Supervisor, WWTF
(207) 645-3682
E-mail: wiltonwasw@yahoo.com

1. APPLICATION SUMMARY

- a. Application - The Town of Wilton (Town/permittee hereinafter) has submitted a timely and complete application to the Department to renew combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0101915/Waste Discharge License (WDL) #W002365-6C-E-R (permit hereinafter) which was issued on June 22, 2011, for a five-year term. The 6/22/11, permit authorized the discharge of up to a monthly average flow of 0.45 million gallons per day (MGD) of secondary treated sanitary waste waters to Wilson Stream, Class C, in Wilton, Maine. See Attachment A of this Fact Sheet for a location map.

1. APPLICATION SUMMARY (cont'd)

- b. Source Description: The waste water treatment facility receives sanitary waste water flows generated by approximately 1,000 residential users within the Town of Wilton. The collection system is a separated system approximately 25.5 miles in length with twenty (20) small grinder pump stations, ten (10) major pump stations and no combined sewer overflow (CSO) points. Six of the major pump stations have on-site generators to provide back-up power in the event of a power failure and the remaining pump stations have emergency generator receptacles and manual transfer switches such that back-up power via a portable generator can be supplied to the stations in the event of a power failure. None of the pump stations have constructed emergency overflow/bypasses.

In December of 1998, Wilton installed a combination sodium hydroxide/sodium bicarbonate corrosion control system for the drinking water supply in an effort to reduce copper and lead concentrations in waste waters being conveyed to the waste water treatment facility. The waste water treatment facility is authorized to accept up to 2,000 gallons per day and 5,000 gallons per week of transported wastes from local septage haulers.

- d. Waste Water Treatment: The facility provides a secondary level of treatment through a rotating biological contactor (RBC) treatment system. Major components of the treatment system include a bar rack, comminuter, roto-screens, four RBC trains of two wheels each, and two secondary clarifiers followed by chlorination and de-chlorination of the effluent via sodium hypochlorite and sodium bi-sulfite respectively. Treated waste waters are discharged to Wilson Stream via a three-port diffuser which provides for rapid and complete mixing as determined by the Department in an evaluation dated 10/28/99. See **Attachment B** for a schematic of the waste water treatment facility.

2. PERMIT SUMMARY

- a. Terms and conditions - This permitting action is carrying forward all the terms and conditions of the June 22, 2011, permitting action except that this permit is :
1. Incorporating the average and maximum interim concentration limitations for mercury that were originally established in a May 2000 permit modification.
 2. Establishing less stringent monthly average water quality based mass limitations for total copper and total lead given the results of an updated statistical evaluation pursuant to 06-096 CMR Chapter 530.
 3. Eliminating the daily maximum mass and concentration for total copper as the updated statistical evaluation indicates the discharge no longer has a reasonable potential to exceed the acute AWQC for total copper.

PERMIT SUMMARY (cont'd)

4. Eliminating the concentration limits for total copper and total lead pursuant to Maine law 38 M.R.S.A. §464, ¶¶ K which states "*Unless otherwise required by an applicable effluent limitation guideline adopted by the department, any limitations for metals in a waste discharge license may be expressed only as mass-based limits.*"
 5. Eliminating the acute and chronic water quality based whole effluent toxicity (WET) limits for the water flea and the brook trout as the updated statistical evaluation indicates the discharge no longer has a reasonable potential to exceed the critical acute or chronic thresholds for either test species.
 6. Reducing the surveillance level testing frequency for both WET species as well as analytical chemistry pursuant to the updated statistical evaluation indicating the facility qualifies for a monitoring frequency reduction pursuant to 06-096 CMR Chapter 530.
 7. Eliminating the waiver to achieve 85% removal for biochemical oxygen demand (BOD) and total suspended solids (TSS) when the monthly average influent concentration is less than 200 mg/L as there was no legal basis to grant such a waiver.
 8. Reducing the monitoring frequency requirements for BOD and TSS from 1/Week to 2/Month based on statistical evaluation of the data for the most current 46 months and USEPA and Department guidance.
 9. Establishing a monthly average water quality based mass limit for total phosphorus as calculations indicate the discharge exceeds the USEPA Gold Book goal of 0.100 mg/L for total phosphorus.
 10. Establishing a schedule of compliance for the seasonal monthly average water quality based mass limit for total phosphorus as the facility is unable to comply with said limit upon permit issuance.
 11. Requiring the permittee to conduct an Industrial Waste Survey (IWS) any time a new industrial user proposes to discharge within the facilities jurisdiction or at least once per permit cycle, pursuant to Special Condition D of this permit, pursuant to Special Condition D of this permit.
- b. History – The most relevant regulatory actions regarding the waste water treatment facility include, but are not limited to, the following:

December 12, 1989 – The Department issued WDL #W002365-59-A-R for a five-year term. The WDL contained secondary treatment limitations.

2. PERMIT SUMMARY (cont'd)

November 26, 1990 - The Department issued WDL modification #W002365-59-B-M that modified the 12/12/89 WDL by authorizing the Wilton facility to accept and treat up to 5,000 gallons of septage per week at the waste water treatment facility.

February 1, 1995 - The Department issued a letter to Wilton that administratively modified the 12/12/89 WDL to incorporate whole effluent toxicity (WET) and chemical specific (priority pollutant) testing pursuant to Department Regulation, Chapter 530.5, *Surface Water Toxics Control Program*.

September 13, 1996 - The Department issued a letter to the Town of Wilton requiring Wilton to prepare a Toxicity Reduction Evaluation (TRE) to address the exceedences of the ambient water quality criteria (AWQC) for ammonia.

October 10, 1996 - The Town of Wilton submitted a letter in response to the Department's 9/13/96 letter regarding toxicity issues. The letter indicated Wilton had been conducting a TRE to address exceedences of the AWQC for ammonia.

September 30, 1998 - The U.S. Environmental Protection Agency (EPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0101915 for a five-year term.

May 23, 2000 - The Department administratively modified the 10/10/96 WDL to establish interim average and maximum concentration limits for mercury.

January 12, 2001 - The State of Maine received authorization from the EPA to administer the NPDES permitting program. From that date forward, the permitting program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) permit program.

August 22, 2001 - The Department issued combination MEPDES permit #ME0101915/WDL #W002365-5L-C-R for a five-year term.

July 7, 2006 - The Department issued combination MEPDES permit #ME0101915/WDL #W002365-5L-D-R for a five-year term.

June 22, 2011 - The Department issued combination MEPDES permit #ME0101915/WDL #W002365-6C-C-R for a five-year term.

December 5, 2011 - The Department issued an minor revision to correct a typographical error in the permit issued on June 22, 2011.

October 3, 2012 - The Department issued a permit modification to incorporate Special Conditions regarding compliance with the 2011 Clean Water State Revolving Fund (CWSRF) Requirements (Green Asset Management and Energy Audit Principal Forgiveness).

2. PERMIT SUMMARY (cont'd)

September 11, 2013 – The Department issued a minor revision to remove the monthly average water quality based mass and concentration limits for inorganic arsenic based on a statistical evaluation utilizing a new human health ambient water quality criteria (AWQC) for inorganic arsenic.

June 11, 2014 – The Department issued a minor revision modifying the compliance dates in Special Condition O, *Asset Management Program (AMP)* and Special Condition Q, *Waste Water Facility Energy Audit* of Maine Pollutant Discharge Elimination System (MEPDES) permit minor revision #ME0101915/WDL #W002365-6C-I-M, issued by the Department on September 11, 2013.

May 13, 2015 - The Department issued a minor revision modifying the compliance dates in Special Condition O, *Asset Management Program (AMP)* and Special Condition Q, *Waste Water Facility Energy Audit* of Maine Pollutant Discharge Elimination System (MEPDES) permit minor revision #ME0101915/WDL #W002365-6C-J-M, issued by the Department on June 11, 2014.

March 1, 2016 – The Town of Wilton submitted a timely and complete application to the Department to renew the MEPDES permit last issued on June 22, 2011.

3. CONDITIONS OF PERMITS

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

4. RECEIVING WATER STANDARDS

Maine law, 38 M.R.S., §467(4)(G)(2)(b) classifies Wilson Stream at the point of discharge as a Class C waterway. Maine law, 38 M.R.S., §465(3) contains the classification standards for Class C waterways. Maine law 38 M.R.S. §465(4)(B) (as amended via P.L. 2005, Chapter 409) states in part, The dissolved oxygen content of Class C water may be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained. In order to provide additional protection for the growth of indigenous fish, the following standards apply.

4. RECEIVING WATER STANDARDS (cont'd)

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

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

(b) A discharge or a hydropower project was in existence on March 16, 2005 and required but did not have a license or water quality certificate other than a general permit for the Class C water.

(1) This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004.

(2) In Class C waters not governed by subparagraph (1), dissolved oxygen may not be less than 6.5 parts per million as a 30-day average based upon a temperature of 24 degrees centigrade or the ambient temperature of the water body, whichever is less. This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004.

The department may negotiate and enter into agreements with licensees and water quality certificate holders in order to provide further protection for the growth of indigenous fish. Agreements entered into under this paragraph are enforceable as department orders according to the provisions of sections 347-A to 349.

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

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

5. RECEIVING WATER CONDITIONS

A document entitled 2012 Integrated Water Quality Monitoring And Assessment Report, (referred to as the 305b Report) published by the Department indicates Wilson Stream is meeting the standards of its assigned classification except that the report lists all of Maine's fresh waters as, "*Category 4-A: Waters Impaired by Atmospheric Deposition of Mercury.*" Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, "All freshwaters are listed in Category 4-A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL. 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 monthly average and daily maximum mercury concentration limits and reporting requirements for this facility pursuant to 06-096 CMR 519.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- a. Flow: The monthly average flow limitation of 0.45 MGD in the previous permitting action is being carried forward in this permitting action and is considered to be representative of the monthly average dry weather design flow of the waste water treatment facility.

A review of the monthly DMR data for the period January 2012 – October 2015 indicates the permittee has been in compliance with the flow limitation 100% of the time with values reported as follows:

Flow (DMRs=46)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	0.45	0.18 – 0.38	0.24
Daily Maximum	Report	0.22 – 0.75	0.34

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

- b. Dilution Factors – Based on a monthly average flow limit of 0.45 MGD and a receiving water flow of 7.5 cfs⁽¹⁾, the acute, chronic and harmonic mean dilution factors associated with the discharge may be calculated as follows:

$$\text{Dilution Factor} \Rightarrow \frac{\text{River Flow (cfs)}(\text{Conv. Factor}) + \text{Plant Flow (MGD)}}{\text{Plant Flow (MGD)}}$$

$$\text{Acute: } 1\text{Q}10 = 7.5 \text{ cfs} \Rightarrow \frac{(7.5 \text{ cfs})(0.6464) + (0.45 \text{ MGD})}{(0.45 \text{ MGD})} = 11.8:1$$

$$\text{Chronic: } 7\text{Q}10 = 7.5 \text{ cfs} \Rightarrow \frac{(7.5 \text{ cfs})(0.6464) + (0.45 \text{ MGD})}{(0.45 \text{ MGD})} = 11.8:1$$

$$\text{Harmonic Mean: } = 22.5 \text{ cfs}^{(2)} \Rightarrow \frac{(22.5 \text{ cfs})(0.6464) + (0.45 \text{ MGD})}{(0.45 \text{ MGD})} = 33.3:1$$

Footnotes:

- (1) The actual 7Q10 low flow value for Wilson Stream at the point of discharge is 4.0 cfs. The 7.5 cfs low flow value was derived in a Waste Load Allocation conducted by the Department in 1975 and is the threshold in which Wilson Stream can assimilate the discharge of 0.45 MGD of waste water from the Wilton facility and attain Class C dissolved oxygen standards. The low flow value of 7.5 cfs was re-evaluated in April of 1993 and again in August of 2000 and remains applicable. The Town of Wilton has agreed to make every reasonable effort, within its capacity, to operate the Wilton Pond dam such that a minimum stream flow of 7.5 cfs is maintained in Wilson Stream at all times. The Town has also agreed to notify the Department in advance, if possible, if this stream flow cannot be maintained for any reason.
- (2) The harmonic mean dilution factor is approximated by multiplying the 7Q10 by a factor of three (3). This multiplying factor is based on guidelines for estimation of human health dilution presented in the USEPA publication Technical Support Document for Water Quality-Based Toxics Control (Office of Water; EPA/505/2-90-001, page 88), and represents an estimation of harmonic mean flow.
- c. Biochemical Oxygen Demand (BOD5) & Total Suspended Solids (TSS): - The previous permitting action contained year-round monthly and weekly average BOD5 and TSS best practicable treatment (BPT) concentration limits of 30 mg/L and 45 mg/L respectively, that were based on secondary treatment requirements pursuant to 06-096 CMR Chapter 525(3)(III). The maximum daily BOD5 and TSS concentration limits of 50 mg/L were based on a Department best professional judgment of BPT. All three concentration limits are being carried forward in this permitting action and are applicable on a year-round basis.

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

As for mass limits, the previous permitting action contained year-round technology based limits based on the concentration limits cited on page 8 of this Fact Sheet and the monthly average design flow of 0.45 MGD for the facility. The mass limits were calculated as follows:

Monthly average: $(0.45 \text{ MGD})(8.34)(30 \text{ mg/L}) = 113 \text{ lbs/day}$

Weekly average: $(0.45 \text{ MGD})(8.34)(45 \text{ mg/L}) = 169 \text{ lbs/day}$

Daily maximum: $(0.45 \text{ MGD})(8.34)(50 \text{ mg/L}) = 188 \text{ lbs/day}$

A review of the DMR data for the period January 2012 – October 2015 indicates the facility has been in compliance with said limitations 100% of the time as values have been reported as follows:

BOD Mass (DMRs=46)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	113	14 - 57	31
Weekly Average	169	17 - 80	41
Daily Maximum	188	17 - 80	41

BOD Concentration (DMRs=46)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	7 - 25	16
Weekly Average	45	7 - 31	20
Daily Maximum	50	9 - 31	20

TSS mass (DMRs=46)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	113	6 - 32	15
Weekly Average	169	10 - 70	23
Daily Maximum	188	10 - 70	23

TSS concentration (DMRs=46)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	3 - 17	8
Weekly Average	45	1 - 35	11
Daily Maximum	50	4 - 35	11

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

Minimum monitoring frequency requirements in MEPDES permits are prescribed by 06-096 CMR Chapter 523 §5(i). The USEPA has published guidance entitled, *Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies* (USEPA Guidance April 1996). In addition, the Department has supplemented the EPA guidance with its own guidance entitled, *Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996* (Maine DEP May 22, 2014). Both documents are being utilized to evaluate the compliance history for each parameter regulated by the previous permit to determine if a reduction in the monitoring frequencies is justified.

Although EPA's 1996 Guidance recommends evaluation of the most current two years of effluent data for a parameter, the Department is considering 46 months of data (January 2012 – October 2015). A review of the mass monitoring data for BOD & TSS indicates the ratios (expressed in percent) of the long term effluent average to the monthly average mass limits can be calculated as 27% for BOD and 13% for TSS. According to Table I of the EPA Guidance and Department Guidance, a 1/Week monitoring requirement can be reduced to 2/Month. Therefore, this permitting action is reducing the monitoring frequencies for BOD and TSS from 1/Week to 2/Month.

Should the facility experience operational problems resulting in significant non-compliance, or subsequent enforcement, then the Department reserves the right to reopen the permit and revoke the testing reductions that have been granted.

This permitting action is carrying forward a requirement of 85% removal for BOD and TSS pursuant to Department rule Chapter 525(3)(III)(a&b)(3). This permit is not carrying forward the relief from the 85% removal limit when the monthly average influent concentration is less than 200 mg/L as there is no legal basis to provide for the exception.

A review of the DMR data for the period January 2012 – October 2015 indicates the facility always reported N-9 on the DMRs indicating the influent is less than 200 mg/L for every month. However, a review of the facility's "49 Forms" submitted to the Department for same timeframe indicates the facility is in substantial compliance the 85% removal requirement.

- d. Settleable Solids - The previous permit contained a daily maximum concentration limit of 0.3 ml/L (considered by the Department to be representative of BPT) with a monitoring frequency of 3/Week. A review of the DMR data for the period January 2012 through October 2015 indicates the permittee has reported <0.1 mL/L every month for said period except for the month of February 2014 where a value of 0.1 ml/L was reported.

A review of the monitoring data for settleable solids indicates the ratio (expressed in percent) of the long term effluent average to the daily maximum limit can be calculated as <33%. According to Table I of the EPA Guidance and Department Guidance, a 3/Week monitoring requirement

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

can be reduced to 2/Week. However, the Department guidance only allows a one time monitoring frequency reduction. The July 7, 2006, permit granted a reduction in the monitoring frequency from 1/Day to 3/Week. Therefore, this permitting action is carrying forward the monitoring frequency of 3/Week for settleable solids.

- e. Escherichia coliform (*E. coli*) bacteria: The previous permit contained seasonal (May 15 – September 30) monthly average and daily maximum *E. coli* bacteria limits of 126 colonies/100 ml and 949 colonies/100 ml along with a 1/Week monitoring requirement. The criteria for Class C waters are 126 colonies/100 ml as a monthly average and 236 colonies/100 ml as a daily maximum. The Department made the determination that after taking into consider the dilution associated with the discharge, the daily maximum BPT limit of 949 colonies/100 ml established in the July 2006 permitting action is protective of the AWQC for bacteria.

A review of the monthly Discharge Monitoring Report (DMR) data for the period May 2012 – September 2015 indicates *E. coli* bacteria have been reported as follows:

E. coli bacteria (n=20)

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	126	5 - 85	26
Daily Maximum	949	8 - 171	54

A review of the monitoring data for *E. coli* bacteria indicates the ratio (expressed in percent) of the long term effluent average to the monthly average limit can be calculated as 21%. According to Table I of the EPA Guidance and Department Guidance, a 1/Week monitoring requirement can be reduced to 2/Month. However, the Department's guidance does not permit a reduction in monitoring frequencies for water quality based limitations. Therefore, the monitoring frequency of 1/Week is being carried forward in this permit.

- f. Total Residual Chlorine (TRC) - The previous permitting action contained a monthly average technology based (BPT) limit of 0.1 mg/L and a daily maximum water quality based limit of 0.22 mg/L that are being carried forward in this permitting action. Limits on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. The Department imposes the more stringent of the water quality or technology based limits in permitting actions. End-of-pipe water quality based concentration thresholds may be calculated as follows:

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution	Acute Limit	Chronic Limit
Chlorine	19 ug/L	11 ug/L	11.8:1	11.8:1	0.22 mg/L	0.13 mg/L

Example calculation: Acute – 0.019 mg/L (11.8) = 0.22 mg/L

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

To meet the water quality based thresholds calculated above, the permittee must continue to dechlorinate the effluent prior to discharge. The Department has established daily maximum and monthly average best practicable treatment (BPT) limitations of 0.3 mg/L and 0.1 mg/L respectively, for facilities that need to dechlorinate their effluent unless calculated water quality based limits are lower than the BPT limits. In the case of the Wilton facility, the calculated acute water quality based limit is lower than 0.3 mg/l, thus the daily maximum water quality based limit of 0.22 mg/L is imposed. As for the monthly average, the calculated chronic water quality based limit is higher than the BPT limit of 0.1 mg/L, thus the monthly average BPT limit of 0.1 mg/L is imposed.

A review of the DMR data for the seasonal period May 2012 through September 2015 indicates the monthly average and daily maximum TRC limitations have been reported as <0.1 mg/L for both monthly average and daily maximum for every month during said period.

The monitoring frequency for TRC of 1/Day is being carried forward from the previous permitting action as the Department's May 2014 monitoring frequency reduction guidance document does not allow a reduction in monitoring frequencies for parameters with water quality based limitations.

- g. pH Range- The previous permitting action contained a pH range limitation of 6.0 – 9.0 standard units pursuant to a Department rule found at Chapter 525(3)(III)(c). The limits are considered BPT and are being carried forward in this permitting action. A review of the DMR data for the period January 2012 – October 2015 indicates the limitation range has never been exceeded. Results are as follows:

pH (n=46)

Value	Limit (SU)	Minimum (SU)	Maximum (SU)
Range	6.0 – 9.0	6.0	7.5

The monitoring frequency for pH of 5/Week is being carried forward from the previous permitting action. The 2006 MEPDES permit renewal reduced the monitoring frequency for pH from 1/Day to 5/Week. The Department's May 2014 monitoring frequency reduction guidance document only allows a one-time reduction. Therefore, the monitoring frequency reduction of 5/Week is being carried forward in this permitting action.

- 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 thereby administratively modifying the permittee's WDL by establishing interim monthly average and daily maximum effluent concentration limits of 27.2 parts per trillion (ppt) and 40.8 ppt, respectively, and a minimum monitoring frequency requirement of four tests per year for mercury. It is noted the limitations have been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit.

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

Maine law, 38 M.R.S.A. § 420(1-B)(B)(1) provides 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. A review of the Department's data base for the period January 2011 through June 2015 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows:

Mercury (n=5)

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average	27.2	4.5 – 11	7.6
Daily Maximum	40.5		

Pursuant to 38 M.R.S.A. §420(1-B)(F), the Department issued a minor revision on February 6, 2012, thereby revising the minimum monitoring frequency requirement from four times per year to once per year given the permittee has maintained at least five years of mercury testing data. In fact, the permittee has been monitoring mercury since June 2000 or 16 years. Pursuant to 38 M.R.S.A. §420(1-B)(F), this permitting action is carrying forward the 1/Year monitoring frequency established in the February 6, 2012, permit modification.

- i. Whole Effluent Toxicity (WET) & Chemical-Specific Testing: Maine law, 38 M.R.S.A., Sections 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 Rules, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants* set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters. WET, priority pollutant and analytical chemistry testing, as required by Chapter 530, is included in this permit in order to fully characterize the effluent. This permit also provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment and receiving water characteristics.

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute 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 ambient water quality criteria (AWQC) as established in Chapter 584.

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

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

Level I – chronic dilution factor of $<20:1$.

Level II – chronic dilution factor of $\geq 20:1$ but $<100:1$.

Level III – chronic dilution factor $\geq 100:1$ but $<500:1$ or $>500:1$ and $Q \geq 1.0$ MGD

Level IV – chronic dilution factor $>500:1$ and $Q \leq 1.0$ MGD

Department rule Chapter 530 (2)(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the Chapter 530 criteria, the permittee's facility falls into the Level I frequency category as the facility has a chronic dilution factor $<20:1$. Chapter 530(2)(D)(1) specifies that routine surveillance and screening level testing requirements are as follows:

Screening level testing

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

Surveillance level testing

Level	WET Testing	Priority pollutant testing	Analytical chemistry
I	2 per year	Not required	4 per year

A review of the data on file with the Department for the permittee indicates that to date, it 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)

WET test evaluation

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."*

On March 17, 2016, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department in accordance with the statistical approach established in 06-096 CMR Chapter 530. The statistical evaluation indicates the discharge from the permittee's waste water treatment facility does not have any tests results (n=48) for the water flea or the brook trout that exceed or have a reasonable potential to exceed the critical acute and chronic water quality thresholds of 8.5%.

06-096 CMR Chapter 530(2)(D)(3)(d) states that *"Level I facilities may reduce surveillance testing to one WET or specific chemical series per year provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E)."* Therefore, this permit is reducing the WET test monitoring frequency for both the water flea and brook trout to 1/Year.

Surveillance level testing - Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit).

Level	WET Testing
I	1 per year for the brook trout 1 per year for the water flea

Department rule Chapter 530 (2)(D)(1) specifies that screening level testing is to be established as follows:

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

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

Level	WET Testing
I	4 per year for the brook trout 4 per year for the water flea

Chapter 530 (2)(D) states:

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

- (a) Changes in the number or types of non-domestic wastes contributed directly or indirectly to the 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.*

Special Condition J, 06-096 CMR 530(D)(2)(4) *Statement For Reduced/Waived Toxics Testing*, of this permitting action requires the permittee to file an annual certification with the Department.

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 background concentrations. For pollutants not listed by the Department, an assumed concentration of 10% of the applicable water quality criteria must be used in calculations."* The Department has limited information on the background levels of metals in the water column in the Wilson Stream in the vicinity of the permittee's outfall and the Kennebec River. Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

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

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.

However, in May 2012, 38 M.R.S.A. §464(J) was enacted which states, *For the purpose of calculating waste discharge license limits for toxic substances, the department may use any unallocated assimilative capacity that the department has set aside for future growth if the use of that unallocated assimilative capacity would avoid an exceedance of applicable ambient water quality criteria or a determination by the department of a reasonable potential to exceed ambient water quality criteria.*

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 exceedance 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.

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.

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

See **Attachment E** of this Fact Sheet for Department guidance that establishes protocols for establishing waste load allocations. The guidance states that the most protective of water quality becomes the facility's allocation. According to the 8/25/15 statistical evaluation (Report ID #800), the pollutants of concern are copper and lead. The data indicates there are three (3) tests for copper and three (3) tests for lead that have a reasonable potential to exceed the respective chronic AWQCs. Being that Wilton is the only discharger on Wilson Stream, the allocation is calculated based on the individual allocation methodology.

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."*

In May 2012, Maine law 38 M.R.S.A. §464, ¶¶ K was enacted which reads as follows, *"Unless otherwise required by an applicable effluent limitation guideline adopted by the department, any limitations for metals in a waste discharge license may be expressed only as mass-based limits."* There are no applicable effluent limitation guidelines adopted by the Department or the USEPA for metals from a publicly owned treatment works.

Individual allocation methodology

Copper

In the individual allocation, the Department continues to utilize the formula it has used in permitting actions since October 2005 taking into consideration background (10% of AWQC) and a reserve (0% of AWQC). The formula is as follows:

$$\text{EOP concentration} = [\text{Dilution factor} \times 0.90 \times \text{AWQC}] + [0.10 \times \text{AWQC}]$$

$$\text{Mass limit} = (\text{EOP concentration in mg/L})(8.34 \text{ lbs/gal})(\text{Permit flow limit in MGD})$$

$$\text{Chronic AWQC} = 2.36 \text{ ug/L}$$

$$\text{Acute dilution factor} = 11.8:1$$

$$\text{EOP concentration} = [\text{Dilution factor} \times 0.90 \times \text{AWQC}] + [0.10 \times \text{AWQC}]$$

$$\text{EOP} = [11.8 \times 0.90 \times 2.36 \text{ ug/L}] + [0.10 \times 2.36 \text{ ug/L}] = 25.3 \text{ ug/L}$$

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

Based on a permitted flow of 0.45 MGD, EOP mass limits are as follows:

<u>Parameter</u>	<u>Calculated EOP Concentrations</u>	<u>Monthly Avg. Mass Limit</u>
Copper	25.3 ug/L	0.095 lbs/day

Example Calculation: Copper - $\frac{(25.3 \text{ ug/L})(8.34)(0.45 \text{ MGD})}{1,000 \text{ ug/mg}} = 0.095 \text{ lbs/day}$

Lead

In the individual allocation formula is as follows:

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

Mass limit = (EOP concentration in mg/L)(8.34 lbs/gal)(Permit flow limit in MGD)

Chronic AWQC= 0.41 ug/L

Acute dilution factor = 11.8:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [11.8 x 0.90 x 0.41 ug/L] + [0.10 x 0.41 ug/L] = 4.4 ug/L

Based on a permitted flow of 0.45 MGD, EOP mass limits are as follows:

<u>Parameter</u>	<u>Calculated EOP Concentrations</u>	<u>Monthly Avg. Mass Limit</u>
Lead	4.4 ug/L	0.095 lbs/day

Example Calculation: Lead - $\frac{(4.4 \text{ ug/L})(8.34)(0.45 \text{ MGD})}{1,000 \text{ ug/mg}} = 0.016 \text{ lbs/day}$

Chapter 530 does not establish specific monitoring frequencies for parameters that exceed or have a reasonable to exceed AWQC. This permitting action is establishing the monitoring requirement frequencies for total copper and total lead based on a best professional judgment given the timing, frequency and severity of the exceedence or reasonable potential to exceed AWQC. Due to multiple test results that have a reasonable potential to exceed applicable AWQC, the Department has made a best professional judgment that routine surveillance level monitoring of 1/Quarter is sufficient to determine on-going compliance with the AWQC.

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

With the exception of copper and lead, monitoring frequencies for priority pollutant and analytical chemistry testing established in this permitting action are based on the Chapter 530 rule. Chapter 530(2)(D)(3)(d) states in part that for Level I facilities "... *may reduce surveillance testing to one WET or specific chemical series per year provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E)*". Based on the results of the 8/25/15 statistical evaluation, the permittee qualifies for the testing reduction. Therefore, this permit action establishes a surveillance level analytical chemistry testing (with the exception of copper and lead) as follows:

Surveillance level testing - Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit).

Level	Priority pollutant testing	Analytical chemistry
I	Not required	1 per year

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

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

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

As with WET testing, Special Condition J, *06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing* of this permitting action requires the permittee to file an annual certification with the Department.

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

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

- j. Transported wastes – The previous permitting action authorized the District to receive and treat up to 5,000 gallons per week of transported waste. Department rule Chapter 555, *Standards For The Addition of Transported Wastes to Wastewater Treatment Facilities*, limits the quantity of transported waste received at a facility to 1% of the design capacity of treatment facility if the facility utilizes a side stream or storage method of introduction into the influent flow, or 0.5% of the design capacity of the facility if the facility does not utilize the side stream or storage method of introduction into the influent flow. A facility may receive more than 1% of the design capacity on a case-by-case basis. The permittee has requested the Department carry forward the daily quantity of transported waste it is authorized to receive and treat up to 2,000 gpd as it does not utilize the side stream/storage method of metering septage into the facility's influent flow. With a design capacity of 0.45 MGD, 2,000 gpd only represents 0.4% of said capacity.

The permittee has submitted an up-to-date Septage Management Plan to the Department as an exhibit in the application for permit renewal. The Department has reviewed and approved said plan and determined that under normal operating conditions, the receipt and treatment of 2,000 gpd and 5,000 gallons per week of septage/transported waste at the facility will not cause or contribute to upset conditions of the treatment process.

- k. Total phosphorus and orthophosphate – The Fact Sheet of the 8/21/06 permit contained the following italicized text:

The previous permitting action established a water quality based monthly average total phosphorus limit of 3.8 lbs/day. The 8/22/01 permit established a schedule of compliance with a deadline of June 1, 2004 to comply with said limit. The permittee installed a phosphorus treatment system consisting of ferric chloride addition to precipitate out phosphorus. A review of the monitoring data for the summers of 2004 and 2005 (June – September) indicate the monthly average mass ranged from 1.7 lbs/day to 2.9 lbs/day with an arithmetic mean of 2.4 lbs/day. As for the daily maximum mass, the discharge levels ranged from 2.0 lbs/day to 3.6 lbs/day with an arithmetic mean of 2.9 lbs/day. Daily maximum concentration levels of total phosphorus discharged range from 1.4 mg/L to 2.0 mg/L with an arithmetic mean of 1.2 mg/L.

Subsequent to the issuance of the 8/22/01 permit, the Department, the Town of Wilton and the University of Maine at Farmington have conducted ambient water quality sampling of Wilson Stream above and below the point of discharge from the Town's waste water treatment facility. Though the sampling regime's have varied, all three entities report the water quality of Wilson Stream is attaining Class C water quality standards. Based on the results of this monitoring, the Department is placing the total phosphorus limitation into abeyance and replacing it with a "report only" requirement for both total phosphorus and orthophosphate. Orthophosphate monitoring is being required in an effort to determine the relationship between total phosphorus and the bio-available orthophosphate. Once enough data is collected to develop a statistically defensible relationship between the two forms of phosphorus, the permittee may petition the Department to modify the permit to suspend or delete the monitoring requirement for orthophosphate.

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

Between June of 2008 and September 2010 the permittee conducted total phosphorus and orthophosphorus on its effluent and reported values to the Department as follows:

Total phosphorus Mass (n=12)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	Report	2.2 – 15	6.3
Daily Maximum	Report	2.2 - 24	7.6

Total phosphorus Concentration (n=12)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	Report	2.0 – 6.3	3.1
Daily Maximum	Report	2.7 – 6.7	3.2

Ortho phosphorus Mass (n=12)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	Report	4.0 – 7.9	5.1
Daily Maximum	Report	4.8 – 7.9	5.9

Ortho phosphorus Concentration (n=12)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	Report	1.8 – 3.2	2.4
Daily Maximum	Report	1.9 – 3.3	2.8

Based on the consistency of the data, the Department suspended the monitoring and reporting requirements for total phosphorus and orthophosphorus when the June 22, 2011 permit was issued.

However, the USEPA is requiring the Department to perform reasonable potential calculations on the discharge of total phosphorus from all facilities that discharge to fresh waters. *Waste Discharge License Conditions*, 06-096 CMR 523 specifies that water quality based limits are necessary when it has been determined that a discharge has a reasonable potential to cause or contribute to an excursion above any State water quality standard including State narrative criteria.¹ In addition, 06-096 CMR 523 specifies that water quality based limits may be based upon criterion derived from a proposed State criterion, or an explicit State policy or regulation interpreting its narrative water quality criterion, supplemented with other relevant information which may include: EPA's Water Quality Standards Handbook, October 1983, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration, and current EPA criteria documents.²

¹ *Waste Discharge License Conditions*, 06-096 CMR 523(5)(d)(1)(i) (effective date January 12, 2001)

² 06-096 CMR 523(5)(d)(1)(vi)(A)

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

USEPA's Quality Criteria for Water 1986 (Gold Book) puts forth an in-stream phosphorus concentration goal of less than 0.100 mg/L in streams or other flowing waters not discharging directly to lakes or impoundments, to prevent nuisance algal growth. The use of the 0.100 mg/L Gold Book goal is consistent with the requirements of 06-096 CMR 523 noted above for use in a reasonable potential (RP) calculation.

Based on the above rationale, the Department has chosen to utilize the Gold Book goal of 0.100 mg/L. It is the Department's intent to continue to make determinations of actual attainment or impairment based upon environmental response indicators from specific water bodies. The use of the Gold Book goal of 0.100 mg/L for use in the RP calculation will enable the Department to establish water quality based limits in a manner that is reasonable and that appropriately establishes the potential for impairment, while providing an opportunity to acquire environmental response indicator data, numeric nutrient indicator data, and facility data as needed to refine the establishment of site-specific water quality-based limits for phosphorus. Therefore, this permit may be reopened during the term of the permit to modify any reasonable potential calculation, phosphorus limits, or monitoring requirements based on site-specific data.

For the background concentration in Wilson Stream just upstream of the Wilton discharge, the Department collected three test results during summer of 2014 and the highest result was 0.009 mg/L. To be conservative, the Department is utilizing this maximum background concentration in determining whether the discharge has a reasonable potential to exceed the AWQ goal of 0.100 mg/L. As for effluent, the Wilton facility collected three samples during the summer of 2014 for total phosphorus with values ranging from 8.8 mg/L to 16 mg/L with a mean effluent concentration of 11.3 mg/L.

Using the following calculation and criteria, the Wilton facility exceeds the EPA's Gold Book goal of 0.100 mg/L for phosphorus and the Department's 06-096 CMR Chapter 583 draft criteria of 0.033 mg/L for Class C waters. The calculations are as follows:

$$Cr = \frac{QeCe + QsCs}{Qr}$$

Qe = effluent flow i.e. facility design flow	=	0.45 MGD
Ce = effluent pollutant concentration	=	11.3 mg/L
Qs = 7Q10 flow of receiving water	=	4.85 MGD (7.5 cfs)
Cs = upstream concentration	=	0.009 mg/L
Qr = receiving water flow	=	5.3 MGD
Cr = receiving water concentration	=	?

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

$$Cr = \frac{(0.45 \text{ MGD} \times 11.3 \text{ mg/L}) + (4.85 \text{ MGD} \times 0.009 \text{ mg/L})}{5.3 \text{ MGD}} = 0.97 \text{ mg/L}$$

$$Cr = 0.97 \text{ mg/L} > 0.100 \text{ mg/L} \Rightarrow \text{Exceedance}$$

$$Cr = 0.97 \text{ mg/L} > 0.033 \text{ mg/L} \Rightarrow \text{Exceedance}$$

Therefore, a seasonal (June 1 – September 30) monthly average water quality based limit for total phosphorus is being established in this permit and was derived as follows:

$$\text{EOP concentration} = [\text{Dilution factor} \times 0.91 \times \text{AWQC}] + [0.09 \times \text{AWQC}]$$

$$\text{Mass limit} = (\text{EOP concentration in mg/L})(8.34 \text{ lbs/gal})(\text{Permit flow limit in MGD})$$

$$\text{Gold Book goal} = 0.100 \text{ mg/L}$$

$$\text{Dilution factor} = 11.8:1$$

$$\text{EOP concentration} = [\text{Dilution factor} \times 0.91 \times \text{AWQC}] + [0.09 \times \text{AWQC}]$$

$$\text{EOP} = [11.8 \times 0.91 \times 0.100 \text{ mg/L}] + [0.09 \times 0.100 \text{ mg/L}] = 1.08 \text{ mg/L}$$

Based on a permitted flow of 0.45 MGD, EOP mass limits are as follows:

$$(1.08 \text{ mg/L})(8.34)(0.45 \text{ MGD}) = 4.0 \text{ lbs/day}$$

This permit is establishing a seasonal (June 1 – September 30) 1/Week monitoring requirement for total phosphorus.

The permittee has demonstrated it cannot comply with the water quality based limit of 4.0 lbs/day upon permit issuance and therefore needs a schedule of compliance to do so. Maine law 38 M.R.S.A. §414(2) *Schedules of Compliance*, clearly authorizes the Department to establish schedules of compliance for water quality based limitations within the terms and conditions of a license. Said law states “*Within the terms and conditions of a license, the department may establish a schedule of compliance for a final effluent limitation based on a water quality standard adopted after July 1, 1977. When a final effluent limitation is based on new or more stringent technology-based treatment requirements, the department may establish a schedule of compliance consistent with the time limitations permitted for compliance under the Federal Water Pollution Control Act, Public Law 92-500, as amended. A schedule of compliance may include interim and final dates for attainment of specific standards necessary to carry out the purposes of this subchapter and must be as short as possible, based on consideration of the technological, economic and environmental impact of the steps necessary to attain those standards.*”

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

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

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

On February 11, 2016, the Town submitted a proposed schedule of compliance with interim dates. The Department has reviewed the proposed schedule and has made a best professional judgment that the schedule is in conformance with Maine law as it is as short as possible, based on consideration of the technological, economic and environmental impact of the steps necessary to attain the water quality based limit. Special Condition A, *Effluent Limitations and Monitoring Requirements* and Special Condition N, *Schedule of Compliance – Total Phosphorus*, establishes the schedule of compliance along with interim dates.

7. ANTI-BACKSLIDING

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

This permitting action is establishing less stringent mass limitations for total copper and total lead based on new information (updated statistical evaluation) that was not available at the time of the previous permitting action. The Department has made the determination that authorizing these less stringent limitations are appropriate and these levels will not cause or contribute to failure of the receiving water to meet its classification standards.

8. ANTI-DEGRADATION - IMPACT ON RECEIVING WATER QUALITY

Maine's anti-degradation policy is included in 38 M.R.S.A., Section 464(4)(F) and addressed in the *Conclusions* section of this permit. Pursuant to the policy, where a new or increased discharge is proposed, the Department shall determine whether the discharge will result in a significant lowering of existing water quality. Increased discharge means a discharge that would add one or more new pollutants to an existing effluent, increase existing levels of pollutants in an effluent, or cause an effluent to exceed one or more of its current licensed discharge flow or effluent limits, after the application of applicable best practicable treatment technology.

This permitting action revises previously established effluent limitations and monitoring requirements for total copper and total lead. The rationale for these actions is contained in Section 6(i) of this Fact Sheet. Based on the information provided in the referenced section, the Department has made the determination that the discharge approved by this permit will not result in a significant lowering of water quality. As permitted, the Department has determined the existing and designated water uses will be maintained and protected and the discharge will not cause or contribute to the failure of Wilson Stream to meet standards for Class C classification.

9. PUBLIC COMMENTS

Public notice of this application was made in the Lewiston Sun Journal newspaper on January 23, 2016. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

10. DEPARTMENT CONTACTS

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

Gregg Wood
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017
E-mail: gregg.wood@maine.gov

Telephone: (207) 287-7693

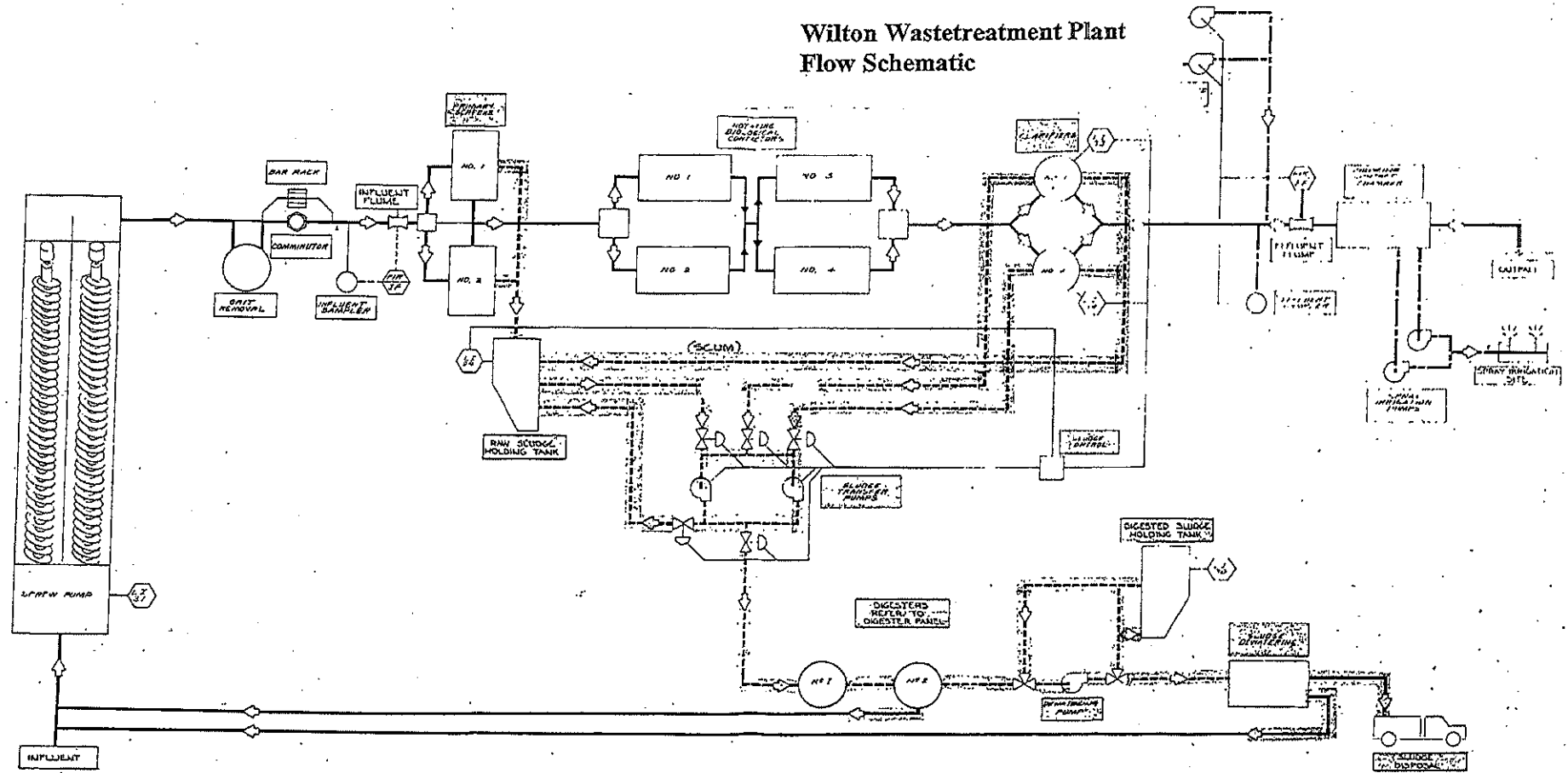
11. RESPONSE TO COMMENTS

During the period of April 25, 2016, 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 did not receive comments from the permittee, state or federal 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.

ATTACHMENT A

ATTACHMENT B

Wilton Wastetreatment Plant Flow Schematic



WILTON, MAINE.
WASTEWATER TREATMENT PLANT

ATTACHMENT 1

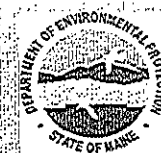
ATTACHMENT C

3/17/2016

WET TEST REPORT

Data for tests conducted for the period

17/Mar/2011 - 17/Mar/2016



WILTON

NPDES= ME010191

Effluent Limit: Acute (%) = 8.494

Chronic (%) = 8.494

Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	100	05/15/2011	8.494		
TROUT	A_NOEL	100	12/04/2011	8.494		
TROUT	A_NOEL	100	03/18/2012	8.494		
TROUT	A_NOEL	100	09/30/2012	8.494		
TROUT	A_NOEL	100	06/09/2013	8.494		
TROUT	A_NOEL	100	12/08/2013	8.494		
TROUT	A_NOEL	100	03/30/2014	8.494		
TROUT	A_NOEL	100	09/07/2014	8.494		
TROUT	A_NOEL	100	04/07/2015	8.494		
TROUT	A_NOEL	100	07/01/2015	8.494		
TROUT	A_NOEL	100	10/06/2015	8.494		
TROUT	C_NOEL	100	05/15/2011	8.494		
TROUT	C_NOEL	100	12/04/2011	8.494		
TROUT	C_NOEL	100	03/18/2012	8.494		
TROUT	C_NOEL	100	09/30/2012	8.494		
TROUT	C_NOEL	100	06/09/2013	8.494		
TROUT	C_NOEL	100	12/08/2013	8.494		
TROUT	C_NOEL	100	03/30/2014	8.494		
TROUT	C_NOEL	100	09/07/2014	8.494		
TROUT	C_NOEL	100	04/07/2015	8.494		
TROUT	C_NOEL	100	07/01/2015	8.494		
TROUT	C_NOEL	100	10/06/2015	8.494		
WATER FLEA	A_NOEL	100	05/15/2011	8.494		
WATER FLEA	A_NOEL	100	12/04/2011	8.494		
WATER FLEA	A_NOEL	100	03/18/2012	8.494		
WATER FLEA	A_NOEL	100	09/30/2012	8.494		
WATER FLEA	A_NOEL	100	06/09/2013	8.494		
WATER FLEA	A_NOEL	100	12/08/2013	8.494		
WATER FLEA	A_NOEL	100	03/30/2014	8.494		
WATER FLEA	A_NOEL	100	09/07/2014	8.494		
WATER FLEA	A_NOEL	100	04/07/2015	8.494		
WATER FLEA	A_NOEL	100	07/01/2015	8.494		
WATER FLEA	A_NOEL	100	11/03/2015	8.494		
WATER FLEA	C_NOEL	100	05/15/2011	8.494		

WATER FLEA	C_NOEL	100	12/04/2011	8.494
WATER FLEA	C_NOEL	50	03/18/2012	8.494
WATER FLEA	C_NOEL	100	09/30/2012	8.494
WATER FLEA	C_NOEL	100	06/09/2013	8.494
WATER FLEA	C_NOEL	100	12/08/2013	8.494
WATER FLEA	C_NOEL	100	03/30/2014	8.494
WATER FLEA	C_NOEL	100	09/07/2014	8.494
WATER FLEA	C_NOEL	100	04/07/2015	8.494
WATER FLEA	C_NOEL	100	07/01/2015	8.494
WATER FLEA	C_NOEL	100	11/03/2015	8.494

ATTACHMENT D

3/17/2016

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 17/Mar/2011 - 17/Mar/2016



Facility Name: TOWN OF WILTON

NPDES: ME0101915

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
07/01/2015	0.22	0.31	133	13	28	46	25	10	11	F	0

Facility Name: WILTON

NPDES: ME0101915

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
05/15/2011	0.29	0.37	22	10	0	0	0	12	0	F	0

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
07/20/2011	0.20	0.19	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		
12/04/2011	0.24	0.24	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		
03/18/2012	0.24	0.26	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		
09/30/2012	0.23	0.23	134	14	28	45	25	11	11	F	0

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
11/19/2012	0.21	0.20	3	3	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		
06/09/2013	0.26	0.27	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		
12/08/2013	0.21	0.22	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		
03/30/2014	0.21	0.31	18	7	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		
09/07/2014	0.20	0.21	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		
04/07/2015	0.31	0.27	20	9	0	0	0	11	0	F	0

Key:

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

3/17/2016

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 17/Mar/2011 - 17/Mar/2016



Facility Name: WILTON

NPDES: ME0101915

Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
04/28/2015	0.31	0.27	1	1	0	0	0	0	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
10/06/2015	NR	NR	21	10	0	0	0	11	0	F	0
<hr/>											
Test Date	Monthly (Flow MGD)	Daily	Total Test Number	Test # By Group						Clean	Hg
				M	V	BN	P	O	A		
11/03/2015	0.21	0.19	19	10	0	0	0	9	0	F	0

Key:

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

3/17/2016

FACILITY PRIORITY POLLUTANT DATA REPORT

Data Date Range: 17/Mar/2011 - 17/Mar/2016



Facility name: WILTON

Permit Number: ME0101915

Parameter: COPPER

Test date

Result (ug/l)

Lsthan

05/15/2011

13.000

N

12/04/2011

21.000

N

03/18/2012

13.000

N

09/30/2012

12.000

N

11/19/2012

21.000

N

06/09/2013

10.000

N

12/08/2013

14.000

N

03/30/2014

12.000

N

09/07/2014

14.000

N

04/07/2015

19.500

N

10/06/2015

25.100

N

11/03/2015

18.700

N

Parameter: LEAD

Test date

Result (ug/l)

Lsthan

05/15/2011

5.000

N

12/04/2011

5.000

N

06/09/2013

2.000

N

03/30/2014

2.000

N

09/07/2014

7.000

N

10/06/2015

1.200

N

11/03/2015

0.958

N

ATTACHMENT E

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

DATE: October 2008

TO: Interested Parties

FROM: Dennis Merrill, DEP

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

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

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

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

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

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

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

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

Maine Department of Environmental Protection

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maine Department of Environmental Protection

Working Definitions of Terms Used in the DeTox System.

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

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

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

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

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

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

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

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

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

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

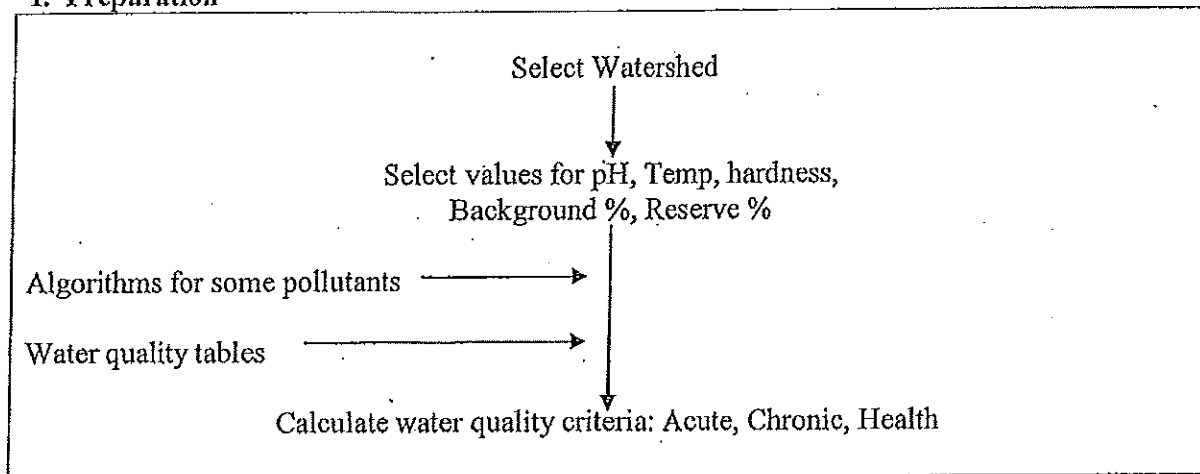
Segment allocation. One of three ways of developing an *allocation*. The amount is set by multiplying a facility's *historical discharge percentage* for a specific pollutant by the *assimilative capacity* for that pollutant and criterion. A facility will have different allocation percentages for each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

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

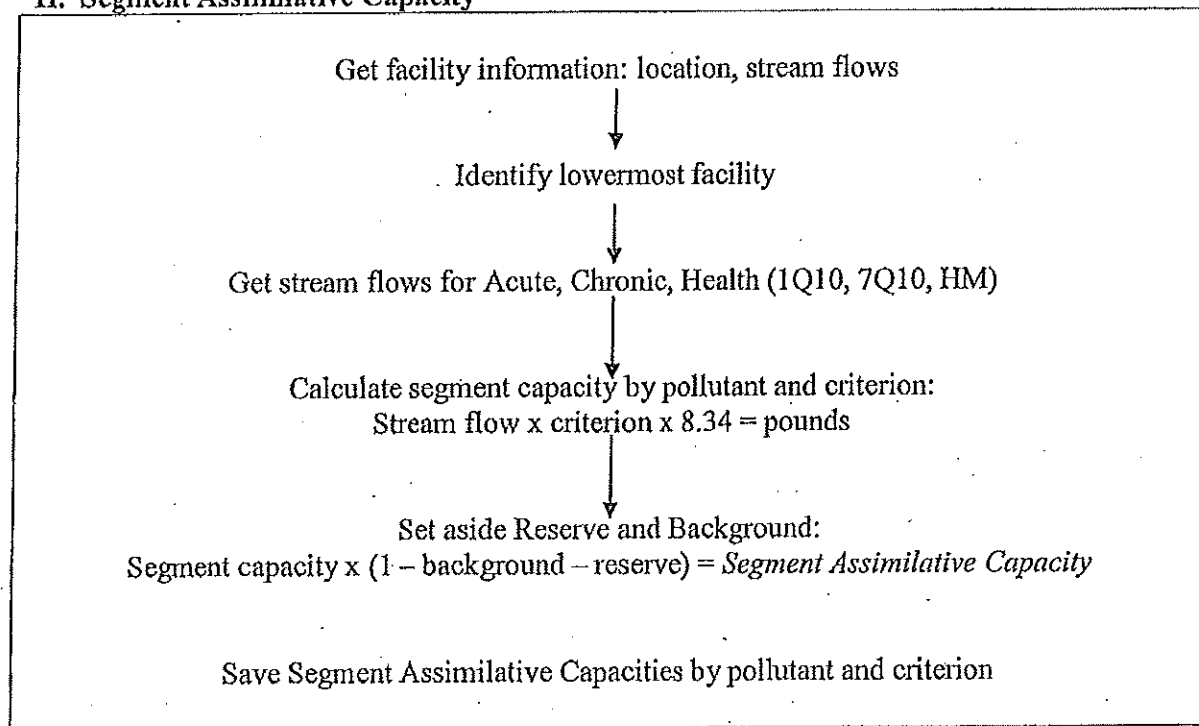
Water quality criteria. Standards for acceptable in-stream or ambient levels of pollutants. These are established in the Department's Chapter 584 and are expressed as concentrations in ug/L. There may be separate standards for acute and chronic protection aquatic life and/or human health. Each criterion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

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

I. Preparation

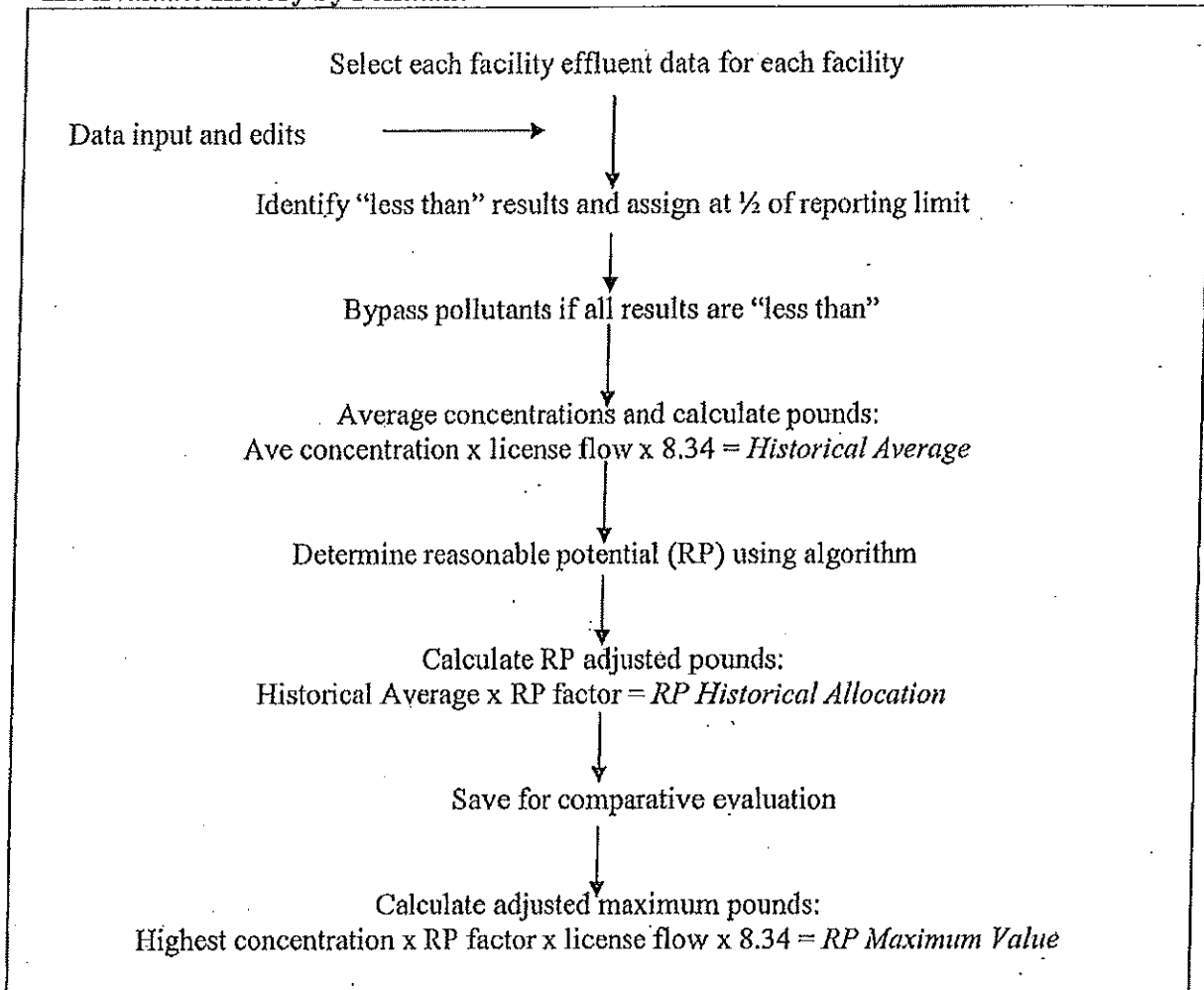


II. Segment Assimilative Capacity

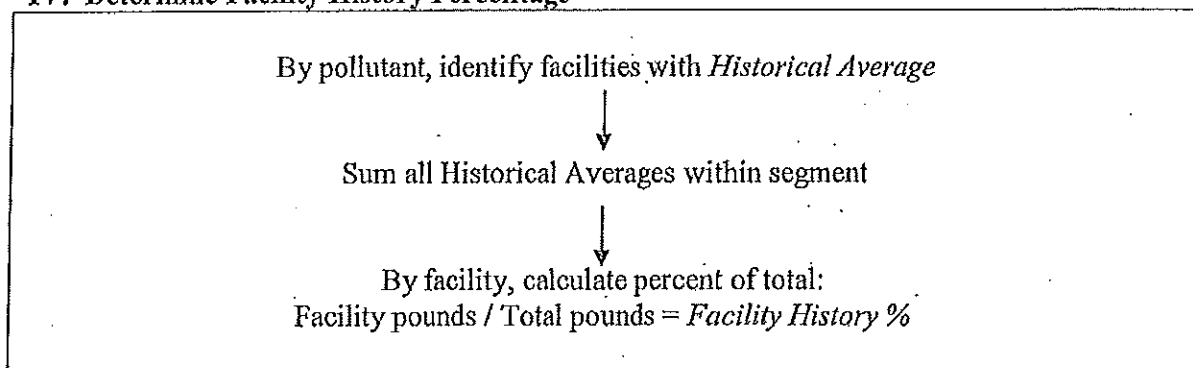


Maine Department of Environmental Protection
General Processing Steps in "DeTox"

III. Evaluate History by Pollutant

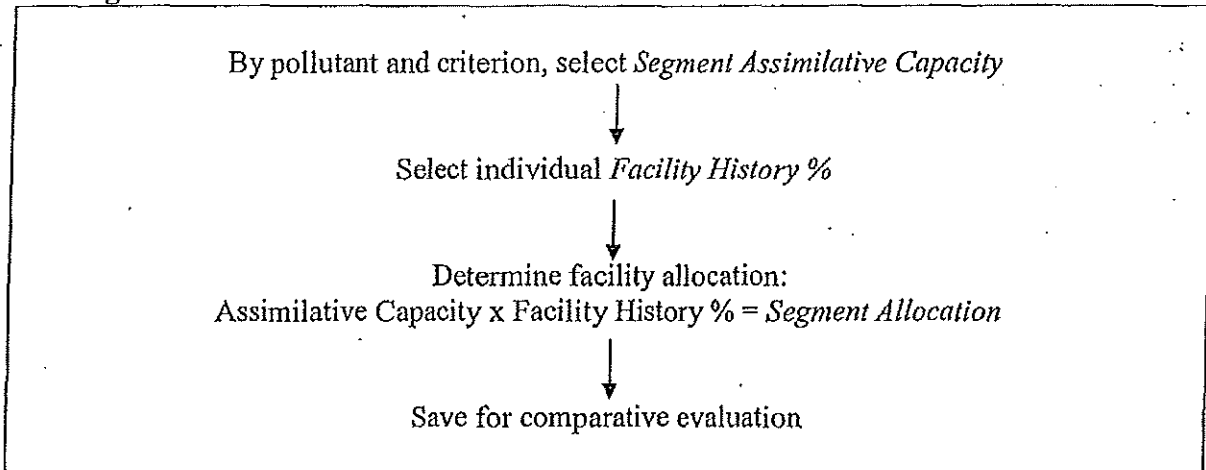


IV. Determine Facility History Percentage

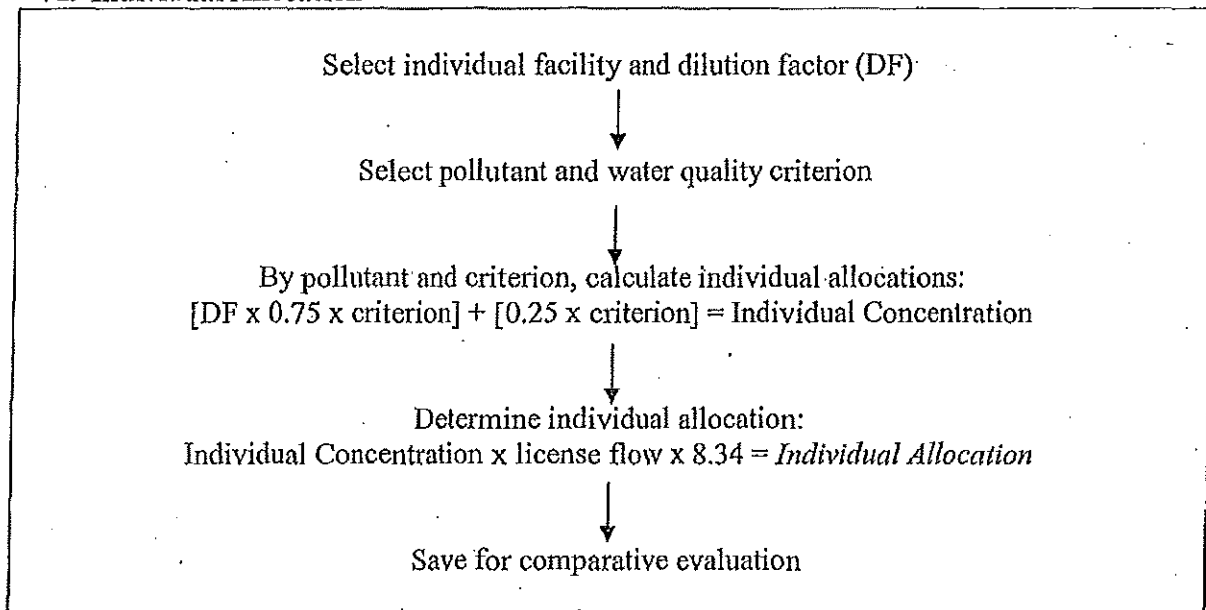


Maine Department of Environmental Protection
General Processing Steps in "DeTox"

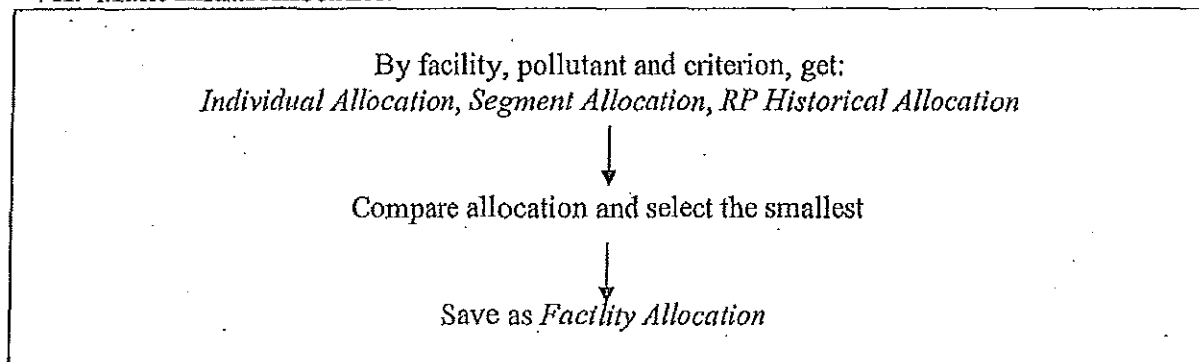
V. Segment Allocation



VI. Individual Allocation

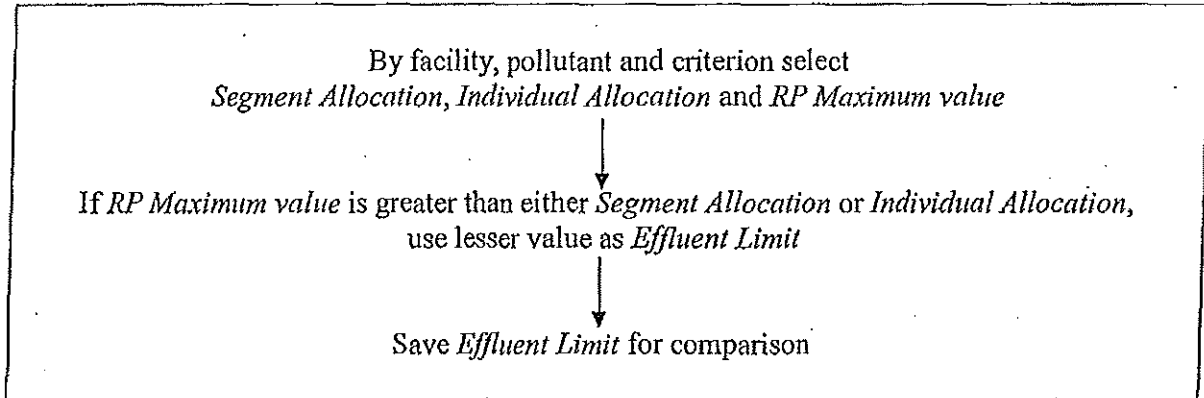


VII. Make Initial Allocation

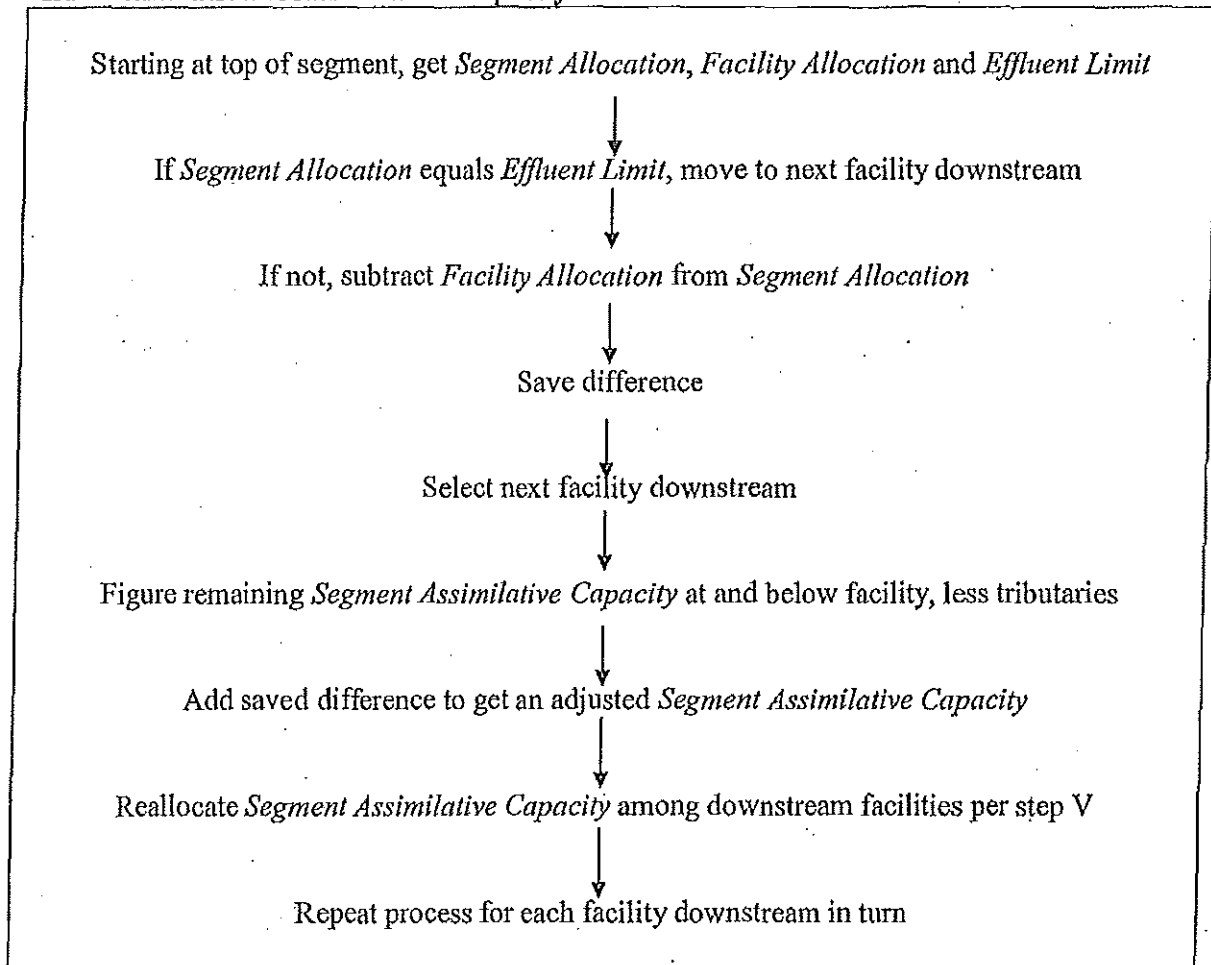


Maine Department of Environmental Protection
General Processing Steps in "DeTox"

VIII. Evaluate Need for Effluent Limits



IX. Reallocation of Assimilative Capacity



ATTACHMENT F

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES# _____ Facility Name _____

Since the effective date of your permit, have there been;		NO	YES Describe in comments section
1	Increases in the number, types, and flows of industrial, commercial, or domestic discharges to the facility that in the judgment of the Department may cause the receiving water to become toxic?	<input type="checkbox"/>	<input type="checkbox"/>
2	Changes in the condition or operations of the facility that may increase the toxicity of the discharge?	<input type="checkbox"/>	<input type="checkbox"/>
3	Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge?	<input type="checkbox"/>	<input type="checkbox"/>
4	Increases in the type or volume of hauled wastes accepted by the facility?	<input type="checkbox"/>	<input type="checkbox"/>

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

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

This form may be used to meet the requirements of Chapter 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.

Scheduled Toxicity Testing for the next calendar year

Test Conducted	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
WET Testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Priority Pollutant Testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analytical Chemistry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other toxic parameters ¹	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please place an "X" in each of the boxes that apply to when you will be conducting any one of the three test types during the next calendar year.

¹ This only applies to parameters where testing is required at a rate less frequently than quarterly.



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.
