STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

October 3, 2016

Mr. Douglas Clark
Superintendent
Gardiner Waste Water Treatment Facility
6 Church Street
Gardiner, ME. 04345
e-mail: dclarck@gardinermaine.com

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101702
Maine Waste Discharge License (WDL) Application #W002655-6D-M-R
Final Permit

Dear Mr. Clark:

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. Compliance with this permit/license will protect water quality.

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. Your Department compliance inspector copied below is also a resource that can assist you with compliance. Please do not hesitate to contact them with any questions.

Thank you for your efforts to protect and improve the waters of the great state of Maine!

Sincerely,

Gregg Wood
Division of Water Quality Management
Bureau of Water Quality

Enc.

cc: Beth DeHaas, DEP/CMRO Lori Mitchell, DEP/CMRO
Sandy Mojica, USEPA Olga Vergara, USEPA Marelyn Vega, 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

CITY OF GARDINER	)	MAINE POLLUTANT DISCHARGE
PUBLICLY OWNED TREATMENT WORKS	)	ELIMINATION SYSTEM PERMIT
GARDINER, KENNEBEC COUNTY, MAINE	)	AND
ME0101702	)	WASTE DISCHARGE LICENSE
W002655-6D-M-R **APPROVAL**	)	**RENEWAL**

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 CITY OF GARDINER (City/permittee hereinafter) with its supportive data, agency review comments, and other related material on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The City has submitted a timely and complete application to the Department for the renewal of combination Maine Pollutant Discharge Elimination System Permit (MEDPES) # ME0101702/Waste Discharge License (WDL) #W002655-6D-I-R (permit hereinafter) which was issued by the Department on October 12, 2011, for a five-year term. The 10/12/11 permit authorized the discharge of up to a monthly average flow of 4.5 million gallons per day (MGD) of secondary treated sanitary waste water, allowed the use of a secondary treatment bypass structure at the facility during certain wet weather events and authorized the discharge of an unspecified quantity of untreated combined sanitary and storm water from one (1) combined sewer overflow (CSO) outfall to the Kennebec River, Class B, in Gardiner, Maine. See **Attachment A** of the attached Fact Sheet for site location maps.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the previous permitting action except it is:

Outfall 001A – (secondary treated waste water)

1. Revising the minimum monitoring frequencies for Outfall #001C for biochemical oxygen demand (BOD_5), total suspended solids (TSS) and *E. coli* bacteria from 3/Week to 2/Week, settleable solids from 5/Week to 3/Week and total residual chlorine from 2/Day to 1/Day, based on a statistical evaluation of test results for the most current 43 months.

2. Incorporating the interim mercury limits established by the Department for this facility pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001).

3. Eliminating the monthly average water quality based mass limits for total lead as the discharge no longer has a reasonable potential to exceed the acute ambient water quality criteria (AWQC) for total lead based on an updated statistical evaluation (Report ID #832) of test results for the most current 60 months.

4. Eliminating the daily maximum water quality based mass limits for total aluminum as the discharge no longer has a reasonable potential to exceed the AWQC for aluminum based on an updated statistical evaluation (Report ID #832) of test results for the most current 60 months.

5. Eliminating the monthly average water quality based concentration limit for total aluminum pursuant to Maine law 38 M.R.S.A. §464, ¶¶ K promulgated subsequent to the previous permit issuance 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.*"

6. Reducing the monthly average water quality based limit for total aluminum from 5.5 lbs/day to 4.4 lbs/day based on an updated statistical evaluation (Report ID 832) for the Kennebec River.

7. Requiring the permittee to conduct an Industrial Waste Survey (IWS) pursuant to Special Condition D of this permit.

Outfall #001B – (CSO related bypass - internal waste stream)

8. Eliminating the percent (%) removal and surface loading rate reporting requirements from Outfall #001B (CSO Related Bypass) as the data collected to date has limited value.

PERMIT SUMMARY (cont'd)

9. Eliminating the daily maximum numeric limitations for *E. coli* bacteria and total residual chlorine for Outfall #001B as limiting an internal waste stream is not necessary given compliance with limitations in the permit is determined after the primary treated and secondary treated waste streams are blended.

Outfall #002- (Blended effluent)

10. Establishing numeric daily maximum technology based mass limitations for BOD and TSS on the discharge of blended effluent to be consistent with the National CSO policy.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated August 26, 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 national 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.

CONCLUSIONS (cont'd)

4. The discharges` will be subject to effluent limitations that require application of best practicable treatment.

ACTION

THEREFORE, the Department APPROVES the application of the CITY OF GARDINER to discharge up to a monthly average flow of 4.5 million gallons per day (MGD) of secondary treated sanitary waste water, allows the use of a CSO related bypass of secondary treatment during certain wet weather events and the discharge of an unspecified quantity of untreated combined sanitary and storm water from one (1) combined sewer overflow outfall to the Kennebec River, Class B, in Gardiner, Maine. The discharges shall be subject to the attached conditions and all applicable standards and regulations:

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 and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all 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) (e) last amended October 9, 2015.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS 4th DAY OF October 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Kuhns
For Paul Mercer, Commissioner

Filed
OCT 04 2016
State of Maine
Board of Environmental Protection

Date of initial receipt of application: August 24, 2016
Date of application acceptance: August 25, 2016
Date filed with Board of Environmental Protection

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

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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

SECONDARY TREATED WASTE WATER - 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]	4.5 MGD [03]	---	Report (MGD)	---	---	---	Continuous [99/99]	Recorder [RC]
Biochemical Oxygen Demand (BOD_5) [00310]	1,126 lbs/Day [26]	1,689 lbs/Day [26]	Report lbs/Day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L (1a) [19]	2/Week [02/07]	24-Hour Composite [24]
BOD_5 % Removal (1b) [81010]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]
BOD_5 [00310] ***(When bypass is active)***	1,126 lbs/Day [26]	1,689 lbs/Day [26]	Report lbs/Day [26]	30 mg/L [19]	45 mg/L [19]	Report mg/L [19]	2/Week [02/07]	Composite [24]
Total Suspended Solids (TSS) [00530]	1,126 lbs/Day [26]	1,689 lbs/Day [26]	Report lbs/Day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L (1a) [19]	2/Week [02/07]	24-Hour Composite [24]
TSS % Removal (1b) [81011]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]
TSS [00530] ***(When bypass is active)***	1,126 lbs/Day [26]	1,689 lbs/Day [26]	Report lbs/Day [26]	30 mg/L [19]	45 mg/L [19]	Report mg/L [19]	2/Week [02/07]	Composite [24]
Settleable Solids [00545]	---	---	---	---	---	0.3 ml/L [25]	3/Week [03/07]	Grab [GR]
E. coli Bacteria (2) [31633] *(May 15 – September 30)*	---	---	---	64/100 mL (3) [13]	---	427/100 mL [13]	2/Week [02/07]	Grab [GR]
Total Residual Chlorine (4) [50060]	---	---	---	---	---	1.0 mg/L [19]	1/Day [01/01]	Grab [GR]
pH (Std. Units) [00400]	---	---	---	---	---	6.0-9.0 [12]	1/Day [01/01]	Grab [GR]

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

SECONDARY TREATED WASTE WATERS - OUTFALL #001A

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Aluminum (Total) *[01105]*	4.4 lbs/day *[26]*	---	---	Report ug/L *[28]*	---	---	1/Year *[01/YR]*	24-Hour Composite *[24]*
Mercury (Total) (5) *[71900]*	---	---	---	12.7 ng/L *[3M]*	---	19.1 ng/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*

SCREENING LEVEL - 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.

SECONDARY TREATED WASTE WATERS - OUTFALL #001A

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity(6)						
Acute – NOEL						
Ceriodaphnia dubia (Water flea) *[TDA3B]*	---	---	--	Report % *[23]*	1/Year *[01/YR]*	24-Hour
Salvelinus fontinalis (Brook trout) *[TDA6F]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Composite *[24]*
Chronic – NOEL						
Ceriodaphnia dubia (Water flea) *[TBP3B]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	24-Hour
Salvelinus fontinalis (Brook trout) *[TBQ6F]*	---	---	---	Report % *[23]*	1/Year *[01YR]*	Composite *[24]*
Analytical chemistry(7,9) *[51477]*	---	---	---	Report ug/L *[28]*	1/Quarter *[01/90]*	24-Hour Composite/ Grab *[24]*
Priority Pollutants(8,9) *[50008]*	---	---	---	Report ug/L *[28]*	1/Year *[01/YR]*	24-Hour Composite/ Grab *[24]*

SPECIAL CONDITIONS

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

Consistent with CSO bypass regulations, the permittee is allowed to bypass secondary treatment and provide primary treatment only for flows conveyed to **Outfall #001B (administrative outfall)** prior to combining with secondary treated waste water. Bypassing secondary treatment is allowed when the influent flow to the treatment plant has exceeded a peak hourly flow rate of 3,125 gpm (4.5 MGD). Allowance to bypass secondary treatment will be reviewed and may be modified or terminated pursuant to Special Condition N, *Reopening of Permit for Modification,* if there is substantial change in the volume or character of pollutants in the collection/treatment system. Also see supplemental report form, *DEP-49-CSO Form For Use With Dedicated CSO Primary Clarifier*, **Attachment F** of this permit. **Outfall 001B** must be monitored as follows:

PRIMARY TREATED WASTE WATERS - OUTFALL #001B (Bypass of Secondary Treatment)

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Overflow Use, Occurrences[10] [74062]	---	---	Report (# of days) [93]	---	1/Discharge Day [01/DD]	Record Total [RT]
Influent Flow Rate Minimum [00058]	---	Report (gpm) [11] [78]	---	---	Instantaneous [99/99]	Recorder [RC]
Flow, MGD [50050]	Report (Total MGD) [03]	Report (MGD) [03]	---	---	Continuous [99/99]	Recorder [RC]
BOD5 [00310]	---	Report lbs/day [26]	---	Report mg/L [19]	2/Week[12] [02/07]	Composite [24]
TSS [00530]	---	Report lbs/day [26]	---	Report mg/L [19]	2/Week[12] [02/07]	Composite [24]
E. coli Bacteria [31633] *(May 15 – September 30)*	---	---	---	Report col/100 ml [13]	3/Week[12] [03/07]	Grab [GR]
Total Residual Chlorine [50060]	---	---	--	Report mg/L [19]	1/Day[12] [01/01]	Grab [GR]

SPECIAL CONDITIONS

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

Consistent with CSO bypass regulations, the permittee is allowed to bypass secondary treatment and provide primary treatment only **Outfall #002 (administrative outfall)** prior to combining with secondary treated waste water. Bypassing secondary treatment is allowed when the influent flow to the treatment plant has exceeded the peak hourly flow rate of 3,125 gpm (4.5 MGD). Allowance to bypass secondary treatment will be reviewed and may be modified or terminated pursuant to Special Condition N, *Reopening of Permit for Modification,* if there is substantial change in the volume or character of pollutants in the collection/treatment system. Also see supplemental report form, *DEP-49-CSO Form For Use With Dedicated CSO Primary Clarifier*, **Attachment F** of this permit. **Outfall 002** must be monitored as follows:

BLENDED EFFLUENT (OUTFALL #002)

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow, MGD [50050]		Report (MGD) [03]	---	---	When Discharging [WH/DS]	Calculate [CA]
BOD5 [00310]	---	3,628 lbs/day(13) [26]	---	Report mg/L(14) [19]	2/Week(12) [02/07]	Calculate [CA]
TSS [00530]	---	5,534 lbs/day(13) [26]	---	Report mg/L(14) [19]	2/Week(12) [02/07]	Calculate [CA]
E. coli Bacteria (2) [31633] *(May 15 – September 30)*	---	---	---	427 col/100 ml(14) [13]	2/Week(12) [02/07]	Calculate [CA]
Total Residual Chlorine(4) [50060]	---	---	--	1.0 mg/L(14) [19]	1/Day(12) [01/01]	Calculate [CA]

SPECIAL CONDITIONS

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

Footnotes:

Sampling Locations:

Influent sampling for BOD_5 and TSS must be sampled after the bar screen but prior to the primary sedimentation basins. Note: Rolling screens are only in the process flow during wet weather events.

Primary (Secondary Treatment Bypass) and Secondary Treated Effluent must be sampled for all parameters at the ends of the respective chlorine contact chambers.

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 analyzed by laboratories operated by waste discharge facilities 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 (last amended 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 results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

OUTFALL 001A – Secondary treatment

1. **BOD & TSS**

   a. **Outfall #001A** – Limitations for Outfall #001A remain in effect at all times with the exception of daily maximum concentration limits of 50 mg/L for BOD and TSS on any day when the bypass of secondary treatment is active and any sample results obtained on these days are not to be included in calculations to determine compliance with monthly or weekly average limitations.

SPECIAL CONDITIONS

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

Footnotes:

OUTFALL #001A – Secondary treatment

b. **Percent removal** – For secondary treated waste waters, the facility must maintain a minimum of 85 percent removal of both BOD_5 and TSS. Percent removal shall be based on a monthly average value calculated based on influent and effluent concentrations. The percent removal shall be waived if the calculated percent removal is less than 85% and the monthly average influent concentration is less than 200 mg/L. For instances when this occurs, the facility shall report *"N-9"* on the monthly Discharge Monitoring Report.

2. ***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.

3. ***E. coli* bacteria** – The monthly average limitation is a geometric mean limitation and must be calculated and reported as such.

4. **Total residual chlorine (TRC)** – Limitations and monitoring requirements are in effect anytime elemental chlorine or chlorine based compounds are utilized to disinfect the discharge(s). The permittee must utilize an EPA-approved test method capable of bracketing the TRC limitations specified in this permitting action.

5. **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 shall 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.

SPECIAL CONDITIONS

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

Footnotes:

OUTFALL #001A – Secondary treatment

6. **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 dilutions of 1.3% and 0.27%, respectively), 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 inverses of the applicable acute and chronic dilution factors of 77:1 and 368:1, respectively.

   a. **Surveillance level testing** – Surveillance level testing is waived per 06-096 CMR 530 (2)(D)(3)(b).

   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 initiate screening level WET tests at a frequency of once per year (any calendar quarter). Testing shall be conducted on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis).*

   WET test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedances of the critical acute and chronic water quality thresholds of 7.8% and 1.1%, respectively. See **Attachment B** of this permit for WET reporting forms.

   Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following U.S.E.P.A. methods manuals as modified by Department protocol for salmonids. See **Attachment C** of this permit for the Department protocol.

SPECIAL CONDITIONS

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

Footnotes:

OUTFALL #001A – Secondary treatment

i. Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, Fourth Edition, October 2002, EPA-821-R-02-013.

ii. Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002, EPA-821-R-02-012.

The permittee is also required to analyze the effluent for the parameters specified in the WET chemistry section and the parameters specified in the analytical chemistry section in **Attachment D** of this permit each time a WET test is performed.

7. **Analytical chemistry** – Refers to a suite of chemicals in **Attachment D** of the permit.

   a. **Surveillance level testing** – With the exception of total aluminum and total mercury, surveillance level testing is waived per 06-096 CMR 530 (2)(D)(3)(b).

   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 analytical chemistry testing at a minimum frequency of four times per year (4/Year) in successive calendar quarters.

8. **Priority pollutant testing** – Refers to a suite of chemicals in **Attachment D** of the permit.

   a. **Surveillance level testing** is not required pursuant to 06-096 CMR 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 shall conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year) in any calendar quarter provided the sample is representative of the discharge and any seasonal or other variations in effluent quality.

SPECIAL CONDITIONS

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

Footnotes:

OUTFALL #001A – Secondary treatment

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

Outfall #001B – Bypass of Secondary Treatment

10. **Overflow occurrence** – An overflow occurrence is defined as the period of time between initiation and cessation of flow from the storm flow chlorine contact tank. Overflow occurrences are reported in number of days. Multiple overflow occurrences may occur in a single day but should be reported as a single event.

11. **Minimum instantaneous influent flow** – The permittee must report the minimum instantaneous influent flow rate entering the headworks of the plant for each month during which there was a bypass of secondary treatment.

12. **2/Week sampling** – Sampling for BOD, TSS, *E. coli* bacteria and total residual chlorine are only required if a continuous overflow occurrence is greater than 60 minutes in duration or intermittent occurrences totaling 120 minutes during a 24-hour period. Multiple intermittent overflow occurrences in one discharge day are reported as one overflow occurrence and are sampled according to the measurement frequency specified. One composite sample for BOD5 and TSS and one grab sample for *E. coli* bacteria and total residual chlorine each must be collected per overflow occurrence that meets the timeframes specified above. Sampling of an overflow occurrence is only required if the overflow occurrence coincides with the regularly scheduled sampling days (2/Week) of the secondary treated waste stream. Composite samples must be flow proportioned from all intermittent overflows during that 24-hour period.

SPECIAL CONDITIONS

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

OUTFALL #002 – Blended effluent

13. BOD & TSS – For reporting compliance with the daily maximum mass limitation for BOD and TSS when the secondary bypass has been active, the permittee shall mathematically add the daily mass values of BOD and TSS of the secondary treated waste water (Outfall #001A) to each of the corresponding daily BOD and TSS mass values of the primary treated waste water (Outfall #001B) when the bypass is active and report the highest combined mass of BOD and TSS values for each month. Example calculation is as follows:

    (Daily BOD/TSS mass for Outfall #001A during a bypass event) + (Daily BOD/TSS mass for Outfall #001B during a bypass event) = BOD/TSS mass (daily blended effluent for each bypass event).

    Report the highest blended effluent BOD/TSS mass values for each month.

14. **BOD, TSS, Total residual chlorine & *E. coli* bacteria** - To fulfill the daily maximum reporting concentration requirements for BOD, TSS and total residual and the bacteria counts for *E. coli* bacteria when the secondary bypass has been active, the permittee shall report the daily maximum flow weighted concentration and bacteria count for each month in accordance with the following equation:

    [(Daily BOD/TSS/TRC/concentration and bacteria count of Outfall #001A for each bypass event) x (Daily flow of Outfall #001A for each bypass event)

    +

    (Daily BOD/TSS/TRC/concentration and bacteria count of Outfall #001B for each bypass event) x (Daily flow of Outfall #001B for each bypass event)]

    ÷

    (Daily flow for Outfall #001A each bypass event) + (Daily flow for Outfall #001B for each bypass event)

    =

    Weighted concentration or bacteria count

    Report the highest weighted concentration results and bacteria count of the blended effluent for each month.

SPECIAL CONDITIONS

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 uses 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 uses 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 uses designated for the classification of the receiving waters.

4. Notwithstanding specific conditions of this permit the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

C. TREATMENT PLANT OPERATOR

The person who has the management responsibility and exercises operational oversight over the treatment facility must hold a **Maine Grade IV** 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). See **Attachment G** of the Fact Sheet for a current list of Significant Industrial Users discharging into the permittee's treatment facility.

SPECIAL CONDITIONS

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.

F. 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 August 25, 2016; 2) the terms and conditions of this permit; and 3) only from Outfall #001A (secondary treated), Outfall #002 (blended) and the one (1) combined sewer overflow (Outfall #003) identified in Special Condition J of this permit. Discharges of waste water from any other point source 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.

G. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

The permittee is not authorized to receive concentrated septage from commercial septage haulers without a formal modification of this permit to do so. The permittee is authorized to accept up to **200 gallons per day and up to 4,000 gallons per year** of holding tank wastes (with or without chemicals) from recreational vehicles and campers. A written log shall be kept of receipts of holding tank waste including gallons delivered, delivery date and the name of the person delivering the holding tank waste.

SPECIAL CONDITIONS

H. WET WEATHER FLOW MANAGEMENT PLAN

The permittee must maintain a current written Wet Weather Flow Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall. 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 during the events. **The permittee must review their plan annually** and record any necessary changes to keep the plan up to date.

I. OPERATION & MAINTENANCE (O&M) PLAN

This facility must have 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, and 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 all facilities and systems of treatment and control and related appurtenances 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 EPA personnel upon request.

Within 90 days of completion of new and or substantial upgrades for all facilities and systems of treatment and control and related appurtenances, the permittee must submit the updated O&M Plan to their Department inspector for review and comment.

SPECIAL CONDITIONS

J. COMBINED SEWER OVERFLOWS (CSOs)

Pursuant to Chapter 570 of Department Rules, *Combined Sewer Overflow Abatement,* the permittee is authorized to discharge from the following combined sewer overflow (CSO) (stormwater and sanitary wastewater) subject to the conditions and requirements herein.

1. CSO location

Outfall #	Location	Receiving Water & Class
003	Maine Avenue Pump Station	Kennebec River, Class B

2. Prohibited Discharges

   a) The discharge of dry weather flows is prohibited. All such discharges must be reported to the Department in accordance with Standard Condition D (1) of this permit.

   b) No discharge shall occur as a result of mechanical failure, improper design or inadequate operation or maintenance.

   c) No discharges shall occur at flow rates below the applicable design capacities of the wastewater treatment facility, pumping stations or sewerage system.

3. Narrative Effluent Limitations

   a) The effluent must not contain a visible oil sheen, settled substances, foam, or floating solids at any time that impair the characteristics and designated uses ascribed to the classification of the receiving waters.

   b) The effluent must not contain materials in concentrations or combinations that are hazardous or toxic to aquatic life; or which would impair the usage designated by the classification of the receiving waters.

   c) The discharge must not impart color, turbidity, toxicity, radioactivity or other properties that cause the receiving waters to be unsuitable for the designated uses and other characteristics ascribed to their class.

   d) Notwithstanding specific conditions of this permit, the effluent by itself or in combination with other discharges 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

J. COMBINED SEWER OVERFLOWS (CSOs) (cont'd)

4. CSO Master Plan (see Sections 2 & 3 of Chapter 570 Department Rules)

   The permittee must implement CSO control projects in accordance with an approved the CSO Master Plan entitled *Combined Sewer Overflow Master Plan Update for the City of Gardiner, Maine,* dated October 2009. Key milestones approved in the most recent abatement schedule or agreed to by the permittee and Department that the permittee is required to comply with are:

   On or before December 31, 2018 ***(ICIS Code 81699)***, the permittee must submit an updated CSO Master Plan to the Department for review and approval.

   To modify the dates and or projects specified above, the permittee must file an application with the Department to formally modify this permit. The remaining work items identified in the abatement schedule may be amended from time to time based on mutual agreements between the permittee and the Department. The permittee must notify the Department in writing prior to any proposed changes to the implementation schedule.

5. Nine Minimum Controls (NMC) (see Section 5 Chapter 570 of Department Rules)

   The permittee must implement and follow the Nine Minimum Control documentation as approved by EPA on May 29, 1997. Work preformed on the Nine Minimum Controls during the year must be included in the annual CSO Progress Report (see below).

6. CSO Compliance Monitoring Program (see Section 6 Chapter 570 of Department Rules) The permittee shall conduct flow monitoring according to an approved *Compliance Monitoring Program* on all CSO points, as part of the CSO Master Plan. Annual flow volumes for all CSO locations must be determined by actual flow monitoring, by estimation using a model such as EPA's Storm Water Management Model (SWMM) or by some other estimation technique approved by the Department.

   Results must be submitted annually as part of the annual *CSO Progress Report* (see below), and shall include annual precipitation, CSO volumes (actual or estimated) and any block test data required. Any abnormalities during CSO monitoring must also be reported. The results must be reported on the Department form *"CSO Activity and Volumes"* (**Attachment E** of this permit) or similar format and submitted to the Department on diskette.

SPECIAL CONDITIONS

J. COMBINED SEWER OVERFLOWS (CSOs) (cont'd)

CSO control projects that have been completed must be monitored for volume and frequency of overflow to determine the effectiveness of the project toward CSO abatement. This requirement shall not apply to those areas where complete separation has been completed and CSO outfalls have been eliminated.

7. Additions of New Wastewater (see Section 8 Chapter 570 of Department Rules)

   Chapter 570 Section 8 lists requirements relating to any proposed addition of wastewater to the combined sewer system. Documentation of the new wastewater additions to the system and associated mitigating measures must be included in the annual *CSO Progress Report* (see below). Reports must contain the volumes and characteristics of the wastewater added or authorized for addition and descriptions of the sewer system improvements and estimated effectiveness. Any sewer extensions upstream of a CSO must be reviewed and approved by the Department prior to their connection to the collection system. Pre-approved sewer extensions totaling up to 25,000 gallons per day from the Libby Hill Industrial Park are exempt from this provision. A Sewer Extension/Addition Reporting Form must be completed and submitted to the Department along with plans and specifications of the proposed extension/addition.

8. Annual CSO Progress Reports (see Section 7 of Chapter 570 of Department Rules)
   By March 1 of each year ***(ICIS Code CS010),*** the permittee must submit a *CSO Progress Reports* covering the previous calendar year (January 1 to December 31). The CSO Progress Report must include, but is not necessarily limited to, the following topics as further described in Chapter 570: CSO abatement projects, schedule comparison, progress on inflow sources, costs, flow monitoring results, CSO activity and volumes, nine minimum controls update, sewer extensions, and new commercial or industrial flows.

   The CSO Progress Reports must be completed on a standard form entitled *"Annual CSO Progress Report"*, furnished by the Department, and submitted in electronic form, if possible, to the following address:

CSO Coordinator
Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333
e-mail: CSOCoordinator@state.me.us

SPECIAL CONDITIONS

J. COMBINED SEWER OVERFLOWS (CSOs) (cont'd)

9. Signs

If not already installed, the permittee must install and maintain an identification sign at each CSO location as notification to the public that intermittent discharges of untreated sanitary wastewater occur. The sign must be located at or near the outfall and be easily readable by the public. The sign must be a minimum of 12" x 18" in size with white lettering against a green background and shall contain the following information:

CITY OF GARDINER
WET WEATHER
SEWAGE DISCHARGE
CSO # AND NAME

10. Definitions

For the purposes of this permitting action, the following terms are defined as follows:

a. Combined Sewer Overflow - a discharge of excess waste water from a municipal or quasi-municipal sewerage system that conveys both sanitary wastes and storm water in a single pipe system and that is in direct response to a storm event or snowmelt.

b. Dry Weather Flows - flow in a sewerage system that occurs as a result of non-storm events or are caused solely by ground water infiltration.

c. Wet Weather Flows - flow in a sewerage system that occurs as a direct result of a storm event, or snowmelt in combination with dry weather flows.

K. PUMP STATION BYPASSES

Discharges from emergency bypass structures in pump stations are not authorized by this permit. The permittee must make provisions to monitor the pump station identified below via an electronic flow estimation system to record frequency, duration and estimation of flow discharged. An electronic device utilized to measure levels in the wet well and measure duration of the overflow is an acceptable methodology for determining quantity.

Outfall Number	Outfall Location	Receiving Water and Class
002	**Rolling Dam**	**Rolling Dam Brook, Class B**

Discharges from the pump stations must be reported in accordance with Standard Condition D(1)(f), *Twenty four hour reporting*, of this permit.

SPECIAL CONDITIONS

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

By December 31 of each calendar year *[ICIS Code 75305]*, the permittee must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit. 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 reinstate routine surveillance level testing or other toxicity testing if new information becomes available that indicates the discharge may cause or have a reasonable potential to cause exceedences of ambient water quality criteria/thresholds.

M. MONITORING AND REPORTING

Monitoring results obtained during the previous month must 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 (13^{th}) 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 (15^{th}) day of the month following the completed reporting period.

A signed copy of the DMR and all other reports required herein must be submitted to 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

M. MONITORING AND REPORTING

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.

Additional monthly reporting requires submitting a paper copy of, *"DEP-49-CSO Form For Use With Non-Dedicated CSO Primary Clarifiers"* (**Attachment E** of this permit) to the Department inspector at the address above and an electronic version to the CSO Coordinator at the address below:

CSO Coordinator
Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333
e-mail: CSOCoordinator@maine.gov

N. 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 anytime 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 and/or ambient water quality monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

O. 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: _____

Date of analysis: _____ **Result:** _____ **ng/L (PPT)**

Please Enter Effluent Limits for your facility

Effluent Limits: **Average =** _____ ng/L **Maximum =** _____ ng/L

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

CERTIFICATION

I certifiy 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

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 _____ (mm/dd/yy) Date Tested _____ (mm/dd/yy)

Chlorinated? _____ Dechlorinated? _____

Results **% effluent**

	water flea	trout
A-NOEL		
C-NOEL		

Effluent Limitations

A-NOEL	
C-NOEL	

Data summary

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

place * next to values statistically different from controls

for trout show final wt and % incr for both controls

Reference toxicant

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

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

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

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° ± 1°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
WET and Chem
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

Facility Name _____ MEPDES # _____ Pipe # _____ Facility Representative Signature _____
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.

			Effluent Limits, %			Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)		Possible Exceedence [7]		
	WHOLE EFFLUENT TOXICITY		Acute	Chronic			WET Result, % Do not enter % sign	Reporting Limit Check	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 Acute[5]	Chronic[6]	Health[6]			Reporting Limit Check	Possible Exceedence [7] Acute	Chronic	Health
	TOTAL RESIDUAL CHLORINE (mg/L) (9)	0.05				NA					
	AMMONIA	NA				(8)					
M	ALUMINUM	NA				(8)					
M	ARSENIC	5				(8)					
M	CADMIUM	1				(8)					
M	CHROMIUM	10				(8)					
M	COPPER	3				(8)					
M	CYANIDE, TOTAL	5				(8)					
	CYANIDE, AVAILABLE [3a]	5				(8)					
M	LEAD	3				(8)					
M	NICKEL	5				(8)					
M	SILVER	1				(8)					
M	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[6]	Chronic[6]	Health[6]			Acute	Chronic	Health
M	ANTIMONY	5								
M	BERYLLIUM	2								
M	MERCURY (5)	0.2								
M	SELENIUM	5								
M	THALLIUM	4								
A	2,4,6-TRICHLOROPHENOL	5								
A	2,4-DICHLOROPHENOL	5								
A	2,4-DIMETHYLPHENOL	5								
A	2,4-DINITROPHENOL	45								
A	2-CHLOROPHENOL	5								
A	2-NITROPHENOL	5								
A	4,6 DINITRO-O-CRESOL (2-Methyl-4,6-dinitrophenol)	25								
A	4-NITROPHENOL	20								
A	P-CHLORO-M-CRESOL (3-methyl-4-chlorophenol)+B80	5								
A	PENTACHLOROPHENOL	20								
A	PHENOL	5								
BN	1,2,4-TRICHLOROBENZENE	5								
BN	1,2-(O)DICHLOROBENZENE	5								
BN	1,2-DIPHENYLHYDRAZINE	20								
BN	1,3-(M)DICHLOROBENZENE	5								
BN	1,4-(P)DICHLOROBENZENE	5								
BN	2,4-DINITROTOLUENE	6								
BN	2,6-DINITROTOLUENE	5								
BN	2-CHLORONAPHTHALENE	5								
BN	3,3'-DICHLOROBENZIDINE	16.5								
BN	3,4-BENZO(B)FLUORANTHENE	5								
BN	4-BROMOPHENYLPHENYL ETHER	5								
BN	4-CHLOROPHENYL PHENYL ETHER	5								
BN	ACENAPHTHENE	5								
BN	ACENAPHTHYLENE	5								
BN	ANTHRACENE	5								
BN	BENZIDINE	45								
BN	BENZO(A)ANTHRACENE	8								
BN	BENZO(A)PYRENE	5								
BN	BENZO(G,H,I)PERYLENE	5								
BN	BENZO(K)FLUORANTHENE	5								
BN	BIS(2-CHLOROETHOXY)METHANE	5								
BN	BIS(2-CHLOROETHYL)ETHER	6								
BN	BIS(2-CHLOROISOPROPYL)ETHER	6								
BN	BIS(2-ETHYLHEXYL)PHTHALATE	10								
BN	BUTYLBENZYL PHTHALATE	5								
BN	CHRYSENE	5								
BN	DI-N-BUTYL PHTHALATE	5								
BN	DI-N-OCTYL PHTHALATE	5								
BN	DIBENZO(A,H)ANTHRACENE	5								
BN	DIETHYL PHTHALATE	5								
BN	DIMETHYL PHTHALATE	5								
BN	FLUORANTHENE	5								

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.

BN	FLUORENE	5										
BN	HEXACHLOROBENZENE	5										
BN	HEXACHLOROBUTADIENE	5										
BN	HEXACHLOROCYCLOPENTADIENE	10										
BN	HEXACHLOROETHANE	5										
BN	INDENO(1,2,3-CD)PYRENE	5										
BN	ISOPHORONE	5										
BN	N-NITROSODI-N-PROPYLAMINE	10										
BN	N-NITROSODIMETHYLAMINE	5										
BN	N-NITROSODIPHENYLAMINE	5										
BN	NAPHTHALENE	5										
BN	NITROBENZENE	5										
BN	PHENANTHRENE	5										
BN	PYRENE	5										
P	4,4'-DDD	0.05										
P	4,4'-DDE	0.05										
P	4,4'-DDT	0.05										
P	A-BHC	0.2										
P	A-ENDOSULFAN	0.05										
P	ALDRIN	0.15										
P	B-BHC	0.05										
P	B-ENDOSULFAN	0.05										
P	CHLORDANE	0.1										
P	D-BHC	0.05										
P	DIELDRIN	0.05										
P	ENDOSULFAN SULFATE	0.1										
P	ENDRIN	0.05										
P	ENDRIN ALDEHYDE	0.05										
P	G-BHC	0.15										
P	HEPTACHLOR	0.15										
P	HEPTACHLOR EPOXIDE	0.1										
P	PCB-1016	0.3										
P	PCB-1221	0.3										
P	PCB-1232	0.3										
P	PCB-1242	0.3										
P	PCB-1248	0.3										
P	PCB-1254	0.3										
P	PCB-1260	0.2										
P	TOXAPHENE	1										
V	1,1,1-TRICHLOROETHANE	5										
V	1,1,2,2-TETRACHLOROETHANE	7										
V	1,1,2-TRICHLOROETHANE	5										
V	1,1-DICHLOROETHANE	5										
V	1,1-DICHLOROETHYLENE (1,1-dichloroethene)	3										
V	1,2-DICHLOROETHANE	3										
V	1,2-DICHLOROPROPANE	6										
V	1,2-TRANS-DICHLOROETHYLENE (1,2-trans-dichloroethene)	5										
V	1,3-DICHLOROPROPYLENE (1,3-dichloropropene)	5										
V	2-CHLOROETHYLVINYL ETHER	20										
V	ACROLEIN	NA										
V	ACRYLONITRILE	NA										
V	BENZENE	5										

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 E

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
CSO ACTIVITY AND VOLUMES

MUNICIPALITY OR DISTRICT	MEPDES / NPDES PERMIT NO.
REPORTING YEAR	SIGNED BY:
YEARLY TOTAL PRECIPITATION INCHES	DATE:

CSO EVENT NO.	START DATE OF STORM	PRECIP. DATA		FLOW DATA (GALLONS PER DAY) OR BLOCK ACTIVITY("1")							
		TOTAL INCHES	MAX. HR. INCHES	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	LOCATION: NUMBER:	EVENT OVERFLOW GALLONS	EVENT DURATION HRS
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
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25											
	TOTALS										

Note 1: Flow data should be listed as gallons per day. Storms lasting more than one day should show total flow for each day.

Note 2: Block activity should be shown as a "1" if the block floated away.

ATTACHMENT F

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP-49-CSO FORM FOR USE WITH DEDICATED CSO PRIMARY CLARIFIERS

Doc Num: DEPLWD463

WET WEATHER BYPASS OPERATIONS REPORT FOR ______________________ State License No. __________ MEPDES/NPDES Permit No. __________ SIGNED BY:______________________ DATE:______________

DEP-49-CSO-Dedicated.xls (rev. 12/12/01)

DATE	SECONDARY BYPASS FLOW DATA						Cl RESIDUALS				BACTERIA								BOD5					TSS					WEATHER				COMMENTS
MONTH___ YEAR___	TREATED PRIMARY FLOW BYPASSING SECONDARY	SECONDARY BYPASS CLARIFIER SURFACE AREA	BYPASS DURATION	BYPASS CLARIFIER SURFACE LOADING RATE	SECONDARY FLOW TREATED	TRUE CSO BYPASS AROUND PRIMARY	MAX CHLORINE DOSE	CHLORINE RESIDUAL IN PRIMARY EFFLUENT	CHLORINE RESIDUAL IN SECONDARY EFFLUENT	CALCULATED BLENDED EFFLUENT	E.COLI / FECAL IN PRIMARY EFFLUENT	E.COLI / FECAL IN PRIMARY EFFLUENT	E.COLI / FECAL IN PRIMARY EFFLUENT	E.COLI / FECAL IN PRIMARY EFFLUENT	E.COLI / FECAL IN SECONDARY EFFLUENT	CALCULATED BLENDED EFFLUENT	pH	SETTLEABLE SOLIDS IN PRIMARY EFFLUENT	PRIMARY INFLUENT	PRIMARY EFFLUENT	PERCENT REMOVAL	SECONDARY EFFLUENT	CALCULATED BLENDED EFFLUENT	PRIMARY INFLUENT	PRIMARY EFFLUENT	PERCENT REMOVAL	SECONDARY EFFLUENT	CALCULATED BLENDED EFFLUENT	CONDITIONS	TEMPERATURE	PRECIPITATION	STORM DURATION	
	MG	Sf	hrs	Gpd/Sf	MG	MG	mg/L	mg/L	mg/L	mg/L	#/100	#/100	#/100	#/100	#/100			ml/L	mg/L	mg/L	%	mg/L	mg/L	mg/L	mg/L	%	mg/L	mg/L		F	In	Hrs	
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31																																	
Total																																	
Avr								Avr																									
Max								Max																									

Number of discharge days ____

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

CONTENTS

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).

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 if 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 MAINTENACE 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

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.

(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.

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.

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

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).

(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.

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 contaminates 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.

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.

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

August 26, 2016

PERMIT NUMBER: **ME0101702**
LICENSE NUMBER: **W002655-6D-M-R**

NAME AND ADDRESS OF APPLICANT:

CITY OF GARDINER
6 Church Street
Gardiner, Maine 04345

COUNTY: **Kennebec County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

CITY OF GARDINER WASTEWATER TREATMENT FACILITY
540 River Avenue
Gardiner, Maine 04345

RECEIVING WATER/CLASSIFICATION: **Kennebec River/Class B**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Douglas Clark**
Superintendent, WWTF
(207) 582-1351
dclark@gardinermaine.com

1. APPLICATION SUMMARY

a. Application - The City of Gardiner (City/permittee hereinafter) has submitted a timely and complete application to the Department for the renewal of combination Maine Pollutant Discharge Elimination System Permit (MEDPES) # ME0101702/Waste Discharge License (WDL) #W002655-6D-I-R (permit hereinafter) which was issued by the Department on October 12, 2011, for a five-year term. The 10/12/11 permit authorized the discharge of up to a monthly average flow of 4.5 million gallons per day (MGD) of secondary treated sanitary waste water, allowed the use of a secondary treatment bypass structure at the facility during certain wet weather events and authorized the discharge of an unspecified quantity of untreated combined sanitary and storm water from one (1) combined sewer overflow (CSO) outfall to the Kennebec River, Class B, in Gardiner, Maine. See **Attachment A** of the attached Fact Sheet for site location maps.

1. APPLICATION SUMMARY (cont'd)

b. Source Description: The permittee receives sanitary waste water flows from approximately 2,750 residential, commercial and industrial users in the cities of Gardiner, Randolph and Farmingdale, Maine. The sewer collection system operated by the City of Gardiner is approximately 10 miles in length and has nine (9) pump stations. Two (2) of the pump stations have on-site back-up power while five (5) are served by portable generator units. One (1) permitted CSO (Outfall #003 – Maine Avenue Pumping Station) is associated with the collection system and is listed in Special Condition J, *Combined Sewer Overflows (CSO),* of this permitting action. It is noted that as of January 2, 2008, CSO Outfall #002 (Rolling Dam Brook) was no longer considered a permitted outfall and was converted to an emergency outfall.

The permittee is authorized to accept up to 200 gallons per day and up to 4,000 gallons per year of holding tank wastes (with or without chemicals) from recreational vehicles and campers. Holding tank wastes are introduced directly into the waste water influent channel.

c. Waste Water Treatment: Approximately 75% of the collection system is clay tile pipe. The pipe is being replaced over time as resources allow. Waste water conveyed to Outfall #001A receives primary treatment and a secondary level of treatment via a mechanical bar screen, two parallel basins each with two medium-density and three high-density rotating biological contactors, two secondary clarifiers, three aerobic digesters and two chlorine contact chambers. Flow is measured utilizing a Parshall flume with a sonic level measuring device. Plant flow schematics are included as **Attachment B** of this Fact Sheet.

CSO-related flows that bypass secondary treatment receive primary treatment and seasonal disinfection are allowed in response to wet weather events when the influent to the waste water treatment facility exceeds a peak hourly flow of 4.5 MGD. The primary and secondary treated waste water streams are disinfected independently and are co-mingled prior to discharge to the Kennebec River via a 20-inch pipe located 2 feet below mean low water. Waste water from Outfall #003 (Maine Avenue Pump Station CSO) is discharged to the Kennebec River via a 15-inch pipe located 2 feet below mean low water.

Biosolids are dewatered by two screw presses and shipped offsite for composting.

2. PERMIT SUMMARY

a. Terms & conditions: This permitting action is carrying forward all the terms and conditions of the previous except this permit is;

Outfall 001A – (secondary treated waste water)

1. Revising the minimum monitoring frequencies for Outfall #001C for biochemical oxygen demand (BOD_5), total suspended solids (TSS) and *E. coli* bacteria from 3/Week to 2/Week, settleable solids from 5/Week to 3/Week and total residual chlorine from 2/Day to 1/Day, based on a statistical evaluation of test results for the most current 43 months.

2. Incorporating the interim mercury limits established by the Department for this facility pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and *Waste discharge licenses*, 38 M.R.S. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001).

3. Eliminating the monthly average water quality based mass limits for total lead as the discharge no longer has a reasonable potential to exceed the acute ambient water quality criteria (AWQC) for total lead based on an updated statistical evaluation (Report ID #800) of test results for the most current 60 months.

4. Eliminating the daily maximum water quality based mass limits for total aluminum as the discharge no longer has a reasonable potential to exceed the AWQC for aluminum based on an updated statistical evaluation (Report ID #800) of test results for the most current 60 months.

5. Eliminating the monthly average water quality based concentration limit for total aluminum pursuant to Maine law 38 M.R.S. §464, ¶¶ K promulgated subsequent to the previous permit issuance 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.*"

6. Reducing the monthly average water quality based limit for total aluminum from 5.5 lbs/day to 4.4 lbs/day based on an updated statistical evaluation (Report ID 832) for the Kennebec River.

7. Requiring the permittee to conduct an Industrial Waste Survey (IWS) pursuant to Special Condition D of this permit.

Outfall #001B – (CSO related bypass - internal waste stream)

8. Eliminating the percent (%) removal and surface loading rate reporting requirements from Outfall #001B (CSO Related Bypass) as the data collected to date has limited value.

2. PERMIT SUMMARY (cont'd)

Outfall #001B – (CSO related bypass - internal waste stream)

9. Eliminating the daily maximum numeric limitations for *E. coli* bacteria and total residual chlorine for Outfall #001B as limiting an internal waste stream is not necessary given compliance with limitations in the permit is determined after the primary treated and secondary treated waste streams are blended.

Outfall #002- (Blended effluent)

10. Establishing numeric daily maximum technology based mass limitations for BOD and TSS on the discharge of blended effluent to be consistent with the National CSO policy.

b. History: The most current relevant licensing permitting and other actions include the following:

September 30, 1998 – The U.S. EPA issued NPDES permit #ME010702 for a five-year term.

June 3, 1999 – The Department issued WDL #W002655-5L-E-R for a five-year term.

May 23, 2000 – The Department administratively modified WDL #W002655-5L-E-R by establishing interim average and maximum concentration limits for mercury.

July 20, 2001 – The Department issued MEPDES permit #ME0101702/WDL modification #W002655-5L-F-M. This permitting/licensing action superseded the NPDES permit which resulted in the terms and conditions of the NPDES permit being null and void.

September 8, 2005 – The permittee submitted an application to the Department to modify its MEPDES permit/WDL to allow the use of a CSO related bypass of secondary treatment under certain wet weather conditions.

March 16, 2006 – The Department issued MEPDES permit #ME0101702/WDL #W002655-5L-H-M for a five-year term.

October 12, 2011 – The Department issued MEPDES permit #ME0101702/WDL #W002655-6D-I-R for a five-year term.

PERMIT SUMMARY (cont'd)

September 10, 2013 – The Department issued a minor revision to the October 12, 2011, permit that eliminated the monthly average water quality based mass and concentration limits for inorganic arsenic as the result of a revision to human health AWQC for inorganic arsenic.

February 6, 2012 – The Department issued a modification of the October 12, 2011, permit that reduced the monitoring frequency reduction for total mercury from 4/Year to 1/Year pursuant to Maine law 38 MRSA §420(1-B)(F)

August 24, 2016 – The permittee submitted a timely and complete application for permit renewal.

3. CONDITIONS OF PERMITS

Conditions of Licenses, 38 M.R.S. §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, *Certain Deposits and Discharges Prohibited,* 38 M.R.S. §420 and *Surface Water Toxics Control Program*, 06-096 CMR 530, require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584, and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classification of major river basins, 38 M.R.S., §467(4)(A)(13) classifies the Kennebec River from the Calumet Bridge at Old Fort Western in Augusta to a line drawn across the tidal estuary of the Kennebec River due east of Abagadasset Point as a Class B waterway.

Standards for classification of fresh surface waters, 38 M.R.S, §465(3) describe standards for classification of Class B waters as follows:

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

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

The dissolved oxygen content of Class B waters may not be less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration may not be less than 9.5 parts per million and the 1-day minimum dissolved oxygen concentration may not be less than 8.0 parts per million in identified fish spawning areas. Between May 15th and September 30th, the number of Escherichia coli bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 64 per 100 milliliters or an instantaneous level of 236 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures.

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

5. RECEIVING WATER CONDITIONS

The State of Maine Department of Environmental Protection 2012 Integrated Water Quality Monitoring and Assessment Report (DEPLW1246), prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act includes the receiving water in the designations Main stem from Augusta (Calumet Bridge) to the Merrymeeting Bay (Chops) (Assessment Unit ID ME0103000312_340R_01), *Kennebec River at Augusta, including Riggs Brook* (Assessment Unit ID ME0103000312_340R_02), *Kennebec River at Hallowell* (Assessment Unit ID ME0103000312_340R_03) and *Kennebec River at Gardiner-Randolph* (Assessment Unit ID ME0103000312_340R_04) listed in the following categories:

Assessment Unit ID ME0103000312_340R_02, ME0103000312_340R_03 and ME0103000312_340R_04 are listed in *Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL completed.* The three segments are impaired due to elevated levels of *E. coli* bacteria caused by CSO discharges but a statewide bacteria TMDL has been approved.

Assessment Unit ID ME0103000312_340R_01 (30.53 miles) is listed in *Category 4-B: Rivers and Streams Impaired by Pollutants – Pollution Control Requirements Reasonably Expected To Result in Attainment* due to the historic presence of dioxin. With the establishment of numeric limitations for dioxin in the MEPDES permit for the SAPPI pulp and paper mill approximately 40 miles upstream of the Gardiner facility and the requirement that the levels of dioxin in fish tissue of fish below the mill discharge cannot be greater than the dioxin levels in fish above the SAPPI outfall, the Department anticipates attainment to be achieved by calendar year 2020.

5. RECEIVING WATER CONDITIONS (cont'd)

Assessment Unit ID ME0103000312_340R_01 (30.53 miles) is listed in *Category 5-D: Rivers and Streams Impaired by Legacy Pollutants* due to historic fish tissue sampling indicating the presence of PCBs.

The 2012 Report also lists Maine's fresh waters as *"Category 4-A: Waters Impaired By Atmospheric Deposition of Mercury"* due to US EPA approval of a Regional Mercury TMDL. Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, *"Impairment caused by atmospheric deposition of mercury; a regional scale TMDL has been approved. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of 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."*

This permit incorporates technology based concentration limits for total mercury that were established in a permit decision issued on May 23, 2000. Pursuant to 38 M.R.S. § 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."* See section 6(i) of this Fact Sheet for a summary of the mercury test results for the most current 60-months.

If ambient water quality monitoring or future modeling determines that at full permitted discharge limits the permittee's discharge is causing or contributing to the non-attainment of standards, this permit will be reopened per Special Condition N, *Reopening of Permit For Modifications*, to impose more stringent limitations to meet water quality standards.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall #001A - Secondary Treated Waste Water

a. Flow: The monthly average flow limitation of 4.5 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 for the waste water treatment facility. This permit is carrying forward a daily maximum flow "Report only" requirement in order to monitor flows associated with wet weather events.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall #001A - Secondary Treated Waste Water

A reviewed of the monthly Discharge Monitoring Reports (DMRs) for the period January 2013 – November 2015 indicates values have reported as follows:

Flow (n=35)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	4.5	0.51 – 2.08	0.99
Daily Maximum	Report	0.65 – 4.57	2.5

b. Dilution Factors: The Department established applicable dilution factors for the discharge in accordance with freshwater protocols established in *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective October 9, 2005). With a WDL flow limit of 4.5 MGD the dilution factors are as follows:

¼ Acute[(1)]: 1Q10 = 526 cfs $\Rightarrow \frac{(526 \text{ cfs})(0.6464^{(2)}) + (4.5 \text{ MGD})}{(4.5 \text{ MGD})} = 77{:}1$

Acute: 1Q10 = 2,104 cfs $\Rightarrow \frac{(2{,}104 \text{ cfs})(0.6464) + (4.5 \text{ MGD})}{(4.5 \text{ MGD})} = 303{:}1$

Chronic: 7Q10 =2,552 cfs $\Rightarrow \frac{(2{,}552 \text{ cfs})(0.6464) + (4.5 \text{ MGD})}{(4.5 \text{ MGD})} = 368{:}1$

Harmonic Mean: = 5,883 cfs $\Rightarrow \frac{(5{,}883 \text{ cfs})(0.6464) + (4.5 \text{ MGD})}{(4.5 \text{ MGD})} = 846{:}1$

Footnotes:

(1) 06-096 CMR 530 (D)(4)(a) states that analyses using numeric acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone. The 1Q10 is the lowest one-day flow over a ten-year recurrence interval. The regulation goes on to say that where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design, up to including all of it. Based on information provided by the permittee as to the configuration and location of the outfall pipe and instream hydrology information collected by the Department in calendar year 1999, the Department has made the determination that the discharge does not receive rapid and complete mixing with the receiving water, therefore the default stream flow of ¼ of the 1Q10 is applicable in acute statistical evaluations pursuant to 06-096 CMR 530.

(2) Conversion factor, cubic feet per second to million gallons per day.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall #001A - Secondary Treated Waste Water

c. Biochemical Oxygen Demand (BOD5) & Total Suspended Solids (TSS): The previous permitting action contained monthly and weekly average BOD5 and TSS best practicable treatment (BPT) concentration limits of 30 mg/L and 45 mg/L respectively, which were based on secondary treatment requirements in 06-096 CMR 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.

As for mass limitations, this permitting action is carrying forward the monthly average and weekly average limitations based on a monthly average limit of 4.5 MGD. The limitations were calculated as follows:

Monthly average: (4.5 MGD)(8.34)(30 mg/L) = 1,126 lbs/day
Weekly average: (4.5 MGD)(8.34)(45 mg/L) = 1,689 lbs/day

No daily maximum mass limitations (report only) for BOD5 or TSS were established in the previous permit or this permit as doing so may discourage the permittee from treating as much waste water as possible through the secondary treatment system during wet weather events.

A review of the DMR data for the period January 2013 – November 2015 indicates the BOD5 & TSS values have been reported as follows:

BOD_5 Mass(n=35)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	1,126	21 - 297	80
Weekly Average	1,689	26 - 682	149
Daily Maximum	Report	28 - 990	223

BOD_5 Concentration(n=35)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	4 - 18	8
Weekly Average	45	4 - 23	11
Daily Maximum	50	5 - 33	13

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall #001A - Secondary Treated Waste Water

TSS mass(n=35)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	1,126	21 - 256	74
Weekly Average	1,689	26 - 712	157
Daily Maximum	Report	32 – 1,281	305

TSS concentration(n=35)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	4 - 13	7
Weekly Average	45	4 - 23	10
Daily Maximum	50	5 - 41	15

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 43 months of data (January 2013 – November 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 limits can be calculated as 7% for both BOD and TSS. According to Table I of the EPA Guidance and Department Guidance, a 3/Week monitoring requirement can be reduced to 2/Week. Therefore, this permitting action is reducing the monitoring frequency for BOD and TSS from 3/Week to 2/Week.

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.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall #001A - Secondary Treated Waste Water

This permitting action is carrying forward a monthly average percent removal requirement of 85 percent for BOD_5 and TSS as required pursuant to 06-096 CMR 525(3)(III)(a&b)(3) for all flows receiving secondary treatment. A requirement to achieve 85% removal at all times at facilities with combined sewers is not attainable due to the complexity of the sewer systems and the highly variable influent concentration. The Department is carrying forward a waiver on the percent removal requirement when the monthly average influent strength is less than 200 mg/L given the collection system is still a combined sewer system with an active CSO outfall.

A reviewed of the monthly DMRs data for the period January 2013 – November 2015 indicates values have reported as follows:

BOD % Removal (DMRs=35)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	88 - 98	95

TSS % Removal (DMRs=35)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	86 - 98	96

d. Settleable Solids: The previous permitting action established, and this permitting action is carrying forward, a technology-based daily maximum concentration limit of 0.3 ml/L for settleable solids, which is considered a BPT for secondary treated wastewater.

A reviewed of the monthly DMRs data for the period January 2015 – November 2015 indicates values have reported as follows:

Settleable solids concentration (n=35)

Value	Limit (ml/L)	Range (ml/L)	Average (ml/L)
Daily Maximum	0.3	<0.1 – 0.3	0.05

A review of the monitoring data for settleable solids indicates the ratios (expressed in percent) of the long term effluent average to the daily maximum limit can be calculated as 17%. According to Table I of the EPA Guidance and Department Guidance, a 5/Week monitoring requirement can be reduced to 3/Week. Therefore, this permitting action is reducing the monitoring frequency for settleable solids from 5/Week to 3/Week.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall #001A - Secondary Treated Waste Water

e. Escherichia coliform (*E. coli)* bacteria: The previous permitting action contained seasonal (May 15 – September 30) monthly average and daily maximum *E. coli* bacteria limits of 142 colonies/100 mL and 427 colonies/100 mL based on the State of Maine Water Classification Program criteria for Class B waters

Standards for the Classification of Fresh Surface Waters, 38 M.R.S., §465(3), establishes monthly average and daily maximum ambient water quality based *E. coli* thresholds of 64 colonies/100 mL and 236 colonies/100 mL, respectively. However, the Department has developed an alternative approach to calculating daily maximum limits that considers the dilution of the receiving water for freshwater dischargers. Based on this approach, the Department has determined that any facility in Class B waters with an acute dilution of at least 1.8:1 would be allowed an end-of-pipe daily maximum *E. coli* bacteria limitation of 427 colonies/100mL as previously established for dischargers to Class B waters. The permittee has an acute dilution meeting this criterion. Therefore, this permitting action is carrying forward monthly average and daily maximum *E. coli* bacteria BPT limits of 64 colonies/100 mL and 427 colonies/100 mL, respectively.

A review of the DMR data for the seasonal period May 2013 – November 2015 indicates the monthly average and daily maximum values have been reported as follows:

***E. coli* bacteria (n=15)**

Value	Limit (col/100 ml)	Range (col/100 ml)	Average (col/100 ml)
Monthly Average	64	2 - 45	5
Daily Maximum	427	3 - 328	38

A review of the monitoring data for *E. coli* bacteria indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limit can be calculated as 9%. According to Table I of the EPA Guidance and Department Guidance, a 3/Week monitoring requirement can be reduced to 2/Week. Therefore, this permitting action is reducing the monitoring frequency for *E. coli* bacteria from 3/Week to 2/Week.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall #001A - Secondary Treated Waste Water

f. Total Residual Chlorine: This permitting action contained a daily maximum total residual chlorine BPT limit of 1.0 mg/L. Limits on total residual chlorine (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-based 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	77:1	368:1	1.5 mg/L	4.0 mg/L

Example calculation, Acute: 0.019 mg/L (77) = 1.5 mg/L

In the case of the permittee, the calculated acute water quality based threshold is higher than 1.0 mg/L, thus the BPT limit of 1.0 mg/L is imposed as a daily maximum limit.

A review of the DMR data for the period May 2013 – September 2015 indicates the daily maximum concentration values have been reported as follows:

Total residual chlorine

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.03 – 0.71	0.2

A review of the monitoring data for total residual chlorine indicates the ratios (expressed in percent) of the long term effluent average to the daily maximum limit can be calculated as 20%. According to Table I of the EPA Guidance and Department Guidance, a 2/Day monitoring requirement can be reduced to 1/Day. Therefore, this permitting action is reducing the monitoring frequency for total residual chlorine from 2/Day to 1/Day.

g. pH Range: This permitting action is carrying forward the BPT-based pH daily maximum limits of 6.0 –9.0 standard units (SU) pursuant to 06-096 CMR 525(3)(III)(c). A reviewed of the monthly DMRs data for the period January 2015 – November 2015 indicates values have reported as follows:

pH (DMRs = 35)

Value	Limit (su)	Minimum (su)	Maximum (su)
Range	6.0 – 9.0	6.1	7.8

Both the pH range limitation and minimum monitoring frequency of once per day (1/Day) are being carried forward in this permitting action.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall #001A - Secondary Treated Waste Water

h. Whole Effluent Toxicity (WET) and Chemical Specific Testing: 38 M.R.S., §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. 06-096 CMR 530 and 06-096 CMR 584 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 06-096 CMR 530 are 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 are required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health AWQC as established in 06-096 CMR 584.

06-096 CMR 530 establishes four categories of testing requirements based predominately on the chronic dilution factor. The categories are as follows:

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

06-096 CMR 530 (D)(1) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the 06-096 CMR 530 (D)(1) criteria, the permittee's facility falls into the Level III frequency category as the facility has a chronic dilution factor of ≥100:1 but < 500:1. 06-096 CMR 530 (D)(1) specifies that routine screening and surveillance level testing requirements are as follows:

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall #001A - Secondary Treated Waste Water

Surveillance level testing – Beginning upon issuance of the permit 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	Priority pollutant testing	Analytical chemistry
III	1 per year	None required	1 per year

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

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

A review of the data on file with the Department indicates that to-date, the permittee has fulfilled the WET and chemical-specific testing requirements of 06-096 CMR 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.

06-096 CMR 530 (3)(b) states in part, *Dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E).*

06-096 CMR 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.*"

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

Secondary Treated Waste Water

06-096 CMR 530(3) states, "*In determining if effluent limits are required, the Department shall consider all information on file and effluent testing conducted during the preceding 60 months. However, testing done in the performance of a Toxicity Reduction Evaluation (TRE) approved by the Department may be excluded from such evaluations.*"

WET evaluation

On 2/29/16, the Department conducted a statistical evaluation on the most recent 60 months of WET data that indicates the discharge does not have a reasonable potential (RP) to exceed the acute or chronic critical ambient water quality criteria (AWQC) thresholds (1.3% and 0.27%, respectively – mathematical inverses of the modified acute dilution factor of 77:1 and the chronic dilution factor of 368:1). As a result, this permitting action is not establishing numerical WET limitations.

As for testing frequencies, Chapter 530(2)(D)(3)(b) states in part that Level III facilities "*... may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3(E)*". Based on the results of the 2/29/16 statistical evaluation, the permittee qualifies for the testing waiver. Therefore, this permit action establishes a screening level WET testing requirements 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	WET Testing
III	1 per year

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

Secondary Treated Waste Water

06-096 CMR 530(2)(D)(4) states, *"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 L, *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. It is noted however that if future WET testing results indicate the discharge exceeds critical water quality thresholds this permit will be reopened pursuant to Special Condition N, *Reopening of Permit For Modification*, of this permit to establish applicable limitations and monitoring requirements.

Chemical evaluation

06-096 CMR 530 (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 Kennebec River in the vicinity of the permittee's outfall. Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

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

Secondary Treated Waste Water

06-096 CMR 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. The Department may increase this amount where it has information that significant non-point sources of a pollutant are present in a watershed. The Department may allocate quantities held in water quality reserve to new or changed dischargers according to the principles of the State's anti-degradation policy described in 38 MRSA, section 464(4)(F). Notwithstanding the above, 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 applicable water quality criteria."*

06-096 CMR 530 (3)(E) states *"... that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedence of water quality criteria, appropriate water quality-based limits must be established in any licensing action."*

06-096 CMR 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.

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

Secondary Treated Waste Water

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."

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 2/27/16 statistical evaluation (Report ID #834), the only pollutant of concern is total aluminum and it is to be limited based on the segment allocation method.

Segment allocation methodology

Historical Average:

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

Aluminum

Mass limits

Mean concentration (n=4) = 60 ug/l = 0.060 mg/L
Permit flow limit = 4.5 MGD
Historical average mass = (0.060mg/L)(8.34)(4.5 MGD) = 2.2 lbs/day

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

Secondary Treated Waste Water

The 2/27/16 statistical evaluation (Report ID 834) indicates the historical average mass of total aluminum discharged by the permittee is 0.42% of the aluminum discharged by the facilities on the Kennebec River and its tributaries. Therefore, the permittee's segment allocation for aluminum is calculated as 0.42% of the chronic assimilative capacity of the river at Richmond, the most downstream facility minus the assimilative capacities assigned to the tributaries on the Kennebec River that have permitted discharges.

Therefore, Gardiner's segment allocation for aluminum is calculated as 0.42% of the chronic assimilative capacity of the river at Richmond, the most downstream discharger on the main stem of the Kennebec River. The assimilative capacity at Richmond is calculated as follows:

7Q10 @Richmond = 2,560 cfs (0.6464) = 1,655 MGD

On August 25, 2015, the Department conducted statistical evaluations based on 15% of the ambient water quality criteria reserve being withheld (Report ID 782) and 0% of the reserve of the criteria being withheld (Report ID 834) to determine if the unallocated assimilative capacity would avoid an exceedance or avoid a reasonable potential to exceed applicable ambient water quality criteria for toxic pollutants. Report ID 834 indicates the Kennebec Sanitary Treatment District facility would no longer have a reasonable potential to exceed the chronic ambient water quality criteria for copper. Therefore, the Department is utilizing the full 15% of the unallocated assimilative capacity in the statistical evaluation when establishing limits for toxic pollutants in waste discharge permits for all facilities in the Kennebec River watershed.

With a chronic ambient water quality criteria (AWQC) of 0.087 mg/L for total aluminum and withholding 10% for background, the assimilative capacity for aluminum for the Kennebec River watershed at Richmond can be calculated as follows:

(1,655 MGD)(8.34 lbs/gal)(0.087 mg/L)(0.90) = 1,081 lbs/day

Given there are three major tributaries of the Kennebec River that have waste water treatment plants, an assimilative capacity for each of the tributaries must be allocated and subtracted from the assimilative capacity at Richmond. They are the Sebasticook River, Sandy River and Wilson Stream. The 7Q10 low flows for each tributary are as follows:

Sebasticook River at Clinton = 65 cfs or 42 MGD
Sandy River at Farmington = 27 cfs or 17 MGD
Wilson Stream at Wilton = 7.5 cfs or 4.8 MGD

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

Secondary Treated Waste Water

The assimilative capacities for aluminum for each tributary can be calculated as follows:

Seabasticook River: (42 MGD)(8.34 lbs/day)(0.087 mg/l)(0.90) = 27 lbs/day
Sandy River: (17 MGD)(8.34 lbs/day)(0.087 mg/l)(0.90) = 11 lbs/day
Wilson Stream: (4.8 MGD)(8.34 lbs/day)(0.087 mg/l)(0.90) = 3 lbs/day

Therefore, the adjusted assimilative capacity for aluminum for the main stem of the Kennebec River can be calculated as follows:

1,081 lbs/day – 27 lbs/day – 11 lbs/day – 3 lbs/day = 1,040 lbs/day

Monthly average (chronic) mass limitations for aluminum are calculated as follows:

Monthly average: (Chronic assimilative capacity mass)(% of total aluminum discharged)
(1,040 lbs/day)(0.0042) = **4.4 lbs/day**

Chapter 530 does not establish monitoring frequencies for parameters that exceed or have a reasonable potential to exceed AWQC. Monitoring frequencies are established on case-by-case basis given the timing, severity and frequency of occurrences of the exceedances or reasonable potential to exceed applicable critical water quality thresholds. Therefore, this permitting action is making a best professional judgment to establish the monitoring frequency for aluminum at the routine surveillance level frequency of 1/Year specified in Chapter 530.

As for the remaining chemical specific parameters tested to date, none of the test results in the 60-month evaluation period exceed or have a reasonable potential to exceed applicable acute, chronic or human health AWQC. Therefore, this permitting action is carrying forward a waiver for surveillance level reporting and monitoring frequency for analytical chemistry testing beginning upon issuance of the permit 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). As with waived WET testing, the permittee must file an annual certification with the Department pursuant to Chapter 530 §2(D)(3) and Special Condition L, *06-096 CMR 530(2)(D)(4), Statement For Reduced/Waived Toxics Testing* of this permit.

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

Secondary Treated Waste Water

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 shall conduct routine screening level analytical chemistry testing at 1/Quarter and priority pollutant testing of 1/Year. Surveillance and screening level testing is summarized as follows;

Surveillance level testing

Level	Priority pollutant testing	Analytical chemistry
III	Not required	Waived

Screening level testing

Level	Priority pollutant testing	Analytical chemistry
III	1/Year	4/Year (1/Quarter)

It is noted however that if future WET or other chemical specific test results indicates the discharge exceeds critical water quality thresholds or AWQC, this permit will be reopened pursuant to Special Condition N, *Reopening of Permit For Modification*, of this permit to establish applicable limitations and monitoring requirements.

i. Mercury: On May 23, 2000, pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420, *Waste discharge licenses*, 38 M.R.S. §413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001), the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL #W002655-5L-E-R by establishing interim monthly average and daily maximum effluent concentration limits of 12.7 parts per trillion (ppt) and 19.1 ppt, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001. However, effective June 15, 2001, the Maine Legislature enacted Maine law, 38 M.R.S.A. §413, sub-§11 specifying that interim mercury limits and monitoring requirements remain in effect. . On September 28, 2011, the Maine Legislature enacted, *Certain deposits and discharges prohibited*, 38 M.R.S.§ 420 sub-§ 1-B(F), allowing the Department to reduce mercury monitoring frequencies to once per year for facilities that maintain at least five (5) years of mercury testing data. The permittee met the data requirement and on February 6, 2012, the Department issued a permit modification revising the minimum mercury monitoring frequency from 4/Year to 1/Year.

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

Secondary Treated Waste Water

Maine law, 38 M.R.S., §420 1-B,(B)(1) states that a facility is not in violation of the ambient water quality criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to § 413, subsection 11. A review of the Department's database for the period March 2011 – October 2015 (#DMRs=8) indicates mercury test results have ranged from 2.9 ng/L to 6.7 ng/L with an arithmetic mean of 4.6 ng/L. The mercury effluent limitations have been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit.

j. Phosphorus - *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]

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.

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[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 AND MONITORING REQUIREMENTS (cont'd)

Secondary Treated Waste Water

For the background concentration in the Kennebec River just upstream of the permittee's discharge, the Department collected three test results during summer of 2014 and the highest result was 0.016 mg/L which is being utilized in reasonable potential calculations in this Fact Sheet.

To be conservative, the Department is utilizing the maximum background concentration in determining whether the discharge has a reasonable potential to exceed the AWQ goal of 0.100 mg/L.

Using the following calculation and criterion, the permittee's facility does not have a reasonable potential to exceed the EPA's Gold Book goal of 0.100 mg/L for phosphorus or a reasonable potential to exceed the Department's 06-096 CMR Chapter 583 draft criteria of 30 ug/L for Class B waters. The calculations are as follows:

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

Qe = effluent flow i.e. facility design flow	=	4.5 MGD
Ce = effluent pollutant concentration	=	3.86 mg/L (2006-2011)
Qs = 7Q10 flow of receiving water	=	1,650 MGD
Cs = upstream concentration	=	0.016 mg/L (2014)
Qr = receiving water flow	=	1,654.5 MGD
Cr = receiving water concentration		

$$Cr = \frac{(4.5 \text{ MGD} \times 3.86 \text{ mg/L}) + (1{,}650 \text{ MGD} \times 0.016 \text{ mg/L})}{1{,}654.5 \text{ MGD}} = 0.026 \text{ mg/L}$$

Cr = 0.026 mg/L < 0.100 mg/L⇒ **No Reasonable Potential**
Cr = 0.026 mg/L < 0.030 mg/L⇒ **No Reasonable Potential**

Therefore, no end-of-pipe limitations or monitoring requirements for total phosphorus are being established in this permitting.

k. Transported Wastes: This permitting action is carrying forward the authorization from the previous permitting action which allowed the permittee to accept and treat up to 200 gallons per day, and up to 4,000 gallons per year, of holding tank wastes (with or without chemicals) from recreational vehicles and campers. The permittee is not authorized to receive or treat any other transported wastes without a formal modification of this permit.

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

CSO Related Bypass of Secondary Treatment

OUTFALL #001B (Internal waste stream)

The permittee maintains a combined sewer system from which wet weather overflows occur. Section 402(q)(1) of the Clean Water Act requires that "each permit, order or decree issued pursuant to this chapter after December 21, 2000 for a discharge from a municipal combined storm and sanitary sewer shall conform to the Combined Sewer Overflow Control Policy signed by the Administrator on April 11, 1994 ....." 33 U.S.C. § 1342(q)(1). The Combined Sewer Overflow Control Policy (CSO Policy, 59 Fed. Reg. 18688-98), states that under USEPA's regulations the intentional diversion of waste streams from any portion of a treatment facility, including secondary treatment, is a bypass and that 40 CFR 122.41(m), allows for a facility to bypass some or all the flow from its treatment process under specified limited circumstances. Under the regulation, the permittee must show that the bypass was unavoidable to prevent loss of life, personal injury or severe property damage or that there was no feasible alternative to the bypass. The CSO Policy also provides that, for some CSO-related permits, the study of feasible alternatives in the control plan may provide sufficient support for the permit record and for approval of a CSO-related bypass to be included in an NPDES permit.[3] Such approvals will be re-evaluated upon the reissuance of the permit, or when new information becomes available that would represent cause for modifying the permit.

The CSO Policy indicates that the feasible alternative threshold may be met if, among other things, "... the record shows the secondary treatment system is properly operated and maintained, that the system has been designed to meet secondary limits for flows greater than peak dry weather flow, plus an appropriate quantity of wet weather flow, and that it is either technically or financially infeasible to provide secondary treatment at the existing facilities for greater amounts of wet weather flow."[4]

USEPA's CSO Control Policy and CWA section 402(q)(1) provide that the CSO-related bypass provision in the permit should make it clear that all wet weather flows passing through the headworks of the POTW will receive at least primary clarification and solids and floatables removal and disposal, and disinfection, where necessary, and any other

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3 59 Fed. Reg. 18,688, at 18,693 and 40 CFR Part 122.41(m)(4) (April 19, 1994).

4 59 Fed. Reg. at 18,694.

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

CSO Related Bypass of Secondary Treatment

OUTFALL #001B (Internal waste stream)

treatment that can reasonably be provided.[5] Under section 402(q)(1) of the CWA and as stated in the CSO Policy, in any case, the discharge must not violate applicable water quality standards.[6] The Department will evaluate and establish on a case-by-case basis effluent limitations for discharges that receive only a primary level of clarification prior to discharge and those bypasses that are blended with secondary treated effluent prior to discharge to ensure applicable water quality standards will be met.

This permitting action allows a CSO-related bypass of secondary treatment at the permittees facility based on an evaluation of feasible alternatives, which indicates it is technically and financially infeasible at this time to provide secondary treatment at the existing facilities as summarized in the original CSO Master Plan. The permittee has been upgrading and rehabilitating pump stations and is targeting future inflow and infiltration (I&I) projects such as constructing a 410,000-gallon retention/treatment basin adjacent to the Maine Avenue Pump Station (MAPS) to reduce the number of CSO discharges and related bypasses at the waste water treatment facility.

During wet weather events when flows to the treatment facility have exceeded a peak hourly flow rate of 3,125 gpm (4.5 MGD), secondary treatment of all wet weather flows is not practicable and a portion of the primary effluent is allowed to be bypassed around the rotating biological contactors (RBCs) and secondary clarifiers. The bypassed flow is disinfected and recombined with the disinfected secondary clarifier effluent and then discharged to the river via the physical outfall designated as Outfall #001A. This permitting action is establishing end-of-pipe limitations to comply with USEPA's CSO Control Policy and Clean Water Act section 402(q)(1).

The CSO Control Policy does not define specific design criteria or performance criteria for primary clarification. The Department and USEPA agree that existing primary treatment infrastructure was constructed to provide primary clarification. Therefore, the effluent quality from a properly designed, operated and maintained existing primary treatment system satisfies the requirements for primary clarification and solids removal.

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5 59 Fed. Reg. at 18,693.

6 59 Fed. Reg. at 18694, col 1 (April 19, 1994).

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

CSO Related Bypass of Secondary Treatment

OUTFALL #001B (Internal waste stream)

For facilities that blend primary and secondary effluent prior to discharge, such as the permittee's facility, compliance must be evaluated at the point of discharge, unless impractical or infeasible.[7] Monitoring to assess compliance with limits based on secondary treatment and other applicable limits is to be conducted following recombination of flows at the point of discharge or, where not feasible, by mathematically combining analytical results for the two waste streams. Where a CSO-related bypass is directly discharged after primary settling and chlorination, monitoring will be at end of pipe if possible.

Due to the variability of CSO-related bypass treatment systems and wet weather related influent quality and quantity, a single technology-based standard cannot be developed for all of Maine's CSO-related bypass facilities[8]. To standardize how the Department will regulate these facilities to ensure compliance with the CSO Control Policy and Clean Water Act [9], the Department has determined that effluent limitations for the discharge of CSO-related bypass effluent that is combined with effluent from the secondary treatment system should be based on the more stringent of either the past demonstrated performance of the properly operated and maintained treatment system(s) or site-specific water quality-based limits derived from computer modeling or best professional judgment of Department water quality engineers of assimilative capacity of the receiving water.

The federal secondary treatment regulation does not contain daily maximum effluent limitations for BOD_5 and TSS. The Department has established a daily maximum concentration limit of 50 mg/L for secondary treated wastewater as best professional judgment of best practicable treatment. This standard was developed by the Department prior to NPDES delegation and promulgation of secondary treatment regulations into State rule that are consistent with the Clean Water Act. Following consultation with USEPA, the Department has chosen to waive the requirement to comply with numeric daily maximum concentration limitations for BOD_5 and TSS for days with CSO-related bypass events.

This permitting action is eliminating the reporting requirements for primary clarifier BOD_5 and TSS percent removal and surface loading rate based on best professional judgment that these technology-based metrics have not been particularly useful in assessing primary treatment system performance and are not necessary to ensure water quality standards are met.

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[7] 40 CFR 122.45(h).

[8] Maine currently has 16 permitted facilities with a CSO-related bypass.

[9] In other words, that any other treatment that can reasonably be provided is, in fact, provided.

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

CSO Related Bypass of Secondary Treatment

OUTFALL #001B (Internal waste stream)

During CSO-related bypasses, secondary treated wastewater is combined with wastewater from the primary treatment system which is designed to provide primary clarification and solids and floatables removal and disposal, and disinfection. The permittee is not able to consistently achieve compliance with technology based effluent limits (TBELs) derived from the secondary treatment regulation during CSO-related bypasses. As part of its consideration of possible adverse effects resulting from the bypass, the Department must ensure that the bypass will not cause exceedance of water quality standards (CSO Control Policy at 59 Fed. Reg. 18694).

For those influent flows in excess of the daily and peak hourly design flows and in excess of the flow level that can be treated to a secondary level of treatment, the Department has made a best professional judgment that primary treatment and disinfection constitutes appropriate and best practicable treatment. The reporting requirements for the parameters in Special Condition A(4) of this permit (Flow, Overflow Occurrences, BOD5, TSS, *E. coli* bacteria and total residual chlorine were established in the previous permit based on Department best professional judgment of the parameters deemed necessary to evaluate the performance of the primary treatment process. It is noted the secondary treated waste water and primary treated waste water (during wet weather events) are disinfected independently and the primary treated waste stream combines with the secondary treated waste stream after the chlorine contact chambers.

During wet weather events, flows up to 3,125 gpm (4.5 MGD) pass through the secondary treatment train of the treatment facility. When the peak hourly flow rate at the overflow structure (prior to any treatment) exceeds 4.5 MGD the excess flow is conveyed to a vortex degritter for preliminary treatment, then to a dedicated primary clarifier for primary treatment and then to a dedicated storm flow chlorine contact chamber for disinfection. After disinfection, the primary treated flow (Outfall #001B) is combined with the secondary treated flow (from the secondary treatment disinfection chamber) and this blended flow (Outfall #002) discharges to the river via the physical Outfall #001A.

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

CSO Related Bypass of Secondary Treatment

OUTFALL #001B (Internal waste stream)

A summary of the DMR results for Outfall #001B for the period January 2013 – November 2015, are as follows:

k. Flow: This permitting action is carrying forward the monthly total and daily maximum flow reporting requirements.

Flow (DMRs = 11)

Value	Limit	Range (MGD)	Average (MGD)
Monthly Total	Report	0.091 – 3.45	1.6
Daily Maximum	Report	0.091 – 2.571	1.106

l. Surface Loading Rate: This permitting action is not carrying forward the daily maximum surface loading rate reporting requirements as the data collected to date for all facilities allowed to bypass secondary treatment has not provided useful information on the performance of clarifiers. However, the results for the period January 2013 – November 2015 are as follows:

Surface Loading Rate (DMRs = 12)

Value	Limit (gpd/sf)	Range (gpd/sf)	Average (gpd/sf)
Daily Maximum	Report	1601 – 3,928	2,545

m. Overflow Use, Occurrences: This permitting action is carrying forward the reporting requirement for reporting the total number of overflow occurrences for each month.

A summary of the monthly Discharge Monitoring Report (DMR) data for the period January 2013 – November 2015 indicates the following:

Overflow occurrences

Value	Range (# of days/month)	Total (# of days/year)
Daily Maximum	---	---
2013	1 – 2	6
2014	1 – 2	8
2015	1 – 2	3

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

CSO Related Bypass of Secondary Treatment

OUTFALL #001B (Internal waste stream)

n. BOD5: The previous permit contained a requirement to report the daily maximum concentration of the primary treated waste stream bypassing secondary treatment. This permitting action is carrying forward that requirement and is also requiring the permittee to report the daily maximum mass of the primary treated waste stream bypassing secondary treatment.

A summary of the monthly Discharge Monitoring Report (DMR) data for the period January 2013 – November 2015 indicates the following:

BOD_5 Concentration (DMRs=9)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Daily Maximum	Report	15 - 86	43

o. Total Suspended Solids: As with BOD5, the previous permit contained a requirement to report the daily maximum concentration of the primary treated waste stream bypassing secondary treatment. This permitting action is carrying forward that requirement and is also requiring the permittee to report the daily maximum mass of the primary treated waste stream bypassing secondary treatment.

A summary of the monthly Discharge Monitoring Report (DMR) data for the period January 2013 – November 2015 indicates the following:

TSS Concentration (DMRs=9)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Daily Maximum	Report	22 - 489	123

p. BOD5 and TSS Percent Removals: The previous permit contained a requirement to calculate the BOD5 and TSS percent removal rates on the primary treated waste stream bypassing secondary treatment. A review of the DMR data for the period January 2013 – November 2015 indicates the BOD5 and TSS percent removals have been reported as follows:

BOD % Removal (DMRs=9)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	Report	-30 - 75	29

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

CSO Related Bypass of Secondary Treatment

OUTFALL #001B (Internal waste stream)

TSS % Removal (DMRs=9)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	Report	-477 - 86	-9

The Department is eliminating the requirement to report the percent removal rates on the primary treated waste stream bypassing secondary treatment as the information collected to data has been of limited value to the Department.

q. *E. coli* bacteria: The previous permit established a seasonal (May 15 – September 30) daily maximum concentration limit of 949 col/100 ml. A summary of the monthly Discharge Monitoring Report (DMR) data for the period May 2013 – September 2015 indicates values have been reported as follows:

***E. coli* bacteria (DMRs=2)**

Value	Limit (#col/100 mL)	Range (#col/100 ml)	Average (#col/100 mL)
Daily Maximum	949	3 – 20	12

The Department is revising the numeric limit to a "report" only requirement as limiting an internal waste stream is not necessary given compliance with limitations in the permit is determined after the primary treated and secondary treated waste streams are blended.

r. Total residual chlorine (TRC): The previous permit established a seasonal (May 15 – September 30) daily maximum concentration limit of 1.0 mg/L. A summary of the monthly Discharge Monitoring Report (DMR) data for the period May 2013 – September 2015 indicates values have been reported as follows:

Total Residual Chlorine (DMRs=4

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Daily Maximum	1.0	0.03 – 0.90	0.46

As with *E. coli* bacteria, the Department is revising the numeric limit to a "report" only requirement as limiting an internal waste stream is not necessary given compliance with limitations in the permit is determined after the primary treated and secondary treated waste streams are blended.

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

CSO Related Bypass of Secondary Treatment

OUTFALL #001B (Internal waste stream)

s. pH – The previous permit established a daily maximum reporting requirement for pH that is being carried forward in this permit. A review of the DMR data for the period January 2013 – November 2015 indicates values have been reported as follows:

pH (DMRs = 8)

Value	Limit (su)	Minimum (su)	Maximum (su)
Range	Report	6.7	7.8

Blended effluent discharged to the Kennebec River

OUTFALL #002 (Blended Effluent)

For the discharge of blended effluent to the Kennebec River via the main outfall (#001A), the Department is establishing daily maximum technology-based effluent limitations for BOD_5 and TSS. For data management purposes, this permitting action is designating an outfall identifier of Outfall #002 for discharges of blended wastewater when the peak hourly influent flow rate at the overflow structure of the treatment facility (prior to any treatment) exceeds 3,125 gpm or 4.5 MGD. Discharges of blended effluent to the Kennebec River are only allowed under the flow regimes cited above.

t. Flow, BOD_5 and TSS: Given the configuration of the treatment plant, the permittee has been measuring the flow and BOD_5 and TSS concentrations for the primary treated waste water that bypasses secondary treatment (Outfall #001B). To be conservative, the Department has calculated the mass of BOD and TSS for each overflow occurrence (n=9) and the daily flows and chose the 99 percentile of pollutant loading and flow discharged from Outfall #001B for the period January 2013 – November 2015. For the purposes of evaluating the potential impact to the Kennebec River during the wet weather events when blended effluent is being discharged, the values for the primary treated waste stream bypassing secondary treatment utilized in calculations are as follows:

Flow: 2.48 MGD
BOD_5: 1,752 lbs./day
TSS: 3,658 lbs./day

$$\text{BOD: } \frac{1752 \text{ lbs/day}}{(2.48 \text{ MGD})(8.34 \text{ lbs/gal})} = 85 \text{ mg/L}$$

$$\text{TSS: } \frac{3{,}658 \text{ lbs/day}}{(2.48 \text{ MGD})(8.34 \text{ lbs/gal})} = 177 \text{ mg/L}$$

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

CSO Related Bypass of Secondary Treatment

OUTFALL #002 (Blended Effluent)

For secondary treated effluent, the Department is evaluating the potential discharge conservatively by utilizing the design flow of 4.5 MGD and a daily maximum concentration of 50 mg/L that yields a mass of 1,876 lbs/day for both BOD and TSS. The calculation is as follows:

(4.5 MGD)(8.34 lbs/gal)(50 mg/L) = 1,876 lbs/day

To determine if water quality standards (dissolved oxygen) are maintained during times when discharging blended effluent, one must calculate the increase in the BOD and TSS concentration in the receiving water when the facility is discharging blended effluent. The highest BOD and TSS mass discharges from the primary treated waste water bypassing secondary treatment both occurred in the month of January 2014. The only remaining unknown variable is what flow does one use for the Kennebec River when discharging blended effluent?

The Department attempted to evaluate the flows of the Kennebec River recorded at USGS gauging station (USGS #01049265) at North Sidney for January 6, 2014, and January 14, 2014, the highest mass discharges of BOD and TSS from Outfall #001B. Due to icing conditions, flow data is not available for those two days. Therefore, for the purposes of this permitting action only, the Department chose the mean daily river flow for the month of January calculated from the most current 29 years of flow data to calculate the increase in BOD and TSS concentrations in the Kennebec River. The calculations are as follows:

What are the BOD and TSS concentrations discharged from the facility when the blended effluent is discharged?

$$\text{BOD} = \frac{(4.5\ \text{MGD})(50\ \text{mg/L}) + (2.48\ \text{MGD})(85\ \text{mg/L})}{6.98\ \text{MGD}} = 62\ \text{mg/L}$$

$$\text{TSS} = \frac{(4.5\ \text{MGD})(50\ \text{mg/L}) + (2.48\ \text{MGD})(177\ \text{mg/L})}{6.98\ \text{MGD}} = 95\ \text{mg/L}$$

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

OUTFALL #002 (Blended Effluent)

What is the increase in the concentrations in the Kennebec River after rapid and complete mixing?

Dilution factor: $\frac{(6{,}000 \text{ cfs})(0.6464) + (6.988 \text{ MGD})}{(6.98 \text{ MGD})} = 567{:}1$

BOD: $\frac{62 \text{ mg/L}}{567} = 0.11 \text{ mg/L}$ (not measurable)

TSS: $\frac{95 \text{ mg/L}}{567} = 0.17 \text{ mg/L}$ (not measurable)

Mass loadings of the blended effluent are as follows:

BOD: 1,876 lbs/day (2°) + 1,752 lbs/day (1°) = 3,628 lbs/day

TSS: 1,876 lbs/day (2°) + 3,658 lbs/day (1°) = 5,534 lbs/day

Based on the combined BOD_5 and TSS values (blended effluent) cited, the Department has made a best professional judgment, maximum effluent discharge limitations of 3,628 lbs./day for BOD_5 and 5,534 lbs/day for TSS established in this permit provides reasonable assurance that the discharge will not cause or contribute to a violation of an applicable water quality standard in the Kennebec River and complies with the State's anti-degradation policy at 38 M.R.S. § 464(4)(F).

These limitations are based on new information concerning treatment system performance data as well as a revised and corrected methodology for regulating CSO-related bypasses in Maine. As such, the Department concludes that the new daily maximum effluent limitations of 3,628 lbs./day for BOD_5 and 5,534 lbs/day for TSS for the discharge of primary and secondary blended effluents when the influent flow rate at the overflow structure of the treatment facility (prior to any treatment) exceeds 3,125 gpm or 4.5 MGD (flow rate at which a bypass of secondary treatment occurs) complies with the exceptions to anti-backsliding at Section 402(o)(2)(B)(i) of the Clean Water Act.

7. ANTI-DEGREDATION - 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 establishes new daily maximum technology based mass limits for BOD5 and TSS on the blended effluent. 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 the Kennebec River to meet standards for Class B classification.

Improvements at the waste water treatment facility and improvements in the collection system have improved the capacity of the plant to treat current combined sewer flows as well as improve the treatment of waste waters before being discharged to the receiving waters. As permitted, the Department of Environmental Protection has determined the existing water uses will be maintained and protected and the treatment plant discharge will not cause or contribute to the failure of the waterbody to meet Class B standards

If ambient water quality monitoring or future modeling determines that at full permitted discharge limits the permittee's discharge is causing or contributing to the non-attainment of standards, this permit will be re-opened per Special Condition M, *Reopening of Permit For Modifications*, to impose more stringent limitations to meet water quality standards.

8. PUBLIC COMMENTS

Public notice of this application was made in the *Kennebec Journal* newspaper on or about August 24, 2016. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses,* 06-096 CMR 522 (effective January 12, 2001).

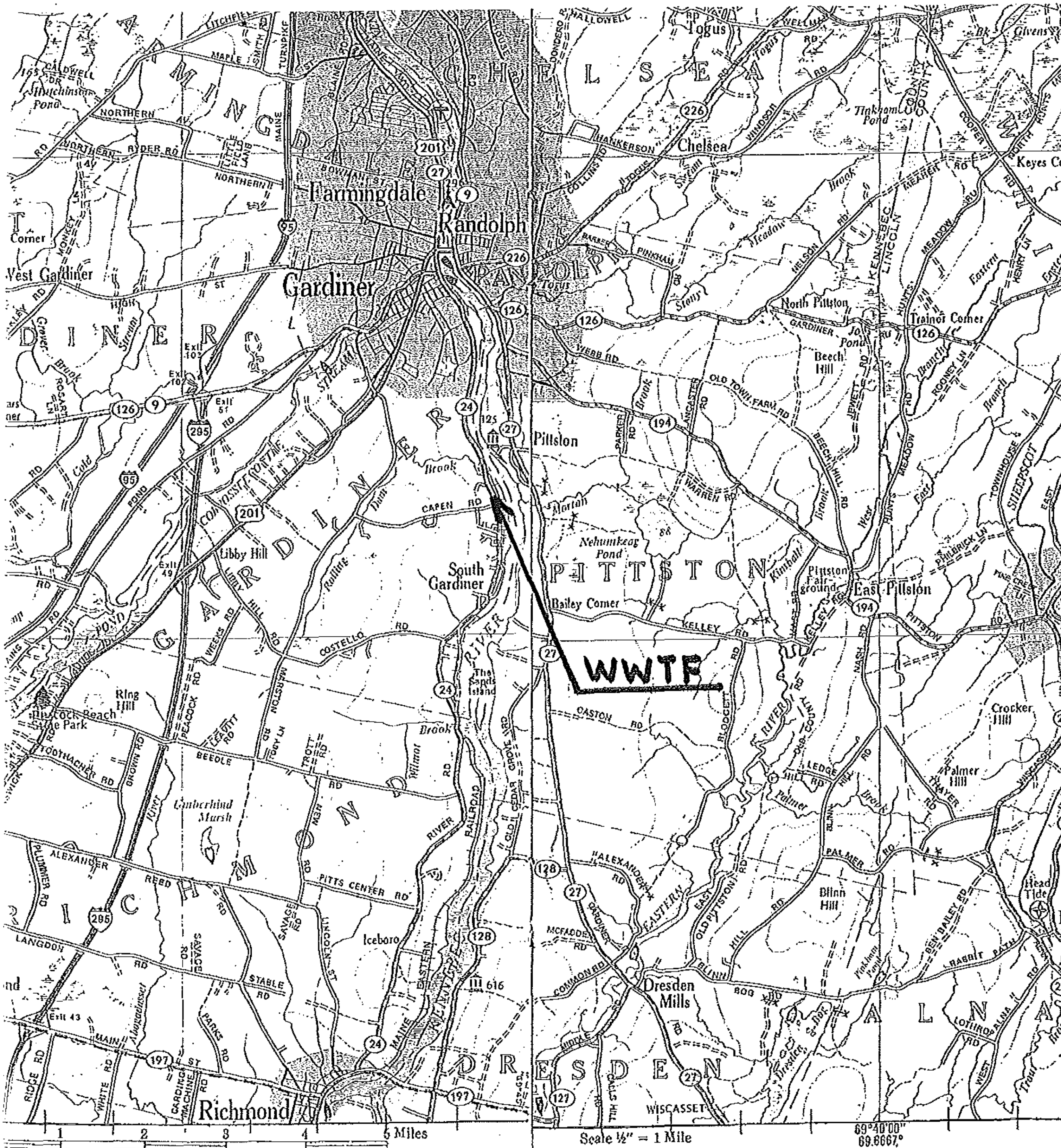
9. DEPARTMENT CONTACTS

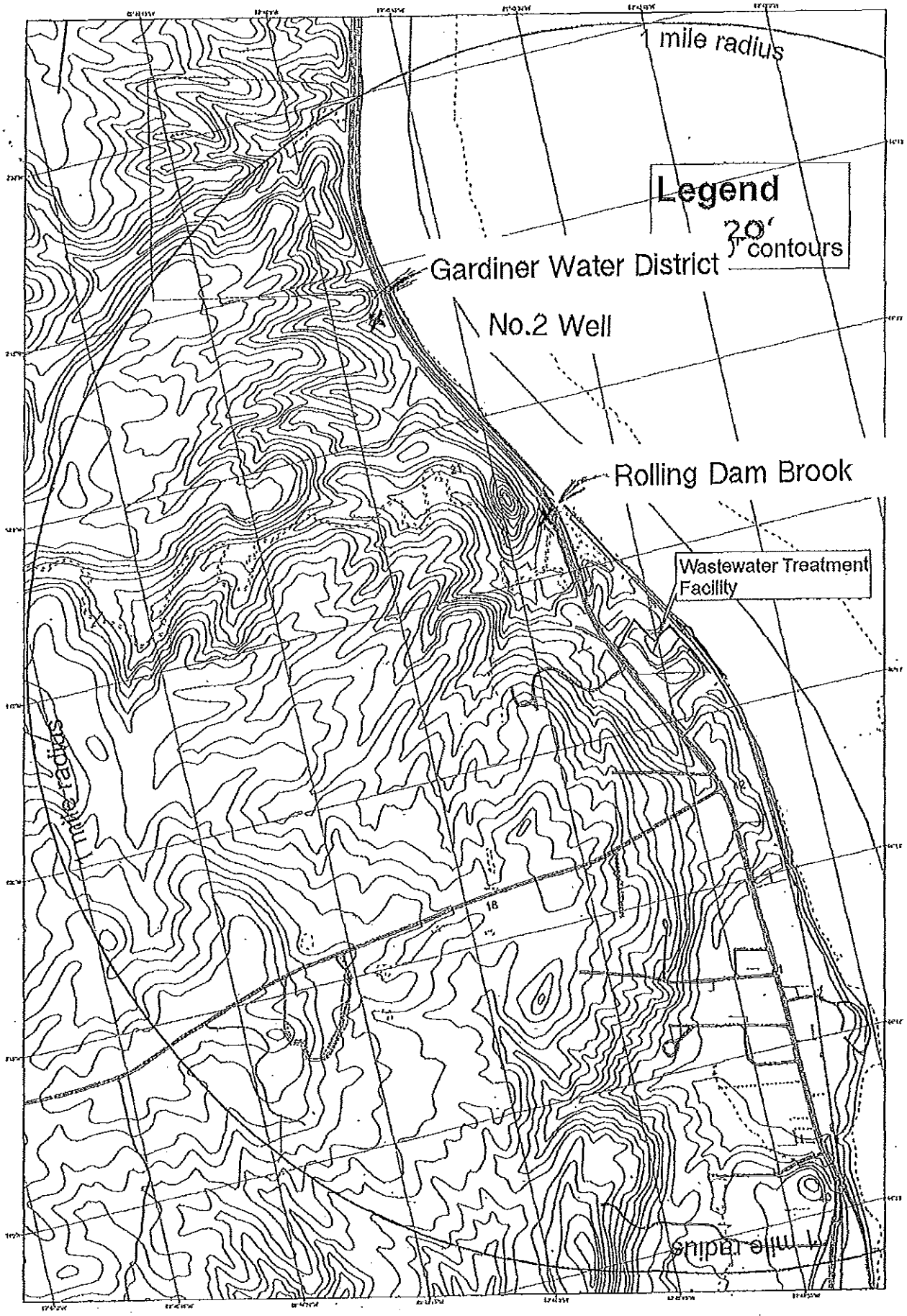
Additional information concerning this permitting action may be obtained from and written comments should be sent to:

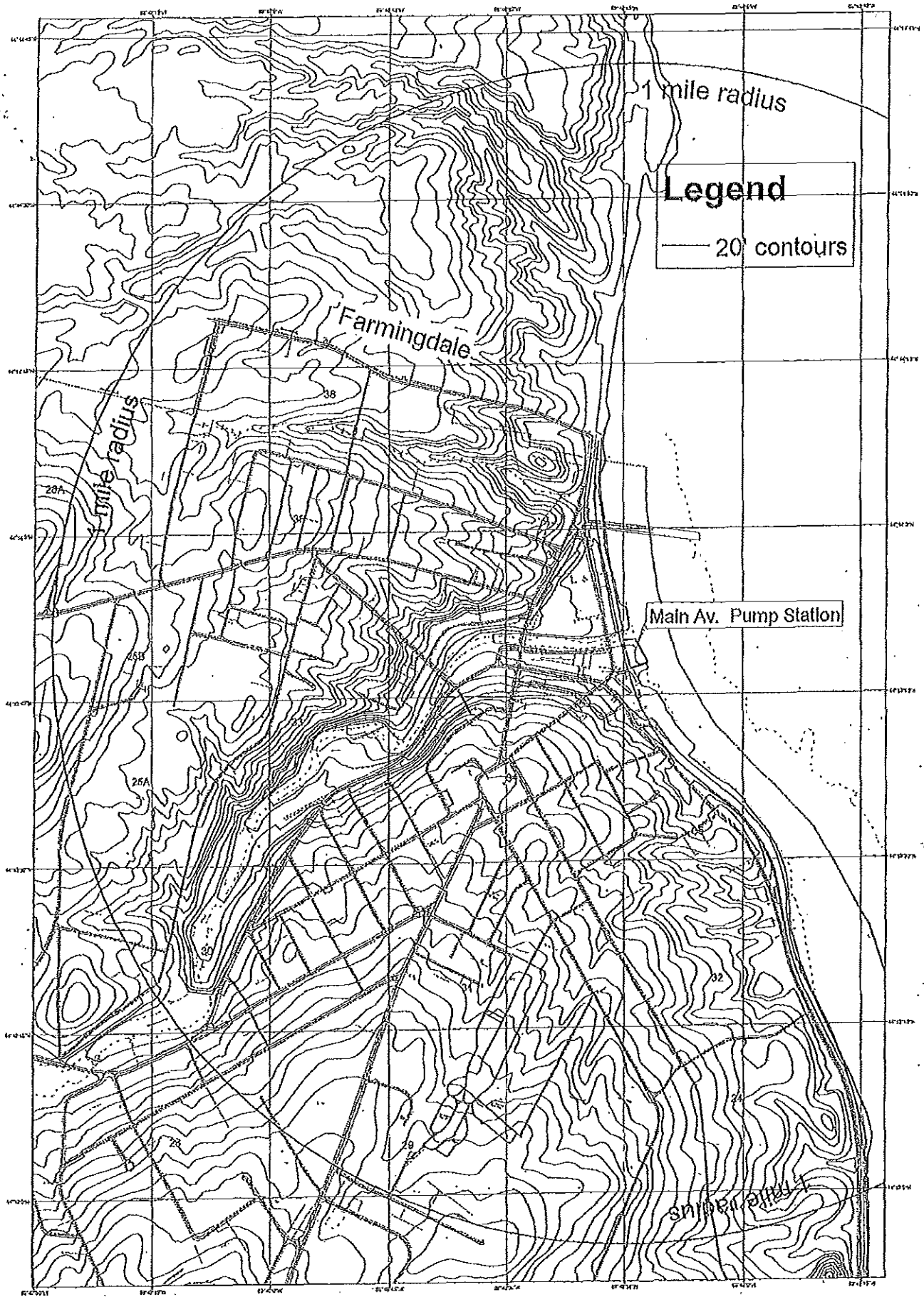
Gregg Wood
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Tel: (207) 287-7693 Fax: (207) 287-3435
e-mail: gregg.wood@maine.gov

10. RESPONSE TO COMMENTS

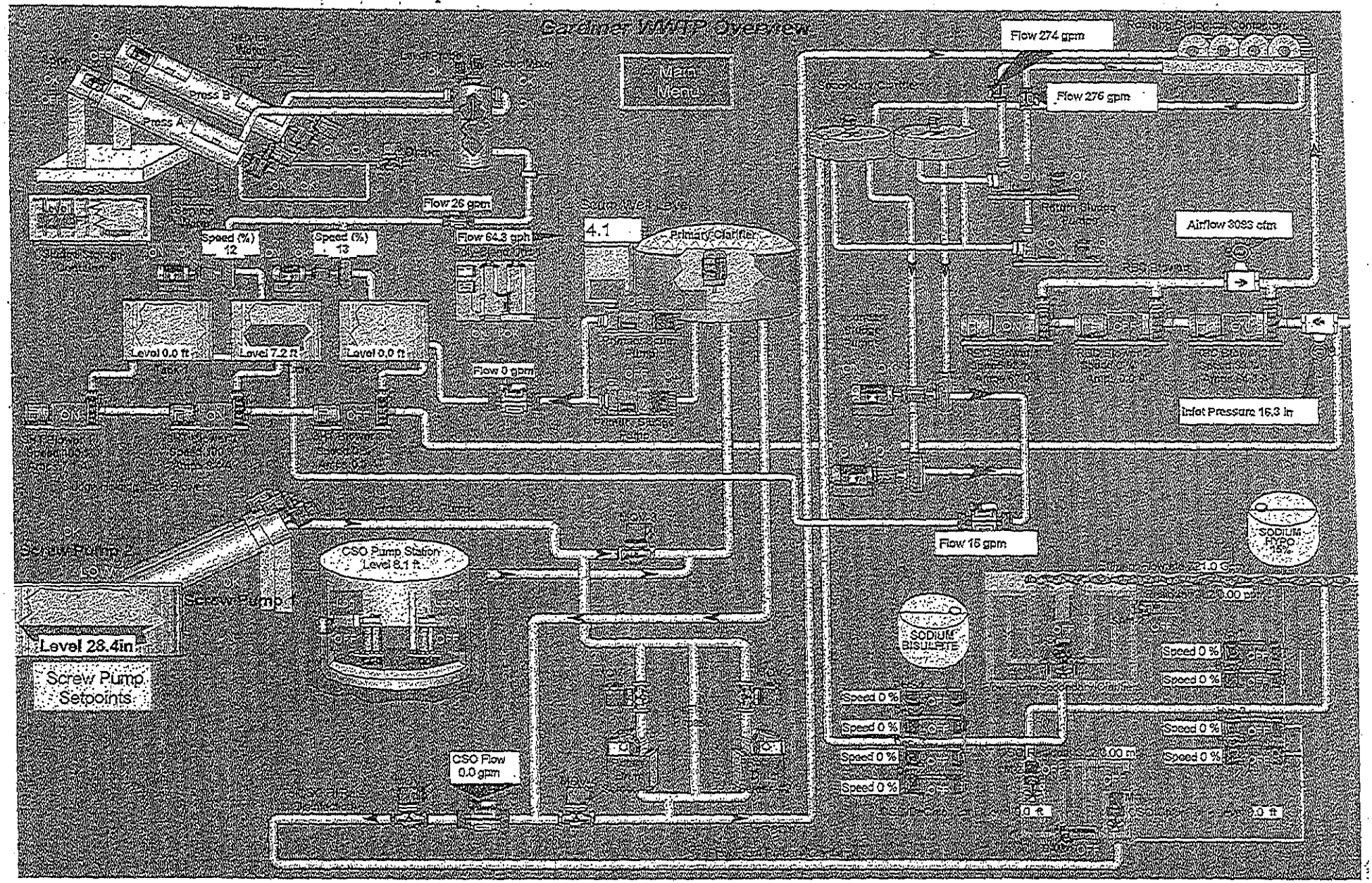
During the period of August 26, 2016, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department did not receive comments from the permittee, state or federal agencies 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.


WWTF
Togus
Chelsea
Farmingdale
Randolph
Gardiner
West Gardiner
North Pittston
Trainor Corner
Beech Hill
Pittston
Nehumkeag Pond
South Gardiner
Bailey Corner
Pittston Fairground
East Pittston
Libby Hill
Ring Hill
Crocker Hill
Palmer Hill
Blinn Hill
Head Tide
Iceboro
Dresden Mills
Richmond
Tinkham Pond
Keyes Cor
PITTSTON
DRESDEN
KELLEY RD
COSTELLO RD
CAPEN RD
CASTON RD
BEEDLE
PITTS CENTER RD
ALEXANDER RD
WEBB RD
OLD TOWN FARM RD
5 Miles
Scale ½" = 1 Mile
69°40'00"
69.6667°

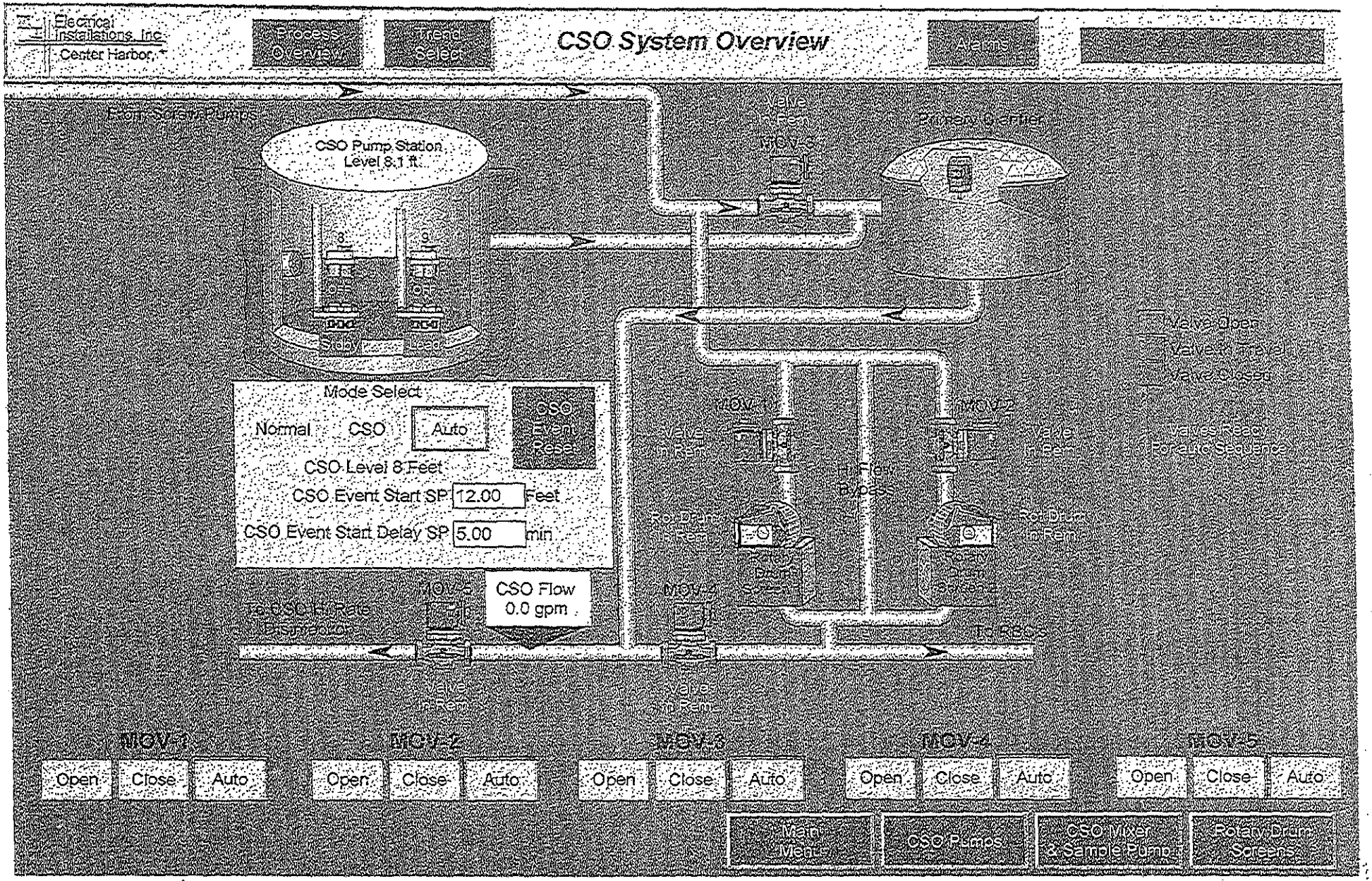

1 mile radius
Legend
20' contours
Gardiner Water District
No.2 Well
Rolling Dam Brook
Wastewater Treatment Facility
1 mile radius
1 mile radius


1 mile radius
Legend
20' contours
Farmingdale
1 mile radius
Main Av. Pump Station
1 mile radius

ATTACHMENT B



Normal (Dry) Flow Schematic



Wet Weather Flow Schematic

ATTACHMENT C

WET TEST REPORT

Data for tests conducted for the period

16/Mar/2011 - 16/Mar/2016

GARDINER NPDES= ME010170 Effluent Limit: Acute (%) = 0.330 Chronic (%) = 0.272

Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	100	01/05/2016	0.330		
TROUT	C_NOEL	100	01/05/2016	0.272		
WATER FLEA	A_NOEL	100	01/05/2016	0.330		
WATER FLEA	C_NOEL	50	01/05/2016	0.272		

ATTACHMENT D

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 16/Mar/2011 - 16/Mar/2016

Facility Name: **GARDINER** NPDES: **ME0101702**

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
04/24/2013	0.96	0.85	1	1	0	0	0	0	0	F	0
06/19/2013	1.19	0.80	2	2	0	0	0	0	0	F	0
07/17/2013	0.85	0.69	1	1	0	0	0	0	0	F	0
08/20/2014	0.91	0.94	2	2	0	0	0	0	0	F	0
11/18/2015	0.97	0.78	2	2	0	0	0	0	0	F	0
01/05/2016	1.14	1.00	133	13	28	46	25	10	11	F	0

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

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 that 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.*

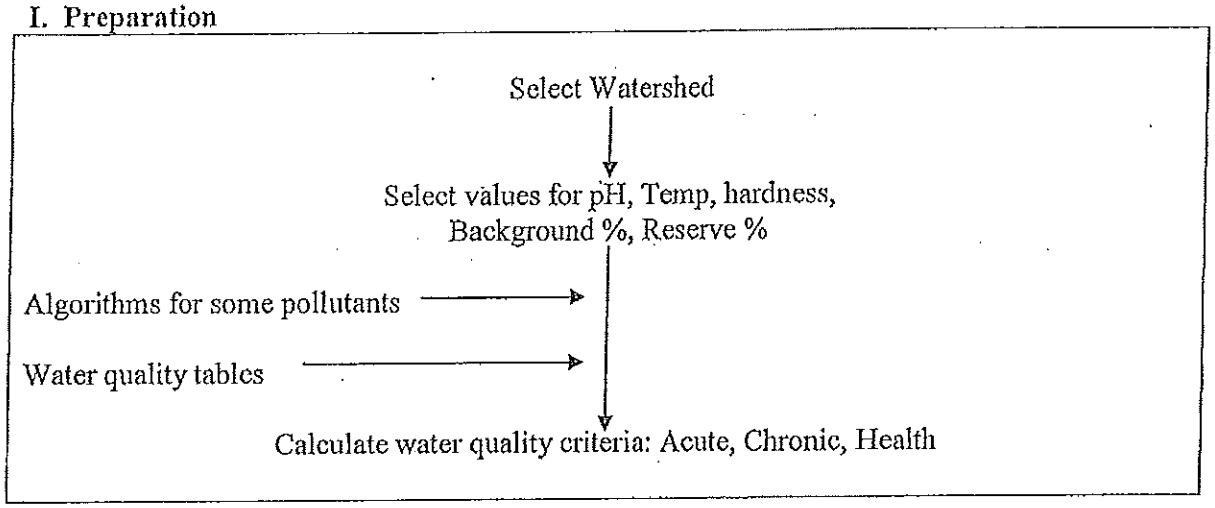
Segment allocation. One of three ways of developing an *allocation.* The amount is set by multiplying a facility's *historical discharge percentage* for a specific pollutant by the *assimilative capacity* for that pollutant and criterion. A facility will have different allocation percentages for each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

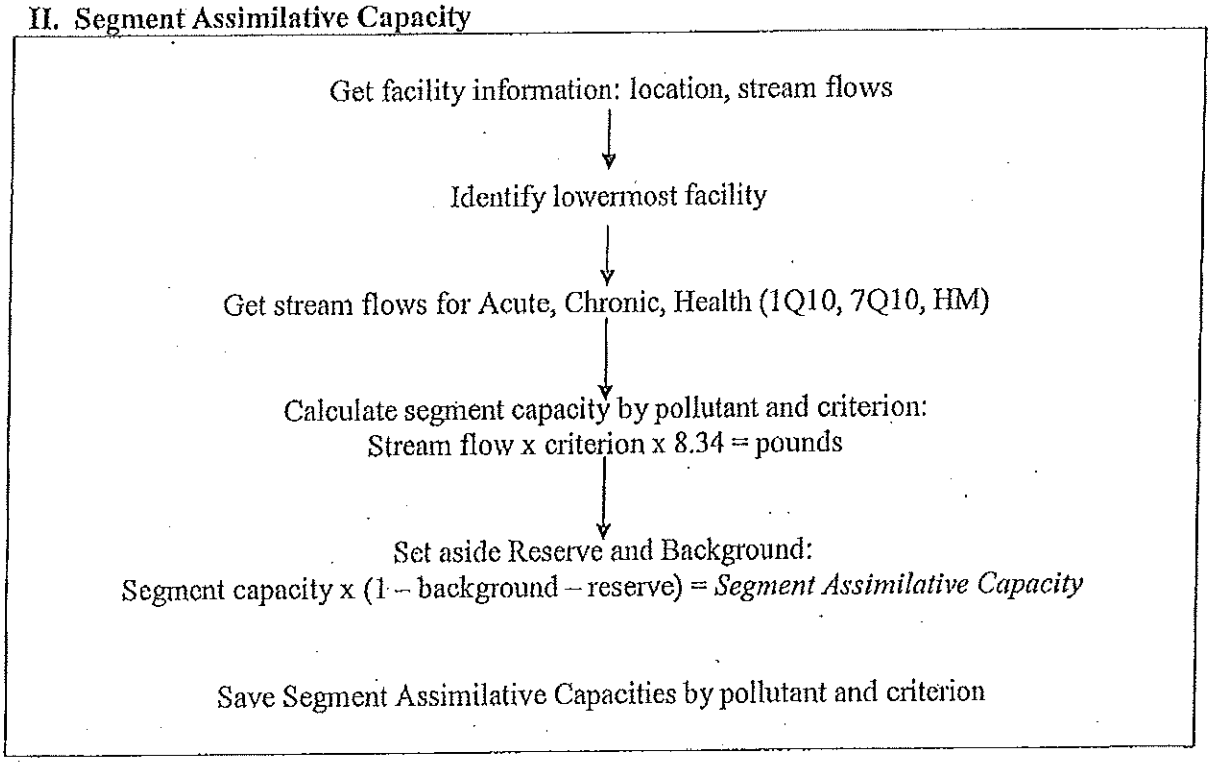
Water quality criteria. Standards for acceptable in-stream or ambient levels of pollutants. These are established in the Department's Chapter 584 and are expressed as concentrations in ug/L. There may be separate standards for acute and chronic protection aquatic life and/or human health. Each criterion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

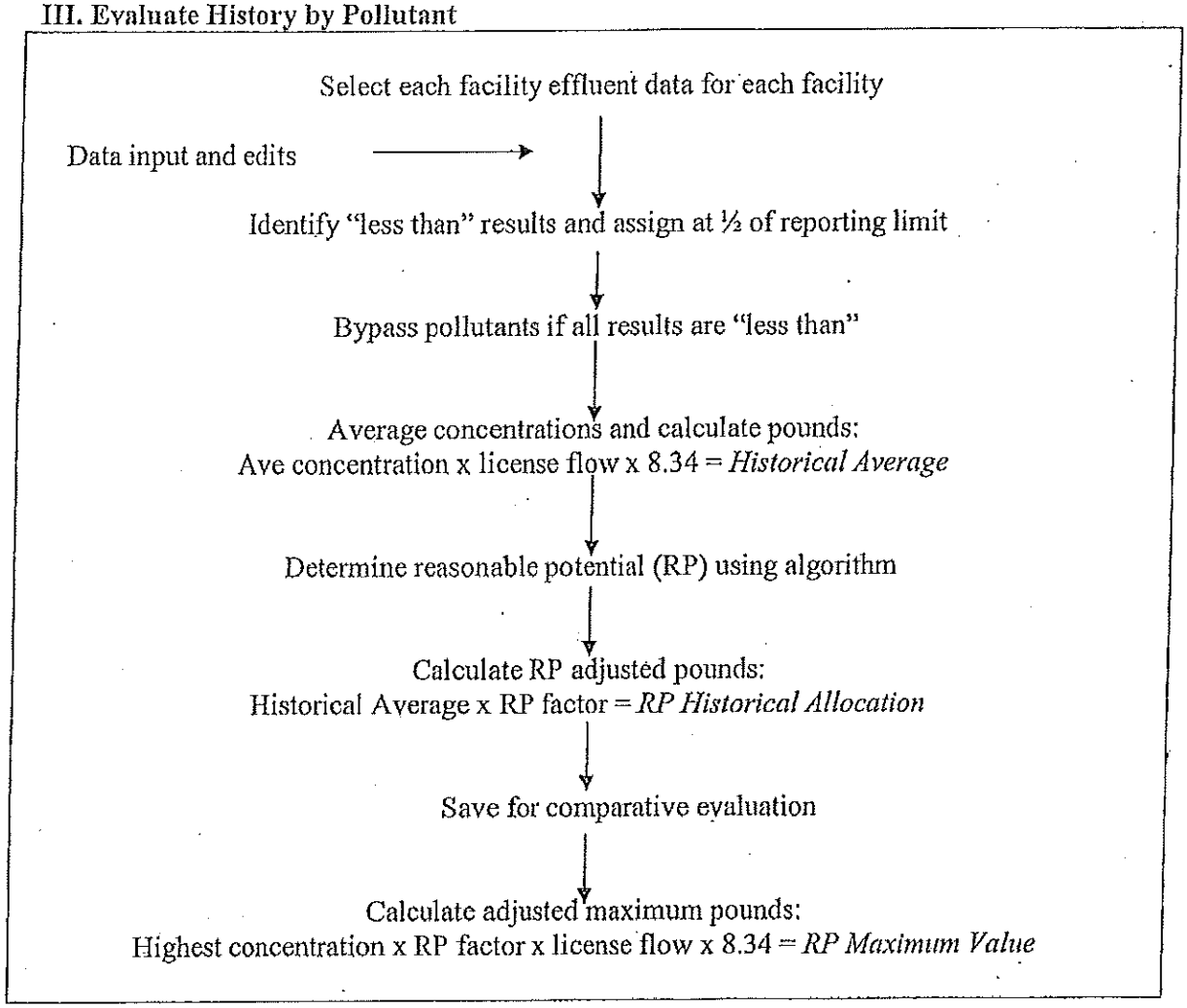


II. Segment Assimilative Capacity

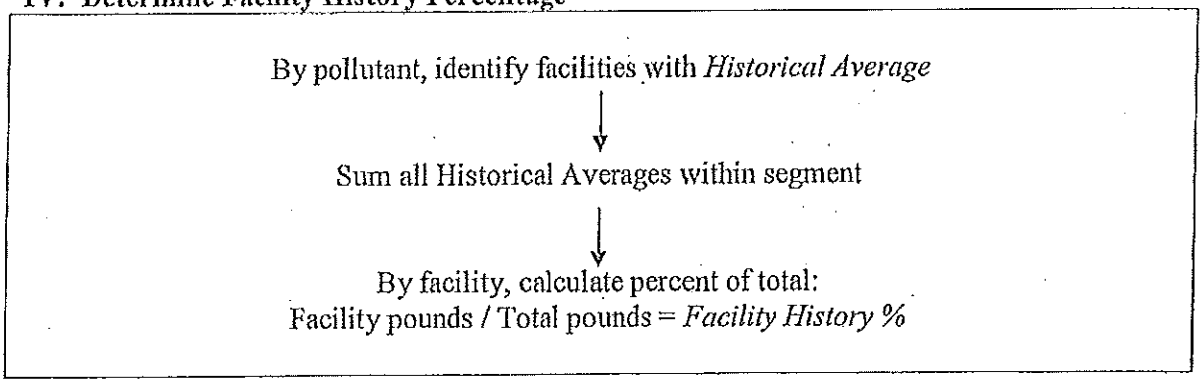


Maine Department of Environmental Protection
General Processing Steps in "DeTox"

III. Evaluate History by Pollutant



IV. Determine Facility History Percentage



VIII. Evaluate Need for Effluent Limits

By facility, pollutant and criterion select
Segment Allocation, *Individual Allocation* and *RP Maximum value*

↓

If *RP Maximum value* is greater than either *Segment Allocation* or *Individual Allocation*, use lesser value as *Effluent Limit*

↓

Save *Effluent Limit* for comparison

IX. Reallocation of Assimilative Capacity

Starting at top of segment, get *Segment Allocation*, *Facility Allocation* and *Effluent Limit*

↓

If *Segment Allocation* equals *Effluent Limit*, move to next facility downstream

↓

If not, subtract *Facility Allocation* from *Segment Allocation*

↓

Save difference

↓

Select next facility downstream

↓

Figure remaining *Segment Assimilative Capacity* at and below facility, less tributaries

↓

Add saved difference to get an adjusted *Segment Assimilative Capacity*

↓

Reallocate *Segment Assimilative Capacity* among downstream facilities per step V

↓

Repeat process for each facility downstream in turn

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?	☐	☐
2	Changes in the condition or operations of the facility that may increase the toxicity of the discharge?	☐	☐
3	Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge?	☐	☐
4	Increases in the type or volume of hauled wastes accepted by the facility?	☐	☐

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	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
WET Testing	☐	☐	☐	☐
Priority Pollutant Testing	☐	☐	☐	☐
Analytical Chemistry	☐	☐	☐	☐
Other toxic parameters [1]	☐	☐	☐	☐

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.

ATTACHMENT G

Categorical Industrial Users (from 40 CFR Sections 403-471)

	5	Dairy Products		26	Glass Manu.		46	Paint formulating
	6	Grain Mill		27	Asbestos manu.		47	Ink formulating
	7	Canned/preserv fruits& vegs		28	Rubber manu.		49	Airport deicing
	8	Canned/preserved seafood		29	Timber products processing		50	Construction & Development
	9	Sugar processing		30	Pulp/paper/paperboard		51	Conc. aquatic animal prod.
	10	Textile mill		32	Meat & Poultry products		54	Gum & Wood chemicals
	11	Cement manufacturing		33	Metal Finishing		55	Pesticide Chemicals
	12	Conc. animal feeding ops.		34	Coal mining		57	Explosives
	13	Electroplating		35	Oil& Gas extraction		58	Carbon Black Manu.
	14	Organic chemicals, plastics & syn. fiber		36	Mineral mining/processing		59	Photographic
	15	Inorganic chemicals		37	Centralized waste treatment		60	Hospital
	17	Soap & Detergent Manu.		38	Metal products		61	Battery manufacturing
	18	Fertilizer manu.		39	Pharmaceutical Manu		63	Plastics molding/forming
	19	Petroleum refining		40	Ore mining/processing		64	Metal molding/casting
	20	Iron & Steel manu.		42	Transportation equip. cleaning		64	Coil coating
	21	Non-Ferrous metals		43	Paving & roofing materials		66	Porcelain
	22	Phosphate		44	Waste combustors		67	Aluminum forming
	23	Steam Electric power		45	Landfill		68	Copper forming
	24	Ferroalloy manu.					69	Electrical & electronic components
	25	Leather tanning/finishing					71	Nonferrous metals forming/Metals powders

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.