STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

March 16, 2016

Mark Holt
Town of Jay Sewer Department
340 Main Street
Jay, ME 04239
jsewer@jay-maine.org

Sent via electronic mail
Delivery confirmation requested

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit # ME0101061
Maine Waste Discharge License (WDL) Application # W002689-6B-J-R
Proposed Draft MEPDES Permit Renewal

Dear: Mark Holt

Enclosed is a proposed draft MEPDES permit and Maine WDL which the Department proposes to issue for your facility as a final document after opportunity for your review and comment. By transmittal of this letter, you are provided with an opportunity to comment on the proposed draft permit and its conditions (special conditions specific to this permit are enclosed; standard conditions applicable to all permits are available upon request). If it contains errors or does not accurately reflect present or proposed conditions, please respond to this Department so that changes can be considered.

By copy of this letter, the Department is requesting comments on the proposed draft permit from various state and federal agencies, as required by our new regulations, and from any other parties who have notified the Department of their interest in this matter.
If you have any questions regarding the matter, please feel free to call me.

All comments must be received in the Department of Environmental Protection office on or before the close of business **Thursday, April 14, 2016.** Failure to submit comments in a timely fashion will result in the final document being issued as drafted.

Comments in writing should be submitted to my attention at the following address:

Maine Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, ME 04333-0017
Aaron.A.Dumont@maine

If you have any questions regarding the matter, please feel free to call me at (207)-592-7161.

Sincerely,

Aaron Dumont
Division of Water Quality Management
Bureau of Water Quality
Aaron.A.Dumont@maine.gov
Phone: 207-592-7161

Enclosure

cc: Beth Dehaas, DEP/CMRO
Lori Mitchell, DEP/CMRO
Alex Rosenberg, EPA
David Webster, EPA
David Pincumbe, EPA
Olga Vergara, EPA
Marelyn Vega, EPA
Richard Carvalho, EPA
DMR Environmental Review
IF&W Environmental Review

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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF JAY	)	MAINE POLLUTANT DISCHARGE
JAY, FRANKLIN COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
ME0101061	)	WASTE DISCHARGE LICENSE
W002689-6B-J-R **APPROVAL**	)	**RENEWAL**

In compliance with the provisions of the *Pollution Control*, 38 M.R.S.A. §§ 411 – 424-B, *Water Classification Program*, 38 M.R.S.A. §§ 464 – 470 and *Federal Water Pollution Control Act*, Title 33 U.S.C. § 1251, *et seq.*, and applicable rules of the, the Department of Environmental Protection (Department) has considered the application of the TOWN OF JAY (Town or permittee), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On March 25, 2015, the Department accepted as complete for processing an application from the Town for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit ME0101061/ Maine Waste Discharge License (WDL) W002689-6B-G-R, which was issued by the Department on August 5, 2010, and expired on August 5, 2015. The permit approved the discharge of a monthly average flow of 0.06 million gallons per day (MGD) of secondary treated wastewater from a municipal wastewater treatment facility to Sevenmile Stream, Class B, in North Jay, Maine.

It is noted that the Department made two permit revisions since issuing the 8/5/10 permit. On February 6, 2012, the permit was modified to reduce mercury monitoring requirements to once per year. On March 8, 2012, the Department issued a minor permit revision eliminating the numeric limitations and monitoring requirements for total lead.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the August 5, 2010, permitting action and subsequent modifications except that it is:

1. Eliminating the waiver to from 85 percent removal of both biochemical oxygen demand (BOD_5) and total suspended solids (TSS) when the influent strength is less than 200 mg/L;

2. Establishing a requirement for effluent monitoring for total phosphorus for the next five years;

PERMIT SUMMARY (cont'd)

3. Establishing a new water quality based limitation for total copper as test results submitted to the Department indicate the discharge from the facility either exceeds or has reasonable potential to exceed ambient water quality criteria (AWQC) for copper; and

4. Reducing the monitoring frequency for Total Residual Chlorine and pH from 1/day to 4/week based on a statistical evaluation for the previous 23 month period.

CONCLUSIONS

Based on the findings summarized in the attached and incorporated Draft Fact Sheet dated March 15, 2016, and subject to the special and standard conditions that follow, the Department makes the following CONCLUSIONS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.

2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.

3. The provisions of the State's antidegradation policy, *Classification of Maine waters*, 38 M.R.S.A. § 464(4)(F), will be met, in that:

    a. Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;

    b. Where high quality waters of the State constitute an outstanding natural resource, that water quality will be maintained and protected;

    c. Where the standards of classification of the receiving waterbody are not met, the discharge will not cause or contribute to the failure of the waterbody to meet the standards of classification;

    d. Where the actual quality of any classified receiving waterbody exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and

    e. Where a discharge will result in lowering the existing water quality of any waterbody, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

4. The discharges will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of licenses* 38 M.R.S.A. § 414-A(1)(D).

ACTION

Based on the findings and conclusions as stated above, the Department APPROVES the above noted application of the TOWN OF JAY to discharge a monthly average of 0.06 MGD of secondary treated sanitary wastewater to Sevenmile Stream in Jay, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

1. *Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits*, revised July 1, 2002, copy attached.

2. The attached Special Conditions, including any effluent limitations and monitoring requirements.

3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. *Maine Administrative Procedure Act*, 5 M.R.S.A. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matter*s, 06-096 CMR 2(21)(A) (amended October 19, 2015).

DONE AND DATED AT AUGUSTA, MAINE, THIS ____ DAY OF _____ 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____
PAUL MERCER, Commissioner

Date filed with Board of Environmental Protection _____

Date of initial receipt of application March 23, 2015
Date of application acceptance March 25, 2015

This Order prepared by Aaron Dumont, BUREAU OF WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge secondary treated sanitary wastewater from **Outfall #001** to Sevenmile Stream in Jay. Such discharges are limited and must be monitored by the permittee as specified below[(1)]:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	0.06 MGD *[03]*	---	Report MGD [*03]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
Biochemical Oxygen Demand *June 1 – September 30* *October 1– May 31 [00310]*	5 lbs/day 15 lbs/day *[26]*	7.5 lbs/day 23 lbs/day *[26]*	8.5 lbs/day 25 lbs/day *[26]*	10 mg/L 30 mg/L *[19]*	15 mg/L 45 mg/L *[19]*	17 mg/L 50 mg/L *[19]*	2/Month *[02/30]* 2/Month *[02/30]*	Composite *[24]*
BOD_5 % Removal[(2)] *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Total Suspended Solids (TSS) *[00530]*	15 lbs/day *[26]*	23 lbs/day *[26]*	25 lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Month *[02/30]*	Composite *[24]*
TSS % Removal[(2)] *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	2/Month *[02/30]*	Grab *[GR]*
E. coli Bacteria[(3,4)] *[31633]* May 15 – September 30	---	---	---	64 col/100 ml *[13]*	---	236 col/100 ml *[13]*	2/Month *[02/30]*	Grab *[GR]*
Total Residual Chlorine[(5)] *[50060]*	---	---	---	0.1 mg/L *[19]*---	---	0.3 mg/L *[19]*	4/Week *[04/07]*	Grab *[GR]*
pH (Std. Unit) *[00400]*	---	---	---	---	---	6.0 – 9.0 SU *[12]*	4/Week *[04/07]*	Grab *[GR]*
Total Phosphorus [(6)] *[00665] (June 1- Sept 30)*	Report lbs/day *[26]*	---	Report lbs/day *[26]*	Report mg/L *[19]*	---	Report mg/L *[19]*	1/Month *[01/30]*	Grab *[GR]*
Mercury (Total)[(7)] *[71900]*	---	---	---	4.5 ng/L *[3M]*	---	6.8 ng/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*

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

Footnotes: See Pages 8-11 of this permit for applicable footnotes.

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

2. The permittee is authorized to discharge secondary treated sanitary wastewater from Outfall #001 to Sevenmile Stream in Jay. Such discharges are limited and must be monitored by the permittee as specified below:

Effluent Characteristic	**Discharge Limitations**						**Minimum Monitoring Requirements**	
	Monthly Average	**Weekly Average**	**Daily Maximum**	**Monthly Average**	**Weekly Average**	**Daily Maximum**	**Measurement Frequency**	**Sample Type**
Copper (Total) *[01042]*	0.022 lbs/day *[26]*		0.024 lbs/day *[26]*	Report *[26]*		Report *[26]*	2/Year *[02/YR]*	Composite *[24]*

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports **(DMRs).**
Footnotes: See Pages 8-11 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

3. **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 testing as follows:

Effluent Characteristic	Discharge Limitations						Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity (WET)[8]								
A-NOEL								
Ceriodaphnia dubia [TDA3B]	---	---	---	---	---	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Salvelinus fontinalis [TDA6F]	---	---	---	---	---	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
C-NOEL								
Ceriodaphnia dubia [TBP3B]	---	---	---	---	---	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Salvelinus fontinalis [TBQ6F]	---	---	---	---	---	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Analytical Chemistry [9,10] *[51477]*	---	---	---	---	---	Report ug/L *[28]*	1/Quarter *[01/QR]*	Composite/ Grab *[24/GR]*
Priority Pollutant [11] *[50008]*	---	---	---			Report ug/L *[28]*	1/Year *[01/YR]*	Composite / Grab *[24/GR]*

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

Footnotes: See Pages 8-11 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

4. **SURVEILLANCE LEVEL TESTING –** Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee must conduct surveillance level testing as follows:

Effluent Characteristic	Discharge Limitations						Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity (WET) [8]								
A-NOEL								
Ceriodaphnia dubia [TDA3B]	---	---	---	---	---	Report % *[23]*	1/2 Years *[01/2Y]*	Composite *[24]*
Salvelinus fontinalis [TDA6F]	---	---	---	---	---	Report % *[23]*	1/2 Years *[01/2Y]*	Composite *[24]*
C-NOEL								
Ceriodaphnia dubia [TBP3B]	---	---	---	---	---	Report % *[23]*	1/2 Years *[01/2Y]*	Composite *[24]*
Salvelinus fontinalis [TBQ6F]	---	---	---	---	---	Report % *[23]*	1/2 Years *[01/2Y]*	Composite *[24]*
Analytical Chemistry [9,10] *[51477]*	---	---	---	---	---	Report ug/L *[28]*	1/2 Years *[01/2Y]*	Composite/ Grab *[24/GR]*

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

Footnotes: See Pages 8-11 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES

1. **Sampling** – Influent sampling must be conducted at the headworks building influent channel. Effluent sampling must be sampled at the end of the chlorine contact chamber but prior to the discharge pipe. Any change in sampling location must be approved by the Department in writing. The permittee must conduct sampling and analysis 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 wastewater analysis. Samples that are sent to a POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (effective April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

2. **Percent Removal** – The permittee must achieve a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand for all flows receiving secondary treatment. The percent removal is calculated based on influent and effluent concentration values.

3. **Bacteria Limits –** *E. coli* bacteria limits and monitoring requirements are seasonal and apply between May 15 and September 30 of each year. In accordance with 38 M.R.S.A. § 414-A(5), the Department may, at any time and with notice to the permittee, modify this permit to establish bacteria limitations on a year-round basis to protect the health, safety and welfare of the public.

4. **Bacteria Reporting –** The monthly average *E. coli* bacteria limitation is a geometric mean limitation and sample results must be reported as such.

5. **TRC Monitoring** – Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine based compounds are being used to disinfect the discharge. The permittee must utilize approved test methods that are capable of bracketing the limitations in this permit.

6. **Total Phosphorus** – Total phosphorus monitoring must be performed in accordance with **Attachment A** of this permit entitled, *Protocol For Total P Sample Collection and Analysis for Waste Water – May, 2014*, unless otherwise specified by the Department.

SPECIAL CONDITIONS

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

7. **Mercury –** All mercury sampling (1/Year) required to determine compliance with interim limitations established pursuant to *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001) must be conducted in accordance with Unites State Environmental Protection Agency's (USEPA) "clean sampling techniques" found in USEPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analyses must be conducted in accordance with USEPA Method 1631E, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See **Attachment A**, *Effluent Mercury Test Report*, of this permit for the Department's form for reporting 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.

8. **Whole Effluent Toxicity (WET)** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 5.8 % and 4.9% 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 inverse of the applicable acute and chronic dilution factors of 17.2:1 and 20.4:1, respectively. See **Attachment B** of this permit for a copy of the Department's WET reporting form.

   a. **Surveillance level testing** – Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee must initiate surveillance level WET tests at a frequency of once every two years (1/2 Years). Tests must be conducted in a different calendar quarter of each year that a WET testing is conducted. Testing must be conducted on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*). Tests must be conducted in different calendar quarters.

   b. **Screening level testing** – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level WET testing at a minimum frequency of twice per year for the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*). Screening tests must be conducted with one test in January to June and one test 6 months later pursuant to 06-096 CMR 530(2)(D)(2).

SPECIAL CONDITIONS

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

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 specified above.

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

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

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

Results of WET tests must be reported on the "*Whole Effluent Toxicity Report Fresh Waters*" form included as **Attachment D** of this permit each time a WET test is performed. Each time a WET test is performed, the permittee must sample and analyze for the parameters in the WET Chemistry and the Analytical Chemistry sections of the Department form entitled, *Maine Department of Environmental Protection, WET and Chemical Specific Data Report Form*. See **Attachment D** of this permit.

9. **Analytical Chemistry** – Refers to a suite of chemicals in **Attachment D** of this permit.

a. **Surveillance level testing** – Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee must conduct analytical chemistry testing at a minimum frequency of once every two years (reduced testing), except for those analytical chemistry parameter(s) otherwise regulated in this permit. Tests must be conducted in different calendar quarters.

b. **Screening level testing** – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement the permittee must conduct analytical chemistry testing at a minimum frequency of once per calendar quarter for four consecutive calendar quarters, except for those analytical chemistry parameter(s) otherwise regulated in this permit.

SPECIAL CONDITIONS

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

Analytical chemistry and priority pollutant testing must be conducted on samples collected at the same time as those collected for whole effluent toxicity tests, when applicable, and must be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve the most current minimum reporting levels of detection as specified by the Department. See **Attachment D** of this permit for a list of the Department's most current reporting limits (RLs).

Analytical chemistry and priority pollutant test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the laboratory reports for up to 10 business days after receiving the test results from the laboratory conducting the testing 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 Chapter 584. For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "N9" monitoring not required this period.

10. **Priority Pollutant Testing –** Refers to a suite of chemicals in **Attachment E** of this permit.

    a. **Surveillance level testing** - 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 must conduct screening level priority pollutant testing at a minimum frequency of once per year, except for those analytical chemistry parameter(s) otherwise regulated in this permit.

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

SPECIAL CONDITIONS

B. NARRATIVE EFFLUENT LIMITATIONS

1. The permittee must not discharge effluent that contains 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 permittee must not discharge effluent that contains 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 permittee must not discharge wastewater that causes visible discoloration or turbidity in the receiving waters that causes those waters to be unsuitable for the designated uses and characteristics ascribed to their class.

4. The permittee must not discharge effluent that lowers the quality of any classified body of water below such classification, or lowers 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 management responsibility over the treatment facility must hold a minimum of a **Grade III** certificate (or higher) or must be a Registered Maine Professional Engineer pursuant to *Sewerage Treatment Operators*, 32 M.R.S.A. §§ 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 CMR 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

D. 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).

SPECIAL CONDITIONS

E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on March 25, 2015; 2) the terms and conditions of this permit; and 3) only from Outfall #001. Discharges of wastewater from any other point source(s) are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit.

F. NOTIFICATION REQUIREMENT

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

1. Any introduction of pollutants into the wastewater collection and treatment system from an indirect discharger in a primary industrial category discharging process wastewater; and

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

3. For the purposes of this section, notice regarding substantial change must include information on:

    a. the quality and quantity of wastewater introduced to the wastewater collection and treatment system; and

    b. any anticipated impact caused by the change in the quantity or quality of the wastewater to be discharged from the treatment system.

G. WET WEATHER FLOW MANAGEMENT PLAN

The treatment facility staff must have 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 conform to Department guidelines for such plans and 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 at least annually and record any necessary changes to keep the plan up to date. The Department may require review and update of the plan as it is determined to be necessary.

SPECIAL CONDITIONS

H. OPERATIONS AND MAINTENANCE (O&M) PLAN

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

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

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

I. 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 (13th) day of the month or hand-delivered to the Department's Regional Office such that the DMRs are received by the Department on or before the fifteenth (15th) day of the month** following the completed reporting period. A signed copy of the DMR and all other reports required herein must be submitted to the Department assigned inspector (unless otherwise specified by the Department) at the following address:

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

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

SPECIAL CONDITIONS

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

By December 31 of each calendar year, the permittee must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit ***[ICIS Code 75305]***. See **Attachment F** of the permit 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;

c. Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge;

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

d. Changes in stormwater collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge; and

e. Increases in the type or volume of transported (hauled) wastes accepted by the facility.

The Department may require that annual testing be re-instated if it determines that there have been changes in the character of the discharge or if annual certifications described above are not submitted.

K. REOPENING OF PERMIT FOR MODIFICATION

In accordance with 38 M.R.S.A. § 414-A(5) and upon evaluation of the tests results or monitoring requirements specified in Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at any time and with notice to the permittee, modify this permit to: 1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded, (2) require additional monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

L. SEVERABILITY

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: **March 15, 2016**

PERMIT NUMBER: **ME0101061**

WASTE DISCHARGE LICENSE: **W002689-6B-J-R**

NAME AND ADDRESS OF APPLICANT:

TOWN OF JAY
340 MAIN STREET
JAY, MAINE 04239

COUNTY: **FRANKLIN**

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

NORTH JAY WWTF
32 JERRY STREET
JAY, MAINE 04239

RECEIVING WATER CLASSIFICATION: **SEVENMILE STREAM/CLASS B**

COGNIZANT OFFICIAL CONTACT INFORMATION:

MR. MARK L. HOLT
(207) 645-4246
jsewer@jay-maine.org

1. APPLICATION SUMMARY

On March 23, 2015, the Department of Environmental Protection (Department) accepted as complete for processing an application from the Town of Jay (Town) for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit ME0101061/ Maine Waste Discharge License (WDL) W002689-6B-G-R, which was issued by the Department on August 5, 2010, and expired on August 5, 2015. The permit approved the discharge of a monthly average flow of 0.06 million gallons per day (MGD) of secondary treated wastewater from a municipal wastewater treatment facility to Sevenmile Stream, Class B, in Jay, Maine.

It is noted that the Department made two permit revisions since issuing the 8/5/10 permit. On February 6, 2012, the permit was modified to reduce mercury monitoring requirements to once per year. On March 8, 2012, the Department issued a minor permit revision eliminating the numeric limitations and monitoring requirements for total lead.

2. PERMIT SUMMARY

a. Terms and Conditions:
This permitting action is carrying forward all the terms and conditions of the August 5, 2010, permitting action and subsequent modifications except that it is:

1. Eliminating the waiver to achieve 85 percent removal of both biochemical oxygen demand and total suspended solids when the influent strength is less than 200 mg/L.

2. Establishing a requirement for effluent monitoring for total phosphorus for the next five years.

3. Establishing a new water quality based limitation for total copper as test results submitted to the Department indicate the discharge from the facility either exceeds or has reasonable potential to exceed applicable ambient water quality criteria (AWQC) for copper.

4. Reducing the monitoring frequency for Total Residual Chlorine and pH from 1/day to 4/week based on a statistical evaluation for the previous 23 month period.

b. History: The most recent regulatory actions include the following:

August 26, 1994 – The Department issued a renewal of WDL #W002689 with secondary limitations associated with a monthly average discharge of 0.06 MGD to Sevenmile Stream in Jay, Maine.

September 21, 1994 – The U.S. Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0101061 for five-year term.

February 5, 1995 – The Department issued a letter to Jay that administratively modified WDL #2689 to incorporate whole effluent toxicity (WET) and chemical specific (priority pollutant) testing pursuant to *Surface Water Toxics Control Program,* CMR 06-096 530.5.

May 23, 2000 – The Department administratively modified the 2/5/95 WDL by establishing interim mean and maximum technology based concentration limitations of 4.5 nanograms per liter (ng/L) and 6.8 ng/L, respectively for mercury.

December 8, 2000 – The Department issued WDL #W002689-5L-D-R for a five-year term.

January 12, 2001 – The State of Maine received authorization from the USEPA to administer the NPDES permitting program in Maine. From that date forward the program has been referred to as the MEPDES permit program and ME0101061 remains the primary permit reference number for the facility.

2. PERMIT SUMMARY (cont'd)

August 2, 2005 – The Department issued combination MEPDES permit #ME0101061/ WDL #W002689-5L-E-R, for a five-year term.

April 10, 2006 – The Department initiated a modification of the 8/2/05 permit by incorporating the whole effluent toxicity (WET) and chemical specific testing requirements of *Surface Water Toxics Control Program,* 06-096 CMR Chapter 530, promulgated on October 12, 2005.

December 29, 2008 – The Department issued a minor revision of the 8/2/05 permit by eliminating water quality based mass and concentration limits for arsenic, bis(2-ethylhexyl)phthalate and silver based on the results of 12/10/08 statistical evaluation pursuant to 09-096 CMR 530 (last amended March 21, 2012).

August 5, 2010 – The Department issued WDL #W002689-6B-G-R / MEPDES #ME0101061 for a five year term.

February 6, 2012 – The Department issued a minor revision to WDL/MEPDES permit #W007713-6B-I-R pursuant to 38 M.R.S.A. §420(1)(B)(F) and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001) to reduce the monitoring frequency for mercury to once per year.

February 25, 2012 – The Department issued a minor revision of the 2/25/12 MEPDES permit by eliminating the numeric limitations and monitoring requirements for total lead from the permit based on the results of the most current 60 months of total lead data for the Town's wastewater treatment facility pursuant to 06-096 CMR, 530 (last amended March 21, 2012).

March 23, 2015 – The Town of Jay submitted a timely and complete General Application to the Department for the renewal the 8/2/10 MEPDES permit (including subsequent minor permit revisions and permit modifications). The application was accepted for processing on March 23, 2015 and was assigned WDL #W002689-6B-J-R/MEPDES #ME0101061.

c. Source Description: The Town of Jay's wastewater treatment facility receives sanitary wastewaters from approximately 120 residential and commercial users in the village of North Jay. The town maintains separate sanitary and stormwater collection systems. The collection system does not contain any combined sewer overflows (CSOs) but there is a significant increase in flow to the plant associated with wet weather. The sanitary collection system is approximately 3 miles in length with no pump stations as the entire system flows via gravity. The wastewater treatment facility is not authorized to accept transported wastes from local septage haulers. There are no significant industrial users contributing to the facility's influent flow. See **Attachment A** of this Fact Sheet for a site location map of this facility.

2. PERMIT SUMMARY (cont'd)

d. Wastewater Treatment: The North Jay wastewater treatment facility provides a secondary level of treatment via an extended air activated sludge process. A facility upgrade was completed in April of 1999 converting the facility from the original package-type treatment facility which was built in 1972, to an enlarged package-type treatment facility. All of the activated sludge treatment units are contained within a circular structure. The disinfection system is located in a separate building. The major components of the wastewater treatment process include a bar screen, a coarse bubble aeration system, one secondary clarifier**,** and a chlorine contact chamber. The effluent is disinfected with sodium hypo-chlorite and dechlorinated with sodium bisulfite prior to being discharged to Sevenmile Stream via an 8-inch diameter outfall pipe. See **Attachment B** of this Fact Sheet for a schematic of the wastewater treatment processes.

3. CONDITIONS OF PERMIT

Conditions of licenses, 38 M.R.S.A. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective March 21, 2012) require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (last amended July 29, 2012), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classification of major river basins, 38 M.R.S.A. § 467(1)(D) classifies minor tributaries of the Androscoggin, which includes Sevenmile Stream at the point of discharge, as Class B waters. *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465(3) describes the standards for Class B.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the 3.0 mile segment of the tributary to the Androscoggin (AU_ID ME0104000206_410R02) entering from the north in Jay as, "Category 3: Rivers and Streams with Insufficient Data or Information to Determine if Designated Uses are Attained (One or More Uses may be Impaired)."

The Report lists all of Maine's fresh waters as, "Category 4-A: Waters Impaired by Atmospheric Deposition of Mercury." Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, "All freshwaters are listed in Category 4-A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL.

5. RECEIVING WATER QUALITY CONDITIONS

Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Health and Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources." Pursuant to 38 M.R.S.A. § 420(1-B)(B), "a facility is not in violation of the ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413 subsection 11." The Department has established interim monthly average and daily maximum mercury concentration limits and reporting requirements for this facility pursuant to 06-096 CMR 519.

The Department has no information at this time that the discharge from the Town of Jay, as permitted, will cause or contribute to the failure of the receiving water to meet the designated uses of its ascribed classification.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

a. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limit of 0.06 MGD based on the dry weather design capacity for the treatment facility, and a daily maximum discharge flow reporting requirement.

The Department reviewed 52 Discharge Monitoring Reports (DMRs) that were submitted for the period of June 2011 – May 2015. A review of data indicates the following:

Flow (DMR=52)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	0.06	0.01 – 0.07	0.032
Daily Maximum	Report	0.02 – 0.13	0.048

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 (last amended March 21, 2012). This permitting action is calculating dilution factors associated with the discharge flow limit of 0.06 MGD as follows.

Mod. Acute: ¼ Q10 = 0.383 cfs $\Rightarrow \frac{(0.383 \text{ cfs})(0.6464) + 0.06 \text{ MGD}}{0.06 \text{ MGD}} = 5.13{:}1$

Acute: 1Q10 = 1.53 cfs $\Rightarrow \frac{(1.5 \text{ cfs})(0.6464) + 0.06 \text{ MGD}}{0.06 \text{ MGD}} = 17.4{:}1$

Chronic: 7Q10 = 1.8 cfs $\Rightarrow \frac{(1.8 \text{ cfs})(0.6464) + 0.06 \text{ MGD}}{0.06 \text{ MGD}} = 20.4{:}1$

Harmonic Mean = 5.4[1] $\Rightarrow \frac{(5.4 \text{ cfs})(0.6464) + 0.06 \text{ MGD}}{0.06 \text{ MGD}} = 59.2{:}1$

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

06-096 CMR 530(4)(B)(1) states that analyses using numeric acute criteria for aquatic life must be based on ¼ of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone. 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.

The Town has provided the Department with information as to the true mixing characteristics of the discharge. Therefore, the Department is utilizing the entire stream flow of 1Q10 pursuant to 06-096 CMR 530 (last amended March 21, 2012) in acute evaluations.

NOTE:

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

c. Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS): The previous permitting action established, and this permitting action is carrying forward, monthly average and weekly average technology-based effluent limits of 30 mg/L and 45 mg/L, respectively, for BOD_5 and TSS pursuant to the secondary treatment regulation at 40 CFR 133.102 and 06-096 CMR 525(3)(III). The previous permit also established a daily maximum technology-based effluent limit of 50 mg/L for both BOD_5 and TSS based on a Department best professional judgment of best practicable treatment for secondary treated wastewater.

The mass-based limits were calculated as follows:

Monthly Average Mass Limit: (30 mg/L)(8.34 lbs./gallon)(0.06 MGD) = 15 lbs./day

Weekly Average Mass Limit: (45 mg/L)(8.34 lbs./gallon)(0.06 MGD) = 23 lbs./day

Daily Maximum Mass Limit: (50 mg/L)(8.34 lbs./gallon)(0.06 MGD) = 25 lbs./day

This permitting action is carrying forward a requirement for a minimum of 85% removal of BOD_5 & TSS pursuant to 06-096 CMR 525(3)(III)(a&b)(3). The permittee has requested a continuance of the waiver from 85% removal for BOD when the influent is less than 200 mg/L. The Department has performed an analysis of BOD and TSS percent removal and found that the permittee is meeting and surpassing 85% removal when the influent is less than 200 mg/L. The Department has determined that this waiver is not necessary due to the demonstrated past performance of the treatment facility. Therefore, this permitting action is eliminating the waiver from the 85% removal requirement provided in the previous permitting action when influent concentration is less than 200 mg/L.

The previous permit also established more stringent summertime (June 15 to October 15) limits for BOD_5 in order to meet the minimum dissolved oxygen (D.O.) standards in Sevenmile Stream, which is classified as a Class B waterway. A desktop model calculation based on the instream

D.O. standard of 7 mg/L yielded a weekly average limit of 7.5 lbs./day of BOD_5 at the 7Q10 flow of 1.8 cfs. Back calculating from this loading to a concentration yields a weekly average

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

concentration limit for BOD_5 of 15 mg/L. Using the same mathematical relationships as the BPT concentrations (30, 45 and 50 mg/L), the monthly average mass and concentration limits are 4.9 lbs./day and 10 mg/L, and the daily maximum mass and concentrations are 8.5 lbs./day and 17 mg/L respectively.

The Department reviewed 56 DMRs that were submitted for the period June 2010 – May 2015 for BOD_5. A review of data indicates the following:

Warm season (June 1 – September 30)

BOD_5 Mass (DMRs=16)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	4.9	0.8 – 3.3	1.6
Weekly Average	7.0	1.0 – 3.9	1.8
Daily Maximum	8.5	1.0 – 3.9	1.8

BOD_5 Concentration (DMRs=16)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	4.1 – 9.5	7.7
Weekly Average	45	4.0 – 14.0	8.5
Daily Maximum	50	4.0 – 14.0	8.5

Cold season (October 1 – May 31)

BOD_5 Mass (DMRs=40)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	15	0.8 – 3.3	2.0
Weekly Average	23	1.1 – 4.3	2.4
Daily Maximum	25	1.1 – 4.3	2.4

BOD_5 Concentration (DMRs=40)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	1.1 – 10.5	8.0
Weekly Average	45	3.8 – 20.0	9.3
Daily Maximum	50	3.8 – 20.0	9.3

Minimum monitoring frequency requirements in MEPDES permits are prescribed by 06-096 CMR 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 USEPA guidance with its own guidance entitled, *Performance Based Reduction of Monitoring Frequencies - Modification of USEPA 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.

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

Although USEPA's 1996 Guidance recommends evaluation of the most current two years of effluent data for a parameter, the Department is considering 56 months of data (June 1, 2010 – May 31, 2015). A review of the monitoring data for BOD_5 in the warm season (June 1 – September 30) indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as 32%, respectively. A review of the monitoring data for BOD_5 in the cold season (October 1 – May 31) indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as 13%, respectively. According to Table I of the USEPA Guidance, a 1/Week monitoring requirement can be reduced to once every two months. However, the Department has determined that a reduction in the minimum monitoring frequency to once every two months for BOD_5 is not sufficient to assess compliance with the effluent limitations and is therefore carrying forward the monitoring frequency of twice per month for BOD_5.

The Department reviewed 56 DMRs that were submitted for the period June 2010 – May 2015 for TSS. A review of data indicates the following:

Year-round

TSS Mass (DMR=56)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	15	0.2 – 2.8	1.0
Weekly Average	23	0.2 – 3.9	1.2
Daily Maximum	25	0.2 – 3.9	1.2

TSS Concentration (DMR=56)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	0.7 – 23.0	4.0
Weekly Average	45	0.8 – 13.0	4.6
Daily Maximum	50	0.8 – 13.0	4.6

Minimum monitoring frequency requirements in MEPDES permits are prescribed by 06-096 CMR 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 USEPA guidance with its own guidance entitled, *Performance Based Reduction of Monitoring Frequencies - Modification of USEPA 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 USEPA's 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering 56 months of data (June 1, 2010 – May 31, 2015). A review of the monitoring data for indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as 6.7% respectively.

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

According to Table I of the USEPA Guidance, a 1/Week monitoring requirement can be reduced to once every two months. However, the Department has determined that a reduction in the minimum monitoring frequency to once every two months for TSS is not sufficient to assess compliance with the effluent limitations and is therefore carrying forward the monitoring frequency of twice per month for TSS.

d. Settleable Solids: This permitting action is carrying forward a daily maximum technology based concentration limit of 0.3 ml/L and a minimum monitoring frequency requirement of 2/Month for settleable solids. This permitting action is carrying forward the technology based daily maximum concentration limit of 0.3 ml/L as it is considered by the Department to be BPT for secondary treated sanitary wastewater.

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 USEPA guidance with its own guidance entitled, *Performance Based Reduction of Monitoring Frequencies - Modification of USEPA 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 USEPA's 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering 60 months of data (June 2010 – May 2015). A review of the monitoring data for Settleable Solids indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as 33% respectively. According to Table I of the USEPA Guidance a 2/Month monitoring requirement can be reduced to 1/Month. However Department Guidance does not allow any reductions below 2/Month, therefore this permitting action is carrying forward the minimum monitoring frequency for Settleable Solids of 2/Month.

Settleable Solids Concentration (DMRs=56)

Value	Limit (ml/L)	Range (ml/L)	Average (ml/L)
Daily Maximum	0.3	<0.10 – 0.10	0.10

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

e. *Escherichia coli* Bacteria: The previous permitting action established, and this permitting action carrying forward, seasonal (May 15-September 30 of each year) monthly average and daily maximum *E. coli* bacteria concentration limits of 64 colonies/100 ml and 236 colonies/100 ml, respectively. The monthly average concentration limit is based on 38 M.R.S.A. § 465(4) which requires that the *E. coli* bacteria of human and domestic animal origin in Class B waters may not exceed a geometric mean of 64 colonies/100 ml or an instantaneous level of 236 colonies/100 ml.

The Department reviewed 21 DMRs that were submitted for the period May 2010 – September 2015. A review of this data for this time period indicates the following:

***E. coli* Bacteria (DMRs=21)**

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	64	1 – 30	7
Daily Maximum	236	1 – 93	20

Although USEPA's 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering 56 months of data (May 2010 – September 2015). A review of the *E. coli* bacteria monitoring data indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as 11%. According to Table I of the USEPA Guidance a 2/Month monitoring requirement can be reduced to 1/Month. However Department Guidance does not allow any reductions below 2/Month, therefore this permitting action is carrying forward the minimum monitoring frequency for *E. coli* of 2/Month.

f. Total Residual Chlorine (TRC): The previous permitting action established technology-based monthly average and daily maximum concentration limits of 0.1 mg/L and 0.3 mg/L, respectively, for TRC. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department permitting actions impose the more stringent of either a water quality-based or best practicable treatment-based limit. With acute and chronic dilution factors associated with the discharge water quality-based concentration thresholds the discharge may be calculated as follows:

			Calculated	
Acute (A) Criterion	Chronic (C) Criterion	A & C Dilution Factors	Acute Threshold	Chronic Threshold
0.019 mg/L	0.011 mg/L	17.5:1(A) 20.4:1 (C)	0.33 mg/L	0.22 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that need to dechlorinate the discharge in order to meet water quality-based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively.

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

The daily maximum technology-based standard of 0.3 mg/L is more stringent than the acute water quality-based threshold calculated above, and is therefore being carried forward in this permitting action. The monthly average technology-based threshold of 0.1 mg/L is more stringent than chronic threshold of 0.22 mg/L and is therefore being carried forward in this permitting action. Although bacteria limitations are seasonal and apply between May 15 and September 30 of each year, TRC monitoring must be conducted during any periods that chlorine-based compounds are in use at the facility.

The Department reviewed 23 DMRs that were submitted for the period May 2010 – September 2014. A review of data indicates the following:

Total Residual Chlorine (DMRs=23)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	0.1	0.00 – 0.10	0.06
Daily Maximum	0.3	0.00 – 0.10	0.06

Although USEPA's 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering 23 months of data (May 2011 – September 2014). A review of the monitoring data for TRC indicates the ratio (expressed in percent) of the long term effluent average to the monthly average limit can be calculated as 60%, respectfully. According to Table I of the USEPA Guidance and Department Guidance, a 1/day monitoring requirement can be reduced to 4/Week. Therefore, this permitting action is reducing the monitoring frequency for Total Residual Chlorine to 4/Week.

g. pH: The previous permitting action established, and this permitting action is carrying forward, a technology-based pH limit of 6.0 – 9.0 standard units (SU), which is based on 06-096 CMR 525(3)(III)(c), and a minimum monitoring frequency requirement of 1/Day. This permitting action is carrying forward the limitation and the monitoring frequency requirement of 1/Day.

The Department reviewed 57 DMRs that were submitted for the period June 2010 – May 2015. A review of data indicates the following:

pH (DMRs=57)

Value	Limit (SU)	Range (SU)	Maximum (SU)
Range	6.0 – 9.0	6.30 – 7.00	7.00

Although USEPA's 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering 57 months of data (May 2011 – September 2014). A review of the monitoring data for pH indicates there have been no excursions outside of the 6.0-9.0 Standard Unit license limit. According to Table I of the USEPA Guidance and Department Guidance, a 1/day monitoring requirement can be reduced to 4/Week. Therefore, this permitting action is reducing the monitoring frequency for pH to 4/Week.

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

h. Mercury: Pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste Discharge Licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001), the Department issued a Notice of Interim Limits for the Discharge of Mercury to the permittee on August 28, 2000, thereby administratively modifying ME0102318/WDL W002689-5L-D-R by establishing interim average and daily maximum effluent concentration limits of 6.8 parts per trillion (ppt) and 4.5 ppt, respectively, and a minimum monitoring frequency requirement of two (2) tests per year for mercury.

38 M.R.S.A. § 420(1-B)(B)(1) provides that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department. A review of the Department's data base for the period June 1 –May 31 for calendar years 2010 – 2015 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows:

Mercury (DMRs=6)

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average	4.5	0.80 – 1.96	1.41
Daily Maximum	6.8		

Pursuant to 38 M.R.S.A. § 420(1-B)(F), the Department issued a minor revision on February 6, 2012 to the August 2, 2010 permit thereby revising the minimum monitoring frequency requirement from twice per year to once per year given the permittee has maintained at least 5 years of mercury testing data. Pursuant to 38 M.R.S.A. § 420(1-B)(F), this permitting action is carrying forward the 1/Year monitoring frequency established in the February 6, 2012 permit modification.

i. Total Phosphorus: *Waste Discharge License Conditions*, 06-096 CMR 523 (effective January 12, 2001) 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: USEPA's Water Quality Standards Handbook, October 1983, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration, and current USEPA 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 value is consistent with the requirements of 06-096 CMR Chapter 523 noted above for use in a reasonable potential (RP) calculation.

[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)

Based on the above rationale, the Department has chosen to utilize the Gold Book value 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 waterbodies.

The use of the Gold Book value 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. This permit may be reopened during the term of the permit to modify any reasonable potential calculations, phosphorus limits, or monitoring requirements based on new site-specific data.

Based upon the most recent test results from the August and September 2015 sampling events, the arithmetic mean concentration discharged for the period is 0.59 mg/L (590 ug/L) and is considered representative of the discharge from the North Jay facility owned and operated by the Town of Jay, which discharges to Sevenmile Stream. For the background concentration in Sevenmile Stream, the permittee conducted sampling upstream of its discharge in the summer of 2015. The results from the August and September 2015 sampling events indicate the background total phosphorus concentration is 0.016 mg/L.

Using the following calculation and criteria, the Town does not exhibit a reasonable potential to exceed the EPA's Gold Book ambient water quality goal of 0.100 mg/L (100 µg/L) for phosphorus but does demonstrate RP to exceed the Department's 06-096 CMR 583 draft goal of 0.030 mg/L (30 ug/L).

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

Qe = effluent flow i.e. facility design flow = 0.06 MGD
Ce = effluent pollutant concentration = 0.59 mg/L
Qs = 7Q10 flow of receiving water = 1.16 MGD
Cs = upstream concentration = 0.016 mg/L
Qr = receiving water flow (1.16 MGD + 0.06 MGD) = 1.2 MGD
Cr = receiving water concentration

$$Cr = \frac{(0.06 \text{ MGD} \times 0.59 \text{ mg/L}) + (1.16 \text{ MGD} \times 0.016 \text{ mg/L})}{1.2 \text{ MGD}} = 0.04 \text{ mg/L}$$

Cr = 0.04 mg/L < 0.1 mg/L ⇒ No, Reasonable Potential
Cr = 0.04 mg/L > 0.030 mg/L ⇒ Yes, Reasonable Potential

In accordance with the Department's letter regarding *Nutrient Sampling for MEPDES/WDL*, dated July 1, 2014, if a discharge does not have RP at the 0.100 mg/L USEPA goal, but does have RP at the Department's draft criterion of 0.030 mg/L, the reissued permit will be conditioned to require effluent total phosphorous monitoring for five years and ambient (background) monitoring for total phosphorous for one year. As of the date of this permitting action, the Department concludes that there is sufficient ambient total phosphorous data for Sevenmile Stream and is therefore not establishing a requirement to conduct ambient monitoring for total phosphorous.

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

j. Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing

38 M.R.S.A. § 414-A and 38 M.R.S.A. § 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 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. 06-096 CMR 584 sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on invertebrate and vertebrate species. Priority pollutant and analytical chemistry testing is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health AWQC as established in Chapter 584. 06-096 CMR 530(2)(B) categorizes dischargers subject to the toxics rule into one of four levels 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 >500:1 and Q <1.0 MGD

06-096 CMR 530 (1)(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the Chapter 530 criteria, the permittee's facility falls into the Level II frequency category as the facility has a chronic dilution factor >20:1 but <100:1. 06-096 CMR 530(2)(D)(1) specifies that default screening and surveillance level testing requirements are as follows:

Screening level testing – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (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
II	2 per year	1 per year	4 per year

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

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

Level	WET Testing	Priority pollutant testing	Analytical chemistry
II	1 per year	None required	2 per year

The Department may require that annual testing be instituted if it determines that there have been changes in the character of the discharge or if annual certifications described above are not submitted. This permitting action carries forward Special Condition J *06-096 CMR 530(2)(D)(4) Statement for Reduced/Waived Toxics Testing*, pursuant to 06-096 CMR 530(2)(D)(4).

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 B** of this Fact Sheet for dates and test results for WET and **Attachment D** of this Fact Sheet for chemical specific testing dates.

WET Evaluation – For this permitting action, a statistical evaluation was conducted on 7/15/15 that indicates the discharge from the Town has not demonstrated a reasonable potential to exceed the critical acute or chronic water quality thresholds of 5.8% and 4.9% for the water flea or the brook trout.

The previous permitting action established and this permitting action is carrying forward reduced surveillance level testing for WET and analytical chemistry testing. **On or before December 31st of each year** of the effective term of this permit ***[ICIS Code 73505]***, the permittee must provide the Department with statements 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.

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

d. Where the actual quality of any classified receiving waterbody exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and

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

e. Where a discharge will result in lowering the existing water quality of any waterbody, 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.

Further, the Department may require that that annual WET testing be instituted if it determines that there have been changes in the character of the discharge or if annual certifications described above are not submitted. This permitting action carries forward Special Condition J *06-096 CMR 530(2)(D)(4) Statement for Reduced/Waived Toxics Testing*, pursuant to 06-096 CMR 530(2)(D)(4). Special Condition J of this permit requires the certification to be submitted to the Department annually. See **Attachment F** of this permit for the certification form.

It is noted, however, that if future WET or Analytical Chemistry testing indicates the discharge exceeds critical water quality thresholds, this permit will be reopened pursuant to Special Condition L, *Reopening of Permit For Modification,* of this permit to establish applicable limitations and monitoring requirements.

Chemical Specific Evaluations

See **Attachment D** of this Fact Sheet for a summary of chemical-specific test dates and results for the pollutants of concern that exceed or have a reasonable potential to exceed applicable AWQC.

The Town is the only discharger on Sevenmile stream that is subject to 06-096 CMR 530 and has received 100% of the allocation for copper on Sevenmile stream. In the individual allocation, the Department continues to utilize the formula it has used in permitting actions since October 2005 taking into consideration background (10% of AWQC) and a reserve (0% of AWQC). The formula is as follows:

On 7/15/2015 the Department conducted statistical evaluations that indicate the discharge from the Town has test results that have a reasonable potential to exceed the acute AWQC for copper established in 06-096 CMR 584, *Surface Water Quality Criteria for Toxic Pollutants.*

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

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

Copper (Total):

Acute AWQC= 3.07 ug/L
Acute dilution factor = 17.5:1

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

EOP = [17.5 x 0.90 x 3.07 ug/L] + [0.10 x 3.07 ug/L] = 48.6 ug/L

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

Based on a permitted flow of 0.060 MGD, EOP mass limits are as follows:

Parameter	Calculated EOP Concentrations	Daily Max. Mass Limit
Copper	48.6 ug/L	0.024 lbs/day

Example Calculation: Copper - $\frac{(48.6 \text{ ug/L})(8.34)(0.060 \text{ MGD})}{1{,}000 \text{ ug/mg}}$ = **0.024 lbs/day**

Chronic AWQC = 2.36 ug/L
Chronic dilution factor = 20.4:1
EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [20.4 x 0.90 x 2.36 ug/L] + [0.10 x 2.36 ug/L] = 43.6 ug/L

Based on a permitted flow of 0.060 MGD, EOP mass limits are as follows:

Parameter	Calculated EOP Concentrations	Monthly Avg. Mass Limit
Copper	43.6 ug/L	0.024 lbs/day

Example Calculation: Copper - $\frac{(43.6 \text{ ug/L})(8.34)(0.060 \text{ MGD})}{1{,}000 \text{ ug/mg}}$ = **0.022 lbs/day**

Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit) the permittee must conduct screening level analytical testing for copper at 1/Quarter and priority pollutant testing of 2/Year.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

8. PUBLIC COMMENTS

Public notice of this application was made in the *Lewiston Sun Journal* newspaper on or about March 18, 2015. 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 must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

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

Aaron Dumont
Division of Water Quality Management
Bureau Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 512-7161
e-mail: Aaron.A.Dumont@maine.gov

10. RESPONSE TO COMMENTS

Reserved until the end of the comment period.

ATTACHMENT A

Maine Department of Environmental Protection

Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____

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

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT B

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WHOLE EFFLUENT TOXICITY REPORT
FRESH WATERS

Facility Name _____ MEPDES Permit # _____

Pipe # _____

Facility Representative _____ Signature _____

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

Facility Telephone # _____ Date Collected _____ Date Tested _____

mm/dd/yy mm/dd/yy

Chlorinated? _____ Dechlorinated? _____

Results % effluent

	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 # _____

REVISED 07/01/2015

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) WET Result, % Do not enter % sign	Reporting Limit Check	Possible Exceedence [7]		
	WHOLE EFFLUENT TOXICITY		Acute	Chronic					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[6]	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
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	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
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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
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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. 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

Protocol for Total Phosphorus Sample Collection and Analysis for Waste Water and Receiving Water Monitoring Required by Permits

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

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

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

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

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

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

ATTACHMENT 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.

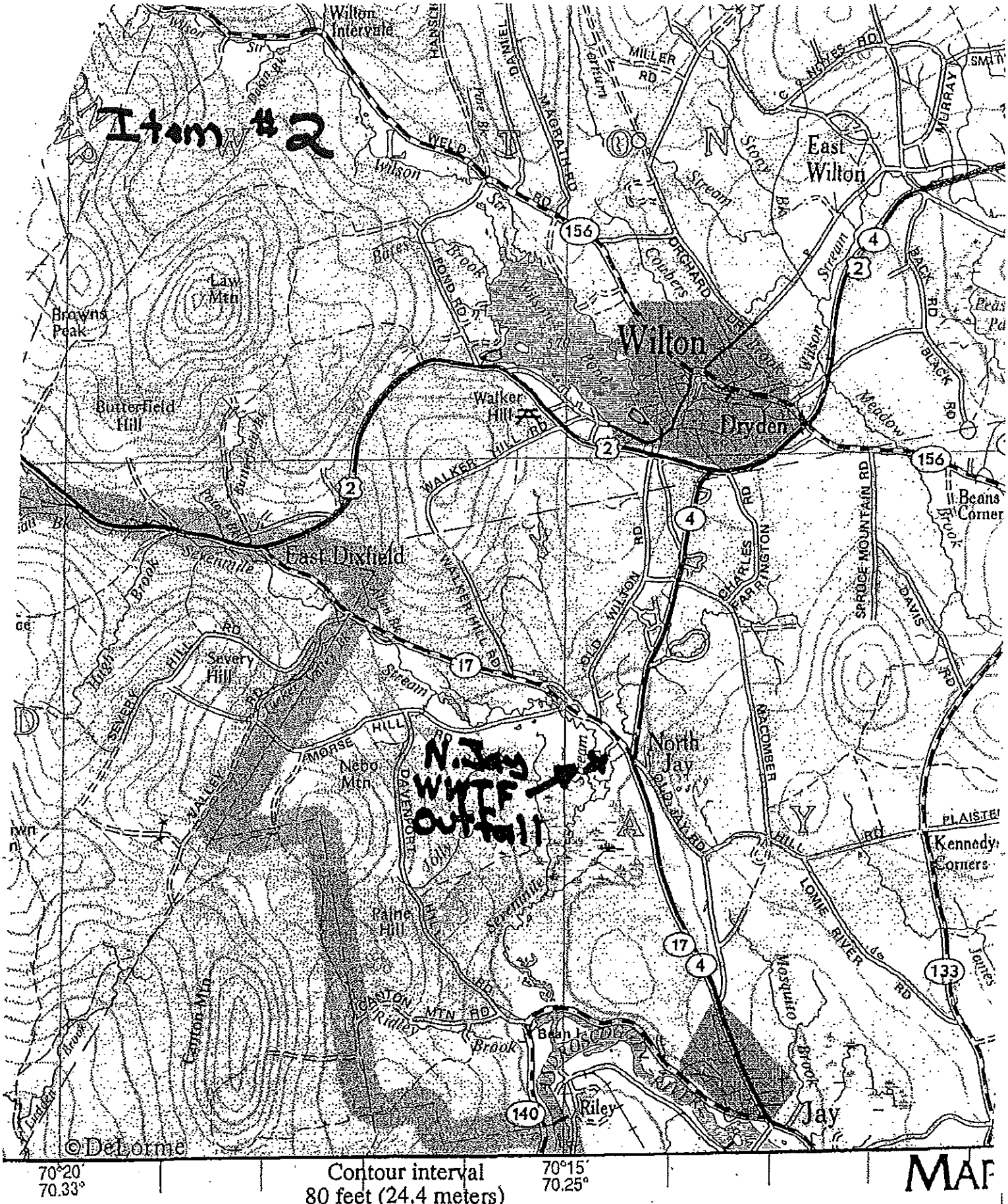
Scheduled Toxicity Testing for the next calendar year

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.

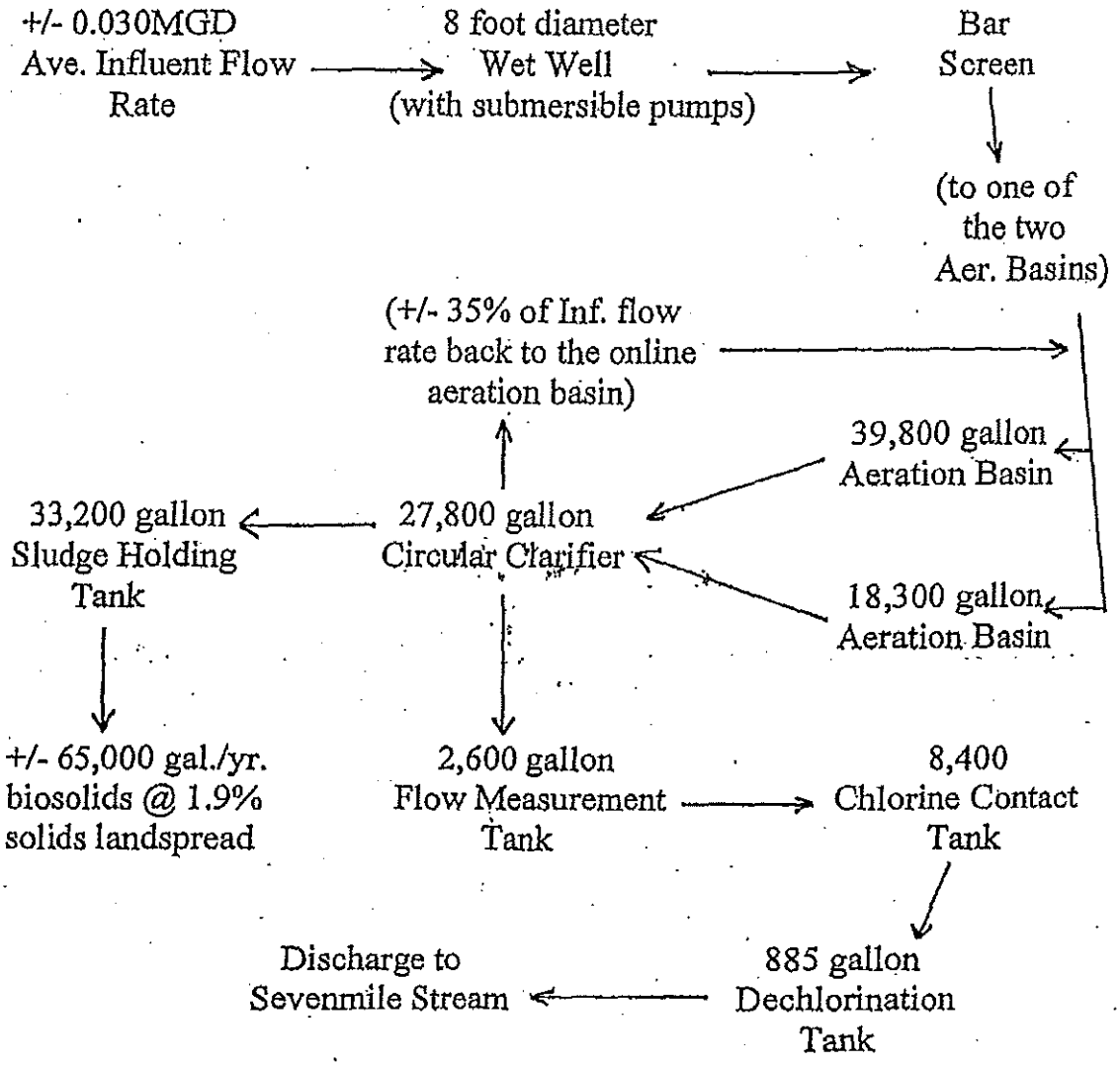
ATTACHMENT A


Item #2
Wilton
Intervale
East
Wilton
Wilton
Dryden
Browns
Peak
Law
Mtn
Butterfield
Hill
Walker
Hill
East Dixfield
Severy
Hill
Nebo
Mtn
Paine
Hill
North
Jay
Jay
Riley
Beans
Corner
Kennedy
Corners
N. Jay
WWTF
outfall
©DeLorme
70°20'
70.33°
Contour interval
80 feet (24.4 meters)
70°15'
70.25°

ATTACHMENT B

LINE DRAWING OF FLOW THROUGH THE NORTH JAY WASTEWATER TREATMENT FACILITY

Note: Flow values indicated are averages. Tank capacities remain constant.



MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

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

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

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

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

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.