STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

July 1, 2017

Mr. Scott Firmin
Director of Operations – Wastewater Services
Portland Water District
225 Douglass Street
P.O. Box 3553
Portland, ME. 04104-3553
e-mail: sfirmin@pwd.org

Mr. Eric Dudley P.E.
Director of Engineering and Public Services
2 York Street
Westbrook, ME. 04092
e-mail: edudley@westbrook.me.us

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100846
Maine Waste Discharge License (WDL) Application #W001510-6D-I-R
Final Permit

Dear Mr. Firmin & Mr. Dudley:

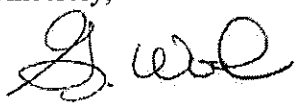
Enclosed please find a copy of your **final** MEPDES permit and Maine WDL **renewal** which was approved by the Department of Environmental Protection. Please read this permit and its attached conditions carefully. Compliance with this permit will protect water quality.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "*Appealing a Commissioner's Licensing Decision.*"

If you have any questions regarding the matter, please feel free to call me at 287-7693. Your Department compliance inspector copied below is also a resource that can assist you with compliance. Please do not hesitate to contact them with any questions.

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

Sincerely,



Gregg Wood
Division of Water Quality Management
Bureau of Water Quality

Enc.

cc: Stuart Rose, DEP/SMRO
Lori Mitchell, DEP/CMRO
Sandy Mojica, USEPA
Olga Vergara, USEPA
Marelyn Vega, USEPA

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

DEPARTMENT ORDER

IN THE MATTER OF

PORTLAND WATER DISTRICT	)	MAINE POLLUTANT DISCHARGE
CITY OF WESTBROOK	)	ELIMINATION SYSTEM PERMIT
WESTBROOK, CUMBERLAND COUNTY, MAINE	)	
PUBLICLY OWNED TREATMENT WORKS	)	AND
ME0100846	)	WASTE DISCHARGE LICENSE
W001510-6D-I-R **APPROVAL**	)	**RENEWAL**

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, § 1251, et seq. and Maine Law 38 M.R.S. § 414-A, et seq., and applicable regulations, the Department of Environmental Protection (Department) has considered the application of the PORTLAND WATER DISTRICT (PWD/co-permittee) and the CITY OF WESTBROOK (City/co-permittee), collectively referred to as co-permittees, with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The co-permittees have submitted a timely and complete application to the Department to renew combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100846/ Maine Waste Discharge License (WDL) #W001510-6D-E-R, (permit) which was issued by the Department on March 6, 2012, for a five-year term. The permit was subsequently modified on December 4, 2012, to increase the daily maximum quantity of transported waste received and treated at the waste water treatment facility and modified again on September 11, 2013, to remove the water quality based mass and concentration limitations for inorganic arsenic.

The March 6, 2012, permit approved the discharge of an unspecified quantity of flow [plant design capacity is a monthly average of 4.54 million gallons per day (MGD)] of secondary treated waste water from a municipal waste water treatment facility and an unspecified quantity of untreated storm water and sanitary waste water from five (5) combined sewer overflow (CSO) outfalls to the Presumpscot River, Class C, in Westbrook, Maine. A site location map is included as **Attachment A** of the attached Fact Sheet.

APPLICATION SUMMARY (cont'd)

Pursuant to a letter dated January 11, 2017, the City of Westbrook requested to be named as a co-permittee to this permit to promote better communication between the City of Westbrook, the PWD and the Department and improve the coordination and timeliness of CSO mitigation projects. Therefore, this permit renewal is being issued with the City of Westbrook named as a co-permittee as it is subject to Special Condition F, *Authorized Discharges* and Special Condition J, *Conditions For Combined Sewer Overflows*, which includes conditions regarding the operation and maintenance of the collection systems owned and operated by the City of Westbrook. For the record, PWD owns and operates the waste water treatment facility, the interceptor lines and the five combined sewer overflows (CSO) outfalls. The City of Westbrook owns the remainder of the collection system within the boundaries of the City of Westbrook that conveys waste water to the PWD waste water system.

PERMIT SUMMARY

This permit is carrying forward all terms and conditions of the March 6, 2012, permit and the two subsequent modifications except this permit is;

1. Establishing key milestones for combined sewer overflow abatement for each co-permittee.

2. Establishing a seasonal monitoring and reporting requirement for total phosphorus to determine present discharge levels of total phosphorus to the Presumpscot River.

3. Reducing the monitoring frequencies for biochemical oxygen demand (BOD), total suspended solids (TSS) and Escherichia coli (*E. coli*) bacteria from 3/Week to 2/Week and reducing the monitoring frequency for settleable solids from 5/Week to 3/Week based on a statistical evaluation of the most current thirty three months of monitoring data for said parameters.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated May 23, 2017, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

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

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

CONCLUSIONS (cont'd)

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

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

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

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

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

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

4. The discharge(s) (including the CSOs) will be subject to effluent limitations that require application of best practicable treatment defined in 38 M.R.S., §414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the above noted application of the PORTLAND WATER DISTRICT and THE CITY OF WESTBROOK to discharge an unspecified quantity of flow (design capacity of 4.54 MGD) of secondary treated waste waters from a municipally owned treatment works facility and an unspecified quantity of untreated storm water and sanitary waste water from five combined sewer overflow (CSO) outfalls to the Presumpscot River, Class C, 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 and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (effective October 9, 2015)].

DONE AND DATED AT AUGUSTA, MAINE, THIS 6th DAY OF July 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
Paul Mercer, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application January 12, 2017

Date of application acceptance January 12, 2017

Filed
JUL 07 2017
State of Maine
Board of Environmental Protection

Date filed with Board of Environmental Protection _____

This Order prepared by Gregg Wood, BUREAU OF WATER QUALITY

ME0100846 2017 6/27/17

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The PWD is authorized to discharge secondary treated waste water from **Outfall #001** to the Presumpscot River. Such discharges shall be limited and 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
Flow *[50050]*	Report MGD *[03]*	---	Report MGD *[03]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
Biochemical Oxygen Demand (BOD_5) *[00310]*	1,137 lbs/day *[26]*	1,705 lbs/day *[26]*	Report lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Week *[02/07]*	24-Hour Composite *[24]*
BOD5 % Removal (1) *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Total Suspended Solids (TSS) *[00530]*	1,137 lbs/day *[26]*	1,705 lbs/day *[26]*	Report lbs/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Week *[02/07]*	24-Hour Composite *[24]*
TSS % Removal (1) *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 mL/L *[25]*	5/Week *[05/07]*	Grab *[GR]*
E. coli. Bacteria (2) *[31616]*	---	---	---	126/100 mL (3) *[13]*	---	949/100 mL *[13]*	2/Week *[02/07]*	Grab *[GR]*
Total Residual Chlorine (4) *[50060]*	---	---	---	0.1 mg/L *[19]*	---	0.3 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
pH (Std. Units) *[00400]*	---	---	---	---	---	6.0-9.0 *[12]*	5/Week *[05/07]*	Grab *[GR]*
Mercury (Total) (5) *[71900]*	---	---	---	15.5 ng/L *[3M]*	---	23.2 ng/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*
Phosphorus (Total) (6) ***(June 1 – Sept. 30) [00665]***	Report lbs/day *[26]*	---	Report lbs/day *[26]*	Report mg/L *[19]*	---	Report mg/L *[19]*	1/Month *[01/30]*	24-Hour Composite *[24]*

The italicized numeric values in brackets in the table above and the tables that follow are not limitations but are code numbers used by Department personnel to code Discharge Monitoring Reports (DMRs). Footnotes – See pages 9-13 for footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd) – OUTFALL #001

SURVEILLANCE LEVEL - 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).

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity(7) **Acute – NOEL** *Ceriodaphnia dubia* [TDA3B] *(Water flea)*	---	---	---	Report % [23]	1/2 Years [01/2Y]	Composite [24]
Salvelinus fontinalis [TDA6F] *(Brook trout)*	---	---	---	Report % [23]	1/2 Years [01/2Y]	Composite [24]
Chronic – NOEL *Ceriodaphnia dubia* [TBP3B] *(Water flea)*	---	---	---	Report % [23]	1/2 Years [01/2Y]	Composite [24]
Salvelinus fontinalis [TBQ6F] *(Brook trout)*	---	---	---	Report % [23]	1/2 Years [01/2Y]	Composite [24]
Analytical chemistry (8) [51477]	---	---	---	Report ug/L [28]	1/2 Years [01/2Y]	Composite/Grab [24]

Footnotes – See pages 9-13 for footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd) – OUTFALL #001

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

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity(7)						
Acute – NOEL						
Ceriodaphnia dubia [TDA3B] *(Water flea)*	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
Salvelinus fontinalis [TDA6F] *(Brook trout)*	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
Chronic – NOEL						
Ceriodaphnia dubia [TBP3B] *(Water flea)*	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
Salvelinus fontinalis [TBQ6F] *(Brook trout)*	---	---	---	Report % [23]	2/Year [01/YR]	Composite [24]
Analytical chemistry (8,10) [51477]	---	---	---	Report ug/L [28]	1/Quarter [01/90]	Composite/Grab [24]
Priority Pollutants (9) [50008]	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/Grab [24]

Footnotes – See pages 9-13 for footnotes.

SPECIAL CONDITIONS

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

Footnotes:

Sampling Locations:

Effluent sampling for all parameters must be sampled after the last treatment process on a year-round basis.

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

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

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

2. ***E. coli*** **bacteria** – Limits and monitoring requirements are in effect on a year-round basis.

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

4. **Total Residual Chlorine (TRC)** – Limitations and monitoring requirements are in effect any time elemental chlorine or chlorine based compounds are utilized to disinfect the discharge(s). The PWD must utilize a U.S. Environmental Protection Agency (EPA)-approved test method capable of bracketing the TRC limitations specified in this permitting action.

SPECIAL CONDITIONS

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

Footnotes (cont'd)

5. **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) shall be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analyses must be conducted in accordance with EPA 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. Tests must be conducted in a different calendar quarter of each year such that tests are conducted in all four quarters during the term of the permit.

6. **Total phosphorus** – Monitoring and reporting total phosphorus mass and concentrations are only required seasonally June 1 – September 30th of each year. Total phosphorus monitoring must be performed in accordance with **Attachment B** of this permit entitled, *Protocol For Total P Sample Collection and Analysis for Waste Water – June 1, 2014*, unless otherwise specified by the Department.

7. **Whole effluent toxicity (WET) testing** - Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 2.3%), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction or growth as the end points. The critical acute and chronic thresholds were derived as the mathematical inverses of the applicable acute and chronic dilution factors of 44:1.

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

SPECIAL CONDITIONS

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

Footnotes (cont'd)

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 PWD must conduct screening level WET testing at a minimum frequency of twice per year (2/Year). Acute and chronic tests must be conducted on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*). There must be at least six (6) months between sampling events.

Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, the PWD may review the toxicity reports for up to 10 business days after receiving the test results from the laboratory conducting the testing before submitting them. The PWD must evaluate test results being submitted and identify to the Department possible excursions of the critical acute and chronic water quality thresholds of 2.3% each. See **Attachment C** of this permit for a copy of the Department's WET report form.

Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following U.S.E.P.A. methods manuals:

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

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

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

SPECIAL CONDITIONS

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

Footnotes (cont'd)

8. **Analytical chemistry** – Refers to a suite of chemical tests in **Attachment D** of the permit.

   a. **Surveillance level testing** – Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the PWD must conduct analytical chemistry testing at a minimum frequency of once every other year (1/2 Years).

   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 PWD must conduct analytical chemistry testing at a minimum frequency of once per calendar quarter (1/Quarter) for four consecutive calendar quarters.

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

   a. **Surveillance level testing** is not required pursuant to 06-096 CMR 530.

   b. **Screening level testing** – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the PWD must conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year) in any calendar quarter provided the sample is representative of the discharge and any seasonal or other variations in effluent quality.

10. **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.

SPECIAL CONDITIONS

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

Footnotes (cont'd)

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 PWD may review the toxicity reports for up to 10 business days of their availability before submitting them. The PWD shall evaluate test results being submitted and identify to the Department, possible excursions of the acute, chronic or human health ambient water quality criteria (AWQC) as established in 06-096 CMR 584. For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "NODI-9" monitoring not required this period.

B. NARRATIVE DISCHARGE LIMITATIONS

1. The discharge must not contain a visible oil sheen, foam or floating solids at any time which would impair the uses designated for the classification of the receiving waters.

2. The discharge must not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the uses designated for the classification of the receiving waters.

3. The discharge must not cause visible discoloration or turbidity in the receiving waters which would impair the uses designated for the classification of the receiving waters.

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

C. TREATMENT PLANT OPERATOR

The person who has the management responsibility over the treatment facility must hold a **Maine Grade IV-B** certificate (or higher) or must be a Maine Registered Professional Engineer pursuant to *Sewerage Treatment Operators*, Title 32 M.R.S., § 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 PWD may engage the services of the contract operator.

SPECIAL CONDITIONS

D. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the waste water collection and treatment system by a non-domestic source (user) must not pass through or interfere with the operation of the treatment system. The PWD must conduct an Industrial Waste Survey (IWS) at any time a new industrial user proposes to discharge within its jurisdiction, an existing user proposes to make a significant change in its discharge, or, at an alternative minimum, once every permit cycle. The IWS must identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of the federal Clean Water Act, 40 CFR Part 403 (general pretreatment regulations) or *Pretreatment Program*, 06-096 CMR 528 (last amended March 17, 2008). See **Attachment F** of the Fact Sheet of this permit for guidance conducting an IWS.

E. NOTIFICATION REQUIREMENT

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

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

2. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system by a source introducing pollutants into the system at the time of permit issuance. For the purposes of this section, notice regarding substantial change must include information on:

   (a) the quality and quantity of waste water introduced to the waste water collection and treatment system; and

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

F. AUTHORIZED DISCHARGES

The co-permittees are authorized to discharge only in accordance with: 1) the General Application for Waste Discharge Permit, accepted for processing on January 12, 2017; 2) the terms and conditions of this permit; and 3) the five (5) combined sewer overflow (CSO) outfalls listed in Special Condition J, *Conditions For Combined Sewer Overflows*, of this permit. Discharges of waste water from any other point source are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit.

SPECIAL CONDITIONS

G. HIGH FLOW MANAGEMENT PLAN

The PWD must maintain a High Flow Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall. The plan must include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events. **The PWD must review their plan annually** and record any necessary changes to keep the plan up to date.

H. OPERATION & MAINTENANCE (O&M) PLAN

This facility must have a current written comprehensive Operation & Maintenance (O&M) Plan. The plan must provide a systematic approach by which the PWD 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 PWD to achieve compliance with the conditions of this permit.

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

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

I. DISPOSAL OF TRANSPORTED WASTES IN WASTE WATER TREATMENT FACILITY

During the effective period of this permit, the PWD is authorized to receive and introduce into the treatment process or solids handling stream **a maximum of 22,700 gallons per day** of transported wastes, subject to the following terms and conditions:

1. "Transported wastes" means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.

SPECIAL CONDITIONS

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

2. The character and handling of all transported wastes received must be consistent with the information and management plans provided in application materials submitted to the Department.

3. At no time shall the addition of transported wastes cause or contribute to effluent quality violations. Transported wastes may not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility. Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. Odors and traffic from the handling of transported wastes may not result in adverse impacts to the surrounding community. If any adverse effects exist, the receipt or introduction of transported wastes into the treatment process or solids handling stream shall be suspended until there is no further risk of adverse effects.

4. The PWD must maintain records for each load of transported wastes in a daily log which shall include at a minimum the following:

   (a) The date;
   (b) The volume of transported wastes received;
   (c) The source of the transported wastes;
   (d) The person transporting the transported wastes;
   (e) The results of inspections or testing conducted;
   (f) The volumes of transported wastes added to each treatment stream; and
   (g) The information in (a) through (d) for any transported wastes refused for acceptance.

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

5. The addition of transported wastes into the treatment process or solids handling stream must not cause the treatment facilities design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of transported wastes into the treatment process or solids handling stream must be reduced or terminated in order to eliminate the overload condition.

SPECIAL CONDITIONS

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

6. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added shall not be recorded as transported wastes but should be reported in the treatment facility's influent flow.

7. During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current High Flow Management Plan approved by the Department pursuant to Special Condition G that provides for full treatment of transported wastes without adverse impacts.

8. In consultation with the Department, chemical analysis is required prior to receiving transported wastes from new sources that are not of the same nature as wastes previously received. The analysis must be specific to the type of source and designed to identify concentrations of pollutants that may pass through, upset or otherwise interfere with the facility's operation.

9. Access to transported waste receiving facilities may be permitted only during the times specified in the application materials and under the control and supervision of the person responsible for the wastewater treatment facility or his/her designated representative.

10. The authorization in this Special Condition is subject to annual review and, with notice to the PWD and other interested parties of record, may be suspended or reduced by the Department as necessary to ensure full compliance with 06-096 CMR 555 and the terms and conditions of this permit.

J. CONDITIONS FOR COMBINED SEWER OVERFLOW

Pursuant to *Combined Sewer Overflow Abatement*, 06-096 CMR 570, the PWD is authorized to discharge mixed sanitary and stormwater from the following locations of CSOs (storm water/sanitary waste water) subject to the conditions and requirements contained herein:

1. CSO Locations

Outfall #	Regulator Location	Receiving Water, Class
002	Warren Parking Lot Regulator	Presumpscot River, C
003	Siphon Inlet Structure	Presumpscot River, C
004	Dunn Street Regulator	Presumpscot River, C
007	Brown Street Regulator	Presumpscot River, C
008	King Street Regulator	Presumpscot River, C

SPECIAL CONDITIONS

J. CONDITIONS FOR COMBINED SEWER OVERFLOW (cont'd)

2. Prohibited Discharges (co-permittees)

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

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

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

3. Narrative Discharge Limitations (co-permittees)

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

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

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

   d) Notwithstanding specific conditions of this permit, any discharge by itself or in combination with other discharges must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

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

   The co-permittees must implement CSO control projects in accordance with an approved CSO Master Plan and abatement schedule. The CSO Master Plan, entitled *Sewer System Master Plan for Westbrook, Maine, December 1993*, prepared by Portland Water District and the City of Westbrook, and a supplemental document entitled *CSO Master Plan for Westbrook, Maine, Volume II, December 1996*, were approved by the Department on March 26, 1997. A revised abatement schedule dated October 8, 1999 was approved by the Department on October 27, 1999. The revised abatement schedule was further modified in the document entitled, *Combined Sewer Overflow Master Plan Update Study for Westbrook, ME*, prepared by Woodard & Curran and dated December 2008 (referred

SPECIAL CONDITIONS

J. CONDITIONS FOR COMBINED SEWER OVERFLOW (cont'd)

as "Volume I" in correspondence) and further modified in a document entitled, *Combined Sewer Overflow Master Plan Update Study for Westbrook, ME*, prepared by Woodard & Curran and dated September 2010 (referred as "Volume II" in correspondence). The revised abatement schedule was further modified in the document entitled *2014 Combined Sewer Overflow Master Plan Update Study for Westbrook, Maine* prepared by Jordan Environmental Engineering, dated December 2014 and revised May 2015.

The Department and the PWD entered into an Administrative Consent Agreement with an effective date of August 2, 2016, that included the project completion dates listed in the table below. Failure to complete the projects prior to the stated deadlines would subject PWD to potential enforcement for violating the Consent Agreement and would subject PWD and the City to either stipulated penalties or demand for payment of suspended penalties.

PORTLAND WATER DISTRICT		
Project Number	Description	Completion Deadline
N705A / N705B	Raise Overflow Weir in Brown Street CSO Regulator (ICIS Code 75305)	12/31/2017
N802A / N802B	Raise Overflow Weir in King Street CSO Regulator (75305)	12/31/2017
N203B	Install Screens, Warren Avenue, Siphon Inlet & Dunn Street (75305)	12/31/2018
N701B	Dana Court PS capacity increase or storage (75305)	3/31/2019
CITY OF WESTBROOK		
Project Number	Description	Completion Deadline
204	Replace Stone Sewer on Seavey Street (75305)	12/01/2017
N201A	Separate Rochester and Haskell Streets (75305)	12/31/2017
N602	Replace Leaking Sewers on Kennard, Chesnut, & Mitchell St. (75305)	12/31/2018
N501	Separate CB's on Maple, Replace Union Street Sewer (75305)	12/31/2019
N505	Replace Leaking Sewers on New Gorham Road (75305)	12/31/2019

SPECIAL CONDITIONS

J. CONDITIONS FOR COMBINED SEWER OVERFLOW (cont'd)

JOINT MILESTONE		
Submit Long Term Control Plan (LTCP) Update(ICIS Code 81699)		6/30/2021

To modify the dates and or projects specified above (but not dates in the Master Plan), the co-permittees must file an application with the Department to formally modify this permit and submit a request to the Department for an amendment of the August 2, 2016, Administrative Consent Agreement.

The work items identified in the abatement schedule may be amended from time to time based upon approval by the Department. The co-permittees must receive written approval from the Department in writing prior to any proposed changes to the implementation schedule.

5. Nine Minimum Controls (NMC) (see §5 of 06-096 CMR 570)

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

6. CSO Compliance Monitoring Program (see §6 of 06-096 CMR 570)

   The PWD must conduct block testing or flow monitoring according to an approved *Compliance Monitoring Program* on all CSO points, as part of the CSO Master Plan. Annual flow volumes for all CSO locations must be determined by actual flow monitoring, or by estimation using a model such as EPA's Storm Water Management Model (SWMM).

   Results must be submitted annually as part of the annual *CSO Progress Report* (see below), and must include annual precipitation, CSO volumes (actual or estimated) and any block test data required. Any abnormalities during CSO monitoring must also be reported. CSO control projects that have been completed must be monitored for volume and frequency of overflow to determine the effectiveness of the project toward CSO abatement. This requirement shall not apply to those areas where complete separation has been completed and CSO outfalls have been eliminated.

SPECIAL CONDITIONS

J. CONDITIONS FOR COMBINED SEWER OVERFLOW (cont'd)

7. Additions of New Wastewater (see §8 of 06-096 CMR 570)

   06-096 CMR § 8 lists requirements relating to any proposed addition of wastewater to the combined sewer system. Documentation of the new wastewater additions to the system and associated mitigating measures must be included in the annual *CSO Progress Report* (see below). Reports must contain the volumes and characteristics of the wastewater added or authorized for addition and descriptions of the sewer system improvements and estimated effectiveness. Any sewer extensions upstream of a CSO must be reviewed and approved by the Department prior to their connection to the collection system. A Sewer Extension/Addition Reporting Form shall be completed and submitted to the Department along with plans and specifications of the proposed extension/addition.

8. Annual CSO Progress Reports (see §7 of 06-096 CMR 570)

   By March 1 of each year ***(ICIS Code CSO010)***, the co-permittees must submit an *Annual CSO Progress Report* covering the previous calendar year (January 1 to December 31) to the Department. The CSO Progress Report must include, but is not necessarily limited to, the following topics as further described in 06-096 CMR 570: CSO abatement projects, schedule comparison, progress on inflow sources, costs, flow monitoring results, CSO activity and volumes, nine minimum controls update, sewer extensions, and new commercial or industrial flows.

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

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

SPECIAL CONDITIONS

J. CONDITIONS FOR COMBINED SEWER OVERFLOW (cont'd)

9. Signs

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

PORTLAND WATER DISTRICT
WET WEATHER
SEWAGE DISCHARGE
CSO # AND NAME

10. Definitions

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

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

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

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

SPECIAL CONDITIONS

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

By December 31 of each calendar year, the PWD must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit ***[ICIS Code 96299]***:

(a) Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;

(b) Changes in the operation of the treatment works that may increase the toxicity of the discharge; and

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

(d) Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge.

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

The Department reserves the right to impose routine surveillance level testing or other toxicity testing if new information becomes available that indicates the discharge may cause or have a reasonable potential to cause excursions of ambient water quality criteria/thresholds. See **Attachment G** of the attached Fact Sheet for an acceptable certification form to satisfy this Special Condition.

SPECIAL CONDITIONS

L. INDUSTRIAL PRETREATMENT PROGRAM

1. Pollutants introduced into the collection system by a non-domestic source (user) must not pass-through the publicly owned treatment works (POTW) or interfere with the operation or performance of the works.

   a. The PWD must develop and enforce specific effluent limits (local limits) for Industrial User(s), and all other users, as appropriate, which together with appropriate changes in the POTW facilities or operation, are necessary to ensure continued compliance with the POTW's MEPDES permit or sludge use or disposal practices. Specific local limits shall not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond.

   b. **Within 180 days of the effective date of this permit,** ***[ICIS code PR002]*** the PWD must prepare and submit a written technical evaluation to the Department analyzing the need to revise local limits. As part of this evaluation, the PWD must assess how the POTW performs with respect to influent and effluent of pollutants, water quality concerns, sludge quality, sludge processing concerns/inhibition, biomonitoring results, activated sludge inhibition, worker health and safety and collection system concerns. In preparing this evaluation, the PWD must complete the *"Re-Assessment of Technically Based Local Limits"* form included as **Attachment E** of this permit with the technical evaluation to assist in determining whether existing local limits need to be revised. Justifications and conclusions should be based on actual plant data if available and should be included in the report. Should the evaluation reveal the need to revise local limits, the PWD must complete the revisions within 120 days of notification by the Department and submit the revisions to the Department for approval. The PWD must carry out the local limits revisions in accordance with EPA's document entitled, *Local Limits Development Guidance (July 2004).*

2. The PWD must implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the permittee's approved Pretreatment Program, and the General Pretreatment Regulations, found at 40 CFR 403 and Pretreatment Program, *Pretreatment Program*, 06-096 CMR 528 (effective January 12, 2001). At a minimum, the PWD must perform the following duties to properly implement the Industrial Pretreatment Program (IPP):

   a. Carry out inspection, surveillance, and monitoring procedures which will determine, independent of information supplied by the industrial user, whether the industrial user is in compliance with the Pretreatment Standards. At a minimum, all significant industrial users must be sampled and inspected at the frequency established in the approved IPP but in no case less than once per year and maintain adequate records.

SPECIAL CONDITIONS

L. INDUSTRIAL PRETREATMENT PROGRAM (cont'd)

b. Issue or renew all necessary industrial user control mechanisms within 90 days of their expiration date or within 180 days after the industry has been determined to be a significant industrial user.

c. Obtain appropriate remedies for noncompliance by an industrial user with any pretreatment standard and/or requirement.

d. Maintain an adequate revenue structure for continued implementation of the Pretreatment Program.

e. The PWD must provide the Department with an annual report describing the permittee's pretreatment program activities for the twelve-month period ending 60 days prior to the due date in accordance with federal regulation found at 40 CFR 403.12(i) and 06-096 CMR 528(12)(i). The annual report ***[ICIS code 53199]*** must be consistent with the format described in the "*MEPDES Permit Requirements For Industrial Pretreatment Annual Report" f*orm included as **Attachment F** of this permit and must be submitted no later than October 15 of each calendar year.

f. The PWD must obtain approval from the Department prior to making any significant changes to the industrial pretreatment program in accordance with federal regulation found at 40 CFR 403.18(c) and 06-096 CMR 528(18).

g. The PWD must assure that applicable National Categorical Pretreatment Standards are met by all categorical industrial users of the POTW. These standards are published in the federal regulations found at 40 CFR Parts 405 through 471.

h. The PWD must modify its pretreatment program to conform to all changes in the federal regulations and State rules that pertain to the implementation and enforcement of the industrial pretreatment program. **Within 180 days of the effective date of this permit** ***[ICIS code 50799]***, the PWD must provide the Department in writing, proposed changes to the PWD's pretreatment program deemed necessary to assure conformity with current federal regulations and State rules. At a minimum, the permittee must address in its written submission the following areas: (1) Enforcement response plan; (2) revised sewer use ordinances; and (3) slug control evaluations. The PWD will implement these proposed changes pending the Department's approval under federal regulation 40 CFR 403.18 and 06-096 CMR 528(18). This submission is separate and distinct from any local limits analysis submission described in section 1(a) above.

SPECIAL CONDITIONS

M. MONITORING AND REPORTING

Electronic Reporting

NPDES Electronic Reporting, 40 C.F.R. 127, requires MEPDES permit holders to submit monitoring results obtained during the previous month on an electronic discharge monitoring report to the regulatory agency utilizing the EPA electronic system.

Electronic Discharge Monitoring Reports (DMRs) submitted using the EPA NetDMR system, must be:

1. Submitted by a facility authorized signatory; and
2. Submitted no later than **midnight on the 15th day of the month** following the completed reporting period.

Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Toxics reporting must be done using the DEP Toxsheet reporting form included as **Attachment D** of this permit. An electronic copy of the Toxsheet reporting document must be submitted to the Department assigned compliance inspector as an attachment to an email. In addition, a hardcopy form of this sheet must be signed and submitted to the Department assigned compliance inspector, or a copy attached to your NetDMR submittal will suffice. Documentation submitted electronically to the Department in support of the electronic DMR must be submitted no later than midnight on the 15th day of the month following the completed reporting period.

Toxsheet reporting forms must be submitted electronically as an attachment to an email sent to the Department assigned compliance inspector. In addition, a signed hardcopy of your Toxsheet must also be submitted. A signed copy of the DMR and all other reports required herein must be submitted to the Department assigned compliance inspector (unless otherwise specified) following address:

Department of Environmental Protection
Southern Maine Regional Office
Bureau of Water Quality
Division of Water Quality Management
312 Canco Road
Portland, ME. 04103

SPECIAL CONDITIONS

N. REOPENING OF PERMIT FOR MODIFICATIONS

Upon evaluation of the tests results in the Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at anytime and with notice to the co-permittees, 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.

O. SEVERABILITY

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

ATTACHMENT A

Maine Department of Environmental Protection

Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____

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

SAMPLE COLLECTION INFORMATION

Sampling Date: ___ ___ ___ (mm dd yy) Sampling time: _____ AM/PM

Sampling Location:

Weather Conditions: _____

Please describe any unusual conditions with the influent or at the facility during or preceding the time of sample collection:

Optional test - not required but recommended where possible to allow for the most meaningful evaluation of mercury results:

Suspended Solids _____ mg/L Sample type: _____ Grab (recommended) or _____ Composite

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

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

Please Enter Effluent Limits for your facility

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

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

CERTIFICATION

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

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

ATTACHMENT B

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 C

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

Chlorinated? _____ Dechlorinated? _____

Results

	% effluent	
	water flea	**trout**
A-NOEL		
C-NOEL		

Effluent Limitations

A-NOEL	
C-NOEL	

Data summary

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

place * next to values statistically different from controls

for trout show final wt and % incr for both controls

Reference toxicant

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

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

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

ATTACHMENT 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)		Flow for Day (MGD)[1]		Flow Avg. for Month (MGD)[2]	
Acute dilution factor					
Chronic dilution factor		Date Sample Collected		Date Sample Analyzed	
Human health dilution factor					
Criteria type: M(arine) or F(resh)	F				

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

Last Revision - July 1, 2015

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

FRESH WATER VERSION

Please see the footnotes on the last page.

			Effluent Limits, %			Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)		Possible Exceedence [7]		
	WHOLE EFFLUENT TOXICITY		Acute	Chronic			WET Result, % Do not enter % sign	Reporting Limit Check	Acute	Chronic	
	Trout - Acute										
	Trout - Chronic										
	Water Flea - Acute										
	Water Flea - Chronic										
	WET CHEMISTRY										
	pH (S.U.) (9)										
	Total Organic Carbon (mg/L)					(8)					
	Total Solids (mg/L)										
	Total Suspended Solids (mg/L)										
	Alkalinity (mg/L)					(8)					
	Specific Conductance (umhos)										
	Total Hardness (mg/L)					(8)					
	Total Magnesium (mg/L)					(8)					
	Total Calcium (mg/L)					(8)					
	ANALYTICAL CHEMISTRY [3]										
	Also do these tests on the effluent with WET. Testing on the receiving water is optional	Reporting Limit	Effluent Limits, ug/L Acute[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
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

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

Maine Department of Environmental Protection
WET and Chem
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

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

Maine Department of Environmental Protection
WET and Chem
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

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

Notes:

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

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

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

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

(4) Priority Pollutants should be reported in micrograms per liter (ug/L).

(5) Mercury is often reported in nanograms per liter (ng/L) by the contract laboratory, so be sure to convert to micrograms per liter on this spreadsheet.

(6) Effluent Limits are calculated based on dilution factor, background allocation (10%) and water quality reserves (15% - to allow for new or changed discharges or non-point sources).

(7) Possible Exceedence determinations are done for a single sample only on a mass basis using the actual pounds discharged. This analysis does not consider watershed wide allocations for fresh water discharges.

(8) These tests are optional for the receiving water. However, where possible samples of the receiving water should be preserved and saved for the duration of the WET test. In the event of questions about the receiving water's possible effect on the WET results, chemistry tests should then be conducted.

(9) pH and Total Residual Chlorine must be conducted at the time of sample collection. Tests for Total Residual Chlorine need be conducted only when an effluent has been chlorinated or residual chlorine is believed to be present for any other reason.

Comments:

ATTACHMENT E

RE-ASSESSMENT OF TECHNICALLY BASED INDUSTRIAL DISCHARGE LIMITS

Pursuant to federal regulation 40 CFR Part 122.21(j)(4) and Department rule Chapter 528, all Publicly Owned Treatment Works (POTWs) with approved Industrial Pretreatment Programs (IPPs) shall provide the Department with a written evaluation of the need to revise local industrial discharge limits under federal regulation 40 CFR Part 403.5(c)(1) and Department rule 06-096 CMR Chapter 528(6).

Below is a form designed by the U.S. Environmental Protection Agency (EPA - New England) to assist POTWs with approved IPPs in evaluating whether their existing Technically Based Local Limits (TBLLs) need to be recalculated. The form allows the permittee and Department to evaluate and compare pertinent information used in previous TBLLs calculations against present conditions at the POTW. **Please read the directions below before filling out the attached form.**

ITEM I.

* In Column (1), list what your POTW's influent flow rate was when your existing TBLLs were calculated. In Column (2), list your POTW's present influent flow rate. Your current flow rate should be calculated using the POTW's average daily flow rate from the previous 12 months.

* In Column (1) list what your POTW's SIU flow rate was when your existing TBLLs were calculated. In Column (2), list your POTW's present SIU flow rate.

* In Column (1), list what dilution ratio and/or 7Q10 value was used in your previous MEPDES permit. In Column (2), list what dilution ration and/or 7Q10 value is presently being used in your reissued MEPDES permit.

  The 7Q10 value is the lowest seven day average flow rate, in the river, over a ten-year period. The 7Q10 value and/or dilution ratio used by the Department in your MEPDES permit can be found in your MEPDES permit "Fact Sheet."

* In Column (1), list the safety factor, if any, that was used when your existing TBLLs were calculated.

* In Column (1), note how your bio-solids were managed when your existing TBLLs were calculated. In Column (2), note how your POTW is presently disposing of its biosolids and how your POTW will be disposing of its biosolids in the future.

ITEM II.

* List what your existing TBLLs are - as they appear in your current Sewer Use Ordinance (SUO).

RE-ASSESSMENT OF TECHNICALLY BASED INDUSTRIAL DISCHARGE LIMITS

ITEM III.

* Identify how your existing TBLLs are allocated out to your industrial community. Some pollutants may be allocated differently than others, if so please explain.

ITEM IV.

* Since your existing TBLLs were calculated, identify the following in detail:

  (1) if your POTW has experienced any upsets, inhibition, interference or pass-through as a result of an industrial discharge.

  (2) if your POTW is presently violating any of its current MEPDES permit limitations - include toxicity.

ITEM V.

* Using current sampling data, list in Column (1) the average and maximum amount of pollutants (in pounds per day) received in the POTW's influent. Current sampling data is defined as data obtained over the last 24 month period.

  All influent data collected and analyzed must be in accordance with federal regulation 40 CFR Part 136. Sampling data collected should be analyzed using the lowest possible detection method(s), e.g. graphite furnace, or other approved method.

  Based on your existing TBLLs, as presented in Item II., list in Column (2) each Maximum Allowable Industrial Headworks Loading (MAIHL) value corresponding to each of the local limits derived from an applicable environmental criteria or standard, *e.g.* water quality, sludge, MEPDES permit, inhibition, etc. For each pollutant, the MAIHL equals the calculated Maximum Allowable Headwork Loading (MAHL) minus the POTW's domestic loading source(s). For more information, please see, *Local Limits Development Guidance (July 2004).*

ITEM VI.

* Using current sampling data, list in Column (1) the average and maximum amount of pollutants (in micrograms per liter) present your POTW's effluent. Current sampling data is defined as data obtained during the last 24 month period.

  All effluent data collected and analyzed must be in accordance with federal regulation 40 CFR Part 136. Sampling data collected should be analyzed using the lowest possible detection method(s), *e.g.* graphite furnace, or other approved method.

RE-ASSESSMENT OF TECHNICALLY BASED INDUSTRIAL DISCHARGE LIMITS

* List in Column (2A) what the Ambient Water Quality Criteria (AWQC) (found in Department rule Chapter 584 –*Surface Water Quality Criteria For Toxic Pollutants, Appendix A,* October 2005) were (in micrograms per liter) when your TBLLs were calculated. Please note what hardness value was used at that time. Hardness should be expressed in milligrams per liter of Calcium Carbonate. In the absence of a specific AWQC, control(s) adequate to protect the narrative water quality standards for the receiving water may be applied.

List in Column (2B) the current AWQC values for each pollutant multiplied by the dilution ratio used in your reissued MEPDES permit. For example, with a dilution ratio of 25:1 at a hardness of 20 mg/l - Calcium Carbonate (copper's chronic freshwater AWQC equals 2.36 ug/l) the chronic MEPDES permit limit for copper would equal 45 ug/l. Example calculation:

EOP concentration = [Dilution factor x 0.75 x AWQC] + [0.25 x AWQC]
Chronic AWQC = 2.36 ug/L

Chronic EOP = [25 x $0.75^{(1)}$ x 2.36 ug/L] + [0.25 x 2.36 ug/L] = 45 ug/L

(1) Department rule Chapter 530, *Surface Water Toxics Control Program*, October 2005) requires that 10% of the AWQC be set aside for background that may be present in the receiving water and 15% of the AWQC be set aside as a reserve capacity for new dischargers or expansion of existing discharges.

ITEM VII.

* In Column (1), list all pollutants (in micrograms per liter) limited in your reissued MEPDES permit. In Column (2), list all pollutants limited in your previous MEPDES permit.

ITEM VIII.

* Using current sampling data, list in Column (1) the average and maximum amount of pollutants in your POTW's biosolids. Current data is defined as data obtained during the last 24-month period. Results are to be expressed as total dry weight.

All biosolids data collected and analyzed must be in accordance with federal 40 CFR Part 136.

In Column (2A), list current State and/or Federal sludge standards that your facility's biosolids must comply with. Also note how your POTW currently manages the disposal of its biosolids. If your POTW is planning on managing its biosolids differently, list in Column (2B) what your new biosolids criteria will be and method of disposal.

If you have any questions, please contact the State Pretreatment Coordinator at the Maine Department of Environmental Protection, Bureau of Land & Water Quality, Division of Water Quality Management, State House Station #17, Augusta, ME. 04333. The telephone number is (207) 287-8898, and the email address is james.r.crowley@maine.gov.

REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

POTW Name & Address : _____

MEDES Permit # : _____

Date EPA approved current TBLLs : _____

Date EPA approved current Sewer Use Ordinance : _____

ITEM I.

In Column (1) list the conditions that existed when your current TBLLs were calculated. In Column (2), list current conditions or expected conditions at your POTW.

	Column (1)	**Column (2)**
	EXISTING TBLLs	PRESENT CONDITIONS
POTW Flow (MGD)	_____	_____
SIU Flow (MGD)	_____	_____
Dilution Ratio or 7Q10 from the MEPDES Permit)	_____	_____
Safety Factor	_____	_____
Biosolids Disposal Method(s)	_____	_____

REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

ITEM II.

EXISTING TBLLs

POLLUTANT	NUMERICAL LIMIT (mg/l) or (lb/day)	POLLUTANT	NUMERICAL LIMIT (mg/l) or (lb/day)

ITEM III.

Note how your existing TBLLs, listed in Item II., are allocated to your Significant Industrial Users (SIUs), i.e. uniform concentration, contributory flow, mass proportioning, other. Please specify by circling.

ITEM IV.

Has your POTW experienced any upsets, inhibition, interference or pass-through from industrial sources since your existing TBLLs were calculated?

If yes, explain. _____

_____

Has your POTW violated any of its MEPDES permit limits and/or toxicity test requirements?

If yes, explain. _____

_____

REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

ITEM V.

Using current POTW influent sampling data fill in Column (1). In Column (2), list your Maximum Allowable Industrial Headwork Loading (MAIHL) values used to derive your TBLLs listed in Item II. In addition, please note the environmental criteria for which each MAIHL value was established, *i.e.* water quality, sludge, MEPDES, etc.

Pollutant	**Column (1)** Influent Data Analyses Maximum (lb/day)	Average (lb/day)	**Column (2)** MAIHL Values (lb/day)	Criteria
Arsenic				
Cadmium				
Chromium				
Copper				
Cyanide				
Lead				
Mercury				
Nickel				
Silver				
Zinc				
Other (List)				

REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

ITEM VI.

Using current POTW effluent sampling data, fill in Column (1). In Column (2A) list what the Ambient Water Quality Criteria (AWQC) were at the time your existing TBLLs were developed. List in Column (2B) current AWQC values multiplied by the dilution ratio used in your reissued MEPDES permit.

	Column (1) Effluent Data Analyses		**Columns** **(2A)** Water Quality Criteria (AWQC)	**(2B)**
	Maximum (ug/l)	Average (ug/l)	From TBLLs (ug/l)	Today (ug/l)
Pollutant				
Arsenic				
Cadmium*				
Chromium*				
Copper*				
Cyanide				
Lead*				
Mercury				
Nickel*				
Silver				
Zinc*				
Other (List)				

*Hardness Dependent (mg/l - CaCO3)

RE-ASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS (TBLLs)

ITEM VII.

In Column (1), identify all pollutants limited in your reissued MEPDES permit. In Column (2), identify all pollutants that were limited in your previous MEPDES permit.

Column (1) REISSUED PERMIT		**Column (2)** PREVIOUS PERMIT	
Pollutants	Limitations (ug/l)	Pollutants	Limitations (ug/l)

ITEM VIII.

Using current POTW biosolids data, fill in Column (1). In Column (2A), list the biosolids criteria that were used at the time your existing TBLLs were calculated. If your POTW is planning on managing its biosolids differently, list in Column (2B) what your new biosolids criteria would be and method of disposal.

	Column (1) Biosolids Data Analyses Average (mg/kg)	**Columns (2A)** Biosolids Criteria From TBLLs (mg/kg)	**(2B)** New (mg/kg)
Pollutant			
Arsenic			
Cadmium			
Chromium			
Copper			
Cyanide			
Lead			
Mercury			
Nickel			
Silver			
Zinc			
Molybdenum			
Selenium			
Other (List)			

ATTACHMENT F

MEPDES PERMIT REQUIREMENTS
FOR
INDUSTRIAL PRETREATMENT ANNUAL REPORT

The information described below shall be included in the pretreatment program annual reports:

1. An updated list of all industrial users by category, as set forth in federal regulation 40 CFR Part 403.8 and Department rule 06-096 CMR Chapter 528(9) indicating compliance or noncompliance with the following:

   - baseline monitoring reporting requirements for newly promulgated industries
   - compliance status reporting requirements for newly promulgated industries
   - periodic (semi-annual) monitoring reporting requirements,
   - categorical standards, and
   - local limit.

2. A summary of compliance and enforcement activities during the preceding year, including the number of:

   - significant industrial users inspected by POTW (include inspection dates for each industrial user);
   - significant industrial users sampled by POTW (include sampling dates for each industrial user);
   - compliance schedules issued (include list of subject users);
   - written notices of violations issued (include list of subject users);
   - administrative orders issued (include list of subject users),
   - criminal or civil suits filed (include list of subject users); and
   - penalties obtained (include list of subject users and penalty amounts).

3. A list of significantly violating industries required to be published in a local newspaper in accordance with federal regulation 40 CFR Part 403.8(f)(2)(viii) and Department rule 06-096 CMR Chapter 528(9)(f)(2)(vii).

4. A narrative description of program effectiveness including present and proposed changes to the program, such as funding, staffing, ordinances, regulations, rules and/or statutory authority.

5. A summary of all pollutant analytical results for influent, effluent, sludge and any toxicity or bioassay data from the wastewater treatment facility. The summary shall include a comparison of influent sampling results versus threshold inhibitory concentrations for the POTW and effluent sampling results versus water quality standards. Such a comparison shall be based on the sampling program described in the paragraph below or any similar sampling program described in this permit.

MEPDES PERMIT REQUIREMENTS
FOR
INDUSTRIAL PRETREATMENT ANNUAL REPORT

At a minimum, annual sampling and analysis of the influent and effluent of the POTW shall be conducted for the following pollutants:

a.) Total Cadmium	f.) Total Nickel
b.) Total Chromium	g.) Total Silver
c.) Total Copper	h.) Total Zinc
d.) Total Lead	i.) Total Cyanide
e.) Total Mercury	j.) Total Arsenic

The sampling program shall consist of one 24-hour, flow-proportioned, composite and at least one grab sample that is representative of the flows received by the POTW. The composite shall consist of hourly, flow-proportioned grab samples taken over a 24-hour period if the sample is collected manually, or shall consist of a minimum of 48 samples collected at 30-minute intervals if an automated sampler is used. Cyanide shall be taken as a grab sample during the same period as the composite sample. Sampling and preservation shall be consistent with federal regulation 40 CFR Part 136.

6. A detailed description of all interference and pass-through that occurred during the past year.

7. A thorough description of all investigations into interference and pass-through during the past year.

8. A description of monitoring, sewer inspections and evaluations which were done during the past year to detect interference and pass-through, specifying parameters and frequencies.

9. A description of actions being taken to reduce the incidence of significant violations by significant industrial users.

10. The date of the latest adoption of local limits and an indication as to whether or not the City is under a State or Federal compliance schedule that includes steps to be taken to revise local limits.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

CONTENTS

A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

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

maximize removal of pollutants unless authorization to the contrary is obtained from the Department.

(b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.

(c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.

(d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.

(e) The permittee shall install flow measuring facilities of a design approved by the Department.

(f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.

2. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

3. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Bypasses.

(a) Definitions.

(i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

(ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.

(c) Notice.

(i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D(1)(f), below. (24-hour notice).

(d) Prohibition of bypass.

(i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
(C) The permittee submitted notices as required under paragraph (c) of this section.

(ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (d)(i) of this section.

6. Upsets.

(a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;
(ii) The permitted facility was at the time being properly operated; and
(iii) The permittee submitted notice of the upset as required in paragraph D(1)(f) , below. (24 hour notice).
(iv) The permittee complied with any remedial measures required under paragraph B(4).

(d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

(c) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;
(ii) The individual(s) who performed the sampling or measurements;
(iii) The date(s) analyses were performed;
(iv) The individual(s) who performed the analyses;
(v) The analytical techniques or methods used; and
(vi) The results of such analyses.

(d) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit.

(e) State law provides that any person who tampers with or renders inaccurate any monitoring devices or method required by any provision of law, or any order, rule license, permit approval or decision is subject to the penalties set forth in 38 MRSA, §349.

D. REPORTING REQUIREMENTS

1. Reporting requirements.

(a) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).

(iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

(b) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Transfers. This permit is not transferable to any person except upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.

(d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

(e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(f) Twenty-four hour reporting.

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance

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

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

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit.
(B) Any upset which exceeds any effluent limitation in the permit.
(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

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

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

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

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

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

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

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

(i) One hundred micrograms per liter (100 ug/l);
(ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

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

(i) Five hundred micrograms per liter (500 ug/l);
(ii) One milligram per liter (1 mg/l) for antimony;
(iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

5. Publicly owned treatment works.

(a) All POTWs must provide adequate notice to the Department of the following:

(i) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA or Chapter 528 if it were directly discharging those pollutants.
(ii) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
(iii) For purposes of this paragraph, adequate notice shall include information on (A) the quality and quantity of effluent introduced into the POTW, and (B) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(b) When the effluent discharged by a POTW for a period of three consecutive months exceeds 80 percent of the permitted flow, the permittee shall submit to the Department a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

E. OTHER REQUIREMENTS

1. Emergency action - power failure. Within thirty days after the effective date of this permit, the permittee shall notify the Department of facilities and plans to be used in the event the primary source of power to its wastewater pumping and treatment facilities fails as follows.

(a) For municipal sources. During power failure, all wastewaters which are normally treated shall receive a minimum of primary treatment and disinfection. Unless otherwise approved, alternate power supplies shall be provided for pumping stations and treatment facilities. Alternate power supplies shall be on-site generating units or an outside power source which is separate and independent from sources used for normal operation of the wastewater facilities.

(b) For industrial and commercial sources. The permittee shall either maintain an alternative power source sufficient to operate the wastewater pumping and treatment facilities or halt, reduce or otherwise control production and or all discharges upon reduction or loss of power to the wastewater pumping or treatment facilities.

2. Spill prevention. (applicable only to industrial sources) Within six months of the effective date of this permit, the permittee shall submit to the Department for review and approval, with or without conditions, a spill prevention plan. The plan shall delineate methods and measures to be taken to prevent and or contain any spills of pulp, chemicals, oils or other contaminates and shall specify means of disposal and or treatment to be used.

3. **Removed substances.** Solids, sludges trash rack cleanings, filter backwash, or other pollutants removed from or resulting from the treatment or control of waste waters shall be disposed of in a manner approved by the Department.

4. **Connection to municipal sewer.** (applicable only to industrial and commercial sources) All wastewaters designated by the Department as treatable in a municipal treatment system will be cosigned to that system when it is available. This permit will expire 90 days after the municipal treatment facility becomes available, unless this time is extended by the Department in writing.

F. DEFINITIONS. For the purposes of this permit, the following definitions shall apply. Other definitions applicable to this permit may be found in Chapters 520 through 529 of the Department's rules

Average means the arithmetic mean of values taken at the frequency required for each parameter over the specified period. For bacteria, the average shall be the geometric mean.

Average monthly discharge limitation means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. Except, however, bacteriological tests may be calculated as a geometric mean.

Average weekly discharge limitation means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best management practices ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Composite sample means a sample consisting of a minimum of eight grab samples collected at equal intervals during a 24 hour period (or a lesser period as specified in the section on monitoring and reporting) and combined proportional to the flow over that same time period.

Continuous discharge means a discharge which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities.

Daily discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

Discharge Monitoring Report ("DMR") means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by approved States as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the State Agency name, address, logo, and other similar information, as appropriate, in place of EPA's.

Flow weighted composite sample means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.

Grab sample means an individual sample collected in a period of less than 15 minutes.

Interference means a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

(1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
(2) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Maximum daily discharge limitation means the highest allowable daily discharge.

New source means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

(a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or
(b) After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.

Pass through means a discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

Permit means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of 40 CFR parts 122, 123 and 124. Permit includes an NPDES general permit (Chapter 529). Permit does not include any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit.

Person means an individual, firm, corporation, municipality, quasi-municipal corporation, state agency, federal agency or other legal entity.

Point source means any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft, from which pollutants are or may be discharged.

Pollutant means dredged spoil, solid waste, junk, incinerator residue, sewage, refuse, effluent, garbage, sewage sludge, munitions, chemicals, biological or radiological materials, oil, petroleum products or byproducts, heat, wrecked or discarded equipment, rock, sand, dirt and industrial, municipal, domestic, commercial or agricultural wastes of any kind.

Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Publicly owned treatment works ("POTW") means any facility for the treatment of pollutants owned by the State or any political subdivision thereof, any municipality, district, quasi-municipal corporation or other public entity.

Septage means, for the purposes of this permit, any waste, refuse, effluent sludge or other material removed from a septic tank, cesspool, vault privy or similar source which concentrates wastes or to which chemicals have been added. Septage does not include wastes from a holding tank.

Time weighted composite means a composite sample consisting of a mixture of equal volume aliquots collected over a constant time interval.

Toxic pollutant includes any pollutant listed as toxic under section 307(a)(1) or, in the case of sludge use or disposal practices, any pollutant identified in regulations implementing section 405(d) of the CWA. Toxic pollutant also includes those substances or combination of substances, including disease causing agents, which after discharge or upon exposure, ingestion, inhalation or assimilation into any organism, including humans either directly through the environment or indirectly through ingestion through food chains, will, on the basis of information available to the board either alone or in combination with other substances already in the receiving waters or the discharge, cause death, disease, abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in such organism or their offspring.

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Whole effluent toxicity means the aggregate toxic effect of an effluent measured directly by a toxicity test.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
MAINE WASTE DISCHARGE LICENSE

May 23, 2017

PERMIT NUMBER: **ME0100846**
LICENSE NUMBER: **W001510-6D-I-R**

NAME AND ADDRESS OF APPLICANTS:

PORTLAND WATER DISTRICT
Westbrook Wastewater Facility
P.O. Box 3553
Portland, Maine 04104-3553

CITY OF WESTBROOK
2 York Street
Westbrook, Maine 04092

COUNTY: **Cumberland County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

Westbrook Wastewater Treatment Facility
Park Road
Westbrook, Maine 04102

RECEIVING WATER AND CLASSIFICATION: **Presumpscot River, Class C**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

PORTLAND WATER DISTRICT

Mr. Scott Firmin
Director of Wastewater Services
(207) 774-5961 x3077
sfirmin@pwd.org

CITY OF WESTBROOK

Mr. Eric Dudley P.E.
Director of Engineering and Public Services
(207) 854-0660 x3001
edudley@westbrook.me.us

1. APPLICATION SUMMARY

a. Application: The Portland Water District (PWD) and the City of Westbrook (City), collectively referred to as co-permittees, have submitted a timely and complete application to the Department to renew combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100846/ Maine Waste Discharge License (WDL) #W001510-6D-E-R, ("permit") which was issued by the Department on March 6, 2012, for a five-year term. The permit was subsequently modified on December 4, 2012, to increase the daily maximum quantity of transported waste received and treated at the waste water treatment facility and modified again on September 11, 2013, to remove the water quality based mass and concentration limitation s for inorganic arsenic.

The March 6, 2012, permit approved the discharge of an unspecified quantity of flow [plant design capacity is a monthly average of 4.54 million gallons per day (MGD)] of secondary treated waste water from a municipal waste water treatment facility and an unspecified quantity of untreated storm water and sanitary waste water from five (5) combined sewer overflow (CSO) outfalls to the Presumpscot River, Class C, in Westbrook, Maine. A site location map is included as **Attachment A** of the attached Fact Sheet.

This permit renewal is being issued with the City of Westbrook named as a co-permittee as it is subject to Special Condition F, *Authorized Discharges* and Special Condition J, *Conditions For Combined Sewer Overflows*, which includes conditions regarding the operation and maintenance of the collection systems owned and operated by the City of Westbrook. For the record, PWD owns and operates the waste water treatment facility, the interceptor lines and the five combined sewer overflow (CSO) outfalls. The City of Westbrook owns the remainder of the collection system within the boundaries of the City of Westbrook that conveys waste water to the PWD waste water system.

b. Source Description: The PWD treats domestic and commercial sanitary waste water generated by approximately 31,000 customers from the City of Westbrook, the Town of Gorham, a southern section of the Town of Windham, and industrial waste from the following categorical industrial users: Silvex (approximately 34,000 gpd of metal finishing wastewater pretreated via hydroxide precipitation), Irwin (approximately 4,400 gpd of mop water, parts washer rinse, and air compressor blow down which is treated through an ultrafiltration system, combined with some volume of non-process basement groundwater, treated through an oil/water separator), Southern Maine Specialties (approximately 3,500 gpd batch discharge of metal finishing wastewater treated via hydroxide precipitation), Calpine, a gas-powered steam electricity generating facility (approximately 212,000 gpd of cooling tower and chiller blowdown with no pretreatment) and Schlotterbeck and Foss (approximately 37,000 gpd of wastewater generated from food preparation, processing and packaging treated through an oil and grease separator). In addition, two non-discharge categorical metal finishers are connected to the system - D&G Machine in Westbrook and MEGA Industries of Gorham. Both of these industries discharge domestic waste only but are permitted and part of the IPT program due to their categorical status. The PWD also receives pretreated or untreated wastewater from three industrial laundries, a newspaper printing facility, a research and development laboratory, a brewery and the Maine Correctional Center (prison).

1. APPLICATION SUMMARY (cont'd)

In Westbrook, the PWD maintains five CSOs, approximately 25,000 feet of interceptor lines, and 17,500 feet of force main from three pump stations, all with on-site back-up power. In Gorham, there is approximately 49,500 feet of collection system, approximately 51,900 feet of interceptor line and 26,500 feet of force main from nine pump stations. Eight of the eleven pump stations have on-site back-up power while the remaining stations are set up to accept power from portable generators or portable pumps owned and operated by the PWD. There are no CSOs located in the Town of Gorham. The Gorham/Windham section includes 5 pump stations (3 with back-up power), 17,300 feet of interceptors and 11,300 feet of force mains.

The co-permittees prepared the original CSO Master Plan back in 1993 and subsequently revised the plan and abatement schedule in 1996, 1999, 2008 and 2010. See Special Condition J, *Conditions For Combined Sewer Overflow*, of this permit for the most current milestones to be completed in accordance with the most current updated CSO Master Plan approved by the Department as well as the August 2, 2016, Administrative Consent Agreement between the Department and the PWD.

The PWD is authorized to treat up to 22,700 gallons per day (gpd) of transported wastes. The PWD submitted an updated Transported Waste Management Plan as part of their 2016 application for renewal as required in *Standards for the Addition of Transported Wastes to Wastewater Treatment Facilities*, 06-096 CMR 555 (last amended March 9, 2009). Also see Special Condition I, *Disposal of Transported Wastes In Waste Water Treatment Facility* of this permit.

c. Waste Water Treatment: The PWD owns and operates a facility that provides a secondary level of treatment via two separate aeration basins followed by two clarifiers that measure 90 feet in diameter. Sludge dewatering is accomplished by means of a sludge thickener and belt filter press. Screenings are removed at the headworks by means of an automatic climbing rake. Grit is removed from the aeration basin semi-annually. Dewatered sludge is composted or landfilled by a third party. Secondary effluent is chlorinated in detention tanks and dechlorinated prior to being discharged to the Presumpscot River through a reinforced concrete outfall pipe measuring 42 inches in diameter with a diffuser. The diffuser consists of fourteen equally spaced risers with ports measuring 6 inches in diameter to enhance rapid and complete mixing of the discharged effluent with the receiving waters. See **Attachment B** of this Fact Sheet for a schematic of the waste water treatment facility.

2. PERMIT SUMMARY

a. Terms and conditions - This permit is carrying forward all terms and conditions of the March 6, 2012, permit and the two subsequent modifications permit except this permit is;

1. Establishing key milestones for combined sewer overflow abatement for each co-permittee.

2. Establishing a seasonal monitoring and reporting requirement for total phosphorus to determine present discharge levels of total phosphorus to the Presumpscot River.

2. PERMIT SUMMARY (cont'd)

3. Reducing the monitoring frequencies for biochemical oxygen demand (BOD), total suspended solids (TSS) and Escherichia coli (*E. coli*) bacteria from 3/Week to 2/Week and reducing the monitoring frequency for settleable solids from 5/Week to 3/Week based on a statistical evaluation of the most current thirty three months of monitoring data for said parameters.

b. History: The most current relevant regulatory actions include the following:

September 28, 1993 – The U.S. Environmental Protection Agency (EPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0100846 for a five-year term.

May 28, 1996 – The Department issued WDL #W001510-46-B-R for a five-year term.

November 30, 1998 – The EPA approved a Total Maximum Daily Load (TMDL) report prepared by the Department for the lower Presumpscot River.

January 24, 2000 – The Department administratively modified WDL #W001510-46-B-R by issuing a letter to the PWD requiring year-round disinfection beginning September 30, 2000. This action was necessary in that the State's Department of Marine Resources (MeDMR) had water quality information that indicated that the City of Westbrook's and Town of Falmouth's waste water treatment facilities were likely causing elevated bacteria levels in Mackworth Cove. As a result, the shellfish growing and winter harvesting area in Mackworth Cove were closed. Year-round disinfection resulted in DMR re-opening the growing and harvesting area.

May 23, 2000 – The Department administratively modified WDL #W001510-46-B-R by establishing interim average and maximum concentration limits for mercury.

December 21, 2001 – The Department issued combination MEPDES permit #ME0100846/ WDL #W001510-5L-C-R, for a five-year term. Issuance of the MEPDES permit resulted in the NPDES permit last issued by the EPA on 9/28/93 being superseded which nullified the terms and conditions contained therein.

December 22, 2006 – The Department issued combination MEPDES permit #ME0100846/ WDL #W001510-5L-D-R for a five-year term.

September 2, 2011 – The permittee submitted a timely application for renewal of combination MEPDES permit #ME0100846/ WDL #W001510-5L-D-R. The Department accepted the application as complete on September 6, 2011 and assigned WDL#W001510-6D-E-R.

February 6, 2012 – The Department issued minor revision MEPDES permit #ME0100846/ WDL #W001510-6D-F-M that reduced the monitoring frequency for total mercury from 4/Year to 1/Year.

March 6, 2012 – The Department issued MEPDES permit renewal #ME0100846/ WDL #W001510-6D-E-R for a five-year term.

2. PERMIT SUMMARY (cont'd)

December 4, 2012 – The Department issued minor revision MEPDES permit #ME0100846/ WDL #W001510-6D-G-M, that increased the quantity of transported waste the facility is allowed to receive and treat from 10,000 gallons per day (gpd) to 22,700 gpd. This represents 0.5% of the design capacity of the waste water treatment facility.

September 11, 2013 – The Department issued minor revision MEPDES permit #ME0100846/ WDL #W001510-6D-H-M that eliminated the numeric water quality based limitations for inorganic arsenic given an updated statistical evaluation of arsenic data on file at the Department indicated the discharge no longer had a reasonable potential to exceed the human health ambient water quality criteria for inorganic arsenic.

August 2, 2016 – The Department and PWD entered into an Administrative Consent Agreement to resolve violations of the MEPDES permit.

January 12, 2017 - The PWD and the City of Westbrook submitted a timely and complete joint application to the Department to renew #ME0100846/ WDL #W001510-6D-E-R.

3. CONDITIONS OF PERMITS

Conditions of Licenses, 38 M.R.S. §414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, *Certain Deposits and Discharges Prohibited,* 38 M.R.S. §420 and *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective October 9, 2005), require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective March 21, 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., §467(9)(A)(4) classifies the Presumpscot River at the point of discharge as a Class C waterway. The Class C classification extends downstream to the head of tide where it is then classified as Class SC pursuant to 38 M.R.S. §469(1)(c). Maine law, 38 M.R.S., §465(4) contains the classification standards for Class C waterways and 38 M.R.S., §465-B(3) contains the classification standards for Class SC waterways as follows;

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

Maine law 38 M.R.S. §465(4)(B) states in part, *The dissolved oxygen content of Class C water may be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained. In order to provide additional protection for the growth of indigenous fish, the following standards apply.*

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

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

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

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

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

Maine law 38 M.R.S. §465-B(3) states in part;

Class SC waters must be of such quality that they are suitable for recreation in and on the water, fishing, aquaculture, propagation and restricted harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation and as a habitat for fish and other estuarine and marine life.

The dissolved oxygen content of Class SC waters must be not less than 70% of saturation. Between May 15th and September 30th, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 14 per 100 milliliters or an instantaneous level of 94 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures. The numbers of total coliform bacteria or other specified indicator organisms in samples representative of the waters in restricted shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish Sanitation Program, United States Food and Drug Administration.

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

Discharges to Class SC waters may cause some changes to estuarine and marine life provided that the receiving waters are of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community.

5. RECEIVING WATER QUALITY CONDITIONS

A document entitled, *2014 Integrated Water Quality Monitoring and Assessment Report* (also known as the "305B Report") prepared by the Department pursuant to Section 305(b) of the Federal Water Pollution Control Act lists the Presumpscot River in Westbrook (ME0106000103_609R_01) in a table entitled, *Category 4-A, Rivers and Streams With Impaired Use Other Than Mercury, TMDL Completed.* The report indicates the impairment is recreational use due to episodic elevated *E. coli* bacteria levels caused by CSO discharges.

The 2014 305b Report also lists all freshwaters in a table entitled, *Category 4-A: Rivers and Streams with Impaired Use, TMDL Completed.* All freshwaters are impaired by atmospheric deposition of mercury. 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.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

a. Flow: In October 2001, the Department promulgated a new rule, *Surface Water Toxics Control Program,* 06-096 CMR 530, which no longer based whole effluent toxicity (WET) or chemical specific testing frequencies on permitted monthly average flow limits. As a result, the permittee requested the Department modify the monthly average flow limitation from 4.54 MGD in the 12/22/06 permit to "Report" as a result of improvements to the Cottage Place and East Bridge Pump Stations, as treating more waste water would result in monthly average flow violations. The permittee and the Department agreed that treating as much waste water as possible is more environmentally sound than discharging untreated waste water from the pump stations in order to avoid violations of the monthly average flow limit in the permit. Therefore, the Department replaced the monthly average flow limit of 4.54 MGD with a "Report" requirement in the March 6, 2012 permitting action based on Department BPJ. Continuing to regulate the discharge in this manner in no way shall be construed to represent any change to design flow or loading criteria of the waste water treatment facility.

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

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2014 – September 2016 indicates the following:

Flow (DMRs=33)

Value	Limit (MGD)	Range (MGD)	Average (MGD)
Monthly Average	Report	1.6 – 4.5	2.6
Daily Maximum	Report	1.9 – 12.9	5.5

b. Dilution Factors: The source of the Presumpscot River is Maine's second largest lake, Sebago Lake. Lake levels and the flow in the Presumpscot River are controlled by a dam and associated hydro-electric generating facility called the Eel Weir Hydro Project. The Eel Weir Project is owned and operated by the SDW Company and is licensed by the Federal Energy Regulatory Commission (FERC) as Project No. 2984.

The PWD waste water treatment facility is approximately 13 miles downstream of the Eel Weir Dam. With a minimum flow of 270 cfs (see Department Order #L-19937-33-J-N, August 30, 2011) from the dam and the additional flow contribution of 30 cfs from the drainage area between the dam and the PWD facility, the resultant 7Q10 flow at the PWD is 300 cfs. It is noted the August 30, 2011 Order requires a minimum flow of 408 CFS between June 1 and September 30 of each year, typically the time of critical low flows in free flow rivers and streams and high temperatures.

As for the harmonic mean river flow, the Department has calculated 511 cfs as being the long term average river flow at the mill based on a statistical analysis of historic USGS gauge flow data for the Presumpscot River.

Dilution factors associated with the discharge from the PWD waste water treatment facility were derived in accordance with freshwater protocols established in Department Rule Chapter 530, *Surface Water Toxics Control Program*, October of 2005. With a monthly average design capacity of 4.54 MGD and 300 cfs being both the $1Q10^{(1)}$ and $7Q10^{(2)}$ low flow values for the Presumpscot River, the dilution factors are:

Acute: $1Q10 = 300$ cfs$^{(4)}$ $\Rightarrow \dfrac{(300\text{ cfs})(0.6464) + (4.54\text{ MGD})}{(4.54\text{ MGD})} = 44{:}1$

Chronic: $7Q10 = 300$ cfs $\Rightarrow \dfrac{(300\text{ cfs})(0.6464) + (4.54\text{ MGD})}{(4.54\text{ MGD})} = 44{:}1$

Harmonic Mean: $= 511$ cfs$^{(5)}$ $\Rightarrow \dfrac{(511\text{ cfs})(0.6464) + (4.54\text{ MGD})}{(4.54\text{ MGD})} = 74{:}1$

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

Footnotes:

(1) The 1Q10 is the lowest one day flow over a ten-year recurrence interval.

(2) The 7Q10 is the lowest seven day flow over a ten-year recurrence interval.

(3) 06-096 CMR 530 (4)(B)(1) states that analyses using numeric acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone. The regulation goes on to say that where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design, up to including all of it. The Department has made the determination that the discharge does receive rapid and complete mixing with the receiving water, therefore the default stream flow of the total 1Q10 is applicable in acute statistical evaluations pursuant to 06-096 CMR 530.

(4) From 1991 study.

c. Biochemical Oxygen Demand (BOD5) & Total Suspended Solids (TSS): This permitting action is carrying forward the monthly and weekly average BOD5 and TSS best practicable treatment (BPT) concentration limits of 30 mg/L and 45 mg/L respectively, that were based on secondary treatment requirements in 06-096 CMR 525(3)(III). The maximum daily BOD5 and TSS concentration limits of 50 mg/L were based on a Department best professional judgment of BPT. All three concentration limits are being carried forward in this permitting action. The monthly average and weekly average mass limits in the previous permitting action are being carried forward in this permitting action and are based on the monthly average design capacity of 4.54 MGD and the applicable concentration limits.

Monthly average: (4.54 MGD)(8.34 lbs/gallon)(30 mg/L) = 1,137 lbs/day
Weekly average: (4.54 MGD)(8.34 lbs/gallon)(45 mg/L) = 1,705 lbs/day
Daily maximum: Report Only

It is noted that no daily maximum mass limits for BOD5 or TSS have been established in this permit (or the previous permit) due to the presence of CSOs in the collection system. Establishing such a limit would likely discourage the PWD from treating as much waste water as it can physically treat during wet weather events. However, pursuant to Standard Condition B(2) of this permit, the PWD must maximize its capacity to treat as much waste water as possible to a secondary level of treatment during wet weather events.

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

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2014 – September 2016 indicates the following:

BOD_5 Mass (DMRs=33)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	1,137	91 - 512	243
Weekly Average	1,705	110 – 1,507	376
Daily Maximum	Report	131 – 2,920	673

BOD_5 Concentration (DMRs=33)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	5 - 22	10
Weekly Average	45	7 - 29	14
Daily Maximum	50	9 - 57	20

TSS Mass (DMRs=33)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	1,137	53 - 542	190
Weekly Average	1,705	67 – 1,496	335
Daily Maximum	Report	89 – 2,578	626

TSS Concentration (DMRs=33)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	3 - 14	8
Weekly Average	45	4 - 32	12
Daily Maximum	50	6 - 84	19

This permitting action also carries forward a requirement of 85% removal for BOD5 and TSS pursuant to 06-096 CMR 525 (3)(III)(a&b)(3).

The previous permit established monitoring frequencies for BOD5 and TSS of 3/Week based on Department guidance for facilities with monthly average flows between 1.5 MGD and 5.0 MGD. Minimum monitoring frequency requirements in MEPDES permits are prescribed by 06-096 C.M.R. 523(8)(b). The EPA has published guidance entitled, *Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies* (USEPA Guidance April 1996). In addition, the Department has supplemented the EPA guidance with its own guidance entitled, *Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996* (Maine DEP May 22, 2014). Both documents are being utilized to evaluate the compliance history for each parameter regulated by the previous permit to determine if a reduction in the monitoring frequencies is justified.

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

Although EPA's 1996 Guidance recommends evaluation of the most current two years of effluent data for a parameter, the Department is considering 33 months of data (January 2014 – September 2016). A review of the mass monitoring data for BOD & TSS indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as 21% for BOD and 17% for TSS. According to Table I of the EPA Guidance and Department Guidance, a 3/Week monitoring requirement can be reduced to 2/Week. Therefore, this permitting action is reducing the monitoring frequency for BOD and TSS from 3/Week to 2/Week.

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

d. Settleable Solids: This permitting action is carrying forward a daily maximum settleable solids concentration limit of 0.3 mL/L and is considered by the Department as a best professional judgment of BPT for secondary treated waste waters. The previous permit established a minimum monitoring frequency of 5/Week based on the permittee's compliance history at that time.

A review of the DMR data for the period January 2014 – September 2016 indicates the daily maximum settleable solids concentration values have been reported as follows:

Settleable solids concentration (DMRs = 33)

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

This permitting action is carrying forward the monitoring frequency to 5/Week for settleable solids.

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

e. *E. coli* bacteria: The previous permitting action carried forward year-round monthly average and daily maximum *E. coli* bacteria concentration limits of 126 colonies/100 mL and 949 colonies/100 mL. Maine law 38 M.R.S. § 465(4) states *E. coli* bacteria of human and domestic animal origin in Class C waters may not exceed a geometric mean of 126 colonies/100 mL or an instantaneous level of 236 colonies/100 mL. The Department has determined that the available dilution in the receiving water will allow the instantaneous standard of 236 colonies/100 ml to be met with a daily maximum concentration limit of 949 colonies/100 ml. Therefore, the year-round monthly average and daily maximum *E. coli* bacteria concentration limits of 126 colonies/100 mL and 949 colonies/100 mL are being carried forward in this permitting action to protect shellfish harvesting areas downstream of the discharge.

A review of the DMR data for the period January 2014 – September 2016 indicates the monthly average and daily maximum values have been reported as follows:

***E. coli* bacteria (DMRs=33)**

Value	Limit (#col/100 mL)	Range (#col/100 mL)	Arith. Mean (#col/100 mL)
Monthly Average	142	1 - 17	4
Daily Maximum	949	5 - 272	46

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

f. Total Residual Chlorine (TRC): The previous permit contained monthly average and daily maximum BPT limits of 0.1 mg/L and 0.3 mg/L respectively. Limits on total residual chlorine are specified to ensure attainment of the in-stream water quality criteria for levels of chlorine and that the BPT technology is utilized to abate the discharge of chlorine. Limits for TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge.

Water quality-based thresholds for TRC can be calculated as follows:

Parameter	Acute Criterion	Chronic Criterion	Acute Dilution	Chronic Dilution	Acute Limit	Chronic Limit
Chlorine	19 µg/L	11 µg/L	40.9:1	40.9:1	0.8 mg/L	0.4 mg/L

Example calculation, Acute: 0.019 mg/L (40.9) = 0.8 mg/L

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

To meet the chronic and acute water quality based thresholds, the PWD must dechlorinate the effluent prior to discharge. In April of 1999, the Department established new daily maximum and monthly average BPT limitations of 0.3 mg/L and 0.1 mg/L, respectively, for facilities that need to dechlorinate their effluent unless calculated water quality based thresholds are lower than the BPT limits. In the case of the PWD Westbrook facility, the calculated acute and chronic water quality based thresholds are higher than the BPT limits of 0.3 mg/L and 0.1 mg/L. Thus, the daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively, are being carried forward in this permit.

A review of the DMR data for the period January 2014 – September 2016 indicates the monthly average and daily maximum TRC concentration values have been reported as follows:

Total Residual Chlorine (DMRs=33)

Value	Limit (mg/L)	Range(mg/L)	Mean (mg/L)
Monthly Average	0.1	0 – 0.1	0.03
Daily Maximum	0.3	0 – 0.61	0.12

According to Table I of the EPA Guidance and Department Guidance, a 1/Day monitoring requirement can be reduced to 5/Week. However, the Department guidance does not allow a permit writer to reduce the monitoring frequency for water quality based limitations or limits based on water quality considerations. Therefore, this permitting action is carrying forward the monitoring frequency of 1/Day for total residual chlorine.

g. pH: The previous permit contained BPT-based pH range limits of 6.0 to 9.0 standard units (su) pursuant to 06-096 CMR 525(3)(III)(c) along with a monitoring frequency of 5/Week.

A review of the monthly DMRs data for the period January 2014 – September 2016 indicates values have been reported as follows:

pH (DMRs=33)

Value	Limit (su)	Minimum (su)	Maximum (su)
Range	6.0 – 9.0	6.0	7.7

The March 6, 2012, permit granted a reduction in the monitoring frequency for pH from 1/Day to 5/Week based on the compliance history at that time. Department guidance only allows a one time monitoring frequency reduction Therefore, this permitting action is carrying forward the monitoring frequency of 5/Week for pH.

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

h. Mercury: On May 23, 2000, pursuant to *Certain deposits and discharges prohibited,* 38 M.R.S. § 420, *Waste discharge licenses*, 38 M.R.S. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury,* 06-096 CMR 519 (last amended October 6, 2001), the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the PWD thereby administratively modifying WDL #W001510-46-B-R by establishing interim average and maximum effluent concentration limits of 15.5 ng/L and 23.2 ng/L, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001; however, effective June 15, 2001, the Maine Legislature enacted *Waste discharge licenses*, 38 M.R.S. §413, sub-§11, specifying that interim mercury limits and monitoring requirements remain in effect. On September 28, 2011, the Maine Legislature enacted, *Certain deposits and discharges prohibited*, 38 M.R.S. §420 sub-§1-B(F), allowing the Department to reduce mercury monitoring frequencies to once per year for facilities that maintain at least five (5) years of mercury testing data. The PWD met the data requirement, therefore, the March 6, 2012 permit established a minimum monitoring of 1/Year for total mercury.

Maine law 38 M.R.S. § 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 database for the period September 1998 – June 2016 indicates mercury test results have been reported as follows:

Mercury (n=60)

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Monthly Average	15.5	1.14 – 30.1	5.5
Daily Maximum	23.2		

There have been two excursions of the maximum limitation of 23.3 ng/L. One excursion of 28.20 ng/L occurred on 12/8/05 and one excursion of 30.1 ng/L occurred on 9/22/09.

Pursuant to 38 M.R.S. §420(1-B)(F), this permitting action is carrying forward the 1/Year monitoring frequency established in the March 6, 2012, permit. Mercury test results are included as **Attachment C** of this Fact Sheet.

i. Whole Effluent Toxicity (WET) & Chemical-Specific Testing: 38 M.R.S., §414-A and §420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. *Surface Water Toxics Control Program,* 06-096 CMR 530, and *Surface Water Quality Criteria for Toxic Pollutants,* 06-096 CMR 584, set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters. WET, priority pollutant and analytical chemistry

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

testing as required by 06-096 CMR 530 are included in this permit in order to fully characterize the effluent. This permit also provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment and receiving water characteristics.

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. 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 06-096 CMR 584.

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

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

Based on the criteria, the PWD Westbrook facility falls into the Level II frequency category as the chronic dilution factor ≥20:1 but <100:1.

06-096 CMR 530 (D)(1) specifies that routine screening and surveillance level testing requirements are as follows:

Routine 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

Routine 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

See **Attachment D** of this Fact Sheet for a summary of the WET test results and **Attachment E** of this Fact Sheet for a summary of the chemical-specific test dates.

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

WET evaluation

Pursuant to 06-096 CMR 530 §(3)(E), on 11/8/16, the Department conducted a statistical evaluation on the most recent 60 months of PWD's WET data. The evaluation indicates the discharge did not exceed or have a reasonable potential to exceed the critical acute or chronic AWQ thresholds of 2.3% and 2.3%, respectively (the mathematical inverses of the acute and chronic dilution factors of 44:1 and 44:1, respectively).

In summary, this permitting action is carrying forward the reduced surveillance level WET testing for the water flea and the brook trout in accordance with 06-096 CMR 530 (3)(c) as follows:

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

Level	WET Testing
II	1 per 2 years

Pursuant to 06-096 CMR 530 (1)(D), screening level testing is being carried forward 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
II	2/Year

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

Chemical Evaluation

06-096 CMR 530 §4(C), states "*The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions." The Department shall use the same general methods as those in section 4(D) to*

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

determine background concentrations. For pollutants not listed by the Department, an assumed concentration of 10% of the applicable water quality criteria must be used in calculations. The Department has very limited information on the background levels of metals in the water column in the Presumpscot River. Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

06-096 CMR 530 4(E), states, "*In allocating assimilative capacity for toxic pollutants, the Department shall hold a portion of the total capacity in an unallocated reserve to allow for new or changed discharges and non-point source contributions. The unallocated reserve must be reviewed and restored as necessary at intervals of not more than five years. The water quality reserve must be not less than 15% of the total assimilative quantity*".

06-096 CMR 530 §4(F) states in part "*Where there is more than one discharge into the same fresh or estuarine receiving water or watershed, the Department shall consider the cumulative effects of those discharges when determining the need for and establishment of the level of effluent limits. The Department shall calculate the total allowable discharge quantity for specific pollutants, less the water quality reserve and background concentration, necessary to achieve or maintain water quality criteria at all points of discharge, and in the entire watershed. The total allowable discharge quantity for pollutants must be allocated consistent with the following principles.* The Presumpscot River has two permitted point sources dischargers of treated waste water, the PWD Westbrook facility and S.D. Warren's paper mill in the City of Westbrook.

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

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

Pursuant to 06-096 CMR 530 §(3)(E), on 11/8/16, the Department conducted a statistical evaluation on the most recent 60 months of PWD's chemistry data. According to the 11/8/16 statistical evaluation (Report ID #898), none of the test results in the 60-month evaluation period exceed or have a reasonable potential to exceed applicable acute, chronic or human health AWQC. Therefore, this permitting action is carrying forward the reduced surveillance level reporting and monitoring frequencies for analytical chemistry (1/2 Years). Surveillance level priority pollutant testing is not required pursuant to 06-096 CMR Chapter 530. As with reduced WET testing, the PWD must file an annual certification with the Department pursuant to Chapter 530 §2(D)(4) and Special Condition K, *06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing* of this permit.

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

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 PWD must conduct routine screening level analytical chemistry testing at 1/Quarter and priority pollutant testing at a minimum frequency of 1/Year.

j. Combined Sewer Overflows: The following are the locations for the permittee's Combined Sewer Overflows (CSOs):

Outfall #	Regulator Location	Receiving Water, Class
002	Warren Parking Lot Regulator	Presumpscot River, C
003	Siphon Inlet Structure	Presumpscot River, C
004	Dunn Street Regulator	Presumpscot River, C
007	Brown Street Regulator	Presumpscot River, C
008	King Street Regulator	Presumpscot River, C

This permit does not contain effluent limitations on the individual CSO outfalls listed in the table below. *Combined Sewer Overflow Abatement,* 06-096 CMR 570 states that for discharges from overflows from combined municipal storm and sanitary sewer systems, the requirement of, "best practicable treatment" specified in 38 M.R.S.A., §414 A-1(D) may be met by agreement with the discharger as a condition of its permit through development of a plan within a time period specified by the Department. The permittee submitted to the Department a CSO Master Plan entitled, *Sewer System Master Plan for Westbrook, Maine, Volume II,* dated December 1996 and abatement project schedules were approved by the EPA on February 24, 1997 and the Department on March 26, 1997. A revised abatement schedule dated October 8, 1999 was approved by the Department on October 27, 1999. The revised abatement schedule was further modified in the document entitled *Combined Sewer Overflow Master Plan Update Study for Westbrook, ME prepared by Woodard & Curran and dated December 2008* (referred as volume I in correspondence) and further modified in a document entitled *Combined Sewer Overflow Master Plan Update Study for Westbrook, ME prepared by Woodard & Curran and dated September 2010* (referred as volume II in correspondence). The permittee has been actively implementing the recommendations of the Master Plan and to-date has significantly reduced the volume of untreated combined sewer overflows to the receiving water.

The revised abatement schedule was further modified in the document entitled *2014 Combined Sewer Overflow Master Plan Update Study for Westbrook, Maine* prepared by Jordan Environmental Engineering, dated December 2014 and revised May 2015. Special Condition J, *Conditions for Combined Sewer Overflows*, of this permit, contains a schedule of compliance for items in the most current up-to-date abatement plan as well as an August 2, 2016, Administrative Consent Agreement that must be completed.

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

k. Transported Wastes: This permitting action is carrying forward the authorization for the permittee to accept and treat up to 22,700 gallons per day (gpd) of transported wastes. *Standards for the Addition of Transported Wastes to Wastewater Treatment Facilities*, 06-096 CMR 555, limits the quantity of transported wastes received at a facility to 1% of the design capacity of the treatment facility if the facility utilizes a side stream or storage method of introduction into the influent flow, or 0.5% of the design capacity of the facility if the facility does not utilize the side stream or storage method of introduction into the influent flow. A facility may receive more than 1% of the design capacity on a case-by-case basis. The PWD Westbrook facility adds transported waste directly into the influent of the treatment facility. Therefore, 22,700 gpd represents 0.5% of the design capacity of the treatment facility.

The Department has reviewed the facility's plan and determined that under normal operating conditions, the addition of 22,700 gallons per day of transported wastes to the facility will not cause or contribute to upset conditions of the treatment process.

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

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

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

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

[2] 06-096 CMR 523(5)(d)(1)(vi)(A)

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

For the background concentration in the Presumpscot River just upstream of the S.D. Warren (SDW) paper mill discharge, the Department utilized 0.017 mg/L based on ambient water quality monitoring conducted during the summer of 2014 and is being utilized as a background value in reasonable potential calculations in the development of this permit.

As for effluent concentration, this Fact Sheet is utilizing a mean effluent concentration of 2.6 mg/L for PWD and 0.2 mg/L for SDW based on data collected by the permittee during the summer of 2014. The statistical evaluation is taking into consideration both discharges due to their close proximity to each other.

Using the following calculation and criteria, the PWD Westbrook facility does not exceed or have a reasonable potential to exceed EPA's Gold Book value of 0.100 mg/L but does have a reasonable potential to exceed the Department's 06-096 CMR Chapter 583 draft criteria of 0.033 mg/L for Class C waters. The calculations are as follows:

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

Qe = PWD effluent flow i.e. facility design flow	=	4.54 MGD
Ce = PWD effluent pollutant concentration	=	2.6 mg/L (2014)
Qe = SDW effluent flow i.e. facility design flow	=	10.0 MGD
Ce = SDW effluent pollutant concentration	=	0.2 mg/L (2014)
Qs = 7Q10 flow of receiving water	=	194 MGD (300 cfs)
Cs = upstream concentration	=	0.017 mg/L (2014)
Qr = receiving water flow	=	195.5 MGD
Cr = receiving water concentration	=	?

$$Cr = \frac{(4.54\ MGD \times 2.6\ mg/L) + (10\ MGD \times 0.2\ mg/L) + (194\ MGD \times 0.017\ mg/L)}{208.5\ MGD} =$$

$$= 0.082\ mg/L$$

$Cr = 0.082\ mg/L < 0.100\ mg/L \Rightarrow$ **No reasonable potential**
$Cr = 0.082\ mg/L > 0.033\ mg/L \Rightarrow$ **Yes reasonable potential**

Therefore, to gather additional data on the total phosphorus loading to the Presumpscot River, this permit is establishing a seasonal 1/Month monitoring requirement for total phosphorus for the term of the permit.

7. PRETREATMENT

The PWD is required to administer a pretreatment program based on the authority granted under Federal regulations 40 CFR §122.44(j), 40 CFR Part 403 and section 307 of the Federal Water Pollution Control Act (Clean Water Act) and *Pretreatment Program*, 06-096 CMR 528. The PWD's pretreatment program received EPA approval on September 30, 1983 and as a result, appropriate pretreatment program requirements were incorporated into the previous MEPDES permit which were consistent with that approval and federal pretreatment regulations in effect when the permit was issued.

Upon issuance of this permit, the PWD is obligated to modify (if applicable) its pretreatment program to be consistent with current federal regulations and Department rules. Those activities that the PWD must address include, but are not limited to, the following: (1) develop and enforce Department approved specific effluent limits (technically-based local limits - last approved by the EPA on May 13, 1999); (2) revise the local sewer-use ordinance or regulation, as appropriate, to be consistent with federal regulations and Department rules; (3) develop an enforcement response plan; (4) implement a slug control evaluation program; (5) track significant noncompliance for industrial users; and (6) establish a definition of and track significant industrial users. These requirements are necessary to ensure continued compliance with this MEPDES permit and its biosolids use or disposal practices.

In addition to the requirements described above, this permit requires that within 180 days of the permit's effective date, the PWD must submit to the Department in writing, a description of proposed changes to permittee's pretreatment program deemed necessary to assure conformity with current federal and State pretreatment regulations and rules respectively. These requirements are included in the permit (Special Condition M) to ensure that the pretreatment program is consistent and up-to-date with all pretreatment requirements in effect. Lastly, by October 15 of each calendar year, the PWD must submit a pretreatment report detailing the activities of the program for the twelve month period ending 60 days prior to the due date.

8. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

The Department acknowledges that the elimination of the five CSOs in the collection system is a costly long-term project. As the co-permittee's sewer collection systems are upgraded and maintained in according to the CSO Master Plan and Nine Minimum Controls, there should be reductions in the frequency and volume of CSO activities and improvement in the quality of the waste water discharge to the receiving waters. As permitted, the Department of Environmental Protection has determined the existing water uses will be maintained and protected. If ambient water quality monitoring or future modeling determines that at full permitted discharge limits, the PWD's discharge is causing or contributing to the non-attainment of standards, this permit will be reopened per Special Condition N, *Reopening of Permit For Modifications*, to impose more stringent limitations to meet water quality standards.

9. PUBLIC COMMENTS

Public notice of this application was made in the *Portland Press Herald* newspaper on or about January 10, 2017. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses,* 06-096 CMR 522 (effective January 12, 2001).

10. DEPARTMENT CONTACTS

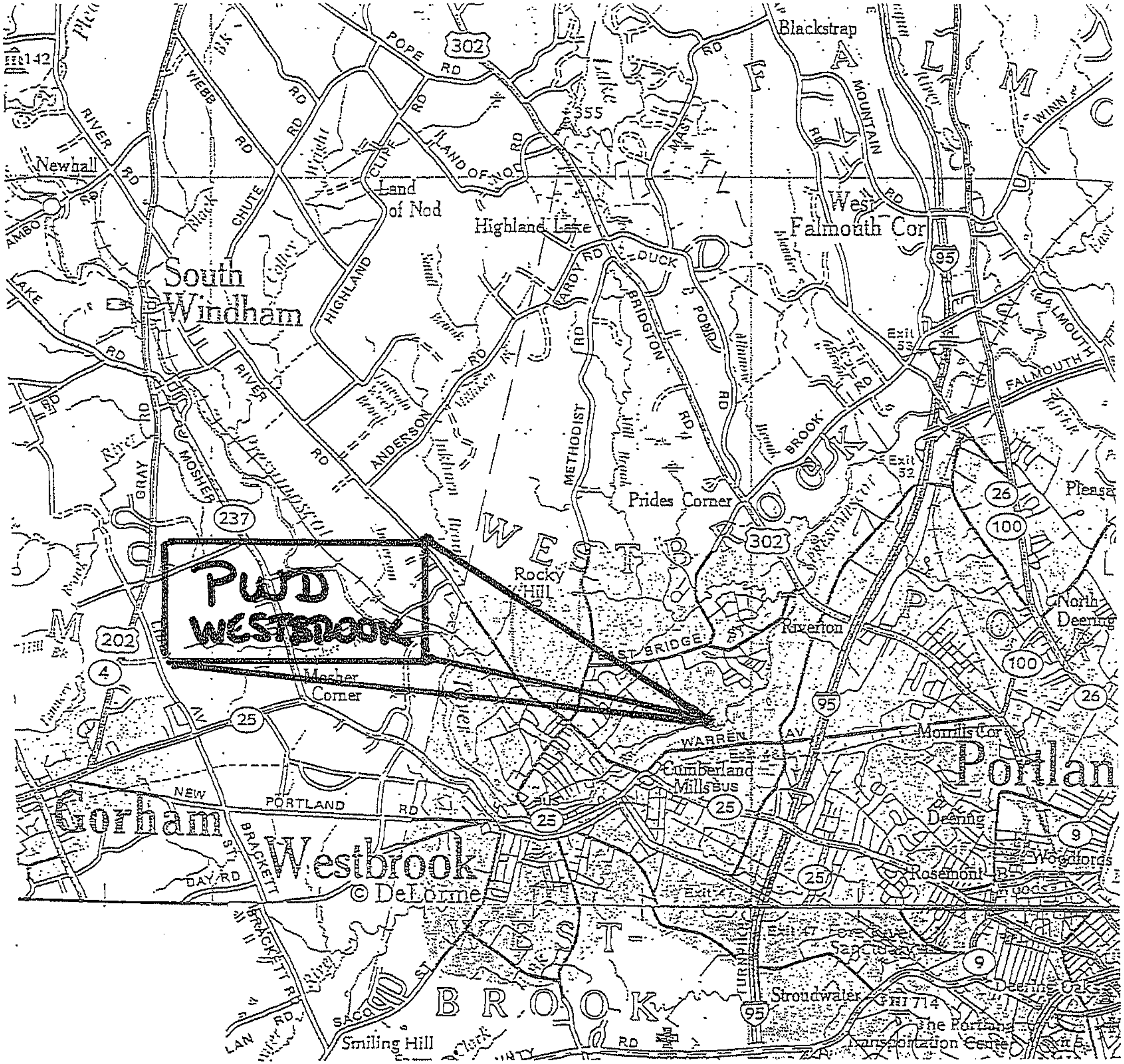
Additional information concerning this permitting action may be obtained from and written comments should be sent to:

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

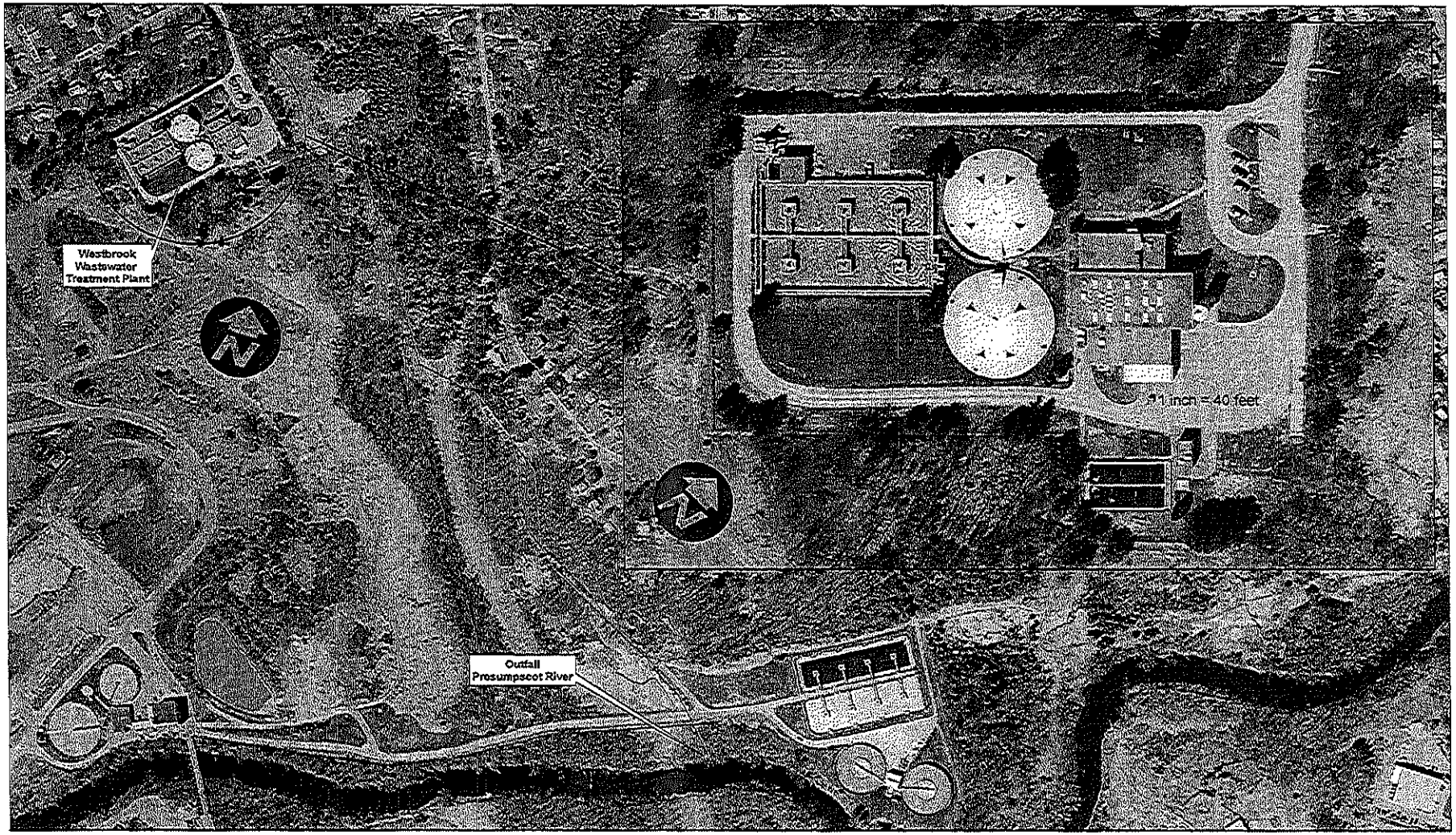
11. RESPONSE TO COMMENTS

During the period of May 23, 2017, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department did not receive comments from the permittee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the permit. Therefore, the Department has not prepared a Response to Comments.

ATTACHMENT A


PWD
WESTBROOK
Blackstrap
302
POPE RD
Newhall
Land of Nod
Highland Lake
West Falmouth Cor
95
South Windham
RIVER RD
WEBB RD
CHUTE RD
HIGHLAND
LAND OF NOD RD
DUCK POND RD
BRIDGTON RD
METHODIST RD
ANDERSON
MOSHER
GRAY RD
237
MOUNTAIN RD
FALMOUTH RD
BROOK RD
Exit 53
Exit 52
26
100
Prides Corner
Rocky Hill
Riverton
North Deering
202
4
Mosher Corner
25
WARREN AV
Morrills Cor
Cumberland Mills
Portlan
NEW PORTLAND RD
Gorham
Westbrook
BRACKETT ST
DAY RD
© DeLorme
Deering
9
Woodfords
Rosemont
Stroudwater
Smiling Hill
BROOK
Exit 47

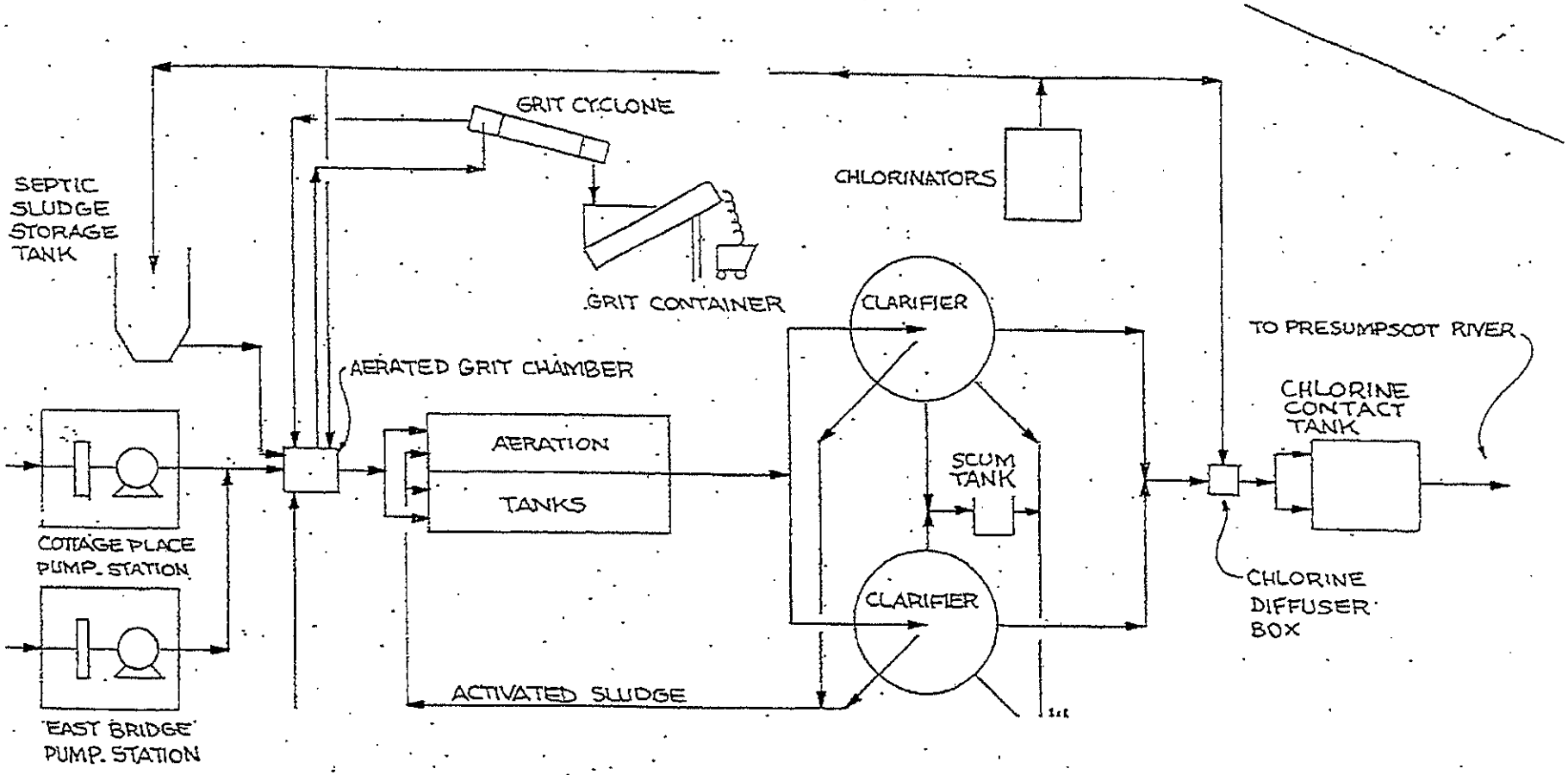
ATTACHMENT B



1 inch = 150 feet

0 75 150 300 450 600 Feet

PORTLAND WATER DISTRICT 225 Douglass Street Portland, ME 04104	Asset Management and Planning Dept.		Wastewater Treatment Plant		Aerial View
	Drawn By: JGH Date: 8/31/2011	Project Completion Date:	**Westbrook**		Sheet No. 1 of 1



Question 19

SCHEMATIC FLOW DIAGRAM - FIGURE No I-1.

EDWARD C. JORDAN CO., INC.

ATTACHMENT C

MERCURY REPORT - Clean Test Only

Data Date Range: 08/Nov/1997-08/Nov/2016

Facility: PORTLAND WATER DISTRICT (WESTBROOK/GORHAM **Permit Number:** ME0100846

Max (ng/l): 30.1000 **Average (ng/l):** 5.4747

Sample Date	Result (ng/l)	Lsthan	Clean
09/23/1998	5.99	N	T
11/09/1998	8.21	N	T
12/02/1998	8.04	N	T
07/01/1999	16.90	N	T
06/12/2000	3.70	N	T
09/14/2000	2.13	N	T
12/04/2000	3.29	N	T
03/26/2001	1.84	N	T
06/18/2001	3.89	N	T
09/26/2001	5.72	N	T
12/05/2001	4.82	N	T
03/13/2002	8.30	N	T
06/17/2002	3.72	N	T
09/11/2002	3.06	N	T
12/04/2002	21.80	N	T
03/17/2003	2.90	N	T
06/23/2003	2.65	N	T
09/22/2003	17.60	N	T
12/16/2003	1.93	N	T
02/18/2004	6.06	N	T
05/20/2004	1.91	N	T
09/27/2004	2.06	N	T
12/16/2004	2.73	N	T
03/04/2005	3.12	N	T
05/16/2005	6.28	N	T
09/15/2005	4.04	N	T
12/08/2005	28.20	N	T
01/11/2006	8.24	N	T
01/27/2006	3.45	N	T
03/19/2006	2.70	N	T
03/20/2006	2.73	N	T
05/30/2006	1.24	N	T
08/14/2006	1.14	N	T
12/13/2006	1.69	N	T
03/21/2007	3.62	N	T
06/22/2007	2.52	N	T
09/25/2007	5.04	N	T
12/11/2007	4.99	N	T
03/18/2008	1.90	N	T
06/12/2008	6.70	N	T
09/16/2008	2.20	N	T
12/15/2008	2.40	N	T
03/18/2009	2.10	N	T
06/17/2009	2.70	N	T
09/22/2009	30.10	N	T
10/16/2009	3.80	N	T
12/08/2009	2.80	N	T
03/08/2010	2.70	N	T
06/09/2010	4.60	N	T

09/24/2010	3.04	N	T
12/14/2010	9.49	N	T
03/14/2011	1.70	N	T
06/17/2011	9.00	N	T
09/15/2011	1.90	N	T
12/12/2011	2.30	N	T
03/12/2012	11.50	N	T
03/27/2013	2.06	N	T
05/07/2014	1.60	N	T
06/22/2015	3.89	N	T
06/13/2016	1.75	N	T

ATTACHMENT D

WET TEST REPORT

Data for tests conducted for the period

28/Nov/2011 -28/Nov/2016

WESTBROOK NPDES= ME010084 Effluent Limit: Acute (%) = 2.288 Chronic (%) = 2.288

Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	100	07/21/2013	2.288		
TROUT	A_NOEL	100	03/15/2015	2.288		
TROUT	A_NOEL	100	06/08/2016	2.288		
TROUT	C_NOEL	100	07/21/2013	2.288		
TROUT	C_NOEL	100	03/15/2015	2.288		
TROUT	C_NOEL	100	06/08/2016	2.288		
WATER FLEA	A_NOEL	100	07/21/2013	2.288		
WATER FLEA	A_NOEL	100	03/15/2015	2.288		
WATER FLEA	A_NOEL	100	06/08/2016	2.288		
WATER FLEA	C_NOEL	100	07/21/2013	2.288		
WATER FLEA	C_NOEL	100	03/15/2015	2.288		
WATER FLEA	C_NOEL	50	06/08/2016	2.288		

ATTACHMENT E

PRIORITY POLLUTANT DATA SUMMARY

Date Range: 08/Nov/2011 - 08/Nov/2016

Facility Name: **WESTBROOK** NPDES: **ME0100846**

Test Date	Monthly (Flow MGD)	Daily (Flow MGD)	Total Test Number	Test # By Group M	V	BN	P	O	A	Clean	Hg
12/28/2011	3.63	4.68	13	10	0	0	0	3	0	F	0
03/15/2012	3.34	3.27	9	9	0	0	0	0	0	F	0
09/11/2012	2.44	2.31	2	1	0	0	0	1	0	F	0
04/02/2013	3.52	4.62	1	1	0	0	0	0	0	F	0
07/21/2013	3.14	1.89	21	10	0	0	0	11	0	F	0
03/11/2014	3.45	2.62	8	8	0	0	0	0	0	F	0
03/12/2014	3.45	2.62	1	1	0	0	0	0	0	F	0
03/15/2015	2.84	4.17	19	9	0	0	0	10	0	F	0
03/16/2015	2.84	4.17	2	1	0	0	0	1	0	F	0
03/09/2016	3.22	2.57	11	10	0	0	0	1	0	F	0
06/08/2016	1.98	2.23	124	13	28	46	25	1	11	F	0
09/14/2016	1.58	1.90	11	10	0	0	0	1	0	F	0

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

ATTACHMENT F

Limitations for Industrial Users – How to conduct an Industrial Waste Survey

The National Pretreatment Program is scaled to cities and towns that are generally more developed than those in Maine. Small towns around here tend to wonder what the fuss is about – we know (or at least are pretty sure we know) everything that's going on in our collection systems. A lot can happen, and a lot can change in areas like Portland, Bangor, Lewiston/Auburn, let alone bigger places like Boston or NY. Regardless of community size, or whether or not you have any new facilities (or existing facilities that have changed what they're doing), the Industrial Waste Survey (IWS) is a federal requirement that has been adopted into Maine's MEPDES wastewater licensing program.

Step 1: For a small community, the quickest, easiest thing to do is take a day when not much is going on at the plant, get in the vehicle, & drive the entire extent of your collection system. Take the attached logsheet with you & make a list of every industrial or significant commercial facility that discharges to your system. The IWS list is basically a summary of the dischargers in your system that may have wastewater with different characteristics than the wastewater discharge from the sinks, toilets, bathtub, dishwasher and washing machine at your typical home or commercial building.

(Note: Do not include homes, rentals, restaurants, delis & fast food joints. You may need a FOG/grease trap program for those kinds of places, but that's a different consideration than an IWS and most small-scale commercial activity. Even some larger-scale places, like schools, cafeterias, managed care homes, etc., generally have wastewater that is similar in characteristics to residential wastewater, just more of it.)

Step 2 – Take your logsheet and compare each facility to this set of conditions:

► Does the facility discharge a monthly average of >25,000 gallons a day of **process** wastewater?

► Does the facility's **process** wastewater discharge make up 5% or more of your daily influent flow?

► Does the facility's **process** wastewater discharge make up 5% or more of your daily influent BOD?

► Does the facility's **process** wastewater discharge make up 5% or more of your daily influent TSS?

► Does the facility's **process** wastewater have a reasonable potential to adversely affect your POTW operations, cause a problem with your discharge, or cause a problem with your sludge disposal?

If "yes" to any of the above, then the facility is a potential **Significant Industrial User** of your system. Put a check in that column on the spreadsheet.

Step 3 - Indicate on the spreadsheet if any of the facilities fall under one of the National Categorical Standards, 40 CFR 405 through 471 (Use the attached list of Categorical Industrial Users to determine if any of the facilities on your list are included).

*If yes to this consideration, then the facility may be a **Categorical Industrial User** of your system. Put a check in that column also.*

See next page

Step 4 - If any of the facilities on your list meet one or more of those conditions, then you're going to want to go back and take a closer look at them; find out more detail on their process(es), wastewater characteristics, discharge pattern. You will likely find that most facilities are not a problem. Only a few will need closer scrutiny.

(Note – having industries within your collection system does not automatically require increased regulatory activity on your part; the only uniform requirement is that you know what you have.) The first time through the IWS process takes some time but after that it is relative easy to update it on an as-needed basis.

Though this requirement has only recently explicitly appeared in MEPDES permits, it has actually been a federal requirement all along. Again, the first time through will be a bit of a project, but from then on, it shouldn't be difficult.

If you have questions regarding whether a particular discharger is a **Significant Industrial User** or **Categorical Industrial User contact your assigned MeDEP wastewater treatment system inspector or the MEDEP Pretreatment coordinator.**

James R. Crowley
Compliance Supervisor, State Pretreatment Coordinator
Department of Environmental Protection
Division of Water Quality Management
207-287-8898
james.r.crowley@maine.gov

Industrial User Survey

Date:_____

Surveyor:_____

	Facility name/Address/ Contact	Type of business	Wastewater flow (GPD)	Wastewater characteristics, conc., constituents, etc	Comments	Onsite Pretreatment?	Significant Industrial User?	Categorical Industrial User?

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

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

ATTACHMENT G

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.