STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

November 16, 2017

Ms. Susan Lessard, Town Manager
Town of Bucksport
50 Main Street, P.O. Box X
Bucksport, ME. 04416
slessard@bucksportmaine.gov

Sent via electronic mail
Delivery confirmation requested

RE: *Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100111*
Maine Waste Discharge License (WDL) Application #W002596-6C-I-R
Proposed Draft MEPDES Permit - Renewal

Dear Ms. Lessard:

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

By copy of this letter, the Department is requesting comments on the proposed draft permit from various state and federal agencies and from any other parties who have notified the Department of their interest in this matter.

The comment period begins on November 16, 2017 and ends on December 18, 2017. All comments on the proposed draft permit must be received in the Department of Environmental Protection office on or before the close of business Monday, December 18, 2017. Failure to submit comments in a timely fashion will result in the proposed draft/license permit document being issued as drafted.

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

Maine Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, ME 04333-0017
Cindy.L.Dionne@maine.gov

If you have any questions regarding the matter, please feel free to contact me.

Sincerely,

Cindy L. Dionne
Division of Water Quality Management
Bureau of Water Quality
ph: 207-557-5950

Enc.

ec: Barry Mower, DEP
Pamela Parker, DEP
Mike Loughlin, DEP
Mike Riley, DEP
Lori Mitchell, DEP
Annaleis Hafford, Olver Associates, Inc.
Sean Mahoney, CLF
Kathleen Leyden, DACF
Environmental Review, DMR
David Webster, USEPA
Ellen Weitzler, USEPA
Olga Vergara, USEPA
Solanch Pastrana-Del Valle, USEPA
Marelyn Vega, USEPA
Richard Carvalho, USEPA

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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF BUCKSPORT	)	MAINE POLLUTANT DISCHARGE
BUCKSPORT, PENOBSCOT COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
ME0100111	)	WASTE DISCHARGE LICENSE
W002596-6C-I-R **APPROVAL**	)	**RENEWAL**

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

APPLICATION SUMMARY

On February 23, 2017, the Department accepted as complete for processing an application from the Town for renewal of combination Waste Discharge License (WDL) # W002596-6C-F-R / Maine Pollutant Discharge Elimination System (MEPDES) permit # ME0100111, which was issued by the Department on April 10, 2012 for a five-year term. The April 10, 2012 permit authorized the monthly average discharge of 0.50 million gallons per day (MGD) of secondary treated sanitary wastewater from Outfall #001, an unspecified quantity of primary treated sanitary/stormwater from Outfall #007 and an unspecified quantity of untreated sanitary/stormwater from Outfall #013 to a segment of the Penobscot River subject to tidal action, Class SC, in Bucksport, Maine.

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PERMIT SUMMARY

a. Terms and conditions

This permitting action is different from the April 10, 2012 permit in that it:

1. Reports the closure of CSO Outfall #013 (closure date was July 2017);

For Secondary Treated Wastewater (Outfall #001)

2. Incorporates an Industrial Waste Survey (IWS) to be performed in each permitting cycle as amended in Special Condition F. *Limitations for Industrial Users*;

3. Establishes effluent monitoring and reporting requirements for total nitrogen (nitrate and nitrite as nitrogen and total Kjehldahl nitrogen as nitrogen);

For Primary Treated Wastewater (Outfall #007)

4. Eliminates biochemical oxygen demand (BOD_5) and total suspended solids (TSS) percent removal monitoring and reporting requirements;

5. Establishes a reporting condition for minimum influent flow rate;

6. Requires a letter at the end of each permit cycle which provides an update on the sewer system, ongoing operation of the swirl concentrator and any sewer projects that have been completed to-date. The permit condition would detail any changes for the feasibility of operating the swirl concentrator; and

7. Increases the threshold flow rate to initiate the use of the secondary treatment bypass to a minimum instantaneous flow rate of 600 gallons per minute (gpm) or 0.864 million gallons per day (MGD).

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CONCLUSIONS

BASED on the findings in the attached and incorporated Fact Sheet dated November 16, 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.

3. The provisions of the State's antidegradation policy, *Classification of Maine waters,* 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 national resource, that water quality will be maintained and protected;

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

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

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

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

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ACTION

THEREFORE, the Department APPROVES the application of the TOWN OF BUCKSPORT to discharge a monthly average of 0.50 million gallons per day of secondary treated sanitary wastewater from Outfall #001, an unspecified quantity of primary treated sanitary/stormwater from Outfall #007 to a segment of the Penobscot River subject to tidal action, Class SC, in Bucksport Maine, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

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

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS_____ DAY OF _____2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____
PAUL MERCER, Commissioner

Date of initial receipt of application February 21, 2017
Date of application acceptance February 23, 2017

Date filed with Board of Environmental Protection _____

This Order prepared by Cindy L. Dionne, Bureau of Water Quality

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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

	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	0.50 MGD *[03]*	---	Report MGD *[03]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
BOD_5 *[00310]*	125 lbs./day *[26]*	188 lbs./day *[26]*	208 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
BOD_5 Percent Removal[(2)] *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
TSS *[00530]*	125 lbs./day *[26]*	188 lbs./day *[26]*	208 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
TSS Percent Removal[(2)] *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	5/Week *[05/07]*	Grab *[GR]*
Fecal Coliform Bacteria[(3)] *[31616]* ***(May 15 – September 30)***	---	---	---	15/100 ml[(4)] *[13]*	---	50/100 ml *[13]*	1/Week *[01/07]*	Grab *[GR]*
Total Residual Chlorine[(5)] *[50060]*	---	---	---	---	---	1.0 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
pH *[00400]*	---	---	---	---	---	6.0 – 9.0 SU *[12]*	5/Week *[05/07]*	Grab *[GR]*
Mercury (Total) [(6)] *[71900]*	---	---	---	109 ng/L[(6)] *[3M]*	---	163 ng/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*

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

Footnotes: See Pages 8-9 of this permit for applicable footnotes.

SPECIAL CONDITIONS

A. 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Nitrate + Nitrite (as N) *[00630]* *(May 1 through Oct. 31, 2018 + 2019)*	Report lbs./day *[26]*	---	Report lbs./day *[26]*	Report mg/L *[19]*	---	Report mg/L *[19]*	1/Month *[01/30]*	24-Hour Composite *[24]*
Total Kjehldahl Nitrogen (as N) *[00625]* *Annually (May 1 through Oct. 31, 2018 + 2019)*	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 bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports (DMRs).

Footnotes: See Pages 8-9 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

2. The permittee is allowed to bypass secondary treatment and provide primary treatment only prior to discharging to the Penobscot River estuary from **Outfall #007** (SWIRL Separator). Bypassing secondary treatment is allowed when the flow rate through Pump Station #2 (PS #2) reaches a minimum instantaneous flow rate of 600 gallons per minute (gpm) (0.864 MGD) until such time that the permittee determines that the wastewater treatment plant is in jeopardy of washout of the secondary treatment system, at which time the permittee may reduce the instantaneous flow rate at Pump Station #2 such that the treatment plant is receiving the maximum sustainable flow rate to prevent washout of the secondary treatment system at the treatment plant. Allowance to bypass secondary treatment will be reviewed pursuant to Special Condition I, *Effluent Conditions and Limitations for Swirl Concentrator and may be modified pursuant to* Special Condition L. *Reopening of Permit for Modification*, if there is substantial change in the volume or character of pollutants in the collection/treatment system. Outfall #007 must be monitored as follows(1):

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Influent Flow Rate Minimum *[00058]*	---	Report (gpm) (7) *[78]*	---	---	Instantaneous *[01/99]*	Recorder *[RC]*
Flow *[50050]*	Report (Total MGD) *[03]*	Report (MGD) *[03]*	---	---	Continuous *[99/99]*	Recorder *[RC]*
Overflow Occurrence (8) *[74062]*	---	---	Report (# of days) *[93]*	---	1/Discharge Day(9) *[01/DS]*	Record Total *[RT]*
BOD *[00310]*	---	---	---	Report (mg/L) *[19]*	1/Discharge Day(9,10) *[01/DS]*	Composite *[CP]*
TSS *[00530]*	---	---	---	Report (mg/L) *[19]*	1/Discharge Day(9,10) *[01/DS]*	Composite *[CP]*
Fecal coliform bacteria (3) *[31633] (May 15 – September 30)*	---	---	---	200/100 ml *[13]*	1/Discharge Day(9,10) *[01/DS]*	Grab(11) *[GR]*
Total Residual Chlorine(5) *[50060]*	---	---	---	1.0 mg/L *[19]*	1/Discharge Day(9,10) *[01/DS]*	Grab(11) *[GR]*

Footnotes: See pages 8 & 9 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

Footnotes

1. **Sampling** – The permittee must conduct all effluent sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. 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). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of 10-144 CMR 263. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR.

2. **Percent Removal** – The permittee must achieve a minimum of 85 percent removal of both TSS and BOD_5 for all flows receiving secondary treatment. The percent removal is calculated based on influent and effluent concentration values. The percent removal will be waived if the calculated percent removal is less than 85% and when the monthly average influent concentration is less than 200 mg/L. For instances when this occurs, the facility may report "*N9*" on the monthly DMR.

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

4. **Fecal coliform bacteria** – The monthly average limitation is a geometric mean limitation and values must be calculated and reported as such.

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

SPECIAL CONDITIONS

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

Footnotes

6. **Mercury** – The permittee must conduct all mercury monitoring required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the U.S. Environmental Protection Agency's (USEPA) "clean sampling techniques" found in USEPA Method 1669, *Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels*. All mercury analysis must be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry.* See **Attachment A** of this permit for a Department report form for mercury test results. Compliance with the monthly average limitation established in Special Condition A of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Method 1669 and analysis Method 1631E on file with the Department for this facility.

7. **Influent Flow Rate Minimum** – The Town must maintain each pump at PS-2 such that at least one pump is operational at its full capacity prior to the operation of the swirl concentrator. (One pump is approximately 600 GPM.) The permittee must report the instantaneous influent flow rate entering the treatment plant at the time each bypass of secondary treatment is activated.

8. **Overflow Occurrence** – An overflow occurrence is defined as the period of time between initiation of flow from the secondary treatment bypass and ceasing discharge from the bypass. Overflow occurrences are reported in discharge days. Multiple intermittent overflow occurrences in one discharge day are reported as one overflow occurrence and are sampled according to the measurement frequency specified. Composite samples for BOD_5 and total suspended solids must be flow proportioned from each intermittent overflow.

9. **Discharge Day** – A discharge day is defined as a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

10. **BOD_5, TSS, TRC, Fecal Coliform bacteria** – When the bypass is active, sampling to comply with the 1/Discharge Day monitoring requirement for these parameters is only required if it coincides with the scheduled monitoring event for the secondary treated effluent waste stream.

SPECIAL CONDITIONS

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

Footnotes

11. **Grab samples** – As stated in Footnote #10, grab samples for fecal coliform bacteria and total residual chlorine are only required to be collected when it coincides with the scheduled monitoring event for the secondary treated effluent waste stream and if said event(s) occur between the hours of 7:00 AM – 4:00 PM during the normal work week (Monday through Friday, holidays excluded). Grab samples for fecal coliform bacteria and total residual chlorine are not required to be collected when Outfall #007 is active for a single continuous discharge event lasting less than 60 minutes or during intermittent discharge events over the course of a 24-hour period lasting less than 120 minutes.

B. NARRATIVE EFFLUENT LIMITATIONS

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

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

3. The permittee must not discharge effluent that causes visible discoloration or turbidity in the receiving waters or otherwise impairs the uses designated for the classification of the receiving waters.

4. The permittee must not discharge effluent that lowers the quality of any classified body of water below such classification, or lowers the existing quality of any body of water if the existing quality is higher than the classification.

C. TREATMENT PLANT OPERATOR

The person who has management responsibility over the treatment facility must hold a Maine **Grade III,** Biological Treatment certificate (or higher) or must be a Maine Registered Professional Engineer pursuant to *Sewage Treatment Operators*, 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 permittee may engage the services of the contract operator.

SPECIAL CONDITIONS

D. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on February 23, 2017, 2) the terms and conditions of this permit; and 3) only from Outfalls #001 and #007. Discharges of wastewater 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.

E. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the wastewater collection and treatment system by a non-domestic source (user) must not pass through or interfere with the operation of the treatment system. The permittee must conduct an IWS any time a new industrial user proposes to discharge within its jurisdiction; an existing user proposes to make a significant change in its discharge; or at an alternative minimum, once every permit cycle, and submit the results to the Department. The IWS must identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the publicly owned treatment works (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).

F. NOTIFICATION REQUIREMENT

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

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

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

3. For the purposes of this section, adequate notice must include information on:

   (a) The quality and quantity of wastewater introduced to the wastewater collection and treatment system; and

   (b) Any anticipated impact of the change in the quantity or quality of the wastewater to be discharged from the treatment system.

SPECIAL CONDITIONS

G. OPERATION & MAINTENANCE (O&M) PLAN

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

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

Within 90 days of completion of new and or substantial upgrades of the wastewater treatment facility (including the secondary treatment bypass system for Outfall #007), the permittee must submit the updated O&M Plan to their Department inspector for review and comment.

H. WET WEATHER FLOW MANAGEMENT PLAN

The treatment facility staff must have a current written Wet Weather Flow Management Plan to direct the staff on how to operate the facility and the secondary treatment bypass system effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall.

The plan must conform to Department guidelines for such plans and must include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events.

The permittee must review their plan at least annually and record any necessary changes to keep the plan up to date. The Department may require review and update of the plan as it is determined to be necessary.

SPECIAL CONDITIONS

I. EFFLUENT CONDITIONS AND LIMITATIONS FOR SWIRL CONCENTRATOR

1. Satellite Treatment – Swirl Concentrator [*Federal Water Pollution Control Act § 402 (Q)]*

On or before December 31, 2020 ***(ICIS Event 97899)***, the permitted must submit the results of a review of the maximum sustainable flow rate to the wastewater treatment plant to avoid washout of the secondary treatment system, including the proposed maximum sustainable treatment plant flow to be added to the currently permitted secondary treatment bypass trigger flow conditions.

On or before April 10, 2023, ***(ICIS Event CS010)***, the permittee must submit to the Department for review projects completed over the five-year permit cycle. The permit condition would detail if there are any changes to the feasibility of operating the swirl concentrator.

To modify the date and or project specified above), the permittee must file an application with the Department to formally modify this permit. The permittee must notify the Department in writing prior to any proposed changes to the implementation schedule.

Any abnormalities during be reported as required in Special Condition J. *Monitoring and Reporting.*

J. 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 USEPA electronic system.

Electronic Discharge Monitoring Reports (DMRs) submitted using the USEPA 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. An electronic copy of the Toxsheet reporting document must be submitted to your Department compliance inspector as an attachment to an email. In addition, a hardcopy form of this sheet must be signed and submitted to your compliance inspector, or a copy attached to your NetDMR submittal will suffice.

SPECIAL CONDITIONS

J. MONITORING AND REPORTING (cont'd)

Secondary treatment bypass reporting must be done using *DEP-49-CSO Form For Use With Dedicated CSO Primary Clarifier (Swirl)*. An electronic copy of the secondary treatment bypass reporting document must be submitted in Microsoft Excel format to your Department compliance inspector and the CSO Coordinator as an attachment to an email. In addition, a hardcopy form of this sheet must be signed and submitted to your 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.

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

By December 31 of each calendar year, the permittee must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit ***[ICIS Code 75305]***. See **Attachment C** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

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

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

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

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

SPECIAL CONDITIONS

L. REOPENING OF PERMIT FOR MODIFICATIONS

In accordance with 38 M.R.S. § 414-A(5) and upon evaluation of the test results in the Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at any time and with notice to the permittee, modify this permit to: (1) include effluent limitations 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.

M. 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 must remain in full force and effect, and must be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

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.

ATTACHMENT A

MERCURY REPORT - Clean Test Only

Data Date Range: 03/02/1990 - 03/02/2017

Inspector Name: MICHAEL LOUGHLIN

Facility: **BUCKSPORT WWTF** **Permit Number:** ME0100111

Max (ng/l): 157.0000 **Average (ng/l):** 25.9042

Sample Date	Result (ng/l)	Lsthan	Clean
07/02/2001	13.50	N	T
12/12/2001	11.00	N	T
04/02/2002	10.00	N	T
10/08/2002	44.00	N	T
04/16/2003	16.00	N	T
11/20/2003	35.20	N	T
06/08/2004	23.00	N	T
10/28/2004	17.00	N	T
07/13/2005	19.00	N	T
12/20/2005	33.00	N	T
03/09/2006	14.00	N	T
12/06/2006	6.00	N	T
07/18/2007	20.80	N	T
12/05/2007	23.90	N	T
12/16/2008	13.90	N	T
05/13/2009	157.00	N	T
07/21/2009	129.00	N	T
02/10/2010	11.00	N	T
07/20/2010	5.86	N	T
06/22/2011	4.80	N	T
11/21/2011	9.40	N	T
02/08/2012	8.29	N	T
09/18/2013	3.36	N	T
09/09/2014	9.65	N	T
11/19/2015	26.10	N	T
08/09/2016	8.75	N	T

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE LICENSE

PROPOSED DRAFT FACT SHEET

Date: **November 16, 2017**

MEPDES PERMIT: **ME0100111**
WASTE DISCHARGE LICENSE: **W002596-6C-I-R**

NAME AND ADDRESS OF APPLICANT:

TOWN OF BUCKSPORT
P.O. DRAWER X
BUCKSPORT, ME 04416

COUNTY: **WALDO**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

BUCKSPORT WASTEWATER TREATMENT FACILITY
205 US ROUTE #1
BUCKSPORT, MAINE 04416

RECEIVING WATER / CLASSIFICATION: **PENOBSCOT RIVER/CLASS SC**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

SUSAN LESSARD, TOWN MANAGER
50 MAIN STREET, P.O. DRAWER X
(207) 469-7368
slessard@bucksportmaine.gov

1. APPLICATION SUMMARY

a. Application: On February 23, 2017, the Department of Environmental Protection (Department) accepted as complete for processing an application from the Town of Bucksport (Town/permittee) for renewal of combination Waste Discharge License (WDL) # W002596-6C-F-R / Maine Pollutant Discharge Elimination System (MEPDES) permit # ME0100111, which was issued by the Department on April 10, 2012 for a five-year term. The April 10, 2012 permit authorized the monthly average discharge of 0.50 million gallons per day (MGD) of secondary treated sanitary wastewater from Outfall #001, an unspecified quantity of primary treated sanitary/stormwater from Outfall #007 to a segment of the Penobscot River subject to tidal action, Class SC, in Bucksport, Maine.

2. PERMIT SUMMARY

a. Terms and conditions

This permitting action is different from the April 10, 2012 permit in that it:

1. Reports the closure of CSO Outfall #013 (closure date was July 2017);

For Secondary Treated Wastewater (Outfall #001)

2. Incorporates an Industrial Waste Survey (IWS) to be performed in each permitting cycle as amended in Special Condition F. *Limitations for Industrial Users*;

3. Establishes effluent monitoring and reporting requirements for total nitrogen (nitrate and nitrite as nitrogen and total Kjehldahl nitrogen as nitrogen);

For Primary Treated Wastewater (Outfall #007)

4. Eliminates biochemical oxygen demand (BOD_5) and total suspended solids (TSS) percent removal monitoring and reporting requirements;

5. Establishes a reporting condition for minimum influent flow rate;

6. Requires a letter at the end of each permit cycle which provides an update on the sewer system, ongoing operation of the swirl concentrator and any sewer projects that have been completed to-date. The permit condition would detail any changes for the feasibility of operating the swirl concentrator; and

7. Increases the threshold flow rate to initiate the use of the secondary treatment bypass to a minimum instantaneous flow rate of 600 gallons per minute (gpm) or 0.864 million gallons per day (MGD).

2. PERMIT SUMMARY (cont'd)

b. History: This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the permittee's facility.

December 31, 1985 – The U.S. Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0100111 for the discharge of untreated wastewater from the Bucksport facility.

June 15, 1986 - The Department issued WDL #2596 that authorized the discharge of untreated municipal wastewater until the construction of a primary wastewater treatment facility was completed.

January 18, 1988 – The Town of Bucksport commenced operation of its primary treatment facility.

March 26, 1993 – The USEPA issued an Administrative Order (AO) to the Town addressing effluent violations at the treatment plant outfall for fecal coliform bacteria, total residual chlorine (TRC), flow, biochemical oxygen demand (BOD), total suspended solids (TSS), settleable solids (SS), and pH limitations for the time period of February 1988 to January 1993. The AO required that the Town submit to USEPA and the Department, a detailed engineering report and implementation schedule (to supplement a March 2, 1993 report prepared by Woodard and Curran Inc.) recommending all corrective actions necessary to achieve compliance with the December 31, 1985 NPDES permit.

May 12, 1993 – The Town submitted a report in accordance with the requirements of the March 26, 1993 AO.

July 9, 1993 – USEPA approved the Town's May 12, 1993, report and implementation schedule. The approved schedule was incorporated into USEPA's March 1993 AO and all work was subsequently completed by the Town.

October 27, 1994 – The USEPA renewed NPDES permit #ME0100111 for five-year term.

October 28, 1994 – The Department issued WDL #W002596-59-B-R that authorized the discharge of 0.46 MGD of primary treated wastewater to the Penobscot River.

April 14, 1995 – The USEPA issued a modification of NPDES permit #ME0100111 issued on October 27, 1994. The modification revised the requirements for toxicity testing, water quality monitoring, and biological monitoring.

May 23, 2000 – The Department initiated a WDL modification by establishing interim average and maximum concentration limits of 109 parts per trillion (ppt) and 163 ppt, respectively, for mercury.

2. PERMIT SUMMARY (cont'd)

January 12, 2001 – The Department received authorization from USEPA to administer the NPDES program in Maine. From that date forward, the permitting program has been referred to as the MEPDES permit program and permit #ME0100111 (same as the NPDES permit number) has been used as the primary reference number for the District's facility.

June 17, 2002 – The USEPA and Department issued a combined NPDES permit and WDL to the Town of Bucksport for a five-year term (ME0100111/W002596-5L-E-R).

April 10, 2006 – The Department issued a WDL modification by incorporating the terms and conditions of the Department's Chapter 530, *Surface Water Toxics Control Program*, promulgated on October 12, 2005.

March 20, 2007 – The Town of Bucksport submitted a timely and complete application to the Department and USEPA to renew the combination MEPDES permit/WDL.

August 22, 2007 – The USEPA issued a draft document to the Town of Bucksport that indicated the USEPA Regional Administrator was not going to be issuing a Tentative Decision to grant the Town of Bucksport a 301(h) waiver from secondary treatment requirements of the Federal Water Pollution Control Act. The Final Decision to deny the Town a 301(h) waiver was signed on March 22, 2012.

April 10, 2012 – The Department issued WDL#W002596-6C-F-R/MEPDES Permit #ME0100111 for a five-year term. This permit included secondary treatment standards.

October 4, 2012 – The Department and the Town entered into an Administrative Consent Agreement to establish a formal process for implementation of an upgrade from primary to secondary treatment. Under that Administrative Consent Agreement, the upgrade to secondary treatment is to be brought into operation during July 2017.

August 6, 2014 – The Department issued minor revision WDL #W002596-6C-H-M /MEPDES Permit #ME0100111 to modify dates pertinent to the CSO Master Plan to coincide with the startup of an upgraded wastewater treatment facility.

February 21, 2017 – The permittee submitted a timely and complete General Application to the Department for renewal of the April 10, 2012 permit. The application was accepted for processing on February 23, 2017 and was assigned WDL #W002596-6C-I-R / MEPDES #ME0100111.

2. PERMIT SUMMARY (cont'd)

c. Source Description: The following is an excerpt from the permittee's application:
The Town of Bucksport operated a primary treatment plant to process wastewater from the urban, developed area of the community. In addition, the Town has inter-municipal agreements in place to treat wastewater from portions of the two neighboring communities of Verona and Orland. Approximately twenty miles of gravity sewer bring raw sewage to the treatment plant's site on Main Street (U.S. Route One), including about fifteen miles located in Bucksport, about one mile in Verona, and about four miles in Orland. In order to overcome elevation differences along the sewer routes, ten pump stations and force mains are used throughout the sewer system. Six of these stations are in Bucksport, and two each are in Verona and Orland.

As with many older systems, excess peak flows can be present in the Town's sewers due to leakage from groundwater infiltration, the direct entry of stormwater inflow during snowmelt and rainfall events, and the effects of inflow induced infiltration after rain events cause the temporary elevation of local groundwater tables over old leaking sewer pipes. The presence of excess flows has historically overloaded both the Town's sewer system and wastewater treatment plant. Excess flows beyond the system's hydraulic capacity were previously discharged to the river through several combined sewer overflow (CSO) points. Over the last two decades, the Town has made significant improvements to its sewer system to eliminate excess flows at their origin. Many miles of sewers have been replaced and the system is essentially separated with little direct entry from stormwater catchbasins. The last overflow, CSO No. 013, also known as the Town Dock overflow, has not discharged since 2007, [and the Town agreed to close this CSO in July of 2017]. In another effort, in May of 2008, the Town constructed a peak flow treatment plant on the corner of Main Street (U.S. Route One) and Route 15 by the Verona Island Bridge and near the previous site of the Town's CSO No. 007 discharge at Mill Street. The swirl concentrator plant, designed to treat 3.75 MGD of peak stormwater, provides primary treatment and disinfection of peak stormwater flows above the main plant's capacity. Peak flows to the main plant are now regulated by the capacity of the pump stations that send flow to the plant. Occasional wet weather flows above the main plant's capacity are treated through the swirl concentrator at the satellite stormwater treatment plant. This dual treatment approach eliminated the discharge of untreated wastewater through the remaining CSO point at the Town Dock, [allowing it to be closed in July, 2017]. In addition, it has stabilized the wastewater loadings at the main treatment plant to the 1.0 MGD peak hourly flow capacity that is now received.

A map showing the location of the treatment facility and receiving water is included as Fact Sheet **Attachment A.**

2. PERMIT SUMMARY (cont'd)

d. Wastewater Treatment: The following is an excerpt from the permittee's application that describes the facility as it will function once it is substantially complete (beginning August 14, 2017) with a final completion date of September 13, 2017:
The selected secondary treatment facility to be implemented in Bucksport is activated sludge wastewater treatment. Raw sewage influent will be taken in through an intercepting manhole modified from the existing 8' diameter wet well and carried to the headworks building. Flow will be directed though a new coarse bar rack for large debris removal and a 6" Parshall flume for influent flow measurement. An influent splitter channel following the flume will allow for flow to be directed through either an aerated grit chamber for sand and gravel removal or through a bypass channel. Both will lead to a new step screen or alternatively to a back-up manual screen. The separated grit will be pumped with a new grit pump to a grit classifier for cleaning and final removal. The screening will be automatically diverted by the step screen to a screening press prior to final removal while the screened flow will continue to a 4,000-gallon dual wet well.

Two new influent pumps will send the flow to a 10,000-gallon anoxic selector basin which will be used to control the growth of filamentous microbes in the plant and to assist with future nutrient removal. This will be followed by two 175,000-gallon aeration basins containing fine bubble diffusers. Bacteria and microbes will be grown within the basins and will biodegrade dissolved organic matter for secondary treatment.

The mixed liquor will then be sent through a new secondary splitter box to two new 35' diameter final clarifiers that will allow for the separation of the microbes grown in the aeration basins and the treated effluent. The effluent will then be directed through a 6" Parshall flume for effluent flow measurement followed by a disinfection reactor. The reactor will have an ultraviolet (UV) disinfection system and a backup chlorination/dechlorination system. Finally, the treated effluent will be discharged to the Penobscot River.

Following thickening and/or aerated digestion, the sludge will be sent to a new sludge dewatering system which will utilize polymer addition and a horizontal screw press before being trucked away for final disposal through land spreading or composting.

See **Attachment B** of this Fact Sheet for a schematic of the wastewater treatment facility as it will appear once it has been completed.

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3. CONDITIONS OF PERMIT

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 the 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 Department rule *Surface Water Toxics Control Program,* 06-096 CMR 530 (effective March 21, 2012), require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants,* 06-096 CMR 584 (effective July 29, 2012), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classification of estuarine and marine waters, 38 M.R.S. § 469(2)(B)(1) classifies all tidal waters in Bucksport (which includes the area of the discharge) as Class SC waters. *Standards for classification of estuarine and marine waters*, 38 M.R.S. § 465-B(3) describes the standards for Class SC waters.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2014 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the Penobscot River Estuary, in the area of the discharge, as:

Category 2: Estuarine and Marine Waters Attaining Some Designated Uses – Insufficient Information for Other Uses.

Category 4-A(b): Estuarine and Marine Waters with Impaired Use, TMDL Completed (for bacteria from combined sewer overflows).

Category 5-B-1(a): Estuarine and Marine Waters Impaired for Bacteria Only – TMDL Required. The cause of the impairment is listed as elevated fecal indicators.

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6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Flow: Previous permitting action established a monthly average discharge flow limitation of 0.50 MGD, which this permitting action is carrying forward.

The Department reviewed 57 DMRs that were submitted for the period of May 1, 2012 through February 2017. A review of data indicates the following:

Flow

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	0.50	0.16 – 0.50	0.3
Daily Maximum	Report	0.19 – 0.87	0.5

The 2012 permit increased the monthly average flow limit from 0.46 MGD to 0.50 MGD based on the projected capacity of the upgraded secondary treatment facility. This permit is carrying forward the increased flow limit.

b. Dilution Factors: Dilution factors associated with the permitted discharge flow of 0.50 MGD from the permittee's facility were derived in accordance with Department rule, 06-096 CMR, Chapter 530 *Surface Water Toxics Control Program*, Section 4(A)(2) of the rule states:

1. For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model.

2. For discharges to estuaries, dilution must be calculated using a method such as MERGE, CORMIX or another predictive model determined by the Department to be appropriate for the site conditions.

3. In the case of discharges to estuaries where tidal flow is dominant and marine waters, the human health criteria must be analyzed using a dilution equal to three times the chronic dilution factor.

Based on available information, the Department has made a best professional judgment that the CORMIX model is an appropriate predictive model to calculate dilution factors associated with the discharge. The Department has determined that applicable dilution factors for the discharge are as follows:

Acute: 155:1 Chronic: 1,550:1 Harmonic Mean: 4,650:1**(1)**

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

Footnotes:

(1) The harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3). This methodology is consistent with Department rule Chapter 530, §4(A)(2)(c). This multiplying factor is based on guidelines for estimation of human health dilution presented in the USEPA publication *"Technical Support Document for Water Quality-based Toxics Control"* (Office of Water; EPA/505/2-90-001, page 88).

c. BOD_5 and TSS: This permitting action is carrying forward the previously established monthly average, weekly average and daily maximum BOD_5 and TSS mass limitations based on calculations using the proposed design flow of 0.50 MGD and the applicable concentration limits as follows:

Monthly Average Mass Limit: (30 mg/L)(8.34 lbs./gal)(0.50 MGD) = 125 lbs./day
Weekly Average Mass Limit: (45 mg/L)(8.34 lbs./gal)(0.50 MGD) = 188 lbs./day
Daily Maximum Mass Limit: (50 mg/L)(8.34 lbs./gal)(0.50 MGD) = 208 lbs./day

This permitting action is also carrying forward the previously established requirement for a minimum of 85% removal of BOD_5 and TSS pursuant to Chapter 525(3)(III)(a)(3) and (b)(3) of the Department's rules.

This permitting action is carrying forward the 1/Week monitoring requirement for BOD and TSS based on a long-standing Department guidance regarding monitoring frequencies for facilities with a discharge flow limitation ranging from 0.10 MGD to 0.50 MGD.

The Department reviewed 57 DMRs that were submitted for the period of May 1, 2012 through February 2017. A review of data indicates the following:

BOD_5 Mass

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	125	113 – 328	184
Weekly Average	188	128 - 449	232
Daily Maximum	208	128 – 449	232

BOD_5 Concentration

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	42 – 167	94
Weekly Average	45	50 - 206	121
Daily Maximum	50	50 – 206	121

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

TSS Mass

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	125	58 – 247	125
Weekly Average	188	65 - 385	184
Daily Maximum	208	65 – 385	184

TSS Concentration

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	29 – 121	62
Weekly Average	45	39 - 200	88
Daily Maximum	50	39 – 200	88

d. Settleable Solids: The previous permitting action established a daily maximum technology-based concentration limit of 0.3 ml/L for settleable solids. This permitting action is carrying forward the daily maximum limitation as well as the minimum monitoring frequency requirement of 5/Week.

The Department reviewed 57 DMRs that were submitted for the period of May 1, 2012 through February 2017. A review of data indicates the following:

Settleable Solids

Value	Limit (ml/L)	Range (ml/L)	Mean (ml/L)
Daily Maximum	0.3	<0.1 - 0.5	<0.1

There was one excursion above the limit of 0.3 ml/L. A daily maximum value of 0.5 ml/L was reported in October 2015.

e. Fecal coliform bacteria: The previous permitting action established monthly average and daily maximum technology based limits of 15 colonies/100 ml and 50 colonies/100 ml respectively, which are consistent with the National Shellfish Sanitation Program. The limits are in effect seasonally from May 15th to September 30th. The Department reserves the right to require year-round disinfection to protect the health and welfare of the public. The limits and the monitoring frequency of 1/Week in the previous permitting action are being carried forward in this permitting action.

The Department reviewed 25 DMRs that were submitted for the period of May 1, 2012 through February 2017. A review of data indicates the following:

Fecal coliform bacteria

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	15	1 - 5	2
Daily Maximum	50	1 - 29	8

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

f. Total Residual Chlorine (TRC): The previous permitting action established a daily maximum technology based concentration limit of 1.0 mg/L for TRC. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department permitting actions impose the more stringent of either a water quality-based or BPT-based limit. With dilution factors as determined above, end-of-pipe (EOP) water quality-based concentration thresholds for TRC may be calculated as follows:

	Criterion	**Dilution Factors**	**Calculated Threshold**
Acute	0.013 mg/L	155:1	2.015 mg/L
Chronic	0.0075 mg/L	1,550:1	11.625 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that dechlorinate the discharge in order to meet water quality based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. The permittee does not have to dechlorinate the effluent to achieve compliance with water quality-based limitation.

The daily maximum technology based effluent TRC concentration limitation of 1.0 mg/L is more stringent than either of the calculated water quality-based thresholds listed above, and is therefore being carried forward in this permitting action. This permitting action is also carrying forward the monitoring frequency of 1/Day whenever elemental chlorine or chlorine based compounds are being utilized to disinfect the discharge.

The Department reviewed 25 DMRs that were submitted for the period of May 1, 2012 through February 2017. A review of data indicates the following:

Total residual chlorine

Value	**Limit (mg/L)**	**Range (mg/L)**	**Mean (mg/L)**
Daily Maximum	1.0	0.00 – 0.65	0.3

g. pH: The previous permitting action established, and this permitting action is carrying forward, a technology based pH range limitation of 6.0 – 9.0 standard units pursuant to 06-096 CMR 525(3)(III)(c) along with a monitoring frequency of 5/Week. A review of the pH values from May 1, 2012 through February 2017 (n=57) indicates that the results ranged from 6.5 to 7.9 standard units.

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

h. Mercury: Pursuant to 38 M.R.S. § 420 and 38 M.R.S. § 413 and 06-096 CMR 519, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W002596-5L-E-R by establishing interim monthly average and daily maximum effluent concentration limits of 108.8 (rounded to 109) parts per trillion (ppt.) and 163.2 (rounded to 163) ppt., respectively, and a minimum monitoring frequency requirement of 2 tests per year for mercury.

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 July 2001 through August 2016 is as follows:

Mercury (n = 26)

Value	Limit (ppt.)	Range (ppt.)	Mean (ppt.)
Monthly Average	109	3.36 – 157	26
Daily Maximum	163		

On February 6, 2012, the Department issued a minor revision to amend the minimum monitoring frequency requirement from twice per year to once per year pursuant to 38 M.R.S. § 420(1-B)(F). This minimum monitoring frequency is being carried forward in this permitting action.

i. Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing: 38 M.R.S. § 414-A and 38 M.R.S. § 420 prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. 06-096 CMR 530 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met.

> 06-096 CMR 530(2)(A) states: *"…all licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedances of narrative or numerical water quality criteria."*

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

Dischargers are categorized based on the dilution of the receiving water and the potential risk of toxic contamination. The four categories for dischargers are as follows:

Level I	Chronic dilution factor of <20:1
Level II	Chronic dilution factor of ≥20:1 but <100:1.
Level III	Chronic dilution factor ≥100:1 but <500:1 or >500:1 and Q ≥1.0 MGD
Level IV	Chronic dilution >500:1 and Q ≤1.0 MGD

Based on the criteria, the permittee's facility is considered a Level IV discharger as the chronic dilution of the receiving water is 1,550:1 and the permitted flow is equal to or less than 1.0 MGD. 06-096 CMR 530(2)(D) specifies routine WET, priority pollutant, and analytical chemistry test schedules for Level IV dischargers as follows:

Screening Level testing

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

Surveillance Level Testing

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

Using the categorization criteria as stated above, and pursuant to 06-096 CMR 530 (2)(D)(1), dischargers are required to characterize their effluent via WET, priority pollutant and analytical chemistry testing. Although this facility has never conducted WET or chemical specific testing, the Department has made the determination that the permittee's facility is not a new discharge nor has it substantially changed since issuance of the previous permit/license. Therefore, the Department is waiving the Level IV routine testing requirements except that the Department is requiring the facility to conduct testing under the following conditions.

(a) The discharger's permit application or information available to the Department indicate that toxic compounds may be present in toxic amounts; or

(b) Previous testing conducted by the discharger or similar dischargers indicates that toxic compounds may be present in toxic amounts.

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

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

However, should there be a substantial change in the characteristics of the discharge in the future, the Department may reopen this permit pursuant to Special Condition L, *Reopening of Permit For Modification*, of this permit to incorporate the applicable WET, priority pollutant, or analytical testing requirements cited above.

j. Nitrogen: The USEPA requested the Department evaluate the reasonable potential for the discharge of total nitrogen to cause or contribute to non-attainment of applicable water quality standards in marine waters, namely DO and marine life support.

Three distinct effluent numeric data sets are available for use in a reasonable potential calculation for Bucksport. The most recent results are from 2001 and 2007. A third data set is from 1997. Unfortunately, even if combined, the sample size is small ($n<5$). The Department does not believe that the available numerical data is a large enough sample to support a representative and defendable reasonable potential analysis at this time.

Ambient nitrogen data was collected when industrial inputs (paper mills) were discharging to the receiving water, so the values may be measurably lower now. The only site where the Department had above both the Verso paper mill and Bucksport POTW outfalls (sampled on the ebb tide) yielded an average TN value of 0.36 mg/L ($n=26$). The TN values from the Penobscot sites were not considerable variable, and those in closest proximity above and below the POTW outfall did not indicate a consistently measureable nitrogen contribution, even when the temperature and salinity data indicate possible influence of the effluent.

Given that nitrogen loading to the Penobscot has changed since 2012 (due to the lack of industrial input), it is likely that ambient nitrogen conditions have improved since 2012.

Regarding the usual biological indicators, it is the Department's understanding that DMR eelgrass surveys did not extend north of the southern tip of Verona Island. While eelgrass could grow in the Bucksport area, spring flows bring very low salinity water down the estuary, and eelgrass would probably not be abundant even if present.

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

It should be noted that the Department's Division of Environmental Assessment has been tracking the presence of macroalgal blooms in the Orland River. Angela Brewer of DEA had the following information to add regarding the macroalgal blooms:

> "For our 2011 and 2012 work, we assessed typical water quality parameters and were prepared to map green macroalgal blooms, but none occurred during those two summers. As recently as last year, however, we received a report of a bloom in the Orland River. 2016 was a year of many reports coastwide, so not isolated to the Orland area …It is notable that even with the Verso discharges removed from the cumulative load in the area, blooms have continued to occur. My expectation is that the Orland provides great habitat, that outflows from the Orland River are contributing to blooms, and that some of the nitrogen flowing down the east side of Verona Island is pushed back up into the Orland on the flood tide. I also expect there is a lot of pore water nitrogen in sediment that is fueling green algae blooms."

Based on the need for additional information regarding the receiving water body as well as the effluent, the Department has established a seasonal, effluent monitoring requirement for total nitrogen (TKN and NO_3+NO_2) so that it may accurately characterize the permittee's contribution to the receiving water.

The Department will review the results from these testing regimes and re-assess the overall condition of the lower Penobscot River and the relative influence of Bucksport's discharge.

The Department reserves the right to reopen the permit to establish necessary limits as stated in permit Special Condition L. *Reopening of Permit for Modifications,* "the Department may, at any time and with notice to the permittee, modify this permit to: include effluent limitations necessary to control specific pollutants…"

7. COMBINED SEWER OVERFLOWS

The previous permitting action contained the following combined sewer overflow point source discharges.

Outfall #	Location	Receiving Water & Class
013	Town Dock CSO	Penobscot River Class SC

7. COMBINED SEWER OVERFLOWS (cont'd)

Combined Sewer Overflow Abatement 06-096 CMR 570 (repealed and replaced on February 5, 2000) establishes procedures for permittees with CSO discharges to evaluate current conditions, determine impacts, study control technologies, analyze financial concerns and prepare a master plan for a CSO program. The original CSO Master Plan entitled *Infiltration and Inflow Study for the Town of Bucksport, Maine* was submitted to the Department in October of 2003. The Master Plan was later updated in a document entitled *CSO Abatement PDR for the Town of Bucksport* approved by the Department on July 12, 2006. The Town's MEPDES Permit, issued on April 10, 2012, called for the next Master Plan Update to be submitted by December 31, 2013, with the goal of continuing to evaluate and take specific actions to mitigate discharges from Outfall #013.

With the advent of Bucksport losing its EPA 301 (h) waiver from secondary treatment requirements on March 22, 2012, all work on CSO abatement has been put on hold, until the upgrade of the Waste Water Treatment Facility is completed. As a result, the Town filed a request to modify the permit, to adjust the deadline for submittal of the next CSO Master Plan Update from December 31, 2013, until April 10, 2017, to "*coincide with the startup of the upgraded waste water treatment facility.*" The deadline for submission of the Master Plan Update was extended to April 10, 2018 to allow operation of the WWTF upgrade.

On April 10, 2012, the Department acted upon Bucksport's WDL renewal application by issuing MEPDES Permit #ME0100111/Maine WDL #W002596 which established secondary treatment standards for any discharge from Outfall #001, and primary treatment standards (solids removal and disinfection) for any discharge from the SWIRL unit at Outfall #007. Under certain conditions, Bucksport was also allowed to discharge a combination of untreated wastewater and storm water during storm events from one licensed CSO outfall, Outfall #013.

The 2012 Permit established a requirement of the WWTF to meet water quality standards typical of secondary treatment, which were clearly unobtainable with a plant designed for only primary treatment. As a result, the WWTF went into non-compliance and the Town and Department entered into an Administrative Consent Agreement on October 4, 2012. The Consent Agreement called for a Preliminary Design Report (PDR) to be submitted within 18 months of the Consent Agreement's effective date of 10/4/2012. Approval of final design was scheduled for 12 months after approval of PDR. According to the schedule contained in the Consent Agreement, construction would commence no later than 30 months after final approval of plans and specs, and be completed within 24 months.

Since the secondary treatment bypass system (SWIRL Separator) was installed in 2008, there have been no further discharges from CSO Outfall #013, meaning all sewer system flows have received at least primary treatment and disinfection since 2008. The SWIRL Separator was determined to be the most cost-effective CSO abatement alternative when compared to upgrading the capacity of the collection system and the wastewater treatment facility to transport and treat all wet-weather flows.

8. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has determined the existing water uses will be maintained and protected. The Department is not aware of any information that the discharge from the Town contains measurable quantities of dioxin, PCBs or any other legacy pollutant(s) that cause or contribute to non-attainment of the Penobscot River estuary. In addition, given the Town has maintained compliance with the monthly average and daily maximum fecal coliform bacteria limitations established in the previous permitting action, the District is not causing or contributing to the non-attainment of the designated use of fishing or the closure of shellfish harvesting in the Penobscot River estuary.

9. PUBLIC COMMENTS

Public notice of this application was made in the *Ellsworth American* newspaper on or about February 23, 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 must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses,* 06-096 CMR 522 (effective January 12, 2001).

10. DEPARTMENT CONTACTS

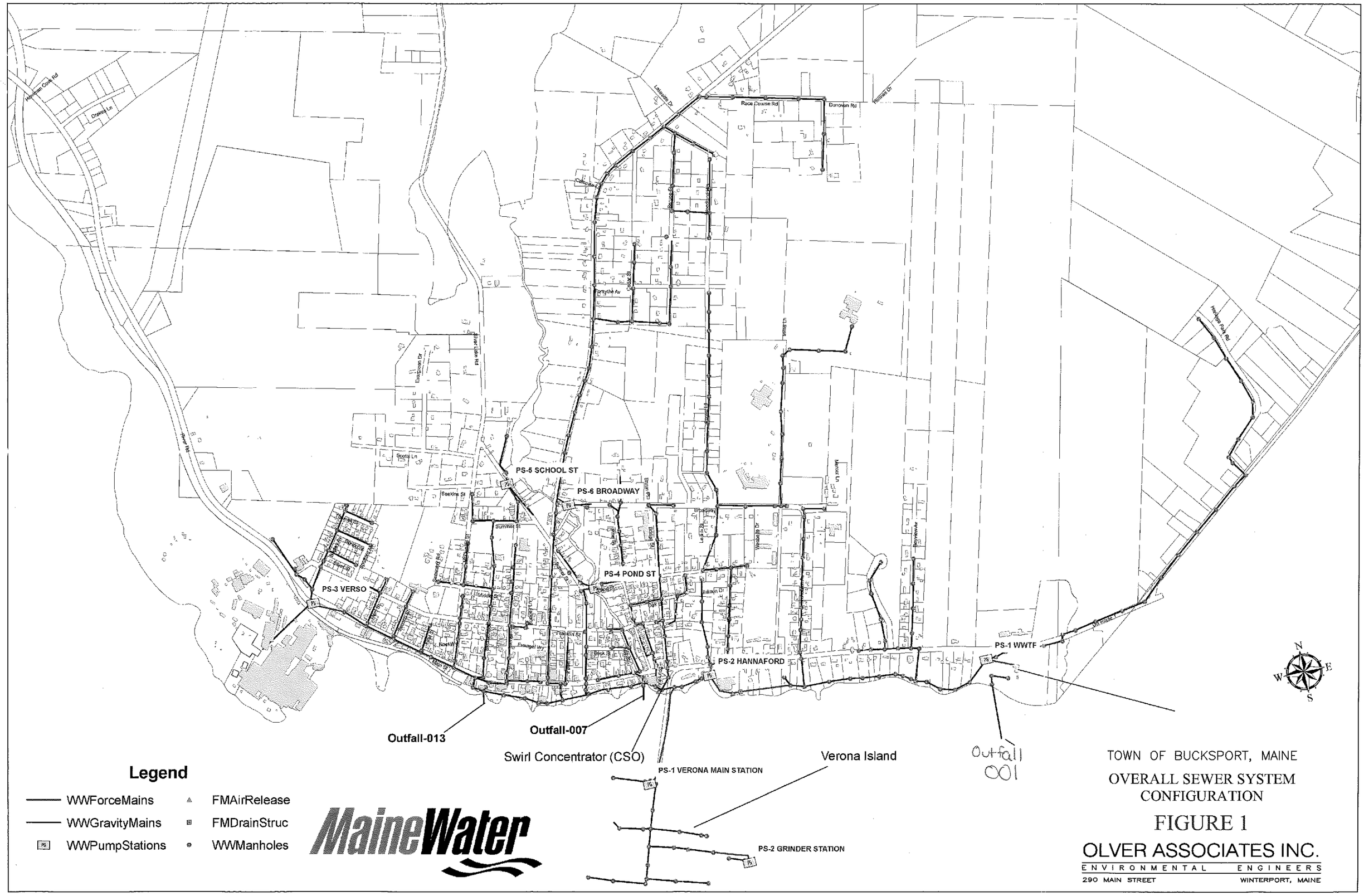
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Cindy L. Dionne
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 557-5950
e-mail: Cindy.L.Dionne@maine.gov

11. RESPONSE TO COMMENTS

Reserved until the end of the comment period.

ATTACHMENT A



Legend

- WWForceMains
- WWGravityMains
- WWPumpStations
- FMAirRelease
- FMDrainStruc
- WWManholes

MaineWater

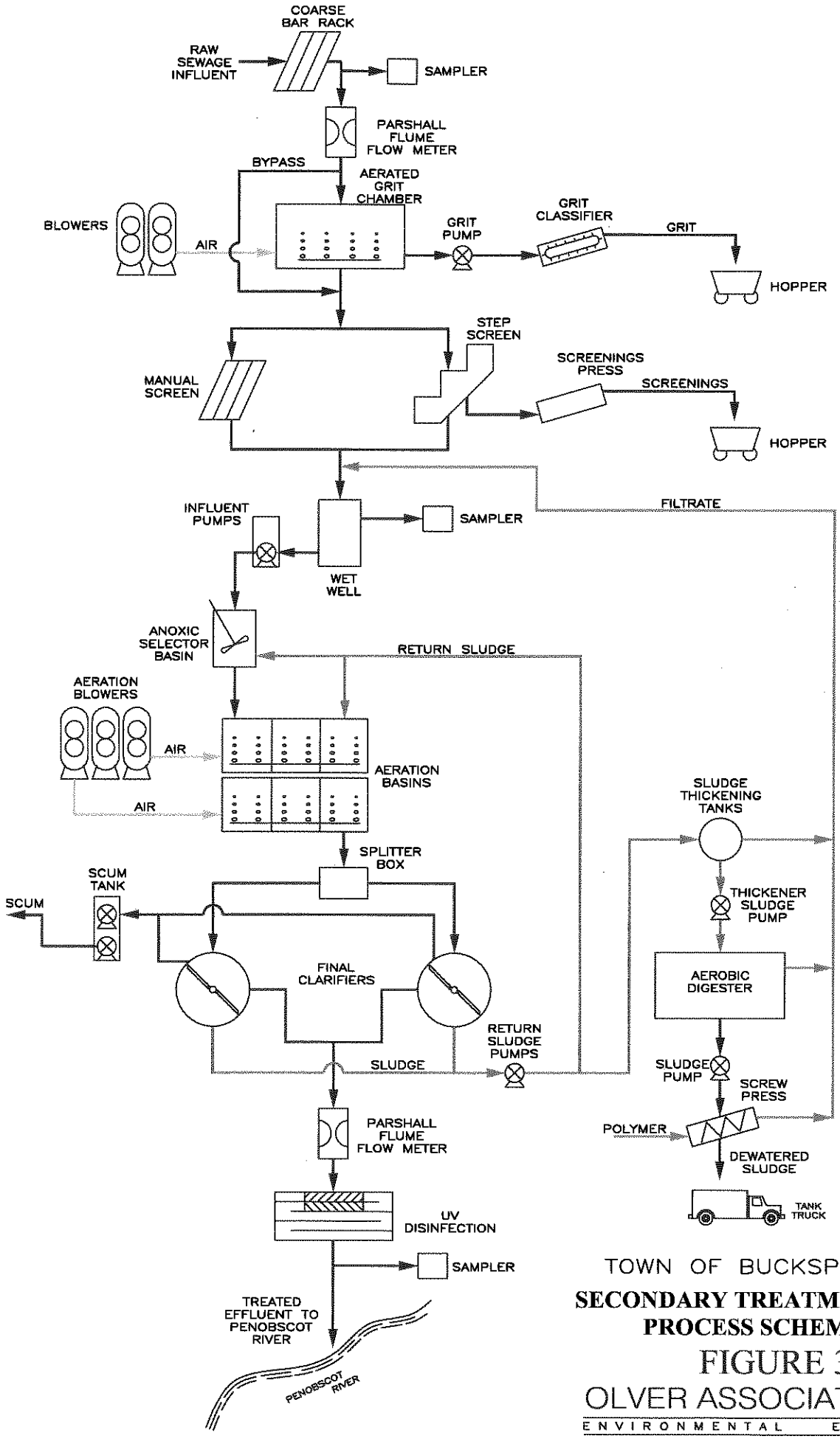
TOWN OF BUCKSPORT, MAINE

OVERALL SEWER SYSTEM CONFIGURATION

FIGURE 1

OLVER ASSOCIATES INC.
ENVIRONMENTAL ENGINEERS
290 MAIN STREET WINTERPORT, MAINE

ATTACHMENT B



X:\oussoc\Dis... \BUCKSPORT\O & M 2-17\FIG 3 SECONDARY PROCESS.dwg

TOWN OF BUCKSPORT, ME

SECONDARY TREATMENT PLANT PROCESS SCHEMATIC

FIGURE 3

OLVER ASSOCIATES INC.
ENVIRONMENTAL ENGINEERS
290 MAIN STREET WINTERPORT, MAINE

ATTACHMENT C

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.