October 2, 2019

Mr. Rick Sirois
Town of Van Buren Waste Water Treatment Facility
133 Jackson Street
Van Buren, ME. 04785
e-mail: vbwastewater@live.com

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100684
Maine Waste Discharge License (WDL) #W002675-6C-1-R

Proposed Draft Permit

Dear Mr. Sirois:

Enclosed is a proposed draft MEPDES permit and Maine WDL which the Department proposes to issue for your facility as a final document after opportunity for your review and comment. By transmittal of this letter, you are provided with an opportunity to comment on the proposed draft document 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.

Beginning today, Wednesday, October 2, 2019, the Department is making the draft permit available for a 30-day public comment period. 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, November 4, 2019. Failure to submit comments in a timely fashion will result in the final 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  
gregg.wood@maine.gov

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

Sincerely,

Gregg Wood  
Division of Water Quality Management  
Bureau of Water Quality

Enc.

cc:   Sean Bernard, MDEP/NMRO  
     Lori Mitchell, MDEP/CMRO  
     Ellen Weitzler, USEPA  
     Shelley Puleo, USEPA  
     Marelyn Vega, USEPA  
     Solanch Pastrana-Del Valle, USEPA  
     Maine Dept. Inland Fisheries and Wildlife Environmental Review  
     Maine Dept. Marine Resources Environmental Review
IN THE MATTER OF

TOWN OF VAN BUREN ) MAINE POLLUTANT DISCHARGE
VAN BUREN, AROOSTOOK COUNTY, MAINE ) ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS ) AND
ME0100684 ) WASTE DISCHARGE LICENSE
W002675-6C-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 hereinafter), has considered the application of the TOWN OF VAN BUREN (Town/permittee), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On August 5, 2019, the permittee submitted a timely and complete application to the Department for the renewal of Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100684 /Maine Waste Discharge License (WDL) #W002675-6C-H-R, (permit hereinafter) which was issued by the Department on October 3, 2014, for a five-year term. The 10/3/14 permit authorized the monthly average discharge of 0.56 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the St. John River, Class C, in Van Buren, Maine.

PERMIT SUMMARY

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

1. Eliminating the seasonal monitoring requirement for total phosphorus in the effluent as well as the ambient concentration in the St. John River.

2. Eliminating the requirement to obtain seasonal stream flow data from USGS gauge #01014000.

3. Expanding the season in which E. coli bacteria limitations and monitoring requirements are applicable from May 15th - September 30th of each year to April 15th – October 31st of each year based a revision to Maine law 38 M.R.S. §465(4)(B).
CONCLUSIONS

Based on the findings summarized in the attached PROPOSED DRAFT Fact Sheet dated October 2, 2019, and subject to the special and standard conditions that follow, the Department makes the following CONCLUSIONS:

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

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

3. The provisions of the State’s antidegradation policy, Classification of Maine waters, 38 M.R.S § 464(4)(F), will be met, in that:
   a. Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
   b. Where high quality waters of the State constitute an outstanding natural resource, that water quality will be maintained and protected;
   c. Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
   d. Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
   e. Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

4. The 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).
ACTION

Based on the findings and conclusions as stated above, the Department APPROVES the above noted application of the TOWN OF VAN BUREN to discharge a monthly average of 0.56 MGD of secondary treated municipal wastewater to the St. John River in Van Buren, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:


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

3. This permit and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act, 5 M.R.S. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (amended June 9, 2018)*].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS _______ DAY OF ___________________ 2019.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: ___________________________________________________________

Gerald D. Reid, Commissioner

Date of initial receipt of application August 5, 2019

Date of application acceptance August 14, 2019

Date filed with Board of Environmental Protection _______________________

This Order prepared by Gregg Wood, Bureau of Water Quality

ME0100684 PROPOSED 2019 10/2/19
SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge secondary treated municipal sanitary wastewater from Outfall #001A to the St. John River at Van Buren. Such discharges are limited and must be monitored by the permittee as specified below:\(^{(1)}\):

<table>
<thead>
<tr>
<th>Effluent Characteristic</th>
<th>Discharge Limitations</th>
<th>Minimum Monitoring Requirements</th>
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<tr>
<td></td>
<td>Monthly Average</td>
<td>Weekly Average</td>
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<tr>
<td>BOD(_5) % Removal(^{(2)}) [81010]</td>
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<tr>
<td>Total Residual Chlorine(^{(3)}) [50060]</td>
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The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

**FOOTNOTES:** See Pages 6 and 7 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 December 19, 2018). 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 total suspended solids and biochemical oxygen demand for all flows receiving secondary treatment. The percent removal is calculated based on monthly average influent concentrations and the monthly average effluent concentrations.

3. **TRC Monitoring** – Limitations and monitoring requirements are in effect any time elemental chlorine or chlorine-based compounds are utilized to disinfect the discharge(s). The permittee must utilize a USEPA-approved test method capable of bracketing the TRC limitations specified in this permitting action. Monitoring for TRC is only required when elemental chlorine or chlorine-based compounds are in use for effluent disinfection. For instances when a facility has not disinfected with chlorine-based compounds for an entire reporting period, the facility must report “N9” for this parameter on the monthly DMR if the submittal is an electronic DMR.

4. **Bacteria Limits** – *E. coli* bacteria limits and monitoring requirements are seasonal and apply between April 15th and October 31st of each year. The Department reserves the right to require year-round bacteria limits to protect the health, safety and welfare of the public.

5. **Bacteria Reporting** - The monthly average *E. coli* bacteria limitation is a geometric mean limitation and sample results must be reported as such.
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 C.M.R. 519 in accordance with the USEPA’s “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*. Go to [https://www.maine.gov/dep/water/wd/municipal_industrial/index.html](https://www.maine.gov/dep/water/wd/municipal_industrial/index.html) and click on “Whole Effluent Toxicity, Chemistry, and Mercury Reporting Forms” for a reporting 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.

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 usages 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 usages designated for the classification of the receiving waters.

3. The discharge must not impart visible discoloration, taste, turbidity, toxicity, radioactivity or other properties in the receiving waters which would impair the usages 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 in responsible charge of the waste water treatment facility must be a person holding a minimum of a **Grade III** certificate (or Registered Maine Professional Engineer) pursuant to *Sewerage Treatment Operators*, 32 M.R.S.A. §§ 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 CMR 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.
SPECIAL CONDITIONS

D. LIMITATIONS FOR INDUSTRIAL USERS

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

E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee’s General Application for Waste Discharge Permit, accepted for processing on August 14, 2019; 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of wastewater from any other point source(s) are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), Twenty-four hour reporting, of this permit.

F. NOTIFICATION REQUIREMENT

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

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

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

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

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

G. WET WEATHER MANAGEMENT PLAN

The permittee must maintain a current written Wet Weather Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. 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. A specific objective of the plan must be to maximize the volume of wastewater receiving secondary treatment under all operating conditions. The revised plan must include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events.

The permittee must review their plan 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.

H. OPERATIONS AND MAINTENANCE (O&M) PLAN

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

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

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

I. 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 96299]. See Attachment B 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;
SPECIAL CONDITIONS

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

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.

J. MONITORING AND REPORTING

Electronic Reporting

NPDES Electronic Reporting, 40 CFR 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 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. 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. SEVERABILITY

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

L. REOPENING OF PERMIT FOR MODIFICATION

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

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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Revised July 1, 2002
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 MAINTENANCE OF FACILITIES

1. General facility requirements.

(a) The permittee shall collect all waste flows designated by the Department as requiring treatment and discharge them into an approved waste treatment facility in such a manner as to
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 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.
MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).
(iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

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

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

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

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.
(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.
(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

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

(f) Twenty-four hour reporting.

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

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

Person means an individual, firm, corporation, municipality, quasi-municipal corporation, state agency, federal agency or other legal entity.
**Point source** means any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft, from which pollutants are or may be discharged.

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

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

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

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

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

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

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

**Whole effluent toxicity** means the aggregate toxic effect of an effluent measured directly by a toxicity test.
MAINE POLLUTANT DIScharge elimination system permit
MAINE waste discharge license

FACt SHEET

date: October 2, 2019

permit number: ME0100684

waste discharge license: W002675-6C-I-R

name and address of applicant:

Town of van buren
133 Jackson street
Van Buren, ME. 04785

County: Aroostook

name and address where discharge(s) occur(s):

VAN BUREN wastewater treatment facility
133 Jackson street
Van Buren, ME, 04785

receiving water classification: St. John River/Class C

COgnizant official contact INFORMATION:

Mr. Ricky Sirois
(207) 868-3975
E-mail: vbwastewater@live.com

1. APPLICATION SUMMARY

a. Application: On August 5, 2019, the Town of Van Buren (Town/permittee) submitted a timely and complete application to the Department for the renewal of Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100684 /Maine Waste Discharge License (WDL) #W002675-6C-H-R, (permit hereinafter) which was issued by the Department on October 3, 2014, for a five-year term. The 10/3/14 permit authorized the monthly average discharge of 0.56 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the St. John River, Class C, in Van Buren, Maine.
1. APPLICATION SUMMARY (cont’d)

b. **Source Description:** Van Buren’s wastewater treatment facility receives sanitary wastewater flows from commercial and residential users in the Town of Van Buren. The population served by the facility is estimated to be approximately 2,500 users. The facility does not receive industrial flows and is not authorized to receive septage. The collection system is approximately 21 miles in length and has seven pump stations (with emergency backup power) conveying flows to the wastewater treatment facility. The collection system is completely separated and does not have any combined sewer overflows points. A map showing the location of the facility and receiving water is included as Fact Sheet Attachment A.

c. **Wastewater Treatment:** The Van Buren wastewater treatment facility commenced operations in 1972. The wastewater treatment facility provides a secondary level of treatment using an extended aeration activated sludge process via a bar screen, an aerated grit chamber, two aeration basins with fine bubble diffused aeration, two secondary clarifiers and a chlorine contact chamber for disinfection. The wastewater is discharged to the St. John River via a 24-inch diameter outfall pipe that extends out into the receiving water approximately 40 feet at a depth of 3 feet below the normal high water line of the river. During 2009/2010 the facility installed new pumps at the McBride pump station, and are planning upgrades at three additional pump stations.

2. PERMIT SUMMARY

a. **Terms and Conditions:** This permitting action is carrying forward all the terms and conditions of the previous permitting action except it is:

1. Eliminating the seasonal monitoring requirement for total phosphorus in the effluent as well as the ambient concentration in the St. John River.

2. Eliminating the requirement to obtain seasonal stream flow data from USGS gauge #01014000.

3. Expanding the season in which *E. coli* bacteria limitations and monitoring requirements are applicable from May 15th - September 30th of each year to April 15th – October 31st of each year based a revision to Maine law 38 M.R.S. §465(4)(B).

b. **History:** The most current relevant regulatory actions include:

March 30, 1995 – The U.S. Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0100684 to the Town, which superseded the previous permit issued on August 11, 1989.

July 10, 2000 – The Department administratively modified WDL #W002675-5L-C-R by establishing interim average and maximum concentration limits for the discharge of mercury.
2. PERMIT SUMMARY (cont’d)

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permitting program in Maine, excluding areas of special interest to Maine Indian Tribes. From this point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program, and MEPDES permit #ME0100684 has been utilized for this facility.


September 14, 2009 – The Department issued combination MEPDES permit #ME0100684/WDL #W002675-6C-F-R for a five-year term.

February 6, 2012 – The Department issued permit modification #ME0100684/WDL#W002675-6C-G-M to incorporate the average and maximum concentration limits for total mercury.

April 7, 2014 – The Town submitted a timely and complete General Application to the Department for renewal of the September 14, 2009 MEPDES permit. The application was accepted for processing on February 2, 2014, and was assigned WDL #W002675-6C-H-R / MEPDES #ME0100684.

October 3, 2014 – The Department issued MEPDES #ME0100684 / WDL #W002675-6C-H-R for a five-year term.

August 5, 2019 – The Town submitted a timely and complete General Application to the Department for renewal of the MEPDES permit. The application was accepted for processing on August 14, 2019, and was assigned WDL #W002675-6C-I-R / MEPDES #ME0100684.

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

Classification of major river basins, 38 M.R.S. § 467(15)(A)(4) classifies the “St. John River, main stem, from the international bridge in Madawaska to where the international boundary leaves the river in Hamlin,” which includes the river at the point of discharge, as Class C waters. Standards for classification of fresh surface waters, 38 M.R.S. § 465(4) describes the standards for Class C as follows:

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

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

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

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

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

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

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

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

Between April 15th and October 31st, the number of Escherichia coli bacteria in Class C waters may not exceed a geometric mean of 100 CFU per 100 milliliters over a 90-day interval or 236 CFU per 100 milliliters in more than 10% of the samples in any 90-day interval. The board shall adopt rules governing the procedure for designation of spawning areas. Those rules must include provision for periodic review of designated spawning areas and consultation with affected persons prior to designation of a stretch of water as a spawning area.

C. Discharges to Class C waters may cause some changes to aquatic life, except that the receiving waters must be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community. For the purpose of allowing the discharge of aquatic pesticides or chemicals approved by the department and conducted by the department, the Department of Inland Fisheries and Wildlife or an agent of either agency to restore biological communities affected by an invasive species, the department may find that the discharged effluent will not cause unacceptable changes to aquatic life as long as the materials and methods used will ensure the support of all species of indigenous fish and the structure and function of the resident biological community and will allow restoration of nontarget species.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2016 Integrated Water Quality Monitoring and Assessment Report (Report), prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists a 10.23-mile segment of the main stem of the St. John River from La Grande Isle to Van Buren (ADB Assessment Unit ID ME0101000121_118R) as, “Category 2: Rivers and Streams Attaining Some Designated Uses – Insufficient Information for Other Uses.”

The Report lists all of Maine’s fresh waters as, “Category 4-A: Waters Impaired by Atmospheric Deposition of Mercury.” Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, “All freshwaters are listed in Category 4-A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Health and Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources.” Pursuant to 38 M.R.S.A. § 420(1-B)(B), “a facility is not in violation of the ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413 subsection 11.” The Department has established interim monthly average and daily maximum mercury concentration limits and reporting requirements for this facility pursuant to 06-096 CMR 519.

The Department has no information at this time that the discharge from the Town of Van Buren, as permitted, will cause or contribute to the failure of the receiving water to meet the designated uses of its ascribed classification.
6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

a. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limit of 0.56 MGD based on the design capacity for the treatment facility, and a daily maximum discharge flow reporting requirement.

A review of the Discharge Monitoring Report (DMR) data for the period November 2014 – June 2019 indicates values have been reported as follows:

<table>
<thead>
<tr>
<th>Flow</th>
<th>Value</th>
<th>Limit (MGD)</th>
<th>Range (MGD)</th>
<th>Mean (MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Average</td>
<td>0.56</td>
<td>0.11 – 1.07*</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>Daily Maximum Report</td>
<td>Report</td>
<td>0.18 – 2.49</td>
<td>0.81</td>
<td></td>
</tr>
</tbody>
</table>

There are 4 excursions of the monthly average limit, all in the month of April in 2016, 2017, 2018 and 2019.

b. Dilution Factors:

Dilution factors are associated with the permitted flow of 0.56 MGD and the location and configuration of the outfall structure and flow data from the Fort Kent gauge and utilizing Geographic Information Systems for a more accurate measurement of contributing drainage areas in both the US and Canada. As a result, the low flow determinations were changed for all dischargers on the river in the 2014-2015 Therefore, the Department has established new dilution factors in accordance with 06-096 CMR 530(4)(A) as follows:

- Mod. Acute: \( \frac{1}{4} \) Q10 = 234 cfs \(
\Rightarrow (234 \text{ cfs})(0.6464) + 0.56 \text{ MGD} = 271:1 \)

- Acute: \( 1Q10 = 934 \text{ cfs} \)
\(
\Rightarrow (934 \text{ cfs})(0.6464) + 0.56 \text{ MGD} = 1,079:1 \)

- Chronic: \( 7Q10 = 951 \text{ cfs} \)
\(
\Rightarrow (951 \text{ cfs})(0.6464) + 0.56 \text{ MGD} = 1,099:1 \)

- Harmonic Mean = 4,890 cfs
\(
\Rightarrow (4,890 \text{ cfs})(0.6464) + 0.56 \text{ MGD} = 5,645:1 \)
6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

c. Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS): Previous permitting action established, and this permitting action is carrying forward, monthly average and weekly average technology-based concentration limits of 30 mg/L and 45 mg/L, respectively, for BOD₅ and TSS based on the secondary treatment requirements specified at *Effluent Guidelines and Standards, 06-096 CMR 525(3)(III) (effective January 12, 2001)*, and a daily maximum concentration limit of 50 mg/L, which is based on a Department best professional judgment (BPJ) of best practicable treatment (BPT) for secondary treated wastewater. This permitting action is carrying forward a requirement for a minimum of 85% removal of BOD₅ & TSS pursuant to 06-096 CMR 525(3)(III)(a&b)(3). The requirement to achieve 85% removal of BOD and TSS applies at all times to all flows receiving secondary treatment. The monthly average, weekly average and daily maximum technology-based mass limitations that are being carried forward in this permitting action are based on a monthly flow limit of 0.56 MGD. The mass limits were derived as follows:

\[
\text{Monthly average: } (0.56 \text{ MGD})(8.34)(30 \text{ mg/L}) = 140 \text{ lbs./day} \\
\text{Weekly average: } (0.56 \text{ MGD})(8.34)(45 \text{ mg/L}) = 210 \text{ lbs./day} \\
\text{Daily Maximum: } (0.56 \text{ MGD})(8.34)(50 \text{ mg/L}) = 234 \text{ lbs./day}
\]

A review of the Discharge Monitoring Report (DMR) data for the period November 2014 – June 2019 indicates values have been reported as follows:

<table>
<thead>
<tr>
<th>BOD₅ mass (n=56)</th>
<th>Value</th>
<th>Limit (lbs./day)</th>
<th>Range (lbs./day)</th>
<th>Mean (lbs./day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Average</td>
<td>140</td>
<td>3.5 - 59</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Weekly Average</td>
<td>210</td>
<td>3.5 - 124</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Daily Maximum</td>
<td>234</td>
<td>3.7 - 98</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BOD₅ concentration (n=56)</th>
<th>Value</th>
<th>Limit (mg/L)</th>
<th>Range (mg/L)</th>
<th>Mean (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Average</td>
<td>30</td>
<td>1.8 - 8</td>
<td></td>
<td>4.8</td>
</tr>
<tr>
<td>Weekly Average</td>
<td>45</td>
<td>2.7 - 9.3</td>
<td></td>
<td>5.6</td>
</tr>
<tr>
<td>Daily Maximum</td>
<td>50</td>
<td>2.7 - 9.3</td>
<td></td>
<td>5.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BOD₅ % removal (n=56)</th>
<th>Value</th>
<th>Limit (%)</th>
<th>Range (%)</th>
<th>Mean (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Average</td>
<td>85</td>
<td>94 - 99</td>
<td></td>
<td>97</td>
</tr>
</tbody>
</table>
6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont’d)

<table>
<thead>
<tr>
<th>TSS mass (n=56)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Limit (lbs./day)</td>
<td>Range (lbs./day)</td>
<td>Mean (lbs./day)</td>
</tr>
<tr>
<td>Monthly Average</td>
<td>140</td>
<td>4 - 104</td>
<td>17</td>
</tr>
<tr>
<td>Weekly Average</td>
<td>210</td>
<td>5.3 - 188</td>
<td>22</td>
</tr>
<tr>
<td>Daily Maximum</td>
<td>234</td>
<td>5.3 - 188</td>
<td>22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TSS concentration (n=56)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Limit (mg/L)</td>
<td>Range (mg/L)</td>
<td>Mean (mg/L)</td>
</tr>
<tr>
<td>Monthly Average</td>
<td>30</td>
<td>2.6 - 21</td>
<td>8</td>
</tr>
<tr>
<td>Weekly Average</td>
<td>45</td>
<td>2.6 - 29</td>
<td>10</td>
</tr>
<tr>
<td>Daily Maximum</td>
<td>50</td>
<td>3.6 - 29</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TSS % removal (n=56)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Limit (%)</td>
<td>Range (%)</td>
<td>Mean (%)</td>
</tr>
<tr>
<td>Monthly Average</td>
<td>85</td>
<td>90 - 99</td>
<td>96</td>
</tr>
</tbody>
</table>

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

A review of the Discharge Monitoring Report (DMR) data for the period November 2014 – June 2019 indicates values have been reported as follows:

<table>
<thead>
<tr>
<th>Settleable solids concentration</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Limit (ml/L)</td>
<td>Range (ml/L)</td>
</tr>
<tr>
<td>Daily Maximum</td>
<td>0.3</td>
<td>&lt;0.1 – 0.1</td>
</tr>
</tbody>
</table>


e. Escherichia coli Bacteria: The previous permitting established seasonal (May 15-September 30 of each year) monthly average and daily maximum *E. coli* bacteria concentration limits of 126 colony forming units (cfu)/100 ml and 949 cfu/100 ml, respectively. The monthly average concentration limit was based on 38 M.R.S. § 465(4) which requires that the *E. coli* bacteria of human and domestic animal origin in Class C waters may not exceed a geometric mean of 126 cfu/100 ml or an instantaneous level of 236 colonies/100 ml. The Department made the determination that end-of-pipe limitations for the instantaneous concentration standard of 236 cfu/100 ml in Maine law 38 M.R.S. §465 (B) would be achieved through available dilution of the effluent with the receiving waters and therefore the limit of 949 cfu/100 ml was carried forward.

On August 2, 2018, 38 M.R.S. §465 (B) was revised to expand the season in which *E. coli* bacteria limitations are applicable. The season was revised from May 15th – September 30 to April 15th – October 31st. This revision is being imposed in the this permit however, the Department reserves the right to impose year-round bacteria limits if deemed necessary to protect the health, safety and welfare of the public.
6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont’d)

A review of the DMR data for the period May 2015 – June 2019 indicates values have been reported as follows:

**E. coli Bacteria**

<table>
<thead>
<tr>
<th>Value</th>
<th>Limit (col/100 ml)</th>
<th>Range (col/100 ml)</th>
<th>Mean (col/100 ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Average</td>
<td>126</td>
<td>10 - 57</td>
<td>20</td>
</tr>
<tr>
<td>Daily Maximum</td>
<td>949</td>
<td>10 - 80</td>
<td>34</td>
</tr>
</tbody>
</table>

f. **Total Residual Chlorine (TRC):** The previous permitting action established a technology-based daily maximum 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 best practicable treatment-based limit. With a modified acute (¼ IQ10) and chronic dilution factors associated with the discharge water quality-based concentration thresholds the discharge may be calculated as follows:

<table>
<thead>
<tr>
<th>Acute (A) Criterion</th>
<th>Chronic (C) Criterion</th>
<th>Modified A &amp; C Dilution Factors</th>
<th>Calculated Acute Threshold</th>
<th>Chronic Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.019 mg/L</td>
<td>0.0011 mg/L</td>
<td>271:1(A)</td>
<td>5 mg/L</td>
<td>12 mg/L</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,099:1 (C)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Department has established a daily maximum best practicable treatment limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. The daily maximum technology-based standard of 1.0 mg/L is more stringent than the modified acute water quality-based threshold calculated above, and is therefore being carried forward in this permitting action.

A review of the Discharge Monitoring Report (DMR) data for the period May 2015 – June 2019 indicates values have been reported as follows:

**Total residual chlorine**

<table>
<thead>
<tr>
<th>Value</th>
<th>Limit (mg/L)</th>
<th>Range (mg/L)</th>
<th>Mean (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Maximum</td>
<td>1.0</td>
<td>0.2 – 0.4</td>
<td>0.3</td>
</tr>
</tbody>
</table>
6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont’d)

g. **pH:** The previous permitting action established, and this permitting action is carrying forward, a technology-based pH limit of 6.0 – 9.0 standard units (SU), which is based on 06-096 CMR 525(3)(III), and a minimum monitoring frequency requirement of once per day.

A review of the Discharge Monitoring Report (DMR) data for the period November 2014 – June 2019 indicates values have been reported as follows:

<table>
<thead>
<tr>
<th>Value</th>
<th>Limit (SU)</th>
<th>Minimum (SU)</th>
<th>Maximum (SU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>6.0 – 9.0</td>
<td>6.0</td>
<td>8.0</td>
</tr>
</tbody>
</table>

h. **Mercury:** Pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001), the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL W002675-5L-C-R by establishing interim monthly average and daily maximum effluent concentration limits of 16 parts per trillion (ppt) and 24 ppt, respectively, and a minimum monitoring frequency requirement of two (2) tests per year for mercury. It is noted the limitations have been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit.

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 data base for the period 1999 through 2019 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows:

<table>
<thead>
<tr>
<th>Mercury</th>
<th>Value</th>
<th>Limit (ng/L)</th>
<th>Range (ng/L)</th>
<th>Mean (ng/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>16</td>
<td>1.00 – 14.6</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>Daily Maximum</td>
<td>24</td>
<td>1.00 – 14.6</td>
<td>2.6</td>
<td></td>
</tr>
</tbody>
</table>

Pursuant to 38 M.R.S. § 420(1-B)(F), the Department issued a minor revision on February 6, 2012, to the September 14, 2009, permit thereby revising the minimum monitoring frequency requirement from twice per year to once per year given the permittee has maintained at least 5 years of mercury testing data. The permittee has been monitoring mercury since September 1999 or 20 years.

Pursuant to 38 M.R.S. § 420(1-B)(F), this permitting action is carrying forward the 1/Year monitoring frequency established in the February 6, 2012, permit modification.
6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont’d)

i. **Total Phosphorus**: Waste Discharge License Conditions, 06-096 CMR 523 (effective January 12, 2001) specifies that water quality-based limits are necessary when it has been determined that a discharge has reasonable potential to cause or contribute to an excursion above any State water quality standard including State narrative criteria. In addition, Chapter 523 specifies that water quality based limits may be based upon criteria derived from a proposed State criterion, or an explicit State policy or regulation interpreting its narrative water quality criteria, supplemented with other relevant information which may include: USEPA's Water Quality Standards Handbook, October 1983, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration, and current USEPA criteria documents; or using USEPA’s Water quality criteria, published under section 304(a) of the CWA supplemented where necessary by other relevant information.

USEPA’s Quality Criteria for Water 1986 (Gold Book) puts forth an in-stream phosphorus concentration recommendation of less than 100 µg/L (0.1 mg/L) in streams or other flowing waters not discharging directly to lakes or impoundments, to prevent nuisance algal growth. The use of the 0.1 mg/L Gold Book goal is consistent with the requirements of 06-096 CMR 523 noted above for use in a RP calculation.

It is noted that the Department has developed a draft rule (Nutrient Criteria for Surface Waters, Chapter 583) that establishes nutrient criteria for surface waters. Methods described in the draft rule are intended to make decisions about attainment or impairment of designated and existing uses of surface waters. The draft rule specifies that nutrient criteria consist of a variety of environmental response indicators (such as percent algal cover, chlorophyll a, dissolved oxygen, etc.) and numeric nutrient indicators (total phosphorus) linked together. The draft rule further specifies that impairment is determined only if one or more of the environmental response indicators is not met. A water body cannot be determined to be impaired solely due to an exceedance of the phosphorus numeric nutrient indicator. The phosphorus numeric nutrient indicators in the draft rule are as follows: Class A: 18 ug/L, Class B: 30 ug/L, Class C: 33 ug/L. These values were derived based on Maine data.

Until Chapter 583, Nutrient Criteria for Surface Waters, is finally promulgated; the Department has chosen to utilize the USEPA national Gold Book goal of 100 ug/L total phosphorus as an interim in-stream threshold (rather than the numeric nutrient indicators in the draft rule) solely for the purposes of the RP calculation. It is the Department’s intent to continue to make determinations of actual attainment or impairment based upon environmental response indicators from specific water bodies. The Department expects the actual numeric nutrient indicators for phosphorus will remain at or near the numbers established in the draft rule, though this is subject to further analysis.
6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont’d)

Based on the above rationale, the Department has chosen to utilize the Gold Book recommendation of 100 ug/L for an initial RP determination. It is the Department’s intent to continue to make determinations of actual attainment or impairment based upon environmental response indicators in the specific receiving water as specified in the Draft Nutrient Criteria. The use of the Gold Book goal of 100 ug/L for use in the RP calculation will enable the Department to establish water quality based limits in a manner that is reasonable and that appropriately establishes the potential for impairment, while providing an opportunity to acquire environmental response indicator data, numeric nutrient indicator data, and facility data as needed to refine the establishment of site-specific water quality-based limits for phosphorus. Therefore, this permit may be reopened during the term of the permit to modify any reasonable potential calculation, phosphorus limits, or monitoring requirements based on site-specific data.

The permittee conducted total phosphorus testing on its effluent during the summer of 2015 and the Department collected ambient concentration levels in the St. John River during the summer on 2014. The values reported were as follows:

**Total phosphorus (effluent DMRs = 3)**

<table>
<thead>
<tr>
<th>Value</th>
<th>Range (mg/L)</th>
<th>Mean (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly average</td>
<td>1.4 – 2.3</td>
<td>1.9</td>
</tr>
<tr>
<td>Daily maximum</td>
<td>1.8 – 2.5</td>
<td>2.2</td>
</tr>
</tbody>
</table>

**Total ambient (effluent DMRs = 3)**

<table>
<thead>
<tr>
<th>Value</th>
<th>Range (mg/L)</th>
<th>Mean (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily maximum</td>
<td>0.032 – 0.063</td>
<td>0.038</td>
</tr>
</tbody>
</table>

\[
Cr = \frac{QeCe + QsCs}{Qr}
\]

- \(Qe\) = effluent flow i.e. facility design flow = 0.56 MGD
- \(Ce\) = effluent pollutant concentration = 2.2 mg/L
- \(Qs\) = 7Q10 flow of receiving water = 615 MGD
- \(Cs\) = upstream concentration = 0.038 mg/L
- \(Qr\) = receiving water flow = 615.56 MGD
- \(Cr\) = receiving water concentration

\[
Cr = \frac{(0.56 \text{ MGD} \times 2.2 \text{ mg/L}) + (615 \text{ MGD} \times 0.038 \text{ mg/L})}{615.56 \text{ MGD}} = 0.040 \text{ mg/L}
\]

Since \(0.040 \text{ mg/L} < 0.0100 \text{ mg/L}\), it is concluded that there is no reasonable potential.

Therefore, no end-of-pipe limitations for total phosphorus are being established in this permitting action. The Department will conduct environmental monitoring in the St. John River during the term of this permit to determine if the discharge is causing or contributing to a violation of Class C standards.
6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont’d)

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

Maine law, 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(2)(A) specifies the dischargers subject to the rule as:

“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.”

06-096 CMR 530(2)(B) categorizes dischargers subject to the toxics rule into one of four levels (Levels I through IV). Level IV dischargers are “those dischargers having a chronic dilution factor of at least 500 to 1 and a permitted flow of less than 1 million gallons per day.” The chronic dilution factor associated with the discharge from the Town is 1,099 to 1, and the permitted flow is 0.560 MGD; therefore, the facility is considered a Level IV facility for purposes of toxics testing. 06-096 CMR 530(D)(1) states that “routine testing requirements for Level IV are waived, except that the Department shall require an individual discharger 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.”

Therefore, this permitting action is carrying forward the toxics testing waiver pursuant to 06-096 CMR 530 and Department best professional judgment.

06-096 CMR 530(2)(D)(4) states, “all dischargers having waived or reduced testing must file statements with the Department on or before December 31 of each year describing the following:

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

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

(c) Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge.”
6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont’d)

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

   (d) Changes in storm water 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 testing if it determines that there have been changes in the character of the discharge or if annual certifications described above are not submitted. This permitting action carries forward Special Condition I, 06-096 CMR 530(2)(D)(4) Statement for Reduced/Waived Toxics Testing, pursuant to 06-096 CMR 530(2)(D)(4).

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

8. PUBLIC COMMENTS

   Public notice of this application was made in the St. John Valley Tribune newspaper on or about July 24, 2019. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Application Processing Procedures for Waste Discharge Licenses, 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

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

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

10. RESPONSE TO COMMENTS

   Reserved until the close of the formal 30-day public comment period.
ATTACHMENT A
CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES#____________ Facility Name__________________________

Since the effective date of your permit, have there been; 

<table>
<thead>
<tr>
<th></th>
<th>NO</th>
<th>YES</th>
<th>Describe in comments section</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>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?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2</td>
<td>Changes in the condition or operations of the facility that may increase the toxicity of the discharge?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3</td>
<td>Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4</td>
<td>Increases in the type or volume of hauled wastes accepted by the facility?</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Test Conducted</th>
<th>1st Quarter</th>
<th>2nd Quarter</th>
<th>3rd Quarter</th>
<th>4th Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>WET Testing</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Priority Pollutant Testing</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Analytical Chemistry</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other toxic parameters 1</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

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.