

PAUL R. LEPAGE -GOVERNOR -

STATE OF MAINE -DEPARTMENT OF -ENVIRONMENTAL PROTECTION -



PAUL MERCER

November 10, 2016

Mr. Mark Soucy Fort Kent Wastewater 416 West Main Street Fort Kent, ME. 04743 Mark.soucy@fortkent.org

Sent via electronic mail Delivery confirmation requested

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0102369 Maine Waste Discharge License (WDL) Application #W000692-6C-J-R Proposed Draft MEPDES Permit - Renewal

Dear Mr. Soucy:

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

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

<u>The comment period begins on November 10, 2016 and ends on December 12, 2016.</u> All comments on the proposed draft permit must be received in the Department of Environmental Protection office on or before the close of business <u>Monday</u>, <u>December 12, 2016</u>. Failure to submit comments in a timely fashion will result in the proposed draft/license permit document being issued as drafted.

AUGUSTA 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017 (207) 287-7688 FAX: (207) 287-7826

BANGOR 106 HOGAN ROAD, SUITE 6 BANGOR, MAINE 04401 (207) 941-4570 FAX: (207) 941-4584 PORTLAND 312 CANCO ROAD PORTLAND, MAINE 04103 (207) 822-6300 FAX: (207) 822-6303 PRESQUE ISLE 1235 CENTRAL DRIVE, SKYWAY PARK PRESQUE ISLE, MAINE 04769 (207) 764-0477 FAX: (207) 760-3143 Town of Fort Kent November 10, 2016 Page 2 of 2

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 <u>Cindy.L.Dionne@maine.gov</u>

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

Sincerely,

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

Enc.

ec: Barry Mower, DEP Pamela Parker, DEP Sean Bernard, DEP Lori Mitchell, DEP Fred Corey, Aroostook Band of Micmac Indians Sean Mahoney, CLF Environmental Review, DMR David Webster, USEPA David Pincumbe, USEPA Olga Vergara, USEPA Marelyn Vega, USEPA Richard Carvalho, USEPA Environmental Review, IFW Sharri Venno, Houlton Band of Maliseet Indians



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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF FORT KENT FORT KENT, AROOSTOOK COUNTY, MAINE PUBLICLY OWNED TREATMENT WORKS ME0102369 W000692-6C-J-R APPROVAL

MAINE POLLUTANT DISCHARGE
 ELIMINATION SYSTEM PERMIT
 AND
 WASTE DISCHARGE LICENSE
 RENEWAL

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

APPLICATION SUMMARY

On August 12, 2016, the Department accepted as complete for processing an application from Fort Kent for renewal of combination Waste Discharge License (WDL) # W000692-6C-H-R / Maine Pollutant Discharge Elimination System (MEPDES) permit # ME0102369, which was issued by the Department on December 12, 2011 for a five-year term. The December 12, 2011 permit authorized the monthly average discharge of 0.43 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to the St. John River, Class B, in Fort Kent, Maine.

PERMIT SUMMARY

a. Terms and conditions

This permitting action is <u>different from</u> the December 12, 2011 permit in that it:

- 1. Eliminates the waiver for percent removal requirements for biochemical oxygen demand (BOD₅) and total suspended solids (TSS) when influent strength is less than 200 milligrams per liter (mg/L);
- 2. Establishes a Footnote associated with the total residual chlorine limit and monitoring requirements;
- 3. Reduces the monitoring frequency from 1/Day to 3/Week for pH; and
- 4. Incorporates an Industrial Waste Survey (IWS) into Special Condition F. *Limitations for Industrial Users*.

CONCLUSIONS

BASED on the findings in the attached and incorporated Fact Sheet dated November 10, 2016, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

- 1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
- 2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with State law.
- 3. The provisions of the State's antidegradation policy, *Classification of Maine waters*, 38 M.R.S. § 464(4)(F), will be met, in that:
 - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
 - (c) Where the standards of classification of the receiving waterbody are not met, the discharge will not cause or contribute to the failure of the waterbody to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving waterbody exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing water quality of any waterbody, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
- 4. The discharges will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of licenses*, 38 M.R.S. § 414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the application of the TOWN OF FORT KENT to discharge a monthly average of 0.43 million gallons per day of secondary treated sanitary wastewater from the permittee's facility to the St. John River, Class B, in Fort Kent, Maine, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

- 1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable to All Permits," revised July 1, 2002, copy attached.
- 2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
- 3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. *Maine Administrative Procedure Act*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (amended October 19, 2015).

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS _____ DAY OF _____2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:____

PAUL MERCER, Commissioner

| Date of initial receipt of application | August 12, 2016 |
|--|-----------------|
| Date of application acceptance | August 12, 2016 |

Date filed with Board of Environmental Protection

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

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge secondary treated sanitary wastewater from **Outfall #001A** to the St. John River in Fort Kent. Such discharges are limited and must be monitored by the permittee as specified below ⁽¹⁾:

| | <u>Monthly</u> <u>Average</u> | <u>Weekly</u> Average | <u>Daily</u> <u>Maximum</u> | <u>Monthly</u> <u>Average</u> | <u>Weekly</u> <u>Average</u> | <u>Daily</u> Maximum | Measurement <u>Frequency</u> | Sample Type |
|---|----------------------------------|--------------------------|--------------------------------|----------------------------------|---------------------------------|-------------------------|---------------------------------|---------------------------|
| Flow [50050] | 0.43 MGD [03] | | Report MGD [03] | | | | Continuous [99/99] | Recorder [RC] |
| BOD ₅ [00310] | 250 lbs./day [26] | | 469 lbs./day [26] | 70 mg/L [19] | | 131 mg/L [19] | 1/Week [01/07] | 24-Hour Composite [24] |
| BOD₅ Percent Removal ⁽²⁾ [81010] | | | | 65% [23] | | | 1/Month [01/30] | Calculate [CA] |
| TSS [00530] | 250 lbs./day [26] | | 469 lbs./day [26] | 70 mg/L [19] | | 131 mg/L [19] | 1/Week [01/07] | 24-Hour Composite [24] |
| TSS Percent Removal ⁽²⁾ [81011] | | | | 85% [23] | | | 1/Month [01/30] | Calculate [CA] |
| Settleable Solids [00545] | | | | | | 0.3 ml/L [25] | 1/Week [01/07] | Grab [GR] |
| <i>E. coli</i> Bacteria ⁽³⁾ [31633] (May 15 – Sept. 30) | | | | 64/100 ml ⁽⁴⁾ [13] | | 427/100 ml [13] | 1/Week [01/07] | Grab [GR] |
| Total Residual Chlorine ⁽⁵⁾ [50060] | | | | | | 1.0 mg/L [19] | 1/Day [01/01] | Grab [GR] |
| pH [00400] | | | | | | 6.0 – 9.0 SU [12] | 3/Week [03/07] | Grab [GR] |
| Mercury (Total) ⁽⁶⁾ [71900] | | | | 22.5 ng/L [3M] | | 33.8 ng/L [3M] | 1/Year [01/YR] | Grab [GR] |

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

Footnotes: See Pages 6-7 of this permit for applicable footnotes.

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

2. The permittee must monitor the lagoon under-drains, at the common under-drain collection manhole, designated <u>**Outfall #002A**</u> in this permit for data management purposes, as specified below.

| Effluent Characteristic | Monitoring Requirements | | |
|--|-------------------------|-----------------------|---------------|
| Parameter | Daily | Measurement | Sample |
| rarameter | Maximum | Frequency | Туре |
| Flow Rate ⁽⁷⁾ | Report GPM | 3/year ⁽⁸⁾ | Estimate |
| [00058] | [78] | [03/YR] | [<i>ES</i>] |
| Conductivity Report µmhos/cm | | 3/year ⁽⁸⁾ | Grab |
| [00094] | [11] | [03/YR] | [GR] |
| Temperature °C | Report °C | 3/year ⁽⁸⁾ | Grab |
| [00010] | [04] | [03/YR] | [GR] |
| <i>E. coli</i> Bacteria ⁽⁴⁾ Report #/100 ml | | 3/year ⁽⁸⁾ | Grab |
| [31633] | [13] | [03/YR] | [GR] |

Footnotes: See Pages 6-7 of this permit for applicable footnotes.

Footnotes

- Sampling The permittee must conduct all effluent sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. Samples that are analyzed by laboratories operated by waste discharge facilities licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended April 1, 2010). 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 treatment facility must maintain a minimum of 65 percent removal of BOD and a minimum of 85 percent removal for TSS for all flows receiving secondary treatment. Compliance with the limitation is based on a twelve-month rolling average. Calendar monthly average percent removal values must be calculated based on influent and effluent concentrations. The twelve-month rolling average calculation is based on the most recent twelve-month period.

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

Footnotes

- **3.** *E. coli* bacteria *E. coli* bacteria limits and monitoring requirements are seasonal and apply between May 15th and September 30th of each year. In accordance with 38 M.R.S. § 414-A(5), the Department may, at any time and with notice to the permittee, modify this permit to establish bacteria limitations on a year-round basis to protect the health and welfare of the public.
- 4. Bacteria Reporting The monthly average *E. coli* bacteria limitation is a geometric mean limitation and sample results must be reported as such.
- **5.** Total residual chlorine (TRC) Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine based compounds are being used to disinfect the discharge. The permittee must utilize approved test methods that are capable of bracketing the limitations in this permit.
- 6. Mercury The permittee must conduct all mercury monitoring required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the U.S. Environmental Protection Agency's (USEPA) "clean sampling techniques" found in USEPA Method 1669, *Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels*. All mercury analysis must be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry*. See Attachment A of this permit for a Department report form for mercury test results. Compliance with the monthly average limitation established in Special Condition A of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Method 1669 and analysis Method 1631E on file with the Department for this facility.
- 7. Lagoon Under-drain Flow Monitoring In lieu of a flow measuring device for the under-drain flow, the under-drain flow rate may be estimated based on a methodology approved by the Department.
- **8.** Lagoon Under-drain Monitoring Period Monitoring must be conducted during the months of May, July and October of each year.

B. NARRATIVE EFFLUENT LIMITATIONS

- 1. The permittee must not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the uses designated for the classification of the receiving waters.
- 2. The permittee must not discharge effluent that contains materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the uses designated for the classification of the receiving waters.
- 3. The permittee must not discharge effluent that causes visible discoloration or turbidity in the receiving waters or otherwise impairs the uses designated for the classification of the receiving waters.
- 4. The permittee must not discharge effluent that lowers the quality of any classified body of water below such classification, or lowers the existing quality of any body of water if the existing quality is higher than the classification.

C. TREATMENT PLANT OPERATOR

The person who has management responsibility over the treatment facility must hold a Maine **Grade III**, Biological Treatment certificate (or higher) or must be a Maine Registered Professional Engineer pursuant to *Sewage Treatment Operators*, 32 M.R.S. § 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 CMR 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

D. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on August 12, 2016, 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of wastewater from any other point source are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit.

E. LIMITATIONS FOR INDUSTRIAL USERS

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

F. NOTIFICATION REQUIREMENT

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

- 1. Any introduction of pollutants into the wastewater collection and treatment system from an indirect discharger in a primary industrial category discharging process wastewater; and
- 2. Any substantial change (increase or decrease) in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants into the system at the time of permit issuance.
- 3. For the purposes of this section, adequate notice must include information on:
 - (a) The quality and quantity of wastewater introduced to the wastewater collection and treatment system; and
 - (b) Any anticipated impact of the change in the quantity or quality of the wastewater to be discharged from the treatment system.

G. PUMP STATION EMERGENCY BYPASSES

Discharges from emergency bypass structures in pump stations are not authorized by this permit. The permittee shall make provisions to monitor the pump stations identified in Table 1 below via an electronic flow estimation system to record frequency, duration and estimation of flow discharged.

| | amp station Emergency Dypuss i | | |
|--------|--------------------------------|-----------------|----------------------------------|
| Number | Name | Location | Receiving Water and Class |
| 002 | R.E. Wright Pump Station | Riverside Park | St. John River Class B |
| 003 | Armory Pump Station | Armory Road | Fish River Class B |
| 003A | Quigley's Pump Station | Blockhouse Road | Fish River, Class B |
| 004 | Madore Brook Pump Station | Market Street | Fish River Class B |
| 005 | Kent Pump Station | Industrial Park | St. John River Class B |
| 007 | Main Pump Station | Market Street | Fish River Class B |

 Table 1. Pump Station Emergency Bypass Points.

Discharges from the pump station shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

H. OPERATION & MAINTENANCE (O&M) PLAN

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

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

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

I. WET WEATHER FLOW MANAGEMENT PLAN

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

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

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

J. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

During the effective period of this permit, the permittee is authorized to <u>receive</u> and <u>introduce</u> **a daily maximum of 2,150 gallons per day** into the treatment process, subject to the following terms and conditions.

- 1. "Transported wastes" means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.
- 2. The character and handling of all transported wastes received must be consistent with the information and management plans provided in application materials submitted to the Department.
- 3. At no time may the addition of transported wastes cause or contribute to effluent quality violations. Transported wastes may not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility.

J. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY (cont'd)

Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. Odors and traffic from the handling of transported wastes may not result in adverse impacts to the surrounding community. If any adverse effects exist, the receipt or introduction of transported wastes into the treatment process or solids handling stream must be suspended until there is no further risk of adverse effects.

- 4. The permittee must maintain records for each load of transported wastes in a daily log which must include at a minimum the following.
 - (a) The date;
 - (b) The volume of transported wastes received;
 - (c) The source of the transported wastes;
 - (d) The person transporting the transported wastes;
 - (e) The results of inspections or testing conducted;
 - (f) The volumes of transported wastes added to each treatment stream; and

(g) The information in (a) through (d) for any transported wastes refused for acceptance.

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

- 5. The addition of transported wastes into the treatment process or solids handling stream must not cause the treatment facility's design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of transported wastes into the treatment process or solids handling stream must be reduced or terminated in order to eliminate the overload condition.
- 6. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added must not be recorded as transported wastes but should be reported in the treatment facility's influent flow.
- During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current Wet Weather Flow Management Plan approved by the Department that provides for full treatment of transported wastes without adverse impacts.
- 8. In consultation with the Department, chemical analysis is required prior to receiving transported wastes from new sources that are not of the same nature as wastes previously received. The analysis must be specific to the type of source and designed to identify concentrations of pollutants that may pass through, upset or otherwise interfere with the facility's operation.

J. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY (cont'd)

- 9. Access to transported waste receiving facilities may be permitted only during the times specified in the application materials and under the control and supervision of the person responsible for the wastewater treatment facility or his/her designated representative.
- 10. The authorization is subject to annual review and, with notice to the permittee and other interested parties of record, may be suspended or reduced by the Department as necessary to ensure full compliance with Chapter 555 of the Department's rules and the terms and conditions of this permit.

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

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

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

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

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

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

L. MONITORING AND REPORTING

Monitoring results obtained during the previous month must be summarized for each month and reported on separate DMR forms provided by the Department and **postmarked on or before the thirteenth** (13th) **day of the month or hand-delivered to the Department's Regional Office such that the DMRs are received by the Department on or before the fifteenth** (15th) **day of the month** following the completed reporting period. A signed copy of the DMR and all other reports required herein must be submitted to the Departmentassigned inspector (unless otherwise specified by the Department) at the following address:

> Department of Environmental Protection Northern Maine Regional Office Bureau of Water Quality Division of Water Quality Management 1235 Central Park Drive – Skyway Park Presque Isle, Maine 04769

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

M. REOPENING OF PERMIT FOR MODIFICATIONS

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

N. SEVERABILITY

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

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A. GENERAL PROVISIONS

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

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

- (a) They are not
 - (i) Designated as toxic or hazardous under the provisions of Sections 307 and 311, respectively, of the Federal Water Pollution Control Act; Title 38, Section 420, Maine Revised Statutes; or other applicable State Law; or
 - (ii) Known to be hazardous or toxic by the licensee.
- (b) The discharge of such materials will not violate applicable water quality standards.

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

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

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

- (b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.
- (c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.
- (d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.
- (e) The permittee shall install flow measuring facilities of a design approved by the Department.
- (f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.

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

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

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

5. Bypasses.

- (a) Definitions.
 - (i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
 - (ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.
- (c) Notice.
 - (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

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

(d) Prohibition of bypass.

- (i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
 - (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (C) The permittee submitted notices as required under paragraph (c) of this section.
- (ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (d)(i) of this section.

6. Upsets.

- (a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (ii) The permitted facility was at the time being properly operated; and
 - (iii) The permittee submitted notice of the upset as required in paragraph D(1)(f) , below. (24 hour notice).
 - (iv) The permittee complied with any remedial measures required under paragraph B(4).
- (d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (b) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.
- (c) Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed;
 - (iv) The individual(s) who performed the analyses;
 - (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.
- (d) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit.
- (e) State law provides that any person who tampers with or renders inaccurate any monitoring devices or method required by any provision of law, or any order, rule license, permit approval or decision is subject to the penalties set forth in 38 MRSA, §349.

D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

- (i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
- (ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).
- (iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
- (b) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Transfers. This permit is not transferable to any person except upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.
- (d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - (i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.
 - (ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.
 - (iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.
- (e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- (f) Twenty-four hour reporting.
 - (i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance

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

- (ii) The following shall be included as information which must be reported within 24 hours under this paragraph.
 - (A) Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - (B) Any upset which exceeds any effluent limitation in the permit.
 - (C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.
- (iii) The Department may waive the written report on a case-by-case basis for reports under paragraph (f)(ii) of this section if the oral report has been received within 24 hours.
- (g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this section.
- (h) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

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

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

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

- (a) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (i) One hundred micrograms per liter (100 ug/l);
 - (ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
 - (iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

- (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following ``notification levels'':
 - (i) Five hundred micrograms per liter (500 ug/l);
 - (ii) One milligram per liter (1 mg/l) for antimony;
 - (iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
 - (iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

5. Publicly owned treatment works.

- (a) All POTWs must provide adequate notice to the Department of the following:
 - (i) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA or Chapter 528 if it were directly discharging those pollutants.
 - (ii) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (iii) For purposes of this paragraph, adequate notice shall include information on (A) the quality and quantity of effluent introduced into the POTW, and (B) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (b) When the effluent discharged by a POTW for a period of three consecutive months exceeds 80 percent of the permitted flow, the permittee shall submit to the Department a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

E. OTHER REQUIREMENTS

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

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

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

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.

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

(a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or

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

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

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

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

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

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

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

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

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

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

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

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

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

ATTACHMENT A

Maine Department of Environmental Protection Effluent Mercury Test Report

| Name of Facility: | Federal Permit # ME | | | |
|--|---|--|--|--|
| Purpose of this test: Initial limit determination Compliance monitoring f Supplemental or extra test SAMPLE COLLECT | or: year calendar quarter | | | |
| Sampling Date: | Sampling time: AM/PM | | | |
| mm dd yy | | | | |
| Sampling Location: | | | | |
| Weather Conditions: | | | | |
| Please describe any unusual conditions with the influent or at the facility during or preceding the time of sample collection: | | | | |
| Optional test - not required but recommended whe evaluation of mercury results: | re possible to allow for the most meaningful | | | |
| Suspended Solidsmg/L Sample | e type: Grab (recommended) or Composite | | | |
| ANALYTICAL RESULT F | OR EFFLUENT MERCURY | | | |
| Name of Laboratory: | | | | |
| Date of analysis: | Result: ng/L (PPT) | | | |
| Please Enter Effluent Limits forEffluent Limits:Average = ng/L | your facility Maximum = ng/L | | | |
| Please attach any remarks or comments from the la their interpretation. If duplicate samples were take | aboratory that may have a bearing on the results or | | | |
| CERTIF | ICATION | | | |
| I certify that to the best of my knowledge the fore conditions at the time of sample collection. The sa using EPA Methods 1669 (clean sampling) and 16 instructions from the DEP. | mple for mercury was collected and analyzed | | | |
| Ву: | Date: | | | |
| Title: | | | | |
| | | | | |

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT AND WASTE DISCHARGE LICENSE

PROPOSED DRAFT FACT SHEET

Date: November 10, 2016

MEPDES PERMIT:ME0102369WASTE DISCHARGE LICENSE:W000692-6C-J-R

NAME AND ADDRESS OF APPLICANT:

TOWN OF FORT KENT 416 WEST MAIN STREET FORT KENT, ME 04743

COUNTY:

AROOSTOOK

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

FORT KENT WASTEWATER 542 WEST MAIN STREET FORT KENT, MAINE 04743

RECEIVING WATER / CLASSIFICATION: ST. JOHN RIVER/CLASS B

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

MR. MARK SOUCY (207) 834-3463 Mark.soucy@fortkent.org

1. APPLICATION SUMMARY

 <u>Application:</u> On August12, 2016, the Department of Environmental Protection (Department) accepted as complete for processing an application from the Town of Fort Kent (Fort Kent/permittee) for renewal of combination Waste Discharge License (WDL) # W000692-6C-H-R / Maine Pollutant Discharge Elimination System (MEPDES) permit # ME0102369, which was issued by the Department on December 12, 2011 for a five-year term. The December 12, 2011 permit authorized the monthly average discharge of 0.43 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to the St. John River, Class B, in Fort Kent, Maine.

2. PERMIT SUMMARY

a. <u>Terms and conditions</u>

This permitting action is <u>different from</u> the December 12, 2011 permit in that it:

- 1. Eliminates the waiver for percent removal requirements for biochemical oxygen demand (BOD₅) and total suspended solids (TSS) when influent strength is less than 200 milligrams per liter (mg/L);
- 2. Establishes a Footnote associated with the total residual chlorine limit and monitoring requirements;
- 3. Reduces the monitoring frequency from 1/Day to 3/Week for pH; and
- 4. Incorporates an Industrial Waste Survey (IWS) into Special Condition F. *Limitations for Industrial Users*.
- b. <u>History:</u> This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the permittee's facility.

May 23, 2000 – Pursuant to Maine law, 38 M.R.S.A. §420 and §413 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W000692-47-D-R by establishing interim monthly average and daily maximum effluent concentration limits of 22.5 parts per trillion (ppt) and 33.8 ppt, respectively, and a minimum monitoring frequency requirement of 4 tests per year for mercury.

March 20, 2000 – The USEPA issued a renewal of National Pollutant Discharge Elimination System (NPDES) permit #ME0102369 to the Town for a five-year term, which superseded all previous NPDES permits issued to the Town for this facility by the USEPA.

2. PERMIT SUMMARY (cont'd)

January 12, 2001 – The State of Maine received authorization from the USEPA to administer the NPDES permitting program. From that date forward, the permitting program has been referred to as the MEPDES permit program and permit #ME0102369 (same as the NPDES permit number) has been used as the primary reference number for the District's facility.

December 28, 2001 – The Department issued WDL #W000692-5K-F-R / MEPDES permit #ME0102369 to the Town for a five year term. The 12/28/01 permit superseded WDL #W000692-47-D-R issued on December 2, 1997, and WDL #W000692-45-A-R issued on September 26, 1985 (earliest Order on file with the Department), as well as the 3/20/00 NPDES permit issued by the USEPA.

December 18, 2006 – The Department issued combination MEPDES permit #ME0102369/WDL #W000692-5K-G-R for a five-year term.

December 12, 2011 – The Department issued MEPDES permit #ME0102369 / WDL #W000692-6C-H-R for a five year term.

August 12, 2016 – The permittee submitted a timely and complete General Application to the Department for renewal of the December 12, 2011 permit (including subsequent minor permit revisions and permit modifications). The application was accepted for processing on the same day and was assigned WDL #W000692-6C-J-R / MEPDES #ME0102369.

c. <u>Source Description</u>: The Town's wastewater treatment facility receives residential sanitary waste waters, commercial waste waters, and industrial waste waters from customers within the Town of Fort Kent. The Town reported in its 8/15/06 application that a potato and whole vegetable processor, contributes (as an average) 35,000 gallons per day of potato processing waste waters at an average BOD strength of 1,800 mg/L. The processing facility contributes more than 10% of the total organic loading to the treatment plant. Although the facility has been off-line for approximately six years, the Town reported that the facility has periodically expressed interest in resuming processing of potatoes at the levels reported in the 8/15/06 application.

The permittee submitted an updated Septage Management Plan as part of their August 12, 2016 renewal application, which has been reviewed and approved by the Department. The septage plan is consistent with the requirements of Department rule Chapter 555, *Regulations Relating To The Addition of Transported Wastes Into Waste Water Treatment Facilities.* This permitting action is carrying forward authorization for the facility to receive and introduce up to 2,150 gallons per day of septage into the treatment process. Also see Special Condition I, *Disposal of Transported Waste In Waste Water Treatment Facility* of this permit.

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

2. PERMIT SUMMARY (cont'd)

d. <u>Wastewater Treatment:</u> The Town provides a secondary level of wastewater treatment at the wastewater treatment facility via a three-celled facultative lagoon system (total capacity of 54 million gallons) equipped with diffused aeration. Treated effluent is seasonally disinfected with chlorine for compliance with the *E. coli* bacteria limits established for Class B waters and is conveyed to the St. John River at Fort Kent via a twelve-inch diameter outfall pipe designated Outfall #001A in this permitting action. The pipe is submerged to a depth of approximately three feet at mean low water conditions and is fitted with a two-port diffuser intended to enhance mixing of the effluent with the receiving waters. Waste sludge is conveyed to two 150-foot by 45-foot reed beds for treatment and disposal. See **Attachment B** of this Fact Sheet for a schematic of the treatment facility.

3. CONDITIONS OF PERMIT

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

4. RECEIVING WATER QUALITY STANDARDS

Classification of major river basins, 38 M.R.S. § 467(15)(A)(3) classifies the St. John River, main stem at the point of discharge (From the international bridge in Fort Kent to the international bridge in Madawaska, those waters lying within the State, including all impoundments) as Class B water. *Standards for classification of fresh surface waters*, 38 M.R.S. § 465(3) describes the standards for Class B waters.

5. RECEIVING WATER QUALITY CONDITIONS

<u>The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report</u>, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the St. John River where the discharge enters as "main stem, above Madawaska" (Assessment Unit ID ME0101000112_115R), and, "Category 2: Rivers and Streams Attaining Some Designated Uses – Insufficient Information for Other Uses."

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

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 4A (Total Maximum Daily Load (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 fish from any given waters 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. § 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 that the discharge from the permittee, as conditioned, causes or contributes to non-attainment of applicable Class B water quality standards.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. <u>Applicability of National Effluent Guidelines:</u> Title 40, Part 407, *Canned and Preserved Fruits and Vegetables Processing Point Source Category*, Subpart D, *Frozen Potato Products Subcategory*, of the Code of Federal Regulations (CFR) applies to the discharge from the permittee. Effluent limitation guidelines for BOD₅, TSS, and pH, which represent the degree of effluent reduction attainable by the application of the Best Practicable Control Technology Currently Available (BPT), are specified at 40 CFR Part 407.42.
- <u>Flow:</u> Previous permitting action established a monthly average discharge flow limitation of 0.43 MGD, based on the monthly average dry weather design capacity of the facility, and a daily maximum discharge flow reporting requirement to assist in compliance evaluations. This permitting action is carrying forward both the limit and reporting requirement.

The Department reviewed 56 Discharge Monitoring Reports (DMRs) that were submitted for the period of January 2012 through September 2016. A review of data indicates the following:

| Value | Limit (MGD) | Range (MGD) | Mean (MGD) | |
|-----------------|-------------|-------------|------------|--|
| Monthly Average | 0.43 | 0.18 - 0.59 | 0.26 | |
| Daily Maximum | Report | 0.23 - 0.94 | 0.44 | |

Flow

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

c. <u>Dilution Factors</u>: The Department established applicable dilution factors for the discharge in accordance with freshwater protocols established in *Surface Water Toxics Control Program*, 06-096 CMR 530 (last amended March 21, 2012). The previous permitting action established dilution factors based on the 0.43 MGD flow limit to ensure that water quality-based limits are protective of receiving water quality on a year-round basis.

| Acute $\frac{1}{4}$ 1Q10 = 137 cfs | $\Rightarrow (137 \text{ cfs})(0.6464) + 0.43 \text{ MGD} = 207:1$ 0.43 MGD |
|------------------------------------|--|
| Acute: 1Q10 = 547 cfs | $\Rightarrow (547 \text{ cfs})(0.6464) + 0.43 \text{ MGD} = 823:1$ 0.43 MGD |
| Chronic: 7Q10 = 564 cfs | $\Rightarrow (564 \text{ cfs})(0.6464) + 0.43 \text{ MGD} = 849:1$ 0.43 MGD |
| Harmonic Mean = 2,827 cfs | $\Rightarrow (2,827 \text{ cfs})(0.6464) + 0.43 \text{ MGD} = 4,251:1$ 0.43 MGD |

The DEA has determined that mixing of the effluent with the receiving water is complete and rapid at this time. Therefore, this permitting action is utilizing 100% of the 1Q10 in acute evaluations as required by Department rule Chapter 530 Section 4.B.1, which states,

Analyses using numerical acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone and to ensure a zone of passage of at least 3/4 of the cross-sectional area of any stream as required by Chapter 581. Where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design flow, up to and including all of it, as long as the required zone of passage is maintained.

c. <u>BOD₅ and TSS</u>: Previous permitting action established, and this permitting action is carrying forward, monthly average and daily maximum technology-based mass limits of 250 pounds per day (lbs./day) and 469 lbs./day, respectively, and monthly average and daily maximum concentration limits of 70 mg/L and 131 mg/L, respectively, for BOD₅ and TSS. The previous permit specified that the mass limits were based on the sum of allowable loadings for the municipal flow of approximately 0.38 MGD and the industrial flow of approximately 0.05 MGD. Technology-based concentration limitations were established by back-calculating from the mass limits.

In cases where the flow or loading of BOD₅ and TSS introduced by an industrial category exceeds 10 percent of the design flow or loading of a publicly owned treatment works (POTW), the secondary treatment requirements (30-day average of 30 mg/L and 7-day average of 45 mg/L) for these pollutants, as defined in Department rule Chapter 525(3)(III)(a), may be adjusted upward provided they meet the criteria outlined in Department rule Chapter 525(3)(IIV)(b). The rule states that the monthly average and weekly average limits may be adjusted upwards provided the permitted discharge of BOD₅ and TSS, attributable to the industrial category, would not be greater than that which would be permitted under Section 306 of the Clean Water Act (CWA) if such industrial category were to discharge directly into navigable waters. Based on information provided by the applicant, the Department has determined that the industrial loading from the food processing facility would exceed 10% of the design loading of the treatment facility; thus, the facility qualifies for the upward adjustment of BOD₅ and TSS beyond those established for secondary treated sanitary wastewater.

The USEPA has not established numeric pretreatment standards for Frozen Potato Products Subcategory. Therefore, the Department is applying the Best Practicable Control Technology Currently Available (BPT)-based effluent guidelines for potato processing promulgated at 40 CFR Part 407.42 to the discharge from Fort Kent based on best professional judgment. The effluent guidelines are expressed in terms of pounds of pollutant per 1,000 pounds of raw material (lbs./lbs. production). The guidelines for BOD₅ and TSS are 2.80 lbs./per 1,000 lbs. raw material (daily maximum) and .40 lbs./1,000 lbs. (monthly average).

The BPT-based effluent guidelines for secondary treated sanitary wastewater are defined in Department rule 06-096 CMR Chapter 525(3)(III) and are expressed in terms of 30-day average and 7-day average concentration limitations. This permitting action is utilizing the monthly average BOD₅ and TSS limit of 30 mg/L and a daily maximum limit of 50 mg/L, which is based on a Department best professional judgment (BPJ) of best practicable treatment (BPT) for secondary treated sanitary wastewater, to calculate the sanitary loading portion of the final effluent limitations.

Department rule Chapter 525 (3)(III) provides secondary treatment effluent standards for BOD_5 and TSS in terms of monthly average and weekly average concentration limitations. The national effluent guideline limitations regulate the discharge of BOD_5 and TSS in terms of mass and do not include weekly average standards. The Department is making a best professional judgment determination that regulating the discharge of BOD_5 and TSS in terms of weekly average limitations is not appropriate for this facility given the significant industrial influent loadings.

The previous permitting action calculated effluent limit thresholds for BOD_5 and TSS based on production figures provided to the Department via personal communication with the Town's Wastewater Department Head on November 7, 2006. An average production figure of 180,000 lbs./day used to calculate the industrial portion of applicable BOD_5 and TSS thresholds and an average of 0.395 MGD (design flow of 0.43 MGD minus industrial flow of 0.035 MGD) was used to calculate the sanitary portion of applicable BOD_5 and TSS thresholds.

The food processing portions of the BOD₅ and TSS mass thresholds were derived as follows:

Monthly Average Mass Portion: (180,000 lbs./day)(1.40 lbs./1,000 lbs.) = 252 lbs./dayDaily Maximum Mass Portion: (180,000 lbs./day)(2.80 lbs./1,000 lbs.) = 504 lbs./day

The sanitary portions of the BOD₅ and TSS mass thresholds were derived as follows:

Monthly Average Mass Portion: (30 mg/L)(8.34 lbs./gallon)(0.395 MGD) = 99 lbs./day Daily Maximum Mass Portion: (50 mg/L)(8.34 lbs./gallon)(0.395 MGD) = 165 lbs./day

Monthly average and daily maximum end-of-pipe effluent BOD₅ and TSS thresholds are the sum of the allowable food processing and sanitary portions as calculated above.

Monthly Average BOD₅ and TSS Threshold: 252 lbs./day + 99 lbs./day = 351 lbs./dayDaily Maximum BOD₅ and TSS Threshold: 504 lbs./day + 165 lbs./day = 669 lbs./day

The monthly average and daily maximum technology-based effluent limitations of 250 lbs./day and 469 lbs./day, respectively, for BOD₅ and TSS established in the previous permitting action are more stringent than the thresholds calculated above and are therefore being carried forward in this permitting action consistent with the intent of the anti-backsliding provisions of the Clean Water Act and Department rule Chapter 523.

Department rule Chapter 523, *Waste Discharge License Conditions*, Section 6, *Calculating NPDES permit conditions*, sub-section f(2) states that "…*pollutants limited in terms of mass additionally may be limited in terms of other units of measurement and the permit shall require the permittee to comply with both limitations*." To ensure best practicable treatment is being applied to the discharge from the Town at all times, the Department has made a best professional judgment determination that carrying forward monthly average and daily maximum technology-based concentrations limits for BOD₅ and TSS is appropriate. The concentration limits were derived by back-calculating values from the applicable mass limits calculated above and the monthly average flow limit established in Section 6(b) of this Fact Sheet. The limits were derived as follows:

| Monthly Average: | 250 lbs/day | _= 70 mg/L |
|------------------|---|-------------------|
| | (8.34 lbs./gallon)(0.43 MG | D) |
| Daily Maximum: | 469 lbs/day (8.34 lbs./gallon)(0.43 MG | _= 131 mg/L D) |

A summary of BOD₅ and TSSdata as reported on the DMRs submitted to the Department for the period of January 2012 – September 2016 is as follows:

BOD₅ Mass

| Value | Limit (lbs./day) | Range (lbs./day) | Average (lbs./day) |
|-----------------|------------------|------------------|--------------------|
| Monthly Average | 250 | 5-89 | 33 |
| Daily Maximum | 469 | 9-141 | 54 |

BOD₅ Concentration

| Value | Limit (mg/L) | Range (mg/L) | Average (mg/L) |
|-----------------|--------------|--------------|----------------|
| Monthly Average | 70 | 3 - 30 | 14 |
| Daily Maximum | 131 | 4-62 | 20 |

TSS Mass

| Value | Limit (lbs./day) | Range (lbs./day) | Average (lbs./day) |
|-----------------|------------------|------------------|--------------------|
| Monthly Average | 250 | 5-72 | 21 |
| Daily Maximum | 469 | 6-111 | 36 |

TSS Concentration

| Value | Limit (mg/L) | Range (mg/L) | Average (mg/L) |
|-----------------|--------------|--------------|----------------|
| Monthly Average | 70 | 3-32 | 9 |
| Daily Maximum | 131 | 4-52 | 14 |

This permitting action is maintaining the current monitoring frequency of 1/Week for both BOD₅ and TSS as the monitoring requirement was reduced in the previous permit.

Department rule Chapter 525(3)(III)(b)(3) specifies a requirement to achieve a minimum 30-day average removal of 85 percent for BOD₅ and TSS for secondary treated wastewaters. The previous permitting action established a best professional judgement that the facility qualified for treatment equivalent to secondary pursuant to Chapter 525 (2)(II)(g) for the parameter BOD₅ percent removal and revised the 30-day average percent removal requirement from 77% to 65% for BOD₅.

| Value | Limit (lbs./day) | Range (%) | Average (%) |
|---------------|------------------|-----------|-------------|
| BOD % Removal | 65 | 90 - 95 | 93 |
| TSS % Removal | 85 | 95 – 98 | 98 |

This permitting action is carrying forward the previously established limits as well as the 1/Month monitoring requirement for both BOD₅ and TSS percent removal.

- d. <u>Settleable Solids</u>: The previous permitting action established a daily maximum concentration limit of 0.3 milliliters per liter (mL/L) for settleable solids and is considered by the Department as a BPJ of BPT for secondary treated wastewater. A review of the DMR data for the period of January 2012 through September 2016 (n = 56) indicates the daily maximum settleable solids concentration value was <0.1 mL/L. This permitting action is maintaining the current monitoring frequency of 1/Week as the monitoring requirement was reduced in the previous permit.
- e. <u>Escherichia coli bacteria:</u> The previous permitting action established, and this permitting action is carrying forward, seasonal monthly average and daily maximum *Escherichia coli* bacteria limitations of 64 colonies/100 ml (geometric mean) and 427 colonies/100 ml (instantaneous), respectively, that are in effect between May 15 and September 30, inclusive, of each year.

During calendar year 2005, Maine's Legislature approved a new daily maximum water quality standard of 236 colonies/100 ml for Class B and Class C waters. The Department has determined that end-of-pipe limitations for the instantaneous concentration standard of 427 colonies/100 mL will be achieved through available dilution of the effluent with the receiving waters and need not be revised in MEPDES permits for facilities with adequate dilution (at least 1.1:1 for facilities in Class B waters).

A review of the bacterial testing data as reported on the monthly DMRs for the period of January 2012 – September 2016 (n=24) indicates the permittee to have been in compliance with the permit limits 100% of the time. A statistical summary of the reported *E. coli* bacteria test results is as follows:

E. coli Bacteria

| Value Limit | | Range | Mean |
|-----------------|--------------|--------------|--------------|
| | (col/100 ml) | (col/100 ml) | (col/100 ml) |
| Monthly Average | 64 | 0 - 46 | 4 |
| Daily Maximum | 427 | 0 - 132 | 13 |

This permitting action is carrying forward the seasonal, 1/Week monitoring and reporting frequency.

f. <u>Total Residual Chlorine (TRC)</u>: The previous permitting action established a daily maximum BPT-based concentration limit of 1.0 mg/L as well as a minimum monitoring frequency requirement of once per day. The Department specifies TRC limitations in order to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. The Department imposes the more stringent of either water quality-based or BPT-based limits. End-of-pipe acute and chronic water quality-based concentration thresholds may be calculated as follows:

| Cri | terion | Dilution Factors | Calculated Threshold |
|---------|------------|-------------------------|-----------------------------|
| Acute | 0.019 mg/L | 823:1 | 15.6 mg/L |
| Chronic | 0.011 mg/L | 849:1 | 9.3 mg/L |

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that must dechlorinate the effluent in order to consistently achieve compliance with water quality based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. The permittee's wastewater treatment process does not include effluent dechlorination following disinfection. This permitting action is carrying forward the daily maximum BPT-based concentration limit of 1.0 mg/L as it is more stringent than the water quality-based thresholds of 15.6 mg/L (acute) and 9.3 mg/L (chronic) as calculated above. Although bacteria limitations are seasonal and apply between May 15 and September 30 of each year, the facility must monitor and report TRC during any period that chlorine-based compounds are in use at the facility because chlorine compounds are toxic at all times of the year.

A summary of TRC data as reported on the monthly DMRs for the period of January 2012 - September 2016 (n=24) is as follows:

Total residual chlorine

| Value | Limit (mg/L) | Range (mg/L) | Mean (mg/L) |
|---------------|--------------|--------------|-------------|
| Daily Maximum | 1.0 | 0.63 - 0.99 | 0.9 |

This permitting action is carrying forward the minimum monitoring requirement of 1/Day.

- g. <u>pH:</u> The previous permitting action established a technology based pH range limitation of 6.0 9.0 standard units pursuant to 06-096 CMR 525(3)(III)(c) along with a monitoring frequency of 1/Day. A review of the pH values from January 2012 to September 2016 (n=56) indicates that the results ranged from 6.4 to 8.8 standard units. Based on the consistent nature of the wastewater as well as facility compliance, this permitting action is reducing the monitoring frequency to 3/Week.
- h. <u>Mercury</u>: Pursuant to 38 M.R.S. § 420 and 38 M.R.S. § 413 and 06-096 CMR 519, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W000692-59-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 22.5 parts per trillion (ppt) and 33.8 ppt, respectively, and a minimum monitoring frequency requirement of 4 tests per year for mercury.

38 M.R.S. § 420(1-B)(B)(1) provides that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department. A review of the Department's database for the period October 1998 through July 2016 is as follows:

| $\operatorname{Mercury}\left(\mathbf{H}=\mathbf{Z}\right)$ | | | |
|--|-------------|-------------|------------|
| Value | Limit (ppt) | Range (ppt) | Mean (ppt) |
| Monthly Average | 22.5 | 2.02 - 22.7 | 67 |
| Daily Maximum | 33.8 | 2.02 - 22.7 | 0.7 |

Mercury (n = 29)

On February 6, 2012, the Department issued a minor revision to amend the minimum monitoring frequency requirement from four times per year to once per year pursuant to 38 M.R.S. 420(1-B)(F). This minimum monitoring frequency is being carried forward in this permitting action. See **Attachment D** of this Fact Sheet for a summary of mercury test results.

i. <u>Transported Wastes</u>: The previous permitting action authorized the permittee to receive and introduce up to 2,1500 gpd of septage from local septage haulers into the wastewater treatment process or solids handling stream. *Standards For The Addition of Transported Wastes to Wastewater Treatment Facilities*, CMR 555 (last amended March 9, 2009), limits the quantity of transported wastes received at a facility to 1% of the design capacity of the treatment facility if the facility utilizes a side stream or storage method of introduction into the influent flow, or 0.5% of the design capacity of the facility if the facility does not utilize the side stream or storage method of introduction into the influent flow. With a design capacity of 430,000 gpd, 2,150 gpd represents 0.5% of said capacity.

The Department has determined that under normal operating conditions, the receipt and treatment of 2,150 gpd of transported wastes to the facility will not cause or contribute to upset conditions of the treatment process.

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

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

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

| Level I | Chronic dilution factor of <20:1 |
|-----------|--|
| Level II | Chronic dilution factor of \geq 20:1 but <100:1. |
| Level III | Chronic dilution factor \geq 100:1 but <500:1 or >500:1 and Q \geq 1.0 MGD |
| Level IV | Chronic dilution >500:1 and Q \leq 1.0 MGD |

Based on the criteria, the permittee's facility is considered a Level IV discharger as the chronic dilution of the receiving water is 849:1 and the permitted flow is equal to or less than 1.0 MGD.

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

- (a) The discharger's permit application or information available to the Department indicate that toxic compounds may be present in toxic amounts; or
- (b) Previous testing conducted by the discharger or similar dischargers indicates that toxic compounds may be present in toxic amounts.

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

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

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

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

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

² 06-096 CMR 523(5)(d)(1)(vi)(A)

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

Two effluent samples from the permittee were obtained in the summer of 2014. The average effluent concentration of those samples was 3.3 mg/L (3,300 micrograms per liter (μ g/L)) and, for this exercise, is considered representative of the discharge from the facility. Three upstream samples were taken between 8/12/2014 and 9/24/2014. The minimum value detected was 6.0 μ g/l and the highest was 11.0 μ g/L. For the calculation below, we will be using 0.011 mg/L.

Using the following calculation, the District does not have a reasonable potential to exceed the USEPA's Total P Ambient Water Quality Gold Book goal of 0.100 mg/L ($100 \mu \text{g/L}$), or the Department's draft ambient water quality criterion of 0.030 mg/L for phosphorus in rivers and streams not feeding lakes.

Reasonable Potential Analysis

$$Cr = QeCe + QsCs$$

 Qr

| Qe = effluent flow | = | 0.43 MGD |
|---|------|------------|
| Ce = average effluent concentration | = | 3.3 mg/L |
| Qs = 7Q10 flow of receiving water | = | 365 MGD |
| Cs = upstream concentration | = | 0.011 mg/L |
| Qr = receiving water flow (365 MGD + 0.43 MG) | D) = | 365.43 MGD |
| Cr = receiving water concentration | | |

Cr = (0.43 MGD x 3.3 mg/L) + (365 MGD x 0.011 mg/L) = 0.015 mg/L365.43 MGD

$$\label{eq:cr} \begin{split} Cr &= 0.015 \text{ mg/L} < 0.100 \text{ (EPA Gold Book) mg/L} \Rightarrow \textbf{No Reasonable Potential} \\ Cr &= 0.015 \text{ mg/L} < 0.030 \text{ (Maine Draft Criterion) mg/L} \Rightarrow \textbf{No Reasonable Potential} \end{split}$$

No effluent limitation for phosphorus will be established in this permitting action.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

8. PUBLIC COMMENTS

Public notice of this application was made in the *St. John Valley* newspaper on <u>September 24,</u> <u>2016</u>. 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

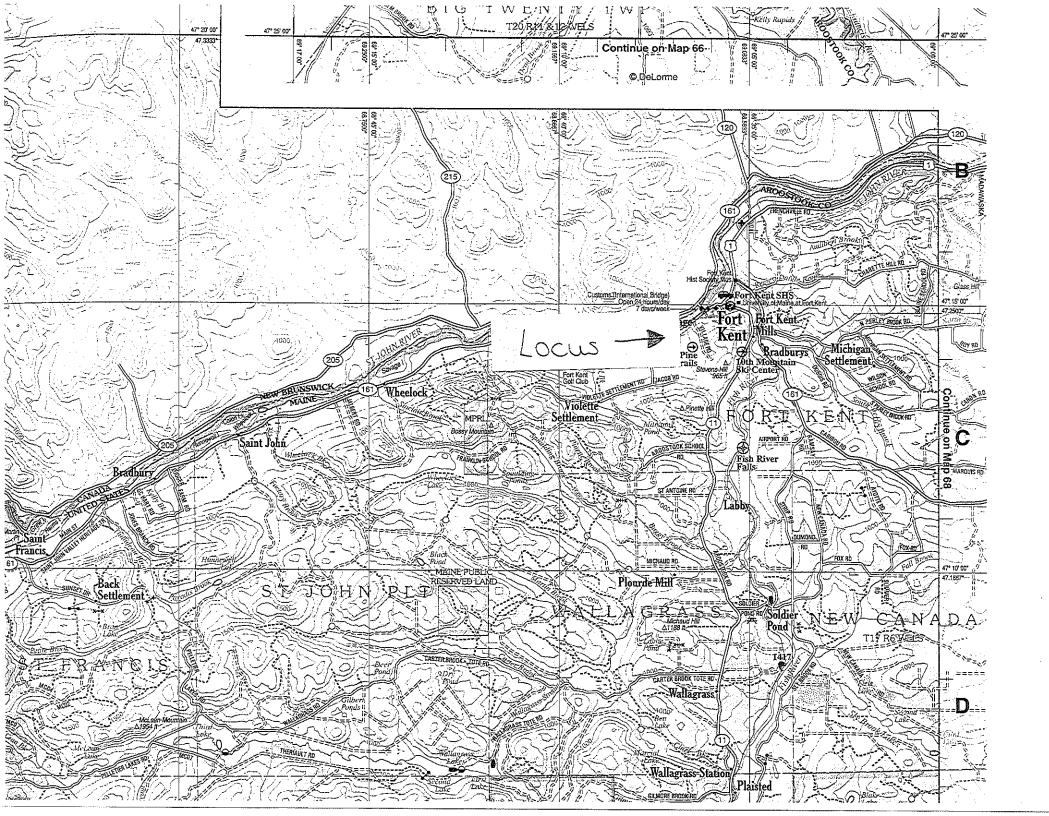
Additional information concerning this permitting action may be obtained from, and written comments sent to:

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

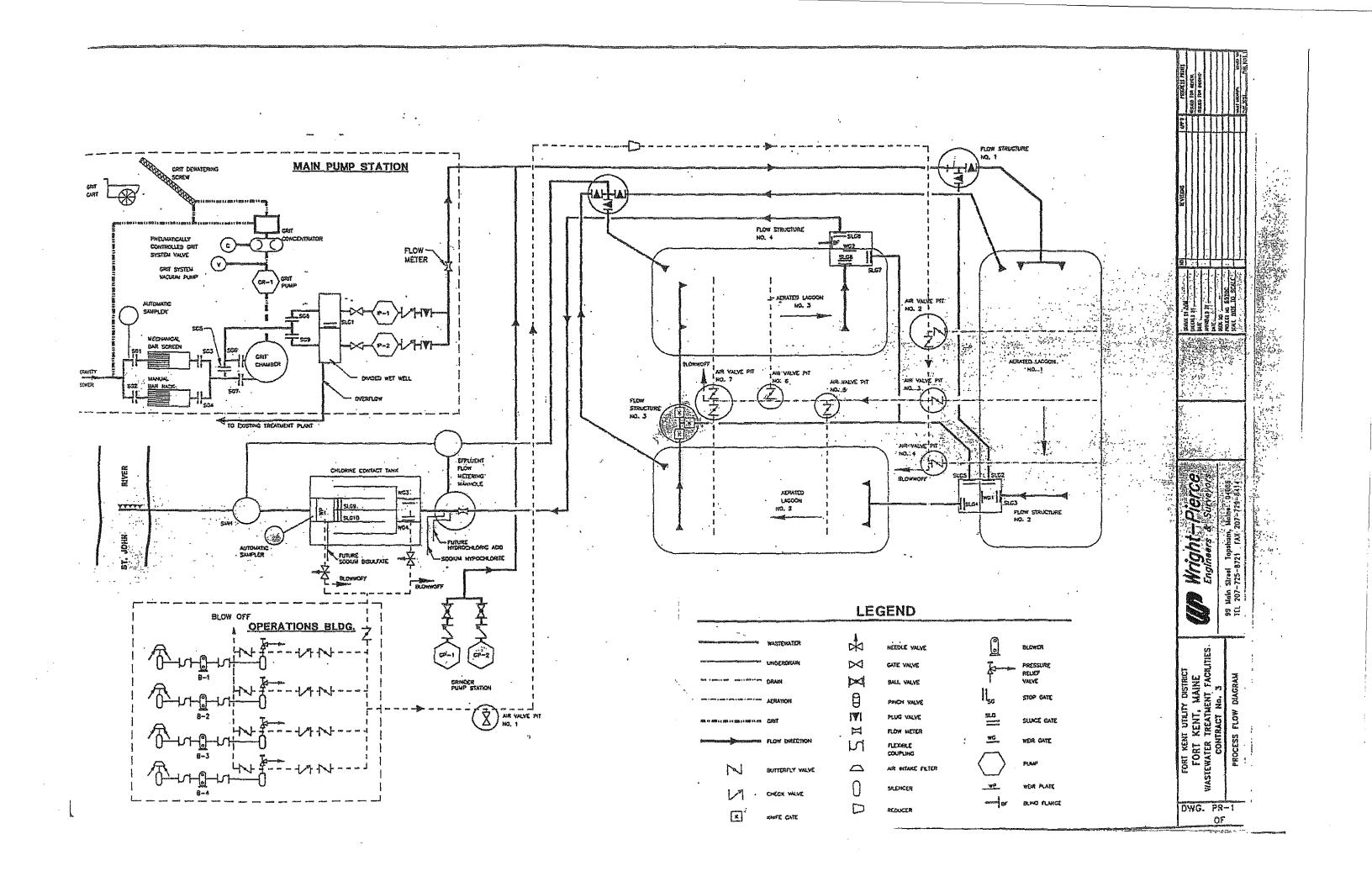
10. RESPONSE TO COMMENTS

Reserved until the end of the formal 30-day public comment period.

ATTACHMENT A



ATTACHMENT B



ATTACHMENT C

STATE OF MAINE **DEPARTMENT OF ENVIRONMENTAL PROTECTION**

CHAPTER 530.2(D)(4) CERTIFICATION

_Facility Name_____ MEPDES#

| Since | the effective date of your permit, have there been; | NO | YES Describe in comments section |
|-------|--|----|--|
| 1 | Increases in the number, types, and flows of industrial, commercial, or domestic discharges to the facility that in the judgment of the Department may cause the receiving water to become toxic? | | |
| 2 | Changes in the condition or operations of the facility that may increase the toxicity of the discharge? | | |
| 3 | Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge? | | |
| 4 | Increases in the type or volume of hauled wastes accepted by the facility? | | |

COMMENTS:

Name (printed):

Signature:_____Date: _____

This document must be signed by the permittee or their legal representative.

This form may be used to meet the requirements of Chapter 530.2(D)(4). This Chapter requires all dischargers having waived or reduced toxic testing to file a statement with the Department describing changes to the waste being contributed to their system as outlined above. As an alternative, the discharger may submit a signed letter containing the same information.

Scheduled Toxicity Testing for the next calendar year

| Test Conducted | 1 st Quarter | 2 nd Quarter | 3 rd Quarter | 4 th Quarter |
|-------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| WET Testing | | | | |
| Priority Pollutant Testing | | | | |
| Analytical Chemistry | | | | |
| Other toxic parameters ¹ | | | | |

Please place an "X" in each of the boxes that apply to when you will be conducting any one of the three test types during the next calendar year.

¹ This only applies to parameters where testing is required at a rate less frequently than quarterly.

ATTACHMENT D

Data Date Range: 26/Sep/1990 - 26/Sep/2016



Facility: FORT KENT

Permit Number: ME0102369

| Max (ng/l): 22.7000 | g/l): 22.7000 Average (ng/l): 6.6848 | | | | | |
|---------------------|--------------------------------------|---------------|--------|-------|--|--|
| Sam | ple Date | Result (ng/l) | Lsthan | Clean | | |
| 10/2 | 27/1998 | 16.82 | Ν | т | | |
| 02/0 | 02/2000 | 19.00 | Ν | т | | |
| 07/2 | 24/2000 | 8.80 | Ν | т | | |
| 06/0 | 06/2001 | 6.60 | Ν | т | | |
| 12/2 | 11/2001 | 7.50 | Ν | т | | |
| 04/2 | 23/2002 | 6.30 | Ν | т | | |
| 11/2 | 25/2002 | 4.10 | Ν | т | | |
| 04/3 | 30/2003 | 4.60 | Ν | т | | |
| 12/0 | 03/2003 | 22.70 | Ν | т | | |
| 06/0 | 01/2004 | 2.80 | Ν | т | | |
| 11/ | 16/2004 | 4.20 | Ν | т | | |
| 04/ | 11/2005 | 4.70 | Ν | Т | | |
| 10/0 | 04/2005 | 3.20 | Ν | т | | |
| 03/2 | 15/2006 | 5.60 | Ν | т | | |
| 12/0 | 05/2006 | 5.80 | Ν | Т | | |
| 10/2 | 22/2007 | 4.30 | Ν | т | | |
| 07/0 | 09/2008 | 7.70 | Ν | т | | |
| 12/0 | 01/2008 | 7.70 | Ν | т | | |
| 08/: | 31/2009 | 4.40 | Ν | т | | |
| 11/3 | 18/2009 | 4.70 | Ν | т | | |
| 03/2 | 23/2010 | 5.00 | Ν | т | | |
| 11/0 | 01/2010 | 4.40 | Ν | т | | |
| 03/2 | 14/2011 | 4.70 | Ν | т | | |
| 07/2 | 27/2011 | 13.00 | Ν | т | | |
| 10/2 | 18/2012 | 5.00 | Ν | т | | |
| 08/3 | 15/2013 | 2.30 | Ν | Т | | |
| 09/2 | 24/2014 | 2.35 | Ν | Т | | |
| 03/2 | 24/2015 | 3.57 | Ν | Т | | |
| 07/2 | 25/2016 | 2.02 | Ν | Т | | |