STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION





September 13, 2019

Ms. Sara Giroux Superintendent, Jackman Utility District P.O. Box 340 Jackman, ME. 04945

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100978

Maine Waste Discharge License (WDL) #W002696-6B-J-R

Proposed Draft Permit

Dear Ms. Giroux:

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

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

Beginning today, Friday, September 13, 2019, the Department is making the draft permit available for a 30-day public comment period. All comments on the proposed draft permit must be received in the Department of Environmental Protection office on or before the close of business Tuesday, October 15, 2019. Failure to submit comments in a timely fashion will result in the final permit document being issued as drafted.

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

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

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

Sincerely,

Gregg Wood

Division of Water Quality Management

Bureau of Water Quality

Enc.

cc: Clarissa Trasko, MDEP/EMRO

Lori Mitchell, MDEP/CMRO

Ellen Weitzler, USEPA Shelley Puleo, USEPA Marelyn Vega, USEPA

Solanch Pastrana-Del Valle, USEPA

Maine Dept. Inland Fisheries and Wildlife Environmental Review

Maine Dept. Marine Resources Environmental Review



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

DEPARTMENT ORDER

IN THE MATTER OF

JACKMAN UTILITY DISTRICT)	MAINE POLLUTANT DISCHARGE
JACKMAN, SOMERSET COUNTY, MAINE)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS)	AND
ME0100978)	WASTE DISCHARGE LICENSE
W002696-6B-J-R APPROVAL)	RENEWAL

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

APPLICATION SUMMARY

On July 22, 2019, the JUD submitted a timely and complete application to the Department to renew Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100978 /Maine Waste Discharge License (WDL) #W002696-6B-I-R (permit hereinafter), which was issued by the Department on December 15, 2014, for a five-year term. The 12/15/14 MEPDES permit authorized the daily maximum discharge of 0.675 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the Moose River, Class B, in Jackman, Maine.

PERMIT SUMMARY

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

1. Eliminating the water quality-based mass limitations for bis (2-ethylhexyl) phthalate, copper and lead based on a statistical evaluation pursuant to 06-096 CMR Chapter 530. The statistical evaluation indicates the discharge does not exceed or have a reasonable potential to exceed applicable acute, chronic or human health ambient water quality criterion (AWQC) for any of the parameters tested in the previous 60-month period.

CONCLUSIONS

Based on the findings summarized in the attached **PROPOSED DRAFT** Fact Sheet dated September 13, 2019, and subject to the special and standard conditions that follow, the Department makes the following CONCLUSIONS:

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

ACTION

Based on the findings and conclusions as stated above, the Department APPROVES the above noted application of the JACKMAN UTILITY DISTRICT to discharge a daily maximum of 0.675 MGD of secondary treated wastewater to the Moose River, Class B in Jackman, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

- 1. Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits, revised July 1, 2002, copy attached.
- 2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
- 3. This permit and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [Maine Administrative Procedure Act, 5 M.R.S.A. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (amended June 9, 2018)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES	
DONE AND DATED AT AUGUSTA, MAINE, THIS DAY OF	_2019.
DEPARTMENT OF ENVIRONMENTAL PROTECTION	
BY:Gerald D. Reid, Commissioner	
Date of initial receipt of application July 22, 2019	
Date of application acceptance <u>August 1, 2019</u>	
Date filed with Board of Environmental Protection	
This Order prepared by Gregg Wood, Bureau of Water Quality	
ME0101681 PROPOSED 2019 9/13/19	

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **secondary treated municipal sanitary wastewater from Outfall #001** to the Moose River at Jackman **during the period of November 1 – March 31, inclusive**. Such discharges are limited and must be monitored by the permittee as specified below⁽¹⁾:

Effluent Characteristic		Minimum Monitoring Requirements						
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow [50050]	Report MGD [03]		0.675 MGD [03]				Continuous [99/99]	Recorder [RC]
Biochemical Oxygen Demand (BOD ₅) [00310]	169 lbs/day [26]	253 lbs/day [26]	281 lbs/day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Month [02/30]	Grab [GR]
BOD ₅ % Removal ⁽²⁾ [81010]				85% [23]			1/Month [01/30]	Calculate [CA]
Total Suspended Solids (TSS) [00530]	169 lbs/day [26]	253 lbs/day [26]	281 lbs/day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Month [02/30]	Grab [<i>GR</i>]
TSS % Removal ⁽²⁾ [81011]				85% [23]			1/Month [01/30]	Calculate [CA]
Total Phosphorus ⁽³⁾ [00065]	Report lbs/Month [76]					3.0 mg/L [25]	1/Week [01/07]	Grab [GR]
Total Phosphorus ⁽³⁾ [00065]	1,388 lbs/season [76]						1/Month [01/30]	Calculate [CA]
pH (Std. Units) [00400]						6.0 – 9.0 SU [12]	1/Week [01/07]	Grab [GR]
Mercury (Total) ⁽⁴⁾ [71900]					5.7 ng/L [3M]	8.6 ng/L [3M]	1/Year [01/YR]	Grab [GR]

FOOTNOTES: See Pages 7 through 10 of this permit for applicable footnotes.

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

2. **SURVEILLANCE LEVEL** - Beginning upon issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit). Such discharges are limited and must be monitored by the permittee as specified below⁽¹⁾:

Discharge Limitations		Minimum			
			Monitoring Requirements		
Monthly	Daily	Monthly	Daily	Measurement	Sample
<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>	Frequency	Type
					Composite [24]
			Report % [23]	1/3 Years [01/3Y]	Composite [24]
			Report % [23]	1/3 Years [01/3Y]	Composite [24]
			Report % [23]	1/3Years [01/3Y]	Composite [24]
			Report µg/L	1/3 Years [01/3Y]	Composite/Grab [24]
	 	Monthly Daily Average Maximum	Monthly Average Maximum Average	Monthly Daily Monthly Daily Maximum Average Maximum Report % [23] Report % [Monthly Daily Monthly Daily Measurement Frequency Report % [23] 1/3 Years [01/3Y] Report % [23] 1/3 Years [01/3Y]

FOOTNOTES: See Pages 7 through 10 of this permit for applicable footnotes.

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

3. **SCREENING LEVEL TESTING** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement. Such discharges are limited and must be monitored by the permittee as specified below⁽¹⁾:

Effluent Characteristic	Discharge Limitations			Minimum		
				Monitoring Requirements		
	Monthly	Daily	Monthly	Daily	Measurement	<u>Sample</u>
	<u>Average</u>	Maximum	Average	<u>Maximum</u>	Frequency	<u>Type</u>
Whole Effluent Toxicity (5)						
Acute – NOEL						
Ceriodaphnia dubia (Water flea) [TDA3B]				Report % [23]	1/Year [01/YR]	Composite [24]
Salvelinus fontinalis (Brook trout) [TDA6F]				Report % [23]	1/Year [01/YR]	Composite [24]
Chronic – NOEL						
Ceriodaphnia dubia (Water flea) [TDA3B]				Report % [23]	1/Year [01/YR]	Composite [24]
Salvelinus fontinalis (Brook trout) [TBQ6F]				Report % [23]	1/Year [01/YR]	Composite [24]
Analytical Chemistry (6,8) [51477]				Report μg/L	2/Year [02/YR]	Composite/Grab [24]
Analytical Chemistry [514//]				[28]	2/ 1 Gar [02/1K]	Cempesite, Grae (24)
Priority Pollutant (7,8) [50008]				Report μg/L	1/Year [01/YR]	Composite/Grab [24]

FOOTNOTES: See Pages 7 through 10 of this permit for applicable footnotes.

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

FOOTNOTES

This permit authorizes the permittee to discharge treated effluent only during the period of November 1 through March 31, inclusive.

1. Sampling – Influent sampling is not required by this permit due to the inability of safe access to obtain a representative influent sample. For the purposes of calculating both total suspended solids and biochemical oxygen demand percent removal see footnote 2. All effluent monitoring must be conducted after the Palmer-Bowlus Flume on a seasonal basis. Wastewater may be discharged from the two (2) storage lagoons or two (2) secondary treatment lagoons. Any change in sampling location must be approved by the Department in writing.

The permittee must conduct all effluent sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. Samples that are analyzed by laboratories operated by waste discharge facilities licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended December 19, 2018). Laboratory facilities that analyze compliance samples inhouse are subject to the provisions and restrictions of 10-144 CMR 263. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR.

2/Month Sampling – There must be at least 10 days in between sampling events.

- 2. **Percent Removal** The permittee must achieve a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand for all flows receiving secondary treatment. The percent removal is calculated based on influent and effluent concentration values. For influent concentrations an assumed value of 290 mg/L will be used for total suspended solids and biochemical oxygen demand, see page 5 of Fact Sheet for a basis statement.
- 3. **Phosphorus** The permittee is limited to <u>a cumulative total</u> of 1,388 pounds of total phosphorus per discharge season (November 1 March 31). See **Attachment A** of this permit for the protocol associated with sampling and analyzing total phosphorus.

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

- 4. Mercury The permittee must conduct all mercury monitoring required by this permit to determine compliance with interim limitations established pursuant to 06-096 C.M.R. 519 in accordance with the USEPA's "clean sampling techniques" found in USEPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis must be conducted in accordance with USEPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. Go to https://www.maine.gov/dep/water/wd/municipal_industrial/index.html and click on "Whole Effluent Toxicity, Chemistry, and Mercury Reporting Forms" for a reporting form for mercury test results. Compliance with the monthly average limitation established in Special Condition A of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Method 1669 and analysis Method 1631E on file with the Department for this facility.
- 5. Whole effluent toxicity (WET) testing Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 5.8% and 5.0% respectively), which provides an estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points. The critical acute and chronic thresholds were derived as the mathematical inverse of the applicable acute and chronic dilution factors of 17.2:1 and 20:1, respectively.
 - a. **Surveillance level testing** Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee must initiate surveillance level acute and chronic WET testing at a minimum frequency of once during the first three years of the surveillance period in the discharge season (1/3 Years) on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*).
 - b. **Screening level testing** Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level acute and chronic WET testing on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*) at a minimum frequency of once per year (1/Year).

WET test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedances of the critical acute and chronic water quality thresholds of 5.8% and 5.0%, respectively.

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

Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following USEPA methods manuals.

- a. U.S. Environmental Protection Agency, 2002. <u>Short-term Methods for Estimating the chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms</u>, Third edition, October 2002, EPA 821-R002-014.
- b. U.S. Environmental Protection Agency, 2002. <u>Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms</u>, Fifth edition, October 2002, EPA 821-R-02-012.
- 6. **Analytical Chemistry** Refers to those pollutants listed under "Analytical Chemistry" on the form found at: https://www.maine.gov/dep/water/wd/municipal industrial/index.html
 - a. **Surveillance level testing** Beginning upon permit issuance and lasting through 24 months prior to permit expiration (Years 1, 2 & 3 of the term of the permit) and commencing again 12 months prior to permit expiration (Year 5 of the term of the permit), the permittee must conduct analytical chemistry testing at a minimum frequency of once during the first three years of the surveillance period in the discharge season (1/3Years).
 - b. **Screening level testing** Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level analytical chemistry testing at a minimum frequency of 2/Year during the discharge season.
- 7. **Priority Pollutant Testing** Refers to those pollutants listed under "Priority Pollutants" on the form found at: https://www.maine.gov/dep/water/wd/municipal industrial/index.html
 - a. Surveillance level testing Not required pursuant to 06-096 CMR Chapter 530.
 - b. **Screening level testing** Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year) during the discharge season.

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

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

Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department, possible exceedances of the acute, chronic or human health AWQC as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (last amended July 29, 2012). For the purposes of DMR reporting, enter a "1" for <u>yes</u>, testing done this monitoring period or "NODI-9" monitoring not required this period. For the purposes of eDMR reporting, enter a "1" for <u>yes</u>, testing done this monitoring period or "N9" monitoring <u>not required</u> this period.

B. NARRATIVE EFFLUENT LIMITATIONS

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

C. TREATMENT PLANT OPERATOR

The treatment facility must be operated by a person holding a minimum of a **Grade II** certificate (or Registered Maine Professional Engineer) pursuant to *Sewerage Treatment Operators*, 32 M.R.S.A. §§ 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 CMR 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

D. LIMITATIONS FOR INDUSTRIAL USERS

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

E. AUTHORIZED DISCHARGES

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

F. NOTIFICATION REQUIREMENT

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

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

G. WET WEATHER MANAGEMENT PLAN

The permittee must maintain a current, written Wet Weather Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall. A specific objective of the plan must be to maximize the volume of wastewater receiving secondary treatment under all operating conditions. The revised plan must include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events.

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

H. OPERATIONS AND MAINTENANCE (O&M) PLAN

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

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

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

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

By December 31 of each calendar year, the permittee must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit *[ICIS Code 96299]*. See Attachment D of the permit for an acceptable certification form to satisfy this Special Condition.

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

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

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

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

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

J. MONITORING AND REPORTING

Electronic Reporting

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

Electronic DMRs submitted using the USEPA NetDMR system, must be:

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

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

K. REOPENING OF PERMIT FOR MODIFICATION

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

L. SEVERABILITY

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

ATTACHMENT A

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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A. GENERAL PROVISIONS

- 1. **General compliance**. All discharges shall be consistent with the terms and conditions of this permit; any changes in production capacity or process modifications which result in changes in the quantity or the characteristics of the discharge must be authorized by an additional license or by modifications of this permit; it shall be a violation of the terms and conditions of this permit to discharge any pollutant not identified and authorized herein or to discharge in excess of the rates or quantities authorized herein or to violate any other conditions of this permit.
- **2. Other materials.** Other materials ordinarily produced or used in the operation of this facility, which have been specifically identified in the application, may be discharged at the maximum frequency and maximum level identified in the application, provided:
 - (a) They are not
 - (i) Designated as toxic or hazardous under the provisions of Sections 307 and 311, respectively, of the Federal Water Pollution Control Act; Title 38, Section 420, Maine Revised Statutes; or other applicable State Law; or
 - (ii) Known to be hazardous or toxic by the licensee.
 - (b) The discharge of such materials will not violate applicable water quality standards.
- **3. Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of State law and the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.
 - (a) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act, and 38 MRSA, §420 or Chapter 530.5 for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
 - (b) Any person who violates any provision of the laws administered by the Department, including without limitation, a violation of the terms of any order, rule license, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.
- **4. Duty to provide information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.
- **5. Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- **6. Reopener clause**. The Department reserves the right to make appropriate revisions to this permit in order to establish any appropriate effluent limitations, schedule of compliance or other provisions which may be authorized under 38 MRSA, §414-A(5).

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- **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

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STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.

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(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.

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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.

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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

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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).

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- (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.

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- **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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: September 13, 2019

PERMIT NUMBER: #ME0100978

WASTE DISCHARGE LICENSE: #W002696-6B-J-R

NAME AND ADDRESS OF APPLICANT:

JACKMAN UTILITY DISTRICT

P.O. Box 340

Jackman, Maine 04945

COUNTY: SOMERSET

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

JACKMAN UTILITY DISTRICT

Walton Street

Jackman, Maine 04945

RECEIVING WATER CLASSIFICATION: Moose River/Class B

COGNIZANT OFFICIAL CONTACT INFORMATION:

Ms. Sara Giroux, Superintendent

(207) 668-7686

judwas@myfairpoint.net

1. APPLICATION SUMMARY

a. <u>Application</u>: On July 22, 2019, the JUD submitted a timely and complete application to the Department to renew Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100978 /Maine Waste Discharge License (WDL) #W002696-6B-I-R (permit hereinafter), which was issued by the Department on December 15, 2014, for a five-year term. The 12/15/14 MEPDES permit authorized the daily maximum discharge of 0.675 million gallons per day (MGD) of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the Moose River, Class B, in Jackman, Maine.

1. APPLICATION SUMMARY (cont'd)

- b. Source Description: The JUD receives sanitary wastewater flows from residential and commercial entities within the District's boundaries. The JUD serves a population of approximately 800 people. The District owns and maintains a separated collection system that is approximately 6.8 miles in length and has 16 pump stations as part of the collection system. Of the 16 pump stations, 3 have on-site back-up power while the remaining 13 pump stations are served by a portable generator during extended power outages. The system has no combined sewer overflows (CSOs). The facility is not authorized to receive transported wastes from local septage haulers. A map showing the location of the treatment facility is included as Fact Sheet **Attachment A**.
- c. Wastewater Treatment: The JUD's wastewater treatment facility commenced operations in 1986. Wastewaters received at JUD treatment facility receive a secondary level of treatment via a facultative lagoon system. The treatment plant itself has two primary treatment ponds followed by two secondary treatment lagoons all of which can be operated in series or parallel. The facility also has two storage lagoons that provide storage during summer months when the receiving waters are commonly at critical low flows. The six ponds cover approximately 15.7 acres with a total volume of 45.4 million gallons. The final effluent from the treatment plant does not require disinfection as the facility does not discharge during the time of year when bacteria standards are applicable (May 15 September 30). Phosphorus treatment is provided by the addition of alum at the outlet of treatment pond #3 and through alum spray on lagoons #2, #3 and #4. Treated wastewaters are discharged to the Moose River via a poly-vinylchloride (PVC) pipe that is 10 inches in diameter and extends out into the middle of the river. The end of the outfall pipe is fitted with a two-port diffuser to provide for rapid and complete mixing of the effluent with the receiving waters.

A process flow diagram submitted by the permittee is included as Fact Sheet Attachment B.

2. PERMIT SUMMARY

- a. <u>Terms and Conditions</u>: This permitting action is carrying forward all the terms and conditions of the previous permitting actions except it is:
 - 1. Eliminating the water quality-based mass limitations for bis (2-ethylhexyl) phthalate, copper and lead based on a statistical evaluation pursuant to 06-096 CMR Chapter 530. The statistical evaluation indicates the discharge does not exceed or have a reasonable potential to exceed applicable acute, chronic or human health ambient water quality criteria AWQC) for any of the parameters tested in the previous 60-month period.
- b. <u>History</u>: The most current relevant regulatory actions include:

October 1, 1992 - The U.S. Environmental Protection Agency (EPA) issued National Pollution Discharge Elimination System (NPDES) permit #ME0100978.

August 28, 1995 - The Department modified WDL #W002696-46-A-R by reducing the daily maximum flow from 0.9 MGD to 0.675 MGD.

2. PERMIT SUMMARY (cont'd)

May 28, 1998 – For the purposes of determining the applicable acute dilution factor for the JUD facility, the Department made the determination that the effluent from the wastewater treatment facility receives rapid and complete mixing and use of the full 1Q10 receiving water flow is applicable in deriving the acute dilution factor and utilized in statistical evaluations.

May 23, 2000 – The Department administratively modified WDL # W002696-5L-C-R by establishing interim average and maximum concentration limits for the discharge of mercury.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permitting program in Maine, excluding areas of special interest to Maine Indian Tribes. From this point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program, and MEPDES permit #ME0100978 has been utilized for this facility.

May 21, 2001 – The Department issued a modification of the 12/23/99 WDL that resulted in the document being issued as a combination MEPDES permit and WDL. The issuance of the MEPDES permit resulted in the federal NPDES permit being retired and no longer valid.

May 25, 2005 – The Department issued a modification of the 9/28/04 permit that modified the total phosphorus limits for the facility.

April 10, 2006 – The Department unilaterally issued a modification of the 9/28/04 permit by incorporating the testing requirements of the Department rule Chapter 530, Surface Water Toxics Control Program promulgated on October 15, 2005.

November 21, 2009 – The Department issued combination MEPDES permit #ME0100978/WDL #W002696-6B-F-R for a five-year term. This permit superseded the previous permits issued by the Department on 9/28/04, 5/21/01 and 12/23/99.

February 6, 2012 – The Department issued permit modification # ME0100978/WDL#W002696-6B - G-M to incorporate the average and maximum concentration limits for total mercury.

December 3, 2012 – The Department issued permit modification #ME0100978/WDL#W002696-6B-H-M to eliminate the monthly average water quality-based mass and concentration limits for bis(2-ethylhexyl)phthalate).

August 13, 2014 – The JUD submitted a timely and complete General Application to the Department for renewal of the November 21, 2009 MEPDES permit. The application was accepted for processing on August 15, 2014, and was assigned WDL #W000978-6B-I-R / MEPDES #ME0100978.

December 14, 2014 – The Department issued combination MEPDES permit #ME0100978/WDL #W002696-6B-I-R for a five-year term.

July 22, 2019 – The JUD submitted a timely and complete General Application to the Department for renewal of the November 21, 2009 MEPDES permit. The application was accepted for processing on July 1, 2019, and was assigned WDL #W000978-6B-J-R / MEPDES #ME0100978.

3. CONDITIONS OF PERMIT

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

4. RECEIVING WATER QUALITY STANDARDS

Classification of major river basins, 38 M.R.S § 467(4)(F)(1)(d) states that the Moose River at the point of discharge is classified as a Class B waterway. Standards for classification of fresh surface waters, 38 M.R.S.§ 465(3) describes the standards for Class B waters.

Class B shall be the 3rd highest classification.

- A. Class B waters must be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as habitat for fish and other aquatic life. The habitat must be characterized as unimpaired.
- B. The dissolved oxygen content of Class B waters may not be less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 4th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration may not be less than 9.5 parts per million and the one-day minimum dissolved oxygen concentration may not be less than 8.0 parts per million in identified fish spawning areas. Between April 15th and October 31st, the number of Escherichia coli bacteria in these waters may not exceed a geometric mean of 64 CFU per 100 milliliters over a 90-day interval or 236 CFU per 100 milliliters in more than 10% of the samples in any 90-day interval.
- C. Discharges to Class B waters may not cause adverse impact to aquatic life in that the receiving waters must be of sufficient quality to support all aquatic species indigenous to the receiving water without detrimental changes in the resident biological community.

It is noted the Moose River is considered to be a tributary of a GPA waterbody (Long Pond) approximately 3 miles downstream of the JUD discharge. 38 M.R.S. § 464(4)(A)(3) states that the Department may not issue a waste discharge license for any discharge to a tributary of GPA waters that by itself or in combination with other activities causes water quality degradation which would impair the characteristics and designated uses of downstream waters or cause an increase in the trophic state of those GPA waters.

5. RECEIVING WATER QUALITY CONDITIONS

<u>The State of Maine 2016 Integrated Water Quality Monitoring and Assessment Report</u> (Report), prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists a 113.6-mile segment of the Moose River and its tributaries at Long Pond (ADB Assessment Unit ID ME0103000103_302R) as, "Category 2: Rivers and Streams Attaining Some Designated Uses – Insufficient Information for Other Uses."

The report also lists the Moose River at Long Pond as, "Category 2: Lake Waters Within Hydrologic Unit Attaining Some Designated Uses- Insufficient Information for Other Uses."

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

This permit (as did the previous permitting/licensing actions) limits the discharge from the JUD wastewater treatment facility to a period between November 1 and March 31 of each year. No discharge is permitted outside of this time frame to minimize the potential for algal blooms in the great ponds (approximately 3 miles downstream) due to nutrient loading by the JUD discharge.

a. <u>Flow:</u> The previous permitting action established, and this permitting action is carrying forward, a daily maximum discharge flow limit of 0.675 MGD and a monthly average discharge flow reporting requirement. The discharge flow limit was proposed by the permittee in August of 1995 to increase the dilution factor associated with the discharge. The increase in the dilution factor resulted in a reduction in the WET testing frequency during the screening level testing period for each five-year permit term.

The Department reviewed 20 Discharge Monitoring Reports (DMRs) that were submitted for the period January 2015 – March 2019. A review of data indicates the following:

Flow

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	Report	0.17 - 0.43	0.28
Daily Maximum	0.675	0.20 - 0.53	0.35

b. Dilution Factors:

06-096 CMR 530(4)(B)(1) states that, "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."

With a permitted flow limitation of 0.675 MGD and the location and configuration of the outfall structure, the Department has established dilution factors as follow:

Acute:
$$1Q10 = 16.83 \text{ cfs}$$
 $\Rightarrow (16.83 \text{ cfs})(0.6464) + 0.675 \text{ MGD} = 17.1:1$
 0.675 MGD

Chronic:
$$7Q10 = 19.80 \text{ cfs}$$
 $\Rightarrow (19.8 \text{ cfs})(0.6464) + 0.675 \text{ MGD} = 20.0:1$
 0.675 MGD

Harmonic Mean = 59.4 cfs
$$\Rightarrow$$
 (59.4 cfs)(0.6464) + 0.675 MGD = 57.9:1 0.675 MGD

c. <u>Biochemical Oxygen Demand (BOD₅)</u> and <u>Total Suspended Solids (TSS)</u>: The previous permitting action established, and this permitting action is carrying forward, a seasonal (November 1st – March 31st) monthly average and weekly average technology-based concentration limits of 30 mg/L and 45 mg/L, respectively, for BOD₅ and TSS based on the secondary treatment requirements specified at *Effluent Guidelines and Standards*, 06-096 CMR 525(3)(III) (effective January 12, 2001), and a daily seasonal maximum concentration limit of 50 mg/L, which is based on a Department best professional judgment of best practicable treatment for secondary treated wastewater. The previous permitting action established, and this permitting action is carrying forward, technology-based monthly average, weekly average and daily maximum mass limits for BOD₅ and TSS are based on the daily maximum flow limitation of 0.675 MGD. The mass limitations were calculated as follows:

Monthly average: (0.675 MGD)(8.34)(30 mg/L) = 169 lbs./day Weekly average: (0.675 MGD)(8.34)(45 mg/L) = 253 lbs./day Daily Maximum: (0.675 MGD)(8.34)(50 mg/L) = 281 lbs./day

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

The permittee's wastewater treatment system does not contain an influent sampling location that is representative of raw wastewater conditions. According to the USEPA's *Onsite Wastewater Treatment Systems Manual*, dated February 2002, table 3-7 entitled "Constituent Mass Loadings and Concentrations in Typical Residential Wastewater" high end range of values, influent values for BOD₅ and TSS may be assumed to be 286 mg/L and 300 mg/L, respectively. Therefore, this permitting action authorizes the permittee to assume an influent BOD₅ and TSS concentration value of 290 mg/L for purposes of calculating the monthly percent removal value.

The Department reviewed 20 DMRs that were submitted for the period January 2015 – March 2019. A review of data indicates the following:

BOD₅ mass

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	169	4 - 56	24
Weekly Average	253	4 - 73	29
Daily Maximum	281	4 - 73	29

BOD₅ concentration

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	2 - 25	11
Weekly Average	45	2 - 37	13
Daily Maximum	50	2 - 37	13

BOD₅ % removal (n=55)

Value	Limit (%)	Range (%)	Mean (%)
Monthly Average	85	91 - 99	97

TSS mass

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	169	2 - 60	19
Weekly Average	253	2 - 60	22
Daily Maximum	281	2 - 60	23

TSS concentration

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	1 - 35	9
Weekly Average	45	1 - 35	11
Daily Maximum	50	1 - 35	11

TSS % removal

Value	Limit (%)	Range (%)	Mean (%)
Monthly Average	85	88 - 99	97

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

The Department reviewed 20 DMRs that were submitted for the period January 2015 – March 2019. A review of data indicates the following:

pН

Value	Limit (SU)	Minimum (SU)	Maximum (SU)
Range	6.0 - 9.0	6.3	8.0

e. <u>Total Phosphorus</u>: The previous permitting action established, and this permitting action is carrying forward, a technology-based concentration limit of 3.0 mg/L and a monitoring frequency of 1/Week for the entire discharge season.

The previous permitting action established, and this permitting action is carrying forward, a maximum seasonal (November 1 – March 31) mass limits of 1,388 lbs./season, and a monthly average reporting requirement. This limitation is based on a Department best professional judgment of limits necessary to protect water quality in Long Pond, classified as class GPA, downstream of the discharge. The JUD began treating for phosphorus reduction in the fall of 1988 by installing units to add alum at the outlets of treating pond #3. The Department reviewed DMRs that were submitted for the period January 2014 – March 2019 for phosphorus. A review of data indicates the following:

Total phosphorus concentration (n=20)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Daily Maximum	3.0	0.6 - 2.8	1.7

Total phosphorus mass (n=20)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly average	Report	3 - 127	72

Total phosphorus seasonal (November 1 – March 31) mass

Value	Limit (lbs./season)	Range (lbs./day)	Average (lbs./day)
Seasonal total	1,388	239 - 342	297

- f. Mercury: Pursuant to Certain deposits and discharges prohibited, 38 M.R.S. § 420 and Waste discharge licenses, 38 M.R.S. § 413 and Interim Effluent Limitations and Controls for the Discharge of Mercury, 06-096 CMR 519 (last amended October 6, 2001), the Department issued a Notice of Interim Limits for the Discharge of Mercury to the permittee thereby administratively modifying WDL W002696-6B-F-R by establishing interim monthly average and daily maximum effluent concentration limits of 5.7 parts per trillion (ppt) and 8.6 ppt, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury. It is noted the limitations have been incorporated into Special Condition A, Effluent Limitations And Monitoring Requirements, of this permit.
 - 38 M.R.S. § 420(1-B)(B)(1) provides that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department. A review of the Department's data base for the period December 1999 through February 2019 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows:

Mercury

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average	5.7	0.70 – 4.99	2.2
Daily Maximum	8.6	0.70 – 4.99	2.2

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

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

Maine law, 38 M.R.S. § 414-A and 38 M.R.S. § 420 prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA.

06-096 CMR 530(2)(A) specifies the dischargers subject to the rule as:

All licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedances of narrative or numerical water quality criteria.

The Department has determined that the applicant's discharge is subject to the testing requirements of the toxics rule.

06-096 CMR 530(3)(E) states:

For effluent monitoring data and the variability of the pollutant in the effluent, the Department must apply the statistical approach in Section 3.3.2 and Table 3-2 of USEPA's "Technical Support Document for Water Quality-Based Toxics Control" (USEPA Publication 505/2-90-001, March, 1991, USEPA, Office of Water, Washington, D.C.) to data to determine whether water-quality based effluent limits must be included in a waste discharge license. Where it is determined through this approach that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedance of water quality criteria, appropriate water quality-based limits must be established in any licensing action.

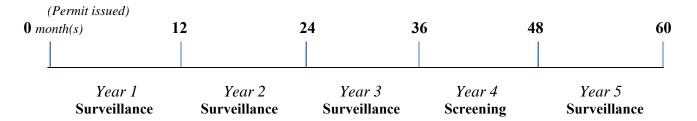
WET, priority pollutant and analytical chemistry testing, as required by 06-096 CMR 530, are included in this permit in order to characterize the effluent.

06-096 CMR 530(2)(D)(1) specifies WET, priority pollutant, and analytical chemistry test schedules for dischargers based on their level¹ as defined by 06-096 CMR 530(2)(B). Please see 06-096 CMR 530(2)(D)(1) for a listing of routine test schedules.

¹ A facility falls into an applicable level based on their chronic dilution factor. The chronic dilution factor associated with the discharge from the JUD is 20:1; therefore, pursuant to 06-096 CMR 530(2)(B), this facility is considered a Level II facility for purposes of toxics testing.

Explanation of Screening and Surveillance Testing Years

Each year of the five-year permit cycle is categorized as either a screening or a surveillance testing year. Surveillance testing years begin upon issuance of the permit and last through 24 months prior to permit expiration (years 1-3 of the permit) and commencing again 12 months prior to permit expiration (year 5 of the permit). Screening level testing begins 24 months prior to permit expiration and lasts through 12 months prior to permit expiration (year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement.



WET Evaluation

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on the invertebrate water flea (*Ceriodaphnia dubia*) and vertebrate brook trout (*Salvelinus fontinalis*).

On August 8, 2019, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department for JUD in accordance with the statistical approach outlined above. The 8/8/19 statistical evaluation indicates the discharge from JUD has not exceeded or demonstrated a reasonable potential to exceed the critical acute or chronic ambient water quality thresholds of 5.8% and 5.0% for the water flea or the brook trout. See **Attachment C** of this Fact Sheet for a summary of the WET test results.

Based on the results of facility testing and pursuant to 06-096 CMR 530 (2)(D)(3), this permitting action is carrying forward the previously established reduced surveillance level testing of once during the first three years of the surveillance period in the discharge season (1/3Years) on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*).

An annual certification statement pursuant to 06-096 CMR 530(2)(D)(4), is established in Special Condition I, 06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing of the permit. The annual certification statement requirement is being carried forward in this permitting action.

Analytical Chemistry & Priority Pollutant Evaluation

Chemical-specific monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria. This permit provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment, and receiving water characteristics. 06-096 CMR 584 sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters. The Department's DeTox system evaluates the chemical results from your facility as well as other dischargers within the watershed

Priority pollutants and analytical chemistry refers to those pollutants listed on the form found at: https://www.maine.gov/dep/water/wd/municipal industrial/index.html

The previous permit established monthly average and or daily maximum water quality-based mass limitations for bis (2-ethylhexyl) phthalate, copper and lead based on the Chapter 530 statistical evaluation at that time. The evaluation indicated that the discharge had a reasonable potential to exceed the acute AWQC threshold for copper, the chronic AWQC threshold for copper and lead, and the human health AWQC for bis (2-ethylhexyl) phthalate. The permit established a monitoring frequency of 1/Year bis (2-ethylexyl) phthalate and 2/Year for copper and lead.

The Department reviewed DMRs that were submitted for the period January 2014 – March 2019 for phosphorus. A review of data indicates the following:

Bis (2-ethylhexyl) phthalate - mass (n=4)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	0.23	0.0	0.0

Bis (2-ethylhexyl) phthalate – concentration (n=4)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	Report	<4.7 - <0.5	< 0.47

Copper - mass (n=10)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	0.24	0.0039 - 0.0205	0.009
Daily Maximum	0.26	0.0039 - 0.0205	0.009

Copper – concentration (n=10)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	Report	1.3 – 9.1	4.0
Daily Maximum	Report	1.3 – 9.1	4.0

Lead - mass (n=10)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	0.04	0.0	0.0

Lead – concentration (n=10)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)	
Monthly Average	Report	<0.2 – 1.1	0.34	

On August 9, 2019, the Department conducted a statistical evaluation of the most recent 60 months of chemical-specific test results on file with the Department for JUD's Wastewater Treatment Facility in accordance with the statistical approach outlined in Chapter 530. The evaluation indicates the discharge does not exceed or have a reasonable potential to exceed the critical AWQC for any parameters. Therefore, this permitting is eliminating the water quality-based mass limitations for bis (2-ethylhexyl) phthalate, copper and lead and pursuant to 06-096 CMR 530 (2)(D)(3), and establishing a reduced surveillance level testing of once during the first three years for analytical chemistry. Chapter 530 does not contain a requirement for surveillance level priority pollutant testing.

In addition to the reduced surveillance level testing specified above, JUD must conduct screening level analytical chemistry and priority pollutant testing beginning 24 months prior to the expiration date of the permit. Due to the seasonal nature of the discharge (5 months per year), this permitting action is establishing screening level analytical chemistry testing at a frequency of 2/year (one half of the default testing frequency of 4/Year) and priority pollutant testing at a frequency of 1/year, the minimum test frequency in Chapter 530.

As with WET testing, an annual certification statement pursuant to 06-096 CMR 530(2)(D)(4), is established in Special Condition I, 06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing of the permit. The annual certification statement requirement is being carried forward 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 water body to meet standards for Class B classification.

8. PUBLIC COMMENTS

Public notice of this application was made in the <u>Jackman Matters</u> newspaper on or about July 25, 2019. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

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

Gregg Wood
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station

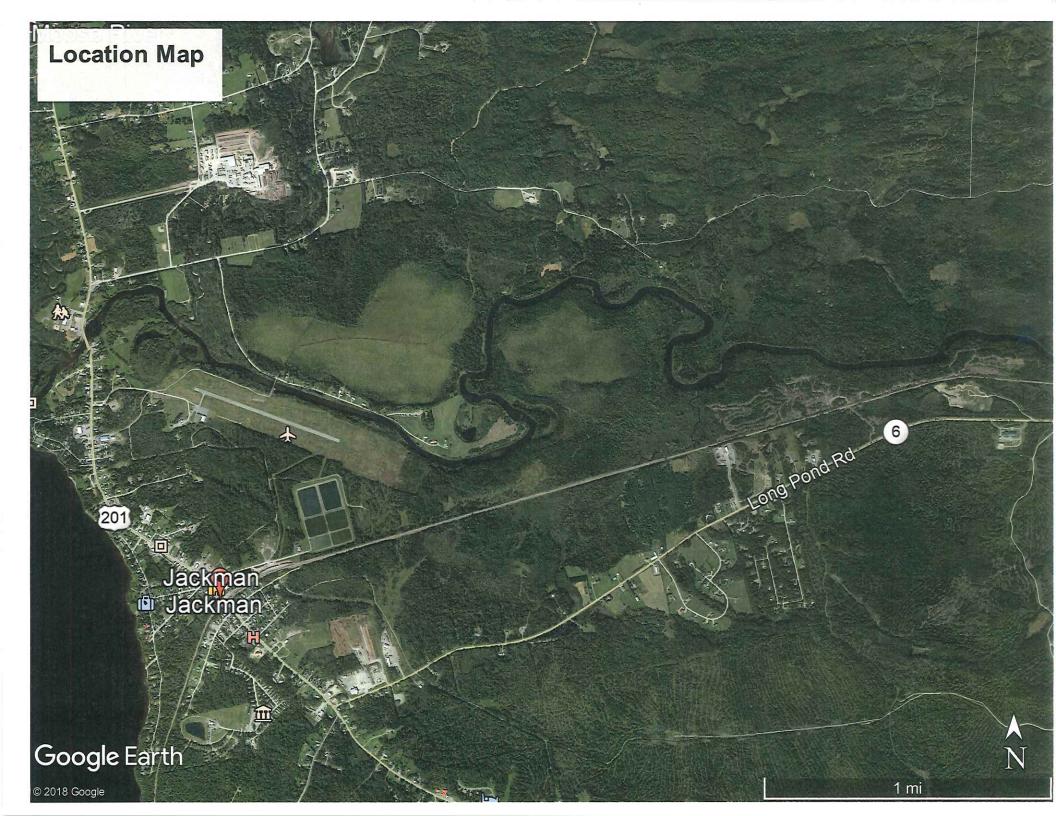
Augusta, Maine 04333-0017 Telephone: (207) 287-7693

e-mail: gregg.wood@maine.gov

10. RESPONSE TO COMMENTS

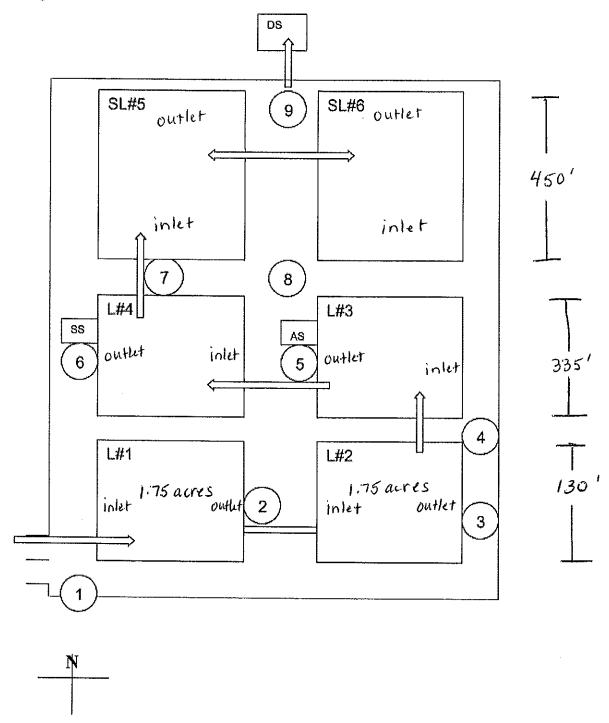
Reserved until the close of the formal 30-day public comment period.

ATTACHMENT A



ATTACHMENT B

Diagram 1



AS: Alum shack located between L#3 and L#4.

DS: Discharge shack located at north end of lagoon system.

L: Facultative lagoon where sewer influent is collected numbered 1-4.

MH: Manhole accessed by a cover where valves are kept for controlling the flow and travel path of the sewage numbered 1-9.

SL: Storage lagoon where discharge water is collected numbered 5-6.

SS: Storage shack located by lagoon #4.

ATTACHMENT C

WET TEST REPORT Data for tests conducted for the period



08/Aug/2014 - 08/Aug/2019

JACKMAN UTILITY DISTRICT	NPDES= ME010097	Efflue	nt Limit: Acute (%) =	5.842	Chronic (%) = 5.010	
Species	Test	Percent	Sample date	Critical %	Exception	RP
TROUT	A_NOEL	100	01/18/2016	5.842		
TROUT	A_NOEL	100	01/19/2016	5.842		
TROUT	A_NOEL	100	12/04/2018	5.842		
TROUT	C_NOEL	100	01/18/2016	5.010		
TROUT	C_NOEL	100	01/19/2016	5.010		
TROUT	C_NOEL	100	12/04/2018	5.010		
WATER FLEA	A_NOEL	100	01/18/2016	5.842		
WATER FLEA	A_NOEL	100	01/19/2016	5.842		
WATER FLEA	A_NOEL	100	12/04/2018	5.842		
WATER FLEA	CNOEL	100	01/18/2016	5.010		
WATER FLEA	C_NOEL	100	01/19/2016	5.010		
WATER FLEA	C_NOEL	100	12/04/2018	5.010		

PRIORITY POLLUTANT DATA SUMMARY

Date Range:

08/Aug/2014-08/Aug/2019



acility Name: J	ACKMAN UTIL	ITY DIST	RICT		1	IPDES	: MI	010	0978		
	Monthly	Daily	Total Test		Tes	st#B	y Gr	oup			
Test Date	(Flow	-	Number	M	V	BN	P	o	Α	Clean	Hg
01/06/2015	0.23	0.25	2	2	0	0	0	0	0	F	ō
	Monthly	Daily	Total Test		Tod	st#B	v Gr	oun			
Test Date	(Flow	-	Number		V	BN	P	<u> </u>	Α	Clean	Hg
01/07/2015	0.23	0.23	1	0	0	1	0	0	Ô	F	0
01/07/2015	0.23	0.23	<u></u>								
•	Monthly	Daily	Total Test			st#B					
Test Date	(Flow	MGD)	Number	M	V	BN	Р	0	Α	Clean	Hg
02/24/2015	0.28	0.28	2	2	0	0	0	0	0	F	0
	Monthly	Daily	Total Test		Tes	st#B	y Gr	oup			
Test Date	(Flow	MGD)	Number	М	V	BN	P	0	Α	Clean	Hg
11/17/2015	0.37	0.37	2	2	0	0	0	0	0	F	0
	84	Dolly	Total Test		To	st#B	v Gr	oun			
Took Doko	Monthly (Flow	Daily MCD)	Number	М	V	BN	P	0	Α	Clean	Hg
Test Date 01/19/2016	0.26	0.27	20	9	o	1	0	10	0	F	0
01/19/2016	0.20	0.27	20			-				I	
	Monthly	Daily	Total Test		Tes	st # B	y Gr	oup			
Test Date	(Flow	MGD)	Number	M	V	BN	P	0	Α	Clean	Hg
12/13/2016	0.21	0.20	2	2	0	0	0	0	0	F	0
	Monthly	Daily	Total Test		Te:	st#B	v Gr	auo			
Test Date	(Flow	_	Number	М	V	BN	P	0	Α	Clean	Hg
02/14/2017	0.02	0.25	2	2	0	0	0	Ō	0	F	0
					-	-		-			
	Monthly	Daily	Total Test			st#B					
Test Date	(Flow	-	Number	M	٧	BN	P	0	A	Clean _	Hg
12/11/2017	0.31	0.26	3	2	0	1	0	0	0	F	0
	Monthly	Daily	Total Test		Te	st#B	y Gr	oup			
Test Date	(Flow	MGD)	Number	М	V	BN	P	0	Α	Clean	Hg
02/13/2018	0.29	0.30	10	9	0	0	0	1	0	F	0
	Monthly	Daily	Total Test		Te	st#B	v Gr	oun			
Test Date	(Flow	~	Number	М	V	BN	P	0	A	Clean	Hg
12/04/2018	0.28	0.27	133	13	28	46	25	10	11	F	0
12/04/2010	0,20	0127									
	Monthly	Daily	Total Test			st # B				6 [
Test Date 02/11/2019	(Flow	-	Number	M	V	BN	P 0	0	A	Clean F	Hg 0
A3 /4 4 /3A4A	0.40	0.36	3	2	0	1	11	11	Ω	 	(1

A = Acid

O = Others

P = Pesticides

BN = Base Neutral M = Metals

V = Volatiles

ATTACHMENT D

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES#	Facility Name	
·		

Sinc	e 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?		
C	OMMENTS:		
N	fame (printed):		
S	ignature: 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.