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

APPLICATION SUMMARY

On March 2, 2021, the permittee submitted an application to the Department for the renewal of Maine Waste Discharge License (WDL) W008084-5C-C-R, which was issued by the Department on October 16, 2015. The 10/16/15 permit authorized the daily maximum year-round discharge of 3,000 gallons per day (gpd) of secondary treated sanitary wastewater from a food processing facility to the Narraguagus River, Class SB, in Cherryfield, Maine.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the previous permit, except that this permit is:

1. Establishing year-round Fecal Coliform bacteria limits with 2/month monitoring and reporting requirements.

2. Establishing limits with 1/month monitoring and reporting requirements for Enterococci bacteria from April 15th -October 31st.

3. Establishing Special Condition, I Septic Tanks

4. Amending Special Condition, H Site Evaluation for Transferred and Renewed Permits.
CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated September 1, 2022, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

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

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

3. The provisions of the State’s antidegradation policy, 38 M.R.S. §464(4)(F), will be met, in that:
   (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
   (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
   (c) Where the standards of classification of the receiving 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).

5. The overboard discharge system was in continuing existence for the 12 months preceding June 1, 1987.

6. A non-discharging subsurface wastewater disposal system could not be installed in compliance with the Maine Subsurface Wastewater Disposal Rules at the time the renewal application was accepted by the Department.

7. A publicly owned sewer line is not located on or abutting land owned or controlled by the permittee or is not available for the permittee’s use.

8. The discharge is not located within the boundaries of a sanitary district or sewer district.
ACTION

THEREFORE, the Department APPROVES the above noted application of JASPER WYMAN & Sons Inc. to discharge a daily maximum flow of 3,000 gallons per day (gpd) of secondary treated sanitary wastewater from a food processing facility to the Narraguagus River, Class SB, in Cherryfield, 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. §10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (last amended June 9, 2018)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

DONE AND DATED AT AUGUSTA, MAINE THIS ___DAY OF ___________________ 2022.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: ________________________________

MELANIE LOYZIM, COMMISSIONER

Date of initial receipt of application: March 2, 2021

Date of application acceptance: March 16, 2021

Date file with the Board of Environmental Protection ____________________________

This Order prepared by Rod Robert, BUREAU OF WATER QUALITY
**SPECIAL CONDITIONS**

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. The permittee is authorized to discharge secondary treated sanitary wastewater from **Outfall #002B** to the Narraguagus River. Such discharges must be limited and monitored by the permittee as specified below:

<table>
<thead>
<tr>
<th>Effluent Characteristic</th>
<th>Discharge Limitations</th>
<th>Minimum Monitoring Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monthly Average</td>
<td>Weekly Average</td>
</tr>
</tbody>
</table>

Footnotes: See Page 6 of this permit for applicable footnotes.
SPECIAL CONDITIONS

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

Footnotes:

1. **Sampling** - All effluent monitoring must be conducted at a location following the last treatment unit in the treatment process as to be representative of end-of-pipe effluent characteristics. Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine’s Department of Health and Human Services for wastewater testing. Samples that are sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 or laboratory facilities that analyze compliance samples in-house 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). 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 Discharge Monitoring Report.

2. **Percent Removal** – The treatment facility must maintain a minimum of 85 percent removal of both BOD5 and TSS for all flows receiving secondary treatment. The percent removal must be calculated based on an assumed influent concentration of 286 mg/L and measured effluent concentration values.

3. **Fecal Coliform Bacteria Reporting** – The monthly average fecal coliform bacteria limitation is a geometric mean limitation and sample results must be reported as such.

4. **Enterococcus Bacteria Reporting** – Enterococcus bacteria limits are a geometric mean and monitoring requirements are seasonal running from April 15th – October 31st.

5. **TRC Monitoring** – Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine-based compounds are being used to disinfect the discharge. The permittee must utilize approved test methods that are capable of bracketing the TRC limitation in this permit.
SPECIAL CONDITIONS

B. ANNUAL DISCHARGE FEES

Pursuant to Annual Waste Discharge License Fees, 38 M.R.S.§353-B, the permittee is required to pay an applicable annual fee for discharges authorized by this permit. Failure to pay an annual fee within 30 days of the anniversary date of a license/permit is sufficient grounds for revocation of the license, permit or privilege under Board Responsibilities and Duties, 38 M.R.S. §341-D, subsection 3.

C. NARRATIVE EFFLUENT LIMITATIONS

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

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

3. The permittee must not discharge effluent that causes visible discoloration or turbidity in the receiving waters which would impair the uses designated by the classification of the receiving waters.

4. 

5. 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.

D. TREATMENT PLANT OPERATOR

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

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 March 16, 2021; 2) the terms and conditions of this permit; and 3) only from Outfall #002B. Discharges of wastewater from any other point source are not authorized under this permit and must be reported in accordance with Standard Condition D(1)(f), Twenty-four-hour reporting, of this permit.
SPECIAL CONDITIONS

F. NOTIFICATION REQUIREMENT

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

1. Any substantial change or proposed change in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants into the system at the time of permit issuance.

2. 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. OPERATION & MAINTENANCE (O&M) PLAN

The permittee must maintain a current written comprehensive Operation & Maintenance (O&M) Plan. 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 current. 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.
SPECIAL CONDITIONS

H. SITE EVALUATION FOR TRANSFERRED AND RENEWED PERMITS

The owners of the overboard discharges subject to this permit are required to install a technologically proven alternative and properly abandon the overboard discharges when any of the following actions are initiated.

1. Transfer of Ownership of Property or Significant Action – Prior to transfer of ownership of property containing an overboard discharge (i.e., change in the legal entity that owns a property, facility or structure that is the subject of a permit), the parties to the transfer must determine the feasibility of technologically proven alternatives1 to the overboard discharge. Prior to completing a significant action (i.e., single construction project performed on a primary residence with an overboard discharge when the total material and labor cost of the construction project exceeds $50,000), the owner must determine the feasibility of technologically proven alternatives to the overboard discharge.

   a) If an alternative to the overboard discharge is available, the alternative system must be installed within 90 days of property transfer or significant action, unless otherwise provided by Waste Discharge Licenses, 38 M.R.S. § 413(3-A).

   b) If an alternative to the overboard discharge is not available, the new owner must, no later than two weeks after any transfer of ownership, submit an application to the Department for transfer of this permit.

1 Feasibility of technologically proven alternatives are based on determinations by a licensed site evaluator’s application of plumbing standards adopted by the Department of Health and Human Services pursuant to Title 22, section 42.

2. Permit Renewal – Waste Discharge Permits for overboard discharges are issued for a five-year term. The permittee must submit a complete application for permit renewal prior to the expiration date of this permit to continue the discharge beyond the expiration date of this permit. If a technologically proven alternative system is available and.

   a) The overboard discharge owner is eligible for grant funding2, the alternative system must be installed within 180 days of written notification from the Department, unless otherwise provided by Conditions of licenses, 38 M.R.S. § 414-A(1-B); or

   b) The overboard discharge owner is not eligible for grant funding, the alternative system must be installed prior to the expiration date of this permit.

3. Abandonment of Overboard Discharge – When an overboard discharge is no longer necessary or is replaced by technologically proven alternative system, it must be properly abandoned within 90 days following the requirements of Overboard discharges: licenses and abandonment, 06-096 CMR 596(8), including submission of Overboard Discharge Abandonment Certification Form #DEPLW0653A.
SPECIAL CONDITIONS

I. SEPTIC TANKS

1. Septic tanks and other treatment tanks must be regularly inspected (at least once per calendar year) and maintained to ensure that they are providing best practicable treatment. The permittee must maintain logs of inspections/maintenance that records the date, notes on observations, repairs conducted etc. The logs must be maintained on site at all times and made available to Department personnel upon request.

2. Tank contents must be removed whenever the sludge and scum occupies one-third of the tank’s liquid capacity or whenever levels approach maximum design capacity. Following pumping, the tanks must be checked for damage at key joints and the inlet and outlet baffles, and repaired promptly if damaged. The permittee must keep a pumping log including the date of pumping, quantity of material.

J. MONITORING AND REPORTING

Electronic Reporting

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

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

1. Submitted by a facility authorized signatory; and

2. Submitted no later than midnight on the 15th day of the month following the completed reporting period.

Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Toxics reporting must be done using the DEP toxsheet reporting form. An electronic copy of the Toxsheet reporting document must be submitted to your Department compliance inspector as an attachment to an email. In addition, a hardcopy form of this sheet must be signed and submitted to your compliance inspector, or a copy attached to your NetDMR submittal will suffice. 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.

A signed copy of the DMR and all other reports required herein must be submitted to the Department assigned compliance inspector (unless otherwise specified) following address:

Department of Environmental Protection
Eastern Maine Regional Office
Bureau of Water Quality
Division of Water Quality Management
106 Hogan Road
Bangor, Maine 04401
SPECIAL CONDITIONS

K. REOPENING OF PERMIT FOR MODIFICATIONS

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 effluent or ambient water quality 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, 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 respects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.
MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE LICENSE

FACT SHEET

Date: September 1, 2022

MEPDES PERMIT: ME0037265
WASTE DISCHARGE LICENSE: W008084-5C-D-R

NAME AND ADDRESS OF APPLICANT:

JASPER WYMAN & SONS INC.
P.O. Box 100
Milbridge, ME. 04658

COUNTY: Washington

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

178 Main Street
Cherryfield, ME. 04658

RECEIVING WATER / CLASSIFICATION: Narraguagus River / Class SB

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

Ms. Ellen L. Rossi
Operations Manager
(207) 546-3381
e-mail: elrossi@wymans.com

1. APPLICATION SUMMARY

On March 2, 2021, the permittee submitted an application to the Department of Environmental Protection (Department) for the renewal of Maine Waste Discharge License (WDL) W008084-5C-C-R, which was issued by the Department on October 16, 2015. The 10/16/15 permit authorized the daily maximum year-round discharge of up to 3,000 gallons per day (gpd) of secondary treated sanitary wastewater from a food processing facility to the Narraguagus River, Class SB, in Cherryfield, Maine. See Attachment A of this Fact Sheet for a location map.
2. PERMIT SUMMARY

a. Terms and conditions: This licensing action carries forward all the terms and conditions of the previous license except that this license is:

1. Establishing year-round Fecal Coliform bacteria limits with 2/month monitoring and reporting requirements.

2. Establishing limits with 1/month monitoring and reporting requirements for Enterococci bacteria from April 15th - October 31st.

3. Establishing Special Condition I Septic Tanks

4. Amending Special Condition H Site Evaluation for Transferred and Renewed Permits.

b. Facility History: This section provides a summary of significant licensing/permitting actions, as well as other significant milestones that have been completed.


September 7, 1993 – The Department issued WDL #W000645-WA-D-R for a five year term.

August 28, 2000 - The Department issued WDL #W008084-5C-A-R for a ten-year term. It is noted a new WDL number was assigned to the sanitary wastewater discharge as the discharge of blueberry process wastewater remains regulated via WDL #W000645.

August 2, 2010 – The Department accepted the permittee’s General Application for renewal of WDL #W008084-5C-A-R. The application was assigned WDL #5C-B-R

October 4, 2010 – The Department issued WDL #W008084-5C-B-R/MEPDES #ME0037265 for a five-year term.

September 1, 2015 – The Department accepted the permittee’s General Application for renewal of WDL #W008084-5C-B-R. The application was assigned WDL #W008084-5C-C-R

March 16, 2015 – The Department issued WDL #W008084-5C-C-R/MEPDES #ME0037265 for a five-year term.

March 16, 2021 – The Department accepted the permittee’s General Application for renewal of WDL #W008084-5C-C-R. The application was assigned WDL #W008084-5C-D-R

c. Source Description: The discharge is sanitary wastewater from a blueberry processing facility. The processing facility building has nine toilets and eight sinks, with a maximum number of 150 employees per day during August, the busiest month. Wastewater volume is calculated by totaling the readings of the flow meters located on each of the domestic water lines serving the facility’s restrooms. The discharge occurs for more than six months of the year.
2. PERMIT SUMMARY

d. **Wastewater Treatment:** The wastewater currently receives a secondary level of treatment from an overboard discharge system consisting of a 3,000-gallon septic tank and a 35' X 75' sand filter, with chlorine disinfection. The treated wastewater is collected in a vault where it is pumped to the wastewater lagoon or discharged into the receiving waterbody via an outfall pipe measuring four (4) inches in diameter which extends out into the receiving water at or just short of the center of the channel.

e. **Replacement options:** Pursuant to 38 M.R.S. §414-A(1-B), the Department finds that the discharge from an OBD meets the requirements of best practicable treatment for purposes of licensing when it finds that there are no technologically proven alternative methods of wastewater disposal consistent with the plumbing code adopted by the Department of Health and Human Services pursuant to Title 22, section 42 that will not result in an overboard discharge. The Department's finding must be based on documentation from a licensed site evaluator (LSE) having experience in designing replacement systems for overboard discharges and provided by the overboard discharge owner.

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 Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, 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

*Classifications of Estuarine and Marine Waters*, 38 M.R.S. §469, classifies all estuarine and marine waters lying within the boundaries of the State and which are not otherwise classified as Class SB, which includes the tidewaters of the Narraguagus River. *Standards for Classification of Estuarine and Marine waters*, 38 M.R.S. §465-B(2) describes the standards for Class SB waters.
5. RECEIVING WATER QUALITY CONDITIONS

*The State of Maine 2018/20/22 Integrated Water Quality Monitoring and Assessment Report*, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the segment of the Narraguagus River in the vicinity of the JWS discharge in several categories indicating impairment of water quality standards. The categories are as follows:

**Category 2: Estuarine and Marine Waters Attaining Some Non-Shellfish Harvesting Designated Uses – Insufficient Information for Other Uses.**

**Category 5-D: Estuarine and Marine Waters Impaired by Legacy Pollutants** states all marine and estuarine waters are listed in Category 5-D, partially supporting fish (fish and shellfish consumption) due to elevated levels of PCB’s, and other persistent, bioaccumulating substances in lobster tomally.

The Maine Department of Marine Resources (DMR) assesses information on shellfish growing areas to ensure that shellfish harvested are safe for consumption. The Maine Department of Marine Resources has authority to close shellfish harvesting areas wherever there is a pollution source, a potential pollution threat, or poor water quality. The DMR traditionally closes shellfish harvesting areas if there are known sources of discharges with unacceptable bacteria levels (in-stream thresholds established in the National Shellfish Sanitation Program) or maintains shellfish harvesting closure areas due to lack of updated information regarding ambient water quality conditions. In addition, the DMR prohibits shellfish harvesting in the immediate vicinity of all wastewater treatment outfall pipes as a precautionary measure in the event of a failure in the treatment plant’s disinfection system. Thus, shellfish harvesting Area #53 is closed to the harvesting of shellfish due to insufficient or limited ambient water quality data to determine that the area meets the standards in the National Shellfish Sanitation Program. The shellfish closure area can be found at [https://www.maine.gov/dmr/shellfish-sanitation-management/maps/index.html](https://www.maine.gov/dmr/shellfish-sanitation-management/maps/index.html).

The Department is making the determination that compliance with the fecal coliform bacteria and other secondary wastewater treatment limits established in this permitting action ensure that the discharge of secondary treated wastewater from the JWS facility will not cause or contribute to the failure of the receiving waters to meet the standards of its designated classification.

The 2018/20/22 305(b) report also lists all estuarine and marine waters in a category entitled, **Category 5-D: Estuarine and Marine Waters Impaired by Legacy Pollutants.** The waters are listed as partially supporting fishing (shellfish consumption) due to elevated levels of PCBs and other persistent, bioaccumulating substances in lobster tomally. Department rule Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury* establishes controls on the discharge of mercury to the surface waters of the State through interim effluent limits and implementation of pollution prevention plans. However, Section 1(A)(1) of the Chapter 519 rule states in part:
6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. **Best Practicable Treatment (BPT)** - The Department finds that the discharge meets the requirements of best practicable treatment pursuant to 38 M.R.S. § 414-A(1-B) for purposes of licensing when it finds that there are no technologically proven alternative methods of wastewater disposal consistent with the plumbing code adopted by the Department of Health and Human Services pursuant to Title 22, section 42 that will not result in an overboard discharge. Pursuant to Overboard Discharges: Licensing and Abandonment, 06-096 CMR 596(9), Criteria and Standards for Waste Discharge Licenses 06-96R 524(2) (effective January 12, 2001) and 06-096 CMR 525(3)(III), BPT for overboard discharges is secondary treatment. The secondary treatment regulation establishes technology-based effluent limitations for BOD5, TSS, and pH which are discussed in more detail in the individual parameter sections below.

The discharge from the permittee’s facility meets all the aforementioned criteria as a HHE 200 form dated July 28, 2010 from a licensed site evaluator indicates an on-site soil investigation has resulted in the LSE making the determination that there are no viable alternatives to the overboard discharge system. Therefore, the discharge is being permitted for another five-year term.

b. **Flow:** The previous permitting action established monthly average and daily maximum discharge flow limitations of 3,000 gpd respectively, based on the dry weather design capacity of the treatment system. The previous permitting action also carried forward the requirement that effluent flow must be measured continuously via a meter to ensure that representative discharge flow data are obtained. This permitting action carries forward all these conditions. A review of the monthly Discharge Monitoring Report (DMR) data for the period March 2015 – March 2021 indicate the values reported as follows:

<table>
<thead>
<tr>
<th>Value</th>
<th>Limit (gpd)</th>
<th>Range (gpd)</th>
<th>Mean (gpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Maximum</td>
<td>3,000</td>
<td>423 - 1480</td>
<td>741</td>
</tr>
</tbody>
</table>

Flow (DMRs=38)

<table>
<thead>
<tr>
<th>Value</th>
<th>Limit (gpd)</th>
<th>Range (gpd)</th>
<th>Mean (gpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td>3,000</td>
<td>423 - 1480</td>
<td>741</td>
</tr>
</tbody>
</table>

Acute: \[1Q_{10} = 22.8 \text{ cfs} \Rightarrow (22.8 \text{ cfs})(0.6464) + 0.003 \text{ MGD} = 4,914:1 \]

Chronic: \[7Q_{10} = 31.7 \text{ cfs} \Rightarrow (31.7 \text{ cfs})(0.6464) + 0.003 \text{ MGD} = 6,831:1 \]

Harmonic Mean = 95.1 cfs \[\Rightarrow (95.1 \text{ cfs})(0.6464) + 0.003 \text{ MGD} = 20,492:1 \]
6. **EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont’d)**

d. **Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS):** The previous permitting action established, and this permitting action carries forward technology-based monthly average and daily maximum BOD₅ and TSS concentration limits of 30 mg/L and 50 mg/L, respectively. The monthly average concentration limit is based on secondary treatment requirements as defined in Department rule, 06-096 CMR Chapter 525(3)(III). The daily maximum BOD₅ and TSS concentration limits of 50 mg/L were based on a Department best professional judgment (BPJ) of best practicable treatment (BPT). In addition, pursuant to Department rule, 06-096 CMR Chapter 525(3)(III), the previous permitting action established a weekly average BPT concentration limit of 45 mg/L.

The previous licensing action established mass limitations for BOD₅ and TSS. Department rule Chapter 523, *Waste Discharge License Conditions*, Section 6, *Calculating NPDES permit conditions*, sub-section f(1) states that, ”all pollutants limited in permits must have limitations, standards or prohibitions expressed in terms of mass...” This permitting action carries forward monthly average, weekly average and daily maximum BOD₅ and TSS mass limitations based on calculations using the design flow for the facility of 3,000 gpd (0.003 MGD) and the applicable concentration limits as follows:

- Monthly Average Limit: 
  \[(30 \text{ mg/L})(8.34 \text{ lbs./gallon})(0.003 \text{ MGD}) = 1.0 \text{ lbs/day}\]
- Weekly Average Limit: 
  \[(45 \text{ mg/L})(8.34 \text{ lbs./gallon})(0.003 \text{ MGD}) = 1.1 \text{ lbs/day}\]
- Daily Maximum Limit: 
  \[(50 \text{ mg/L})(8.34 \text{ lbs./gallon})(0.003 \text{ MGD}) = 1.2 \text{ lbs/day}\]

This permitting action also carries forward the requirement for a minimum of 85% removal of BOD₅ and TSS pursuant to Chapter 525(3)(III)(a)(3) and (b)(3) of the Department’s rules. The permittee’s wastewater treatment system does not have an influent sampling port 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” a reasonable influent value for BOD₅ and TSS may be assumed to be 286 mg/L. Therefore, this permitting action authorizes the permittee to assume an influent BOD₅ and TSS concentration value of 286 mg/L when calculating the monthly percent removal rate.

A review of the monthly Discharge Monitoring Report (DMR) data for the period March 2015-March 2021 indicate the values reported as follows:

### **BOD Concentration (DMRs=38)**

<table>
<thead>
<tr>
<th>Value</th>
<th>Limit (mg/L)</th>
<th>Range (mg/L)</th>
<th>Average (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Average</td>
<td>30</td>
<td>&lt;1.6 - 43</td>
<td>&lt;7.63</td>
</tr>
<tr>
<td>Daily Maximum</td>
<td>50</td>
<td>1.6 - 43</td>
<td>7.70</td>
</tr>
</tbody>
</table>

### **TSS concentration (DMRs=38)**

<table>
<thead>
<tr>
<th>Value</th>
<th>Limit (mg/L)</th>
<th>Range (mg/L)</th>
<th>Average (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Average</td>
<td>30</td>
<td>&lt;2 - 22</td>
<td>6.44</td>
</tr>
<tr>
<td>Daily Maximum</td>
<td>50</td>
<td>2 - 22</td>
<td>6.44</td>
</tr>
</tbody>
</table>
6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont’d)

e. Settleable Solids: The previous permitting action established a daily maximum technology-based concentration limit of 0.3 ml/L for settleable solids and a minimum monitoring frequency of 1/Month. This permitting action carries forward these limits and monitoring frequency. A review of the monthly Discharge Monitoring Report (DMR) data for the period March 2015-March 2021 indicate that the permittee has been in compliance with the 0.3 ml/L limit 100% of the time.

f. Fecal Coliform Bacteria: The 8/28/00 permitting action established seasonal (April 15th – October 31st) monthly average and daily maximum concentration limits of 64 colonies/100 ml and 427 colonies/100 ml (instantaneous level) respectively, for the indicator organism *E. coli* bacteria. Though at the point of discharge the receiving water is dominated by freshwater, the non-attainment status for shellfish harvesting cited in Section 5, Water Quality Conditions, of this Fact Sheet is based on most probable numbers for fecal coliform bacteria. Therefore, to be consistent with the National Shellfish Sanitation Program (NSSP). The 2010 permitting action modified the indicator organism to fecal coliform bacteria and established seasonal monthly average and daily maximum concentration limits of 15 colonies/100 ml and 50 colonies/100 ml (instantaneous level) respectively, to be consistent with the NSSP.

This permitting action is establishing a seasonal monthly average and daily maximum concentration limits of 14 colonies/100 ml and 31 colonies/100 ml, respectively, for fecal coliform bacteria, which are consistent with the National Shellfish Sanitation Program.

A review of monthly DMR data for the period March 2015-March 2021 indicates values reported as follows:

**Fecal Coliform Bacteria (DMRs=7)**

<table>
<thead>
<tr>
<th>Value</th>
<th>Limit (col/100 ml)</th>
<th>Range (col/100 ml)</th>
<th>Mean (col/100 ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Average</td>
<td>15</td>
<td>No data reported</td>
<td>-</td>
</tr>
<tr>
<td>Daily Maximum</td>
<td>50</td>
<td>No data reported</td>
<td>-</td>
</tr>
</tbody>
</table>
6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont’d)

g. Total Residual Chlorine (TRC): The previous permitting action carried forward a daily maximum technology-based concentration limit of 1.0 mg/L along with a monitoring frequency of 2/Week for TRC. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department permitting actions impose the more stringent of either a water quality-based or BPT-based limit. With dilution factors as determined above, end-of-pipe (EOP) water quality-based concentration thresholds for TRC may be calculated as follows:

<table>
<thead>
<tr>
<th>Acute (A) Criterion</th>
<th>Chronic (C) Criterion</th>
<th>A &amp; C Dilution Factors</th>
<th>Calculated Acute Threshold</th>
<th>Calculated Chronic Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.013 mg/L</td>
<td>0.0075 mg/L</td>
<td>4,914:1 (A)</td>
<td>64 mg/L</td>
<td>51 mg/L</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6,813:1 (C)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that dechlorinate the discharge in order to meet water quality-based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively.

The calculated acute water quality-based threshold of 64 mg/L is less stringent than the technology-based standard of 1.0 mg/L. Therefore, this permitting action is carrying forward the technology-based limit of 1.0 mg/L and the monitoring frequency of 2/Week. TRC monitoring is required any time chlorine-based compounds are in use for effluent disinfection. For instances when the permittee has not utilized chlorine-based compounds for effluent disinfection for an entire reporting period, the permittee must report “NODI-9” for this parameter on the monthly discharge monitoring report (DMR).

A review of the monthly Discharge Monitoring Report (DMR) data for the period March 2015 – March 2021 indicates the permittee has not reported data for Total Residual Chlorine and has reported NODI-9, indicating use of a non-chlorine based effluent disinfectant, in 65 instances.

h. pH: The previous permitting action established, and this permitting action carries forward a pH range limit of 6.0 – 9.0 standard units (SU), and a monitoring frequency of 1/yr in compliance with 06-096 CMR 523(5)(i)(2) and 06-096 CMR 523(5)(i)(5). A review of DMRs for the period since the last permitting action indicates that permittee has been in compliance with established pH range limitations 100% of the time.
6. **EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont’d)**

i. **Whole Effluent Toxicity (WET) & Chemical Specific Testing:** 38 M.R.S., §414-A and §420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department rule, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program* (toxics rule) sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected, and narrative and numeric water quality criteria are met. Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

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 both invertebrate and vertebrate species. Priority pollutant 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. Analytical chemistry refers to a suite of chemical tests for ammonia-nitrogen, total aluminum, total cadmium, total chromium, total copper, total hardness (fresh water only), total lead, total nickel, total silver, total zinc, total arsenic, total cyanide (amenable to chlorination) and total residual chlorine.

Chapter 530 Section 2.A specifies the criteria for exemption of certain discharges from toxics testing as follows:

1. *Discharges from individual discharge points licensed to discharge less than 50,000 gallons per day of solely domestic wastewater and with a chronic dilution factor of at least 50 to 1, provided no holding tank wastes containing chemicals are accepted by the facility;*

2. *Discharges from residential overboard discharge systems; or*

3. *Discharges from combined sewer overflow discharge points, provided the owner of the sewerage system is conducting or participating in a discharge abatement program.*

The JWS facility is permitted to discharge a flow of less than 50,000 gallons per day and has a chronic dilution factor of at least 50:1. Therefore, the facility is categorically exempt from the Chapter 530 testing requirements.
7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

8. PUBLIC COMMENTS

Public notice of this application was made in the Ellsworth American newspaper on February 25, 2021. 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:

Rodney Robert  
Division of Water Quality Management  
Bureau of Water Quality  
Department of Environmental Protection  
17 State House Station  
Augusta, Maine 04333-0017  
Telephone: (207) 680-0576  
e-mail: rodney.robert@maine.gov

10. RESPONSE TO COMMENTS

Reserved until the end of the formal thirty-day comment period.
ATTACHMENT A
ATTACHMENT B