

AGENCY OF NATURAL RESOURCES  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
WATERSHED MANAGEMENT DIVISION  
ONE NATIONAL LIFE DRIVE, DAVIS BUILDING, 3<sup>RD</sup> FLOOR  
MONTPELIER, VT 05620-3522

Permit No.: 3-1324  
PIN: SJ95-0114  
NPDES No.: VT0020893

DISCHARGE PERMIT

In compliance with the provisions of the Vermont Water Pollution Control Act as amended (10 V.S.A. chapter 47), the Vermont Water Pollution Control Permit Regulations as amended (Environmental Protection Rules, Chapter 13), the federal Clean Water Act as amended (33 U.S.C. §1251 *et seq.*), and implementing federal regulations,

Ryegate Associates  
247 Weesner Drive  
East Ryegate, VT 05042

(hereinafter referred to as the "Permittee") is authorized by the Secretary of the Agency of Natural Resources (hereinafter referred to as the "Secretary") to discharge from a facility located at:

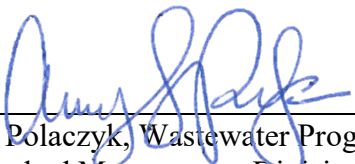
Weesner Drive  
East Ryegate, VT

to the Connecticut River in accordance with the following conditions.

This permit shall become effective on July 1, 2021

This permit and the authorization to discharge shall expire on June 30, 2026

Peter Walke, Commissioner  
Department of Environmental Conservation

By:  Date: 7/1/2021  
Amy Polaczyk, Wastewater Program Manager  
Watershed Management Division

**I. SPECIAL CONDITIONS**

**A. EFFLUENT LIMITS**

1. **Discharge Point S/N 001 Lat. 44.21311, Long. -72.05534:** During the term of this permit, the Permittee is authorized to discharge process wastewater: cooling tower blowdown, reverse osmosis regenerant, demineralization regenerant, filter backwash, miscellaneous cooling waters, and floor drains from outfall S/N 001 to the Connecticut River, an effluent for which the characteristics shall not exceed the values listed below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Monthly Average	Maximum Day	Measurement Frequency	Sample Type
Flow		65,000 GPD	continuous	Daily Total
Total Suspended Solids <sup>(1)</sup>	30 mg/L <sup>(2,3)</sup>	100 mg/L	1 × month	24-hour composite
Oil & Grease	15 mg/L	20 mg/L	1 × month	Grab
Turbidity <sup>(1)</sup>		Monitor Only (NTU)	1 × month	Grab
Temperature (May-Sept)		90°F	1 × week	Grab
Temperature (Oct-April)		90°F	1 × month	Grab
Total Metals <sup>(4)</sup>		Monitor Only (mg/L)	annually	24-hour composite
pH		6.5 to 8.5 S.U.	daily	Grab

*The Permittee shall collect samples prior to combining with Discharge S/N 002.*

(1) Samples of Total Suspended Solids and Turbidity shall be collected during normal R.O. regenerant operations or during filter backwashing if the filters are backwashed during that month.

(2) At the Permittee’s choice the Total Suspended Solids effluent limitation may be a “Net Limitation”. The net limitation value shall be determined by subtracting the intake water sample concentration from the effluent water sample concentration. The difference cannot be greater than 30 mg/L, monthly average.

Intake (source water) Total Suspended Solids sampling shall be conducted to account for the detention time in the system based on the current effluent flows. If the Permittee fails to collect and analyze a valid Total Suspended Solids sample of the source water, then the “net limitation” cannot be evoked.

If the Permittee chooses to report net effluent limitations, the intake water sample results shall also be submitted on the Discharge Monitoring Report (DMR) and the sampling indicated on the DMR.

(3) If the “Net” Total Suspended Solids result is greater than 30 mg/L, then at a minimum, the Permittee shall collect and analyze additional samples for “Net” Total Suspended Solids.

(4) The Total Metals sample shall be collected annually in September and analyzed for Total Cadmium, Total Copper, Total Iron, Total Lead, Total Nickel, and Total Zinc. Each metal shall be reported separately.

1. <sup>cont.</sup> During the term of this permit, the Permittee is authorized to discharge process wastewater: cooling tower blowdown, reverse osmosis regenerant, demineralization regenerant, filter backwash, miscellaneous cooling water, and floor drains from a biomass (wood) fired electrical power plant from outfall S/N 001, an effluent for which the characteristics shall not exceed the values listed below:

**For a discharge of not more than 2 hours in a day:**

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	2-Hour Average	Instantaneous Maximum	Measurement Frequency	Sample Type

Free Available Chlorine <sup>(1)</sup>	0.2 mg/L	0.5 mg/L	Daily	Grab
Total Residual Chlorine <sup>(1)</sup>		1.0 mg/L	Daily	Grab
Free Available Oxidants <sup>(1)</sup>	0.1 mg/L	0.25 mg/L	Daily	Grab
Total Residual Oxidants <sup>(1)</sup>		0.5 mg/L	Daily	Grab

*The Permittee shall collect samples prior to combining with Discharge S/N 002. The discharge valve shall not be opened for more than 2 hours per day.*

(1) Samples for Free Available Chlorine, Free Available Oxidants (Bromine), Total Residual Chlorine, and Total Residual Oxidants (Bromine) shall be collected only during periods when the discharge of chlorinated or brominated cooling water is occurring.

**For continuous discharges (more than 2 hours in a day):**

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Monthly Average	Instantaneous Maximum	Measurement Frequency	Sample Type

Free Available Chlorine <sup>(1,2)</sup>		0.0 mg/L	Daily	Grab
Total Residual Chlorine <sup>(1,2)</sup>		0.0 mg/L	Daily	Grab
Free Available Oxidants <sup>(1,2)</sup>		0.0 mg/L	Daily	Grab
Total Residual Oxidants <sup>(1,2)</sup>		0.0 mg/L	Daily	Grab

*The Permittee shall collect samples prior to combining with Discharge S/N 002. The discharge valve shall be opened for more than 2 hours per day.*

(1) Samples for Free Available Chlorine, Free Available Oxidants (Bromine), Total Residual Chlorine, and Total Residual Oxidants (Bromine) shall be collected only during periods when the discharge of chlorinated or brominated cooling water is occurring.

(2) Neither Free Available Chlorine, Free Available Oxidants (Bromine), Total Residual Chlorine, and Total Residual Oxidants (Bromine) shall be discharged for more than 2 hours in a day unless the Permittee can demonstrate to the Secretary that the unit in question cannot operate at or below this level of chlorination or bromination.

2. During the term of this permit, the Permittee is authorized to discharge from outfall S/N 002: stormwater runoff from the woodchip storage area. Such discharges shall be limited and monitored by the Permittee as specified below.

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow		As naturally occurs	None	None
Biochemical Oxygen Demand <sup>(1)</sup>		Monitor only (mg/L)	1 × month (seasonal)	Grab
Total Suspended Solids <sup>(1)</sup>		Monitor only (mg/L)	1 × month (seasonal)	Grab
Turbidity <sup>(1)</sup>		Monitor only (NTU)	1 × month (seasonal)	Grab
pH <sup>(1)</sup>		Monitor only (SU)	1 × month (seasonal)	Grab

*The Permittee shall collect samples prior to combining with Discharge S/N 001.*

(1) A grab sample shall be collected each month during the period of May 1<sup>st</sup> through October 31<sup>st</sup>. The sample shall be collected during the first 30 minutes of discharge after a rainstorm has started. If a stormwater discharge does not occur during a month (reporting period), then the monthly discharge monitoring report shall indicate “no discharge” for that month.

### 3. Special Conditions

- a. The Permittee is limited to using the chemicals that are similar in composition, concentration, and toxicity to those identified in the permit application. An increase in the dosage rate or a substantial change in the chemicals used shall be reviewed by the Secretary to assure that there is no adverse impact on the receiving water.
  1. A change in chemical vendors shall require that the Permittee, at a minimum, submit the appropriate SDS sheets to the Secretary.
  2. A substantial change in chemical usage may require the Permittee to conduct a priority pollutant analysis of the discharge for some or all of the pollutants listed in Appendix A of 40 CFR Part 423 or conduct Whole Effluent Toxicity (WET) testing on the discharge.

A substantial change in chemical usage shall be defined as chemicals that are not similar in composition, concentration, or toxicity to those identified in the application.

- b. The Permittee shall maintain a current spill prevention and contingency plan for the facility. The plan shall be reviewed periodically and updated as necessary to reflect changes in the facility's design or operations. If the plan is updated, the revised plan shall be submitted to the Secretary. The plan shall define management, operations, and procedures to properly contain and dispose of any unusable hazardous materials that may be generated by this facility's processes or as a result of a spill. The plan shall minimize the potential for spills and prevent the discharge of these materials to floor drains, the cooling tower, or waters of the State.
- c. The facility shall maintain and utilize a Chip Management Plan. At a minimum, the Chip Management Plan shall include the following:
  1. The chip pile shall be built on sloped asphalt or concrete.
  2. The chip pile shall be rotated at least every 120 days or as necessary in order to prevent significant decomposition, acid formation, or spontaneous combustion.
  3. The storage area shall be kept free of oil or other chemical residues, litter, and other miscellaneous refuse.

The chip Management Plan shall be updated as necessary, and the updated version shall be submitted to the Secretary.

- d. The discharge of polychlorinated biphenyl compounds is prohibited.

- e. Chlorine and bromine-based compounds may be used as biocides. No other chemically based biocides or slimicides may be used without review and approval from the Secretary.
- f. The Permittee shall demonstrate the accuracy of the effluent flow measurement device monthly and report the results on the monthly report forms. The acceptable limit of error is  $\pm 10\%$ .
- g. The discharge shall be free from substances in kind or quantity that settle to form harmful benthic deposits; float as foam, debris, scum or other visible substances; produce odor, color, taste or turbidity that is not naturally occurring and would render the surface water unsuitable for its designated uses; result in the dominance of nuisance species; or interfere with recreational activities; or which would cause a violation of the Vermont Water Quality Standards.
- h. The effluent shall not cause visible discoloration of the receiving waters.
- i. Any action on the part of the Secretary in reviewing, commenting upon or approving plans and specifications for the construction of WWTFs shall not relieve the Permittee from the responsibility to achieve effluent limitations set forth in this permit and shall not constitute a waiver of, or act of estoppel against any remedy available to the Secretary, the State of Vermont or the federal government for failure to meet any requirement set forth in this permit or imposed by state or federal law.

## **B. REAPPLICATION**

If the Permittee desires to continue to discharge after the expiration of this permit, the Permittee shall reapply on the application forms then in use at least 180 days before this permit expires.

Reapply for a Discharge Permit by: **December 31, 2025**

## **C. OPERATING FEES**

This discharge is subject to operating fees as required by 3 V.S.A. § 2822.

## **D. WHOLE EFFLUENT TOXICITY TESTING (ACUTE)**

1. The Permittee shall conduct one, two-species (*Pimephales promelas* and *Ceriodaphnia dubia*) acute WET tests on a composite effluent sample collected from outfall serial number S/N 001. Total Ammonia shall be measured in the highest concentration of test solution at the beginning of the test. If chlorine is used in the WWTF's system, Total Residual Chlorine shall be measured in the highest concentration of test solution at the beginning of the test.

2. The WET tests shall be conducted according to the procedures and guidelines specified in “Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms” and “Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms” (both documents U.S. EPA October 2002 or, if a newer edition is available, the most recent edition).

3. Based upon the results of these tests or any other toxicity tests conducted, the Secretary reserves the right to reopen and amend this permit to require additional WET testing or a Toxicity Reduction Evaluation.

4. The Permittee may request the use of lab water for controls and dilution if:

- a. acquiring receiving water is hazardous due to weather or topography;
- b. previous WET tests have shown that the receiving water has had poor performance in the lab controls or dilution; or
- c. requested by the Permittee and approved by the Secretary.

5. In the event this permit is administratively continued pursuant to 3 V.S.A. § 814, and WET tests conducted during the permit term indicated any acute or chronic toxicity, the Permittee shall maintain the WET testing frequency established in Condition I.D.6. during such continuance.

6. The Permittee shall sample and report according to the following table:

Due Date	Event Description
12/31/2022	The Permittee shall submit the WET test results for the sample taken during August-October 2022.

**E. QUALITY ASSURANCE REPORT/PROFICIENCY TESTING**

1. In accordance with 10 V.S.A. § 1263.d.2, the Secretary may require a laboratory quality assurance sample program to ensure qualification of laboratory analysts. For purposes of demonstrating compliance with the requirements of this permit regarding adequate laboratory controls and appropriate quality assurance procedures, the Permittee shall conduct and pass an annual laboratory proficiency test, via an accredited laboratory, for the analysis of all pollutant parameters performed within their facility laboratory and reported as required by this permit. This can be carried out as part of an EPA DMR-QA study.

2. In the event this permit is administratively continued pursuant to 3 V.S.A. § 814, the Permittee shall continue to complete annual proficiency tests and report by December 31 each year.



3. The Permittee shall report on quality assurance according to the following table:

Due Date	Event Description
12/31/2022	The Permittee shall submit passing proficiency test results.
12/31/2023	The Permittee shall submit passing proficiency test results.
12/31/2024	The Permittee shall submit passing proficiency test results.
12/31/2025	The Permittee shall submit passing proficiency test results.

## F. MONITORING AND REPORTING

### 1. Sampling and Analysis

The sampling, preservation, handling, and analytical methods used shall conform to the test procedures published in Title 40 of the Code of Federal Regulations (C.F.R.) Part 136. The Permittee shall use sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 for the analysis of the pollutants or pollutant parameters required under this Section.

Samples shall be representative of the volume and quality of effluent discharged over the sampling and reporting period. All samples are to be taken during normal operating hours. The Permittee shall identify the effluent sampling location used for each discharge. A description of the effluent sample location is included in Condition I.A.1.

### 4. Reporting

The Permittee is required to submit monthly reports of monitoring results as required in Condition I.A. and operational parameters on Discharge Monitoring Report (DMR) form WR-43 or through an electronic reporting system made available by the Secretary. Reports are due on the 15<sup>th</sup> day of each month, beginning with the month following the effective date of this permit.

Unless waived by the Secretary, the Permittee shall electronically submit its DMRs via Vermont's online electronic reporting system. The Permittee shall electronically submit additional compliance monitoring data and reports specified by the Secretary. When the Permittee submits DMRs using an electronic system designated by the Secretary, which requires attachment of scanned DMRs in PDF format, it is not required to submit hard copies of DMRs. The link below shall be used for electronic submittals:

<https://anronline.vermont.gov/>

If, in any reporting period there has been no discharge, the Permittee must submit that information by the report due date. All reports shall be signed:

- a. In the case of corporations, by a principal executive officer of at least the level of vice president, or his/her duly authorized representative, if such representative is responsible

for the overall operation of the facility from which the discharge described in the permit form originates and the authorization is made in writing and submitted to the Secretary;

- b. In the case of a partnership, by a general partner;
- c. In the case of a sole proprietorship, by the proprietor; or
- d. In the case of a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

## **5. Recording of Results**

The Permittee shall maintain records of all information resulting from any monitoring activities required, including:

- a. The exact place, date, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The dates and times the analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques and methods used, including sample collection handling and preservation techniques;
- f. The results of such analyses;
- g. The records of monitoring activities and results, including all instrumentation and calibration and maintenance records;
- h. The original calculation and data bench sheets of the operator who performed analysis of the influent or effluent pursuant to requirements of this permit; and
- i. For analyses performed by contract laboratories:
  - a. The detection level reported by the laboratory for each sample; and
  - b. The laboratory analytical report including documentation of the QA/QC and analytical procedures.

When “non-detects” are recorded, the method detection limit shall be reported and used in calculating any time-period averaging for reporting on DMRs.

## **6. Additional Monitoring**

If the Permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the DMR form WR-43. Such increased frequency shall also be indicated.

## II. GENERAL CONDITIONS

### A. MANAGEMENT REQUIREMENTS

#### 1. Facility Modification / Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such a violation may result in the imposition of civil and/or criminal penalties pursuant to 10 V.S.A. chapters 47, 201, and/or 211. Any anticipated facility alterations or expansions or process modifications which will result in new, different, or increased discharges of any pollutants must be reported by submission of a new permit application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the Secretary of such changes. Following such notice, the permit may be modified, pursuant to Condition II.B.4. of this permit, to specify and limit any pollutants not previously limited.

#### 2. Noncompliance Notification

- a. The Permittee shall give advance notice to the Secretary of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- b. In the event the Permittee is unable to comply with any of the conditions of this permit due, among other reasons, to:
  - i. Breakdown or maintenance of waste treatment equipment (biological and physical-chemical systems including all pipes, transfer pumps, compressors, collection ponds or tanks for the segregation of treated or untreated wastes, ion exchange columns, or carbon absorption units);
  - ii. Accidents caused by human error or negligence;
  - iii. Any unanticipated bypass or upset which exceeds any effluent limitation in the permit;
  - iv. Violation of a maximum day discharge limitation for any of the pollutants listed by the Secretary in this permit; or
  - v. Other causes such as acts of nature,the Permittee shall provide notice as specified in subdivision (c) of this subsection.
- c. For any noncompliance not covered under Condition II.A.2.b. of this permit, an operator of a WWTF or the operator's delegate shall notify the Secretary within 24 hours of becoming aware of such condition and shall provide the Secretary with the following information, in writing, within five days:

- i. Cause of noncompliance;
- ii. A description of the non-complying discharge including its impact upon the receiving water;
- iii. Anticipated time the condition of noncompliance is expected to continue or, if such condition has been corrected, the duration of the period of noncompliance;
- iv. Steps taken by the Permittee to reduce and eliminate the non-complying discharge; and
- v. Steps to be taken by the Permittee to prevent recurrence of the condition of noncompliance.

### **3. Operation and Maintenance**

All waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the following:

- a. The Permittee shall, at all times, maintain in good working order and operate as efficiently as possible all treatment and control facilities and systems (and related appurtenances) installed or used by the Permittee to achieve compliance with the terms and 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 the Permittee only when the operation is necessary to achieve compliance with the conditions of this permit; and
- b. The Permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit.

### **4. Quality Control**

The Permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at regular intervals to ensure accuracy of measurements or shall ensure that both activities will be conducted.

The Permittee shall keep records of these activities and shall provide such records upon request of the Secretary.

The Permittee shall analyze any additional samples as may be required by the Secretary to ensure analytical quality control.

## **5. Bypass**

The bypass of facilities (including pump stations) is prohibited, except where authorized under the terms and conditions of an Emergency Pollution Permit issued pursuant to 10 V.S.A. § 1268. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the activity in order to maintain compliance with the conditions of this permit.

## **6. Duty to Mitigate**

The Permittee shall take all reasonable steps to minimize or prevent any adverse impact to waters of the State, the environment, or human health resulting from noncompliance with any condition specified in this permit, including accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

## **7. Records Retention**

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed, all calibration and maintenance of instrumentation records and all original 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 shall be retained for a minimum of three years, and shall be submitted to the Secretary upon request. This period shall be extended during the course of unresolved litigation regarding the discharge of pollutants or when requested by the Secretary.

## **8. Solids Management**

Collected screenings, sludges, and other solids removed in the course of treatment and control of wastewaters shall be stored, treated and disposed of in accordance with 10 V.S.A. chapter 159 and with the terms and conditions of any certification, interim or final, transitional operation authorization, or order issued pursuant to 10 V.S.A. chapter 159 that is in effect on the effective date of this permit or is issued during the term of this permit.

## **9. Emergency Pollution Permits**

Maintenance activities, or emergencies resulting from equipment failure or malfunction, including power outages, which result in an effluent which exceeds the effluent limitations specified herein, shall be considered a violation of the conditions of this permit, unless the Permittee's discharge is covered under an emergency pollution permit under the provisions of 10 V.S.A. § 1268. The Permittee shall notify the Secretary of the emergency situation by the next working day, unless notice is required sooner under Condition II.A.2.

10 V.S.A. § 1268 reads as follows:

When a discharge permit holder finds that pollution abatement facilities require repairs, replacement, or other corrective action in order for them to continue to meet standards specified in the permit, the holder may apply in the manner specified by the Secretary

for an emergency pollution permit for a term sufficient to effect repairs, replacements, or other corrective action. The Secretary shall proceed in accordance with chapter 170 of this title. No emergency pollution permit shall be issued unless the applicant certifies and the Secretary finds that:

- (1) there is no present, reasonable alternative means of disposing of the waste other than by discharging it into the waters of the State during the limited period of time of the emergency;
- (2) the denial of an emergency pollution permit would work an extreme hardship upon the applicant;
- (3) the granting of an emergency pollution permit will result in some public benefit;
- (4) the discharge will not be unreasonably harmful to the quality of the receiving waters; and
- (5) the cause or reason for the emergency is not due to willful or intended acts or omissions of the applicant.

Application shall be made to the Secretary at the following address: Agency of Natural Resources, Department of Environmental Conservation, One National Life Drive, Davis Building, 3<sup>rd</sup> Floor, Montpelier VT 05620-3522.

## **10. Power Failure**

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the Permittee shall either:

- a. Provide an alternative power source sufficient to operate the wastewater control facilities, or if such alternative power source is not in existence,
- b. Halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

## **B. RESPONSIBILITIES**

### **1. Right of Entry**

The Permittee shall allow the Secretary or authorized representative, upon the presentation of proper credentials:

- a. To 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. To have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;

- c. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. To 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.

## 2. Transfer of Ownership or Control

This permit is not transferable without prior written approval of the Secretary. All application and operating fees must be paid in full prior to transfer of this permit. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the Permittee shall provide a copy of this permit to the succeeding owner or controller and shall send written notification of the change in ownership or control to the Secretary **at least 30 days in advance of the proposed transfer date**. The notice to the Secretary shall include a written agreement between the existing and new Permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them. The Permittee shall also inform the prospective owner or operator of their responsibility to make an application for transfer of this permit.

This request for transfer application must include as a minimum:

- a. A properly completed application form provided by the Secretary and the applicable processing fee.
- b. A written statement from the prospective owner or operator certifying:
  - i. The conditions of the operation that contribute to, or affect, the discharge will not be materially different under the new ownership;
  - ii. The prospective owner or operator has read and is familiar with the terms of the permit and agrees to comply with all terms and conditions of the permit; and
  - iii. The prospective owner or operator has adequate funding to operate and maintain the treatment system and remain in compliance with the terms and conditions of the permit.
- c. The date of the sale or transfer.

The Secretary may require additional information dependent upon the current status of the facility operation, maintenance, and permit compliance.

## 3. Confidentiality

Pursuant to 10 V.S.A. § 1259(b):



Any records or information obtained under this permit program that constituents trade secrets under 1 V.S.A. § 317 (c)(9) shall be kept confidential, except that such records or information may be disclosed to authorized representatives of the State and the United States when relevant to any proceedings under this chapter.

Claims for confidentiality for the following information will be denied:

- a. The name and address of any permit applicant or Permittee.
- b. Permit applications, permits, and effluent data.
- c. Information required by application forms, including information submitted on the forms themselves and any attachments used to supply information required by the forms.

#### **4. Permit Modification and Revocation**

Pursuant to 40 C.F.R. § 124.5, the Secretary may modify, revoke and reissue, or terminate for cause, in whole or in part, the authorization to discharge under this permit. These actions may be taken for the reasons specified in 40 C.F.R. § 122.62 (modification or revocation and reissuance) and § 122.64 (termination), including:

- a. There are material and substantial alterations or additions to the permitted facility or activity;
- b. New information is received that was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance;
- c. To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions;
- d. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- e. Reallocation of WLA under the LIS TMDL;
- f. Development of an integrated WWTF and stormwater runoff NPDES permit; or
- g. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

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 shall not stay any permit condition.

## **5. Toxic Effluent Standards**

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under section 307(a) of the Clean Water Act for a toxic pollutant which is present in the Permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, then this permit shall be modified or revoked and reissued, pursuant to Condition II.B.4. of this permit, in accordance with the toxic effluent standard or prohibition and the Permittee so notified.

## **6. Oil and Hazardous Substance Liability**

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under 10 V.S.A. §1281.

## **7. Civil and Criminal Liability**

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of 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. Except as provided in "Bypass" (Condition II.A.5.) and "Emergency Pollution Permits" (Condition II.A.9.), nothing in this permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance. Civil and criminal penalties for noncompliance are provided for in 10 V.S.A. Chapters 47, 201, and 211.

## **8. State Laws**

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 established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

## **9. Property Rights**

Issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

## **10. Other Information**

If 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 Secretary, it shall promptly submit such facts or information.

## 11. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

## 12. Authority

This permit is issued under authority of 10 V.S.A. §§1258 and 1259 of the Vermont Water Pollution Control Act, the Vermont Water Pollution Control Permit Regulation, and Section 402 of the Clean Water Act, as amended.

### III.

#### A. OTHER REQUIREMENTS

This permit shall be modified, suspended, or revoked to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit, or
2. Controls any pollutant not limited in the permit.

The permit as modified under this paragraph shall also contain any other requirements of the Vermont Water Pollution Control Act then applicable.

#### B. DEFINITIONS

For purposes of this permit, the following definitions shall apply.

**Agency** – means the Vermont Agency of Natural Resources.

**Annual Average** – means the highest allowable average of daily discharges calculated as the sum of all daily discharges (mg/L, lbs or gallons) measured during a calendar year divided by the number of daily discharges measured during that year.

**Average** – means the arithmetic means of values taken at the frequency required for each parameter over the specified period.

**Bypass** – means the intentional diversion of waste streams from any portion of the treatment facility.

**The Clean Water Act** – means the federal Clean Water Act, as amended (33 U.S.C. § 1251, *et seq.*).

**Composite Sample** – means a sample consisting of a minimum of one grab sample per hour collected during a 24-hour period (or lesser period as specified in the section on Monitoring and Reporting) and combined proportionally to flow over that same time period.

**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 pounds the daily discharge is calculated as the total pounds of pollutants discharged over the day.

For pollutants with limitations expressed in mg/L the daily discharge is calculated as the average measurement of the pollutant over the day.

**Discharge** – means the placing, depositing, or emission of any wastes, directly or indirectly, into an injection well or into the waters of the State.

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

**Incompatible Substance** – means any waste being discharged into the treatment works which interferes with, passes through without treatment, or is otherwise incompatible with said works or would have a substantial adverse effect on the works or on water quality. This includes all pollutants required to be regulated under the Clean Water Act.

**Instantaneous Maximum** – means a value not to be exceeded in any grab sample.

**Major Contributing Industry** – means one that: (1) has a flow of 50,000 gallons or more per average work day; (2) has a flow greater than five percent of the flow carried by the municipal system receiving the waste; (3) has in its wastes a toxic pollutant in toxic amounts as defined in standards issued under Section 307(a) of the Clean Water Act; or (4) has a significant impact, either singly or in combination with other contributing industries, on a treatment works or on the quality of effluent from that treatment works.

**Maximum Day or Maximum Daily Discharge Limitation** – means the highest allowable “daily discharge” (mg/L, lbs or gallons).

**Mean** – means the arithmetic mean.

**Monthly Average or Average Monthly Discharge Limitation** – means the highest allowable average of daily discharges (mg/L, lbs or gallons) over a calendar month, calculated as the sum of all daily discharges (mg/L, lbs or gallons) measured during a calendar month divided by the number of daily discharges measured during that month.

**NPDES** – means the National Pollutant Discharge Elimination System.

**Secretary** – means the Secretary of the Agency of Natural Resources or the Secretary’s duly authorized representative.

**Septage** – means the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

**Untreated Discharge** – means (1) combined sewer overflows from a WWTF; (2) overflows from sanitary sewers and combined sewer systems that are part of a WWTF during dry weather flows, which result in a discharge to waters of the State; (3) upsets or bypasses around or within a WWTF during dry or wet weather conditions that are due to factors unrelated to a wet weather storm event and that result in a discharge of sewage that has not been fully treated to waters of the State; and (4) discharges from a WWTF to separate storm sewer systems.

**Waste** – means effluent, sewage or any substance or material, liquid, gaseous, solid, or radioactive, including heated liquids, whether or not harmful or deleterious to waters.

**Waste Management Zone** – means a specific reach of Class B waters designated by a permit to accept the discharge of properly treated wastes that prior to treatment contained organisms pathogenic to human beings. Throughout the receiving waters, water quality criteria must be achieved but increased health risks exist in a waste management zone due to the authorized discharge.

**Waters** – means all rivers, streams, creeks, brooks, reservoirs, ponds, lakes, springs, and all bodies of surface waters, artificial or natural, which are contained within, flow through, or border upon the State or any portion of it.

**Weekly average or Average Weekly Discharge Limitation** – means the highest allowable average of daily discharges (mg/L, lbs or gallons) over a calendar week, calculated as the sum of all daily discharges (mg/L, lbs or gallons) measured during a calendar week divided by the number of daily discharges measured during that week.

**Whole Effluent Toxicity (WET)** – means the aggregate toxic effect of an effluent measured directly by a toxicity test.

**Wastewater Treatment Facility (WWTF)** – means a treatment plant, collection system, pump station, and attendant facilities permitted by the Secretary for the purpose of treating domestic, commercial, or industrial wastewater.

**Attachment A.**

Discharge ID	Discharge Activity	Discharge Status	Receiving Water	Latitude	Longitude
001	Process Wastewater Outfall	A	Connecticut River	44.21311	-72.05534
002	Stormwater runoff from chip storage area	A	Connecticut River	44.21311	-72.05534

AGENCY OF NATURAL RESOURCES  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
WATERSHED MANAGEMENT DIVISION  
ONE NATIONAL LIFE DRIVE, DAVIS BUILDING, 3<sup>rd</sup> FLOOR  
MONTPELIER, VT 05620-3522

**FACT SHEET FOR PERMIT**  
**July 2021**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE STATE**

**PERMIT NO:** 3-1324  
**PIN:** SJ95-0114  
**NPDES NO:** VT0020893

**NAME AND ADDRESS OF APPLICANT:**

Ryegate Associates  
247 Weesner Drive  
East Ryegate, VT 05042

**NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:**

Ryegate Power Station  
Weesner Drive  
East Ryegate, VT 05042

**FACILITY COORDINATES:** Lat: 44.21601 Long: -72.05803

**RECEIVING WATER:** Connecticut River

**CLASSIFICATION:** All uses Class B(2) with a waste management zone. Class B waters are suitable for swimming and other primary contact recreation; irrigation and agricultural uses; aquatic biota and aquatic habitat; good aesthetic value; boating, fishing, and other recreational uses; and suitable for public water source with filtration and disinfection or other required treatment. A waste management zone is a specific reach of Class B(1) or B(2) waters designated by a permit to accept the discharge of properly treated wastes that prior to treatment contained organisms pathogenic to human beings.

**I. Proposed Action, Type of Facility, and Discharge Location**

The Secretary of the Vermont Agency of Natural Resources (hereinafter referred to as “the Secretary”) received a renewal application for the permit to discharge into the designated receiving water from the above-named applicant on December 13, 2019. The facility’s previous permit was issued on July 1, 2015. On March 16, 2018, the Permittee submitted an application for

an emergency permit modification to authorize an increase in flow during maintenance activities in April 2018. The Secretary approved the permit application, and the emergency pollution permit was issued on April 1, 2018. The previous permit (hereinafter referred to as the "current permit") has been administratively continued, pursuant to 3 V.S.A. § 814, as the applicant filed a complete application for permit reissuance within the prescribed time period per the Vermont Water Pollution Control Permit Regulations Section 13.5(b). At this time, the Secretary has made a tentative decision to reissue the discharge permit.

A Reasonable Potential Determination Waiver Memo for the facility is provided in Attachment A.

## **II. Description of Discharge**

This permit authorizes the discharge of 65,000 GPD, daily maximum, of cooling water and other miscellaneous wastewaters. A quantitative description of the discharge in terms of significant effluent parameters is presented in section VIII below.

## **III. Limitations and Conditions**

The draft permit contains limitations for effluent flow, Total Suspended Solids (TSS), Oil and Grease, Temperature, pH, Free Available Chlorine, Total Residual Chlorine, Free Available Oxidants, and Total Residual Oxidants. It also contains monitoring requirements for Turbidity, Total Metals, and Biochemical Oxygen Demand (BOD<sub>5</sub>). The effluent limitations of the draft permit and the monitoring requirements may be found on the following pages of the draft permit:

Effluent Limitations:	Pages 2-5 of 22
Monitoring Requirements:	Pages 2-7 of 22

## **IV. Statutory and Regulatory Authority**

### **A. Clean Water Act and NPDES Background**

Congress enacted the Clean Water Act (CWA or Act), "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." CWA § 101(a). To achieve this objective, the CWA makes it unlawful for any person to discharge any pollutant into the waters of the United States from any point source, except as authorized by specified permitting sections of the Act, one of which is § 402. CWA §§ 301(a), 402(a). Section 402 establishes one of the CWA's principal permitting programs, the National Pollutant Discharge Elimination System (NPDES). Under this section of the Act, the U.S. Environmental Protection Agency (EPA) may "issue a permit for the discharge of any pollutant, or combination of pollutants" in accordance with certain conditions. CWA § 402(a). The State of Vermont has been approved by the EPA to administer the NPDES Program in Vermont. NPDES permits generally contain discharge limitations and establish related monitoring and reporting requirements. CWA § 402(a)(1) - (2).

Section 301 of the CWA provides for two types of effluent limitations to be included in NPDES permits: "technology-based" limitations and "water quality-based" limitations. CWA §§ 301, 303, 304(b); 40 C.F.R. Parts 122, 125, 131. Technology-based limitations, generally developed on an industry-by-industry basis, reflect a specified level of pollutant-reducing technology available and



economically achievable for the type of facility being permitted. CWA § 301(b). As a class, WWTFs must meet performance-based requirements based on available wastewater treatment technology. CWA § 301(b)(1)(B). The performance level for WWTFs is referred to as “secondary treatment.” Secondary treatment is comprised of technology-based requirements expressed in terms of BOD<sub>5</sub>, TSS, and pH; 40 C.F.R. Part 133.

Water quality-based effluent limits, on the other hand, are designed to ensure that state water quality standards are achieved, irrespective of the technological or economic considerations that inform technology-based limits. Under the CWA, states must develop water quality standards for all water bodies within the state. CWA § 303. These standards have three parts: (1) one or more “designated uses” for each water body or water body segment in the state; (2) water quality “criteria,” consisting of numerical concentration levels and/or narrative statements specifying the amounts of various pollutants that may be present in each water body without impairing the designated uses of that water body; and (3) an antidegradation provision, focused on protecting high quality waters and protecting and maintaining water quality necessary to protect existing uses. CWA § 303(c)(2)(A); 40 C.F.R. § 131.12. The applicable water quality standards for this permit are the 2017 Vermont Water Quality Standards (Environmental Protection Rule, Chapter 29a).

A permit must include limits for any pollutant or pollutant parameter (conventional, non-conventional, toxic, and whole effluent toxicity) that is or may be discharged at a level that causes or has "reasonable potential" to cause or contribute to an excursion above any water quality standard, including narrative water quality criteria. See 40 C.F.R. § 122.44(d)(1). An excursion occurs if the projected or actual in-stream concentration exceeds the applicable criterion. A NPDES permit must contain effluent limitations and conditions in order to ensure that the discharge does not cause or contribute to water quality standard violations.

Receiving stream requirements are established according to numerical and narrative standards adopted under state law for each stream classification. When using chemical-specific numeric criteria from the State's water quality standards to develop permit limits, both the acute and chronic aquatic life criteria are used and expressed in terms of maximum allowable instream pollutant concentrations. Acute aquatic life criteria are generally implemented through maximum daily limits and chronic aquatic life criteria are generally implemented through average monthly limits.

Where a state has not established a numeric water quality criterion for a specific chemical pollutant that is present in the effluent in a concentration that causes or has a reasonable potential to cause a violation of narrative water quality standards, the permitting authority must establish effluent limits in one of three ways: based on a “calculated numeric criterion for the pollutant which the permitting authority demonstrates will attain and maintain applicable narrative water quality criteria and fully protect the designated use”; on a “case-by-case basis” using CWA § 304(a) recommended water quality criteria, supplemented as necessary by other relevant information; or, in certain circumstances, based on an “indicator parameter.” 40 C.F.R. § 122.44(d)(1)(vi)(A-C).

The state rules governing Vermont’s NPDES permit program are found in the Vermont Water Pollution Control Permit Regulations (Environmental Protection Rule, Chapter 13).

## **1. Reasonable Potential Determination**

In determining whether this permit has the reasonable potential to cause or contribute to an impairment, Vermont has considered:

- 1) Existing controls on point and non-point sources of pollution as evidenced by the Vermont surface water assessment database;
- 2) Pollutant concentration and variability in the effluent as determined from the permit application materials, monthly discharge monitoring reports (DMRs), or other facility reports;
- 3) Receiving water quality based on targeted water quality and biological assessments of receiving waters, as applicable, or other State or Federal water quality reports;
- 4) Toxicity testing results based on the Vermont Toxic Discharge Control Strategy, and compelled as a condition of prior permits;
- 5) Available dilution of the effluent in the receiving water, expressed as the instream waste concentration. In accordance with the applicable Vermont Water Quality Standards, available dilution for rivers and streams is based on a known or estimated value of the lowest average flow which occurs for seven (7) consecutive days with a recurrence interval of once in ten (10) years (7Q10) for aquatic life and human health criteria for non-carcinogens, or at all flows for human health (carcinogens only) in the receiving water. For nutrients, available dilution for stream and river discharges is assessed using the low median monthly flow computed as the median flow of the month containing the lowest annual flow. Available dilution for lakes is based on mixing zones of no more than 200 feet in diameter, in any direction, from the effluent discharge point, including as applicable the length of a diffuser apparatus; and
- 6) All effluent limitations, monitoring requirements, and other conditions of the draft permit.

A Reasonable Potential Determination Waiver for the facility is provided in Attachment A.

## **B. Anti-Backsliding**

Section 402(o) of the CWA provides that certain effluent limitations of a renewed, reissued, or modified permit must be at least as stringent as the comparable effluent limitations in the current permit. EPA has also promulgated anti-backsliding regulations which are found at 40 C.F.R. § 122.44(l). Unless applicable anti-backsliding exemptions are met, the limits and conditions in the reissued permit must be at least as stringent as those in the current permit.

## **V. Description of Receiving Water**

The receiving water for this discharge is the Connecticut River, a designated Cold-Water Fish Habitat. The 7Q10 flow of the river is estimated to be 606 cubic feet per second (CFS) and the

Low Median Monthly flow is estimated to be 1,659 CFS. The instream waste concentration at the 7Q10 flow is 0.00033 (0.033%) and the instream waste concentration at the Low Median Monthly flow is 0.00012 (0.012%).

## **VI. Mixing Zones**

**Mixing Zone.** A Mixing Zone is a length or area within Class B waters required for the dispersion and dilution of waste discharges adequately treated to meet federal and state treatment requirements and within which it is recognized that specific water uses or water quality criteria associated with the assigned classification for such waters may not be realized. A mixing zone shall not extend more than 200 feet from the point of discharge and must meet the terms of 10 V.S.A. § 29A-204. For a mixing zone to be applicable to a discharge it must be authorized within the discharge permit.

## **VII. Facility History and Background**

Ryegate Associates owns and operates the "East Ryegate Power Station" a 20 MW wood burning electric generating facility. The facility uses sawmill residue and tree chips as fuel. These materials are delivered and stored onsite prior to use. Water is pumped from the Connecticut River and from wells to provide cooling and process waters at the facility.

Wastewater is generated at the facility from the following processes:

### **Cooling Tower and Circulating Water:**

River water is used to cool components in the facility such as the main condenser, turbines, feed pump bearings, etc. Sulfuric acid is added for pH control at the intake structure. Sodium hypochlorite, bromine-based compounds and other biocides are added to this water. The water is recirculated through the cooling system into a 12,000-gallon wastewater tank, combined with other waste streams and discharged to the Connecticut river.

### **Boiler Blowdown Water:**

Continuous and intermittent boiler blowdown is generated at this facility. The boiler blowdown is combined with the cooling tower water and is conveyed to the 12,000-gallon wastewater tank and is then discharged to the receiving water via S/N 001.

### **Demineralizer Regenerate and Reverse Osmosis Wastewaters:**

Wastewater is generated from the demineralizer and reverse osmosis treatment process. Water is extracted from a well and is treated through a water softener, a demineralization process, and a reverse osmosis process prior to being used in the facility. The water softener brine, the reverse osmosis concentrate and the wastewater from the regeneration process of the demineralization process are transferred to the 12,000-gallon wastewater storage tank and then discharged via S/N 001.

### **Floor Drains:**

Floor drains collect miscellaneous wastewaters in the facility. The floor drain system is

connected to the collections system for Discharge S/N 001 at various locations in the facility. All the floor drains are piped to the 12,000-gallon wastewater storage tank and then discharged via S/N 001.

**Chip Storage Pile Runoff:**

Wood chips are stored at the facility in covered silos and an outdoor storage pile. Stormwater from the storage pile is discharged via a pipe system (S/N 002) which combines with the primary outfall (S/N 001) prior to entering the Connecticut River.

**VIII. Permit Basis and Explanation of Effluent Limitation Derivation (S/N 001)**

**A. Flow** – The draft permit maintains a flow limitation of 65,000 GPD, daily maximum. Continuous flow monitoring is required.

**B. Conventional Pollutants**

**1. Total Suspended Solids (TSS)** – The draft permit contains a TSS limitation of 100 mg/L, daily maximum and 30 mg/L, monthly average. The limitations are based on 40 CFR Part 423 and are unchanged from the current permit. TSS monitoring is required once per month and shall be collected when the R.O. regenerant and/or filter backwash discharge is occurring.

The Permittee previously requested consideration under the net discharge rule (40 CFR 122.45) for TSS. This adjustment has typically been calculated by subtracting water treatment system effluent concentrations from the final process effluent concentrations. In this case the water treatment system (filters) effluent is likely to have very low TSS levels. Consequently, the Agency does not believe that applying the net rule would have a detectable impact on effluent TSS values.

**2. pH** – The pH limitation remains at 6.5 - 8.5 Standard Units as specified in Section 29A-303(6) in the Vermont Water Quality Standards. Monitoring remains at daily.

**C. Non-Conventional and Toxics**

**1. Oil and Grease** – The draft permit contains an Oil and Grease limitation of 20 mg/l, daily maximum and 15 mg/l, monthly average. The limitations are based on 40 CFR Part 423 and are unchanged from the current permit. Oil and grease monitoring is required once per month.

**2. Turbidity** – The draft permit contains a monitor only requirement for turbidity. This monitoring provides confirmation that the requirements of the Vermont Water Quality Standards are met and is unchanged from the current permit. Turbidity monitoring is required once per month and samples shall be collected when the R.O. regenerant and/or filter backwash discharge is occurring.

3. **Temperature** – The draft permit contains an effluent temperature limitation of 90°F, daily maximum, and is unchanged from the current permit. Temperature monitoring is required once per week from May through September and once per month from October through April.
4. **Total Metals** – The draft permit contains a monitor only requirement for Total Metals (Total Cadmium, Total Copper, Total Iron, Total Lead, Total Nickel, and Total Zinc). This monitoring requirement is based on 40 CFR Part 423 and is unchanged from the current permit. Sampling is required twice per year (biannually).
5. **Chlorine** – For discharges lasting not more than two hours per day, the draft permit contains a Free Available Chlorine limitation of 0.2 mg/L, 2-hour average and 0.5 mg/L, instantaneous maximum and a Total Residual Chlorine limitation of 1.0 mg/L, instantaneous maximum. These limitations are based on 40 CFR Part 423 and are unchanged from the current permit.

For discharges lasting more than two hours per day, the draft permit contains a Free Available Chlorine limitation of 0.0 mg/L, instantaneous maximum and a Total Residual Chlorine limitation of 0.0 mg/L, instantaneous maximum. These limitations are based on 40 CFR Part 423 and are unchanged from the current permit.

6. **Oxidants (i.e. Bromine)** – For discharges lasting not more than two hours per day, the draft permit contains a Free Available Oxidants limitation of 0.1 mg/L, 2-hour average, and 0.25 mg/L, instantaneous maximum and a Total Residual Oxidants limitation of 0.5 mg/L, instantaneous maximum. These limitations are based on 40 CFR Part 423 and are unchanged from the current permit.

For discharges lasting more than two hours per day, the draft permit contains a Free Available Oxidants limitation of 0.0 mg/L, instantaneous maximum and a Total Residual Oxidant limitation of 0.0 mg/L, instantaneous maximum. These limitations are based on 40 CFR Part 423 and are unchanged from the current permit.

7. **Toxicity Testing** – 40 CFR Part 122.44(d)(1) requires the Secretary to assess whether the discharge causes or has the reasonable potential to cause or contribute to an excursion above any narrative or numeric water quality criteria. Per these federal requirements, the Permittee shall conduct Whole Effluent Toxicity (WET) testing and toxic pollutant analyses according to Condition I.D. outlined in the draft permit. If the results of these tests indicate a reasonable potential to cause an instream toxic impact, the Secretary may require additional WET testing, establish a WET limit, or require a Toxicity Reduction Evaluation.

#### 8. **Discharge Point S/N 002: Chip Pile Runoff**

Flow, Biochemical Oxygen Demand (BOD<sub>5</sub>), Total Suspended Solids, Turbidity, and pH monitoring is required on a seasonal basis (May 1<sup>st</sup> through October 31<sup>st</sup>). Sampling is required once per month.

#### D. **Special Conditions**

Condition I.A.3.a. limits the use of chemicals in the facility to those that are similar in composition, concentration, and toxicity to the chemicals identified in the discharge permit renewal application.

Condition I.A.3.b. requires a current spill prevention and contingency plan for the facility be maintained.

Condition I.A.3.c. requires a chip management plan to be implemented to prevent the decomposition of the chips and the formation of potentially toxic decomposition products.

Condition I.A.3.d. prohibits the discharge of polychlorinated biphenyl compounds.

Condition I.A.3.e. restricts the Permittee to using either chlorine or bromine-based compounds as biocides unless the alternative compound is reviewed and approved by the Secretary.

Condition I.A.3.f. requires the Permittee to demonstrate the accuracy of the effluent flow measurement device monthly and report the results on the monthly report form.

1. **Laboratory Proficiency Testing** – To ensure there are adequate laboratory controls and appropriate quality assurance procedures, the Permittee shall conduct an annual laboratory proficiency test for the analysis of all pollutant parameters performed within their facility laboratory and reported as required by their NPDES permit. Proficiency test samples must be obtained from an accredited laboratory or as part of an EPA DMR-QA study. Results shall be submitted to the Secretary by December 31, annually beginning in **2022**.
2. **Electronic Reporting** - The EPA recently promulgated a final rule to modernize the Clean Water Act reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system. The final rule requires the inclusion of electronic reporting requirements in NPDES permits that become effective after December 21, 2015. The rule requires that NPDES regulated entities that are required to submit discharge monitoring reports (DMRs), including majors and non-majors, individually permitted or covered by a general permit, must do so electronically after December 2016. The Secretary has created an electronic reporting system for DMRs and has recently trained facilities in its use. As of December 2020, these NPDES facilities will also be expected to submit additional information electronically as specified in Appendix A in 40 C.F.R. part 127.
3. **Noncompliance Notification** - Condition II.A.2. has been included in the draft permit. The Permittee shall notify the Secretary within 24 hours of becoming aware of noncompliance and shall provide the following to the Secretary within 5 days: the cause of noncompliance, a description of the non-complying discharge including its impact upon the receiving water, anticipated time the condition of noncompliance is expected to continue or the total duration of noncompliance, steps taken to reduce and eliminate the non-complying discharge, and steps taken to prevent recurrence of the condition of noncompliance.
4. **Reopener** - This draft permit includes a reopener whereby the Secretary reserves the right to reopen and amend the permit to implement an integrated plan to address multiple Clean Water Act obligations.

**E. Reasonable Potential Analysis**

The Agency has waived a reasonable potential analysis for the facility. The decision to waive the determination was based on the extremely small size of the effluent discharge from Ryegate Associates and the large size of the receiving water (Connecticut River). The decision is attached to this Fact Sheet as Attachment A.

**IX. Procedures for Formulation of Final Decision**

The public comment period for receiving comments on this draft permit was from May 27, 2021 to June 28, 2021 during which time interested persons could submit their written views on the draft permit. No comments were received during the public comment period.

**ATTACHMENT A.**  
**REASONABLE POTENTIAL DETERMINATION**



**Agency of Natural Resources  
Department of Environmental Conservation**

**Watershed Management Division  
1 National Life Drive Davis 3  
802-828-1535**

**MEMORANDUM**

To: Katie Parrish, Wastewater Management Program

From: John Merrifield, Wastewater Management Program

Cc: Pete LaFlamme, Director, Watershed  
Management Division  
Bethany Sargent, Monitoring and  
Assessment Program

Date: May 26, 2021

Subject: Ryegate Associates Reasonable Potential Determination Decision

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The Wastewater Management Program (WWP) has evaluated the available data for the Ryegate Associates. Due to the extremely small size of the Ryegate Associates discharge and the very large size of the receiving water, the WWP has determined it is appropriate to waive a full Reasonable Potential Determination for the facility.

Ryegate Associates is permitted to discharge 0.065 MGD ( 0.101 CFS). At the point of discharge, the Connecticut River has a 7Q10 flow of 606 CFS. This results in an Instream Waste Concentration of 0.00017. Considering this amount of dilution, the WWP has determined this WWTF as currently operated and permitted, does not have the reasonable potential to exceed Vermont Water Quality Standards.

***Facility:***

Ryegate Associates  
Permit No. 3-1324  
NPDES No. VT0020893

***Hydrology for Ryegate Associates used in this evaluation:***

Design Flow: 0.065 MGD =0.101 CFS  
7Q10 = 606 CFS  
LMM = 1659 CFS  
IWC-7Q10 = 0.00017 (<1%)  
IWC-LMM= 0.00006 (<1%)

***Receiving Water:***

Connecticut River