



**State of Vermont**  
**Department of Environmental Conservation**

*Agency of Natural Resources*

Wastewater Management Division  
103 South Main Street - Sewing Bldg.  
Waterbury, Vermont 05671-0405

Telephone: (802) 241-3822  
Fax: (802) 241-2596  
[www.anr.state.vt.us/dec/ww/wwmd.cfm](http://www.anr.state.vt.us/dec/ww/wwmd.cfm)

January 2, 2009

Roger Thieken  
Rock-Tenn Company  
PO Box 98  
Sheldon Springs, VT 05485

**Re: Final Discharge Permit #3-1118**

Dear Mr Thieken:

Enclosed is your copy of the above referenced permit, which has been signed by the Director of the Wastewater Management Division for the Commissioner of the Department of Environmental Conservation. Please read the permit carefully and familiarize yourself with all its terms and conditions. Your attention is particularly directed to those conditions which may require written responses by certain dates.

If you have any questions concerning your permit, please contact Carol Carpenter at 241-3828.

Sincerely,

A handwritten signature in cursive script that reads "Brian D. Kooiker".

Brian D. Kooiker, Chief  
Discharge Permits Section

Enclosure



AGENCY OF NATURAL RESOURCES  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
WASTEWATER MANAGEMENT DIVISION  
103 SOUTH MAIN STREET, - THE SEWING BUILDING  
WATERBURY, VERMONT 05671-0405

Permit No. 3-1118  
Project ID No. EJ96-0028  
NPDES No. VT0000469

DISCHARGE PERMIT

In compliance with the provisions of the Vermont Water Pollution Control Act, as amended, (10 V.S.A. Chapter 47 §1251 et. seq), and the Federal Clean Water Act, as amended (33 U.S.C. § 1251 et. seq),

Rock-Tenn Company  
PO Box 98  
Sheldon Springs, VT 05485

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

369 Mill Street  
Sheldon Springs, Vermont

to the Missisquoi River, Class B at the point of discharge in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III hereof.

**This permit shall become effective on the date of signing.**

This permit and the authorization to discharge shall expire on December 31, 2013.

Signed this 2<sup>nd</sup> day of January, 2009.

Laura Q Pelosi, Commissioner  
Department of Environmental Conservation

By Christine Thompson  
Christine Thompson, Director  
Wastewater Management Division

## PART I

## A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Until December 31, 2013, the permittee is authorized to discharge from outfall serial number S/N 003: Treated process wastewater. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow	2.5 MGD		Continuous	Daily Total
Biochemical Oxygen Demand (BOD <sub>5</sub> ) (1)	739 lbs	1300 / 1487 lbs (2)	1 x weekly	24-hour composite
Total Suspended Solids (TSS) (1)	1226 lbs	2453 lbs	1 x weekly	24-hour composite
Total Phosphorus	0.8 mg/l	2777 lbs (3) (annual total)	1 x weekly	24-hour composite
Total Nitrogen (4)	Monitor only, mg/l		1 x monthly	24-hour composite
Turbidity (5)		100 NTU (6)	1 x weekly	Grab
pH	Between 6.5 and 8.5 Standard Units		1 x daily	Grab

- (1) Clarifier influent analysis for both BOD and TSS shall be completed at the same frequency as required for the effluent BOD and TSS analysis. Samples for influent BOD and TSS shall be taken at the same location.
- (2) During the period May 1 through October 31, the daily maximum BOD limitation shall be 1300 lbs/day. From November 1 through April 30, the daily maximum BOD limitation shall be 1487 lbs/day.
- (3) **Total Annual Pounds of Phosphorus** discharged shall be defined as the sum of all **Total Monthly Pounds of Phosphorus** discharged for the calendar year. **Total Monthly Pounds of Phosphorus** discharged shall be calculated as follows:  
 (Monthly Average Phosphorus Concentration) x (Total Monthly Flow) x 8.34. (See Total Phosphorus monitoring report form WR-43-PO4.)
- (4) Notwithstanding Part I.F.1., Total Nitrogen shall be determined by the persulfate digestion method (Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> edition, method 4500-N C) with a minimum detection limit of 0.5 mg/l.
- (5) See Special Condition B.1.
- (6) The turbidity limit is an annual average under dry weather base flow conditions.

Samples taken in compliance with the monitoring requirements specified above shall be collected following the DAF unit and before discharge to the Missisquoi River.

2. Until December 31, 2013, the permittee is authorized to discharge from outfall serial number **S/N 005**: Non-contact cooling water from the emergency diesel generator. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow		See (2) below	Each discharge	Estimate
Temperature		96°F	Each Discharge	Instantaneous maximum

- (1) This flow is only authorized with a minimum flow of 200 cfs in the mill tailrace.
- (2) The permittee may, during power outages, discharge up to an amount not to exceed 2.5 MGD, daily maximum, in combination with S/N 003.

**B. SPECIAL CONDITIONS**

1. In accordance with Section 2-04 of the Vermont Water Quality Standards, this permit hereby establishes a mixing zone for turbidity not to exceed 200 feet from the point of the S/N 003 discharge. Within the mixing zone, Section 3-04 B.1. of the Water Quality Standards is waived in accordance with Section 2-04. up to the turbidity discharge limitation of 100 NTU.
2. The effluent shall not have concentrations or combinations of contaminants including oil, grease, scum, foam, or floating solids which would cause a violation of the water quality standards of the receiving waters.
3. The use of chlorophenolic-based biocides in the production process is prohibited.
4. The permittee shall conduct a program of sludge monitoring and sludge removal from the treatment lagoon. The sludge monitoring program shall include measurements of settling zone sludge depths taken at least annually and the results shall be submitted to the Department with the corresponding monthly Discharge Monitoring Report form.
5. The permittee shall maintain a submersible pump in the wet well of the underdrain discharge of sufficient capacity to pump the volume and rate equivalent to the 'worst case' liner breach previously experienced at the facility. The underdrain pump shall pump the collected wet well waters back into the lagoon. A meter shall be maintained for the purpose of recording the amount of time the submersible pump is operated. The wet well shall be inspected and the run-time meter reading recorded on a weekly basis. Records of these weekly readings shall be maintained at the facility. If the weekly run-time reading changes from the previous reading, the readings and an explanation for the changes shall be reported with the corresponding monthly Discharge Monitoring Report form. If the change in readings is due to a liner breach then the permittee shall

notify the Department within 24 hours, or by the next business day, and follow this notification with a written report within 5 calendar days.

6. The permittee is limited to using those chemicals which are similar in composition, concentration, and toxicity to those identified in the permit application unless substantially different chemicals are approved by the Department. A significant increase in the dosage rate or a substantial change in the chemicals used must be reviewed by the Department to assure that no adverse impact will occur on either the treatment facility or the receiving water. A substantial change in chemicals shall be defined as chemicals that are not similar in composition, concentration, and toxicity to those identified in the application.
7. The discharge shall not cause a violation of the water quality standards of the receiving water.

### C. TOXICITY TESTING

1. The permittee shall complete the following Whole Effluent Toxicity (WET) testing on the S/N 003 effluent:
  - a. The permittee shall complete one two-species (*Pimephales promelas* and *Ceriodaphnia dubia*) acute/chronic Whole Effluent Toxicity (WET) test, conducted on a 24-hour composite effluent sample taken during the month of **August 2009**. The results shall be submitted to the Department by October 31, 2009.
  - b. The permittee shall complete one two-species (*Pimephales promelas* and *Ceriodaphnia dubia*) acute Whole Effluent Toxicity (WET) test, conducted on a 24-hour composite effluent sample taken during the months of **August 2010 and August 2012**. The results shall be submitted to the Department by the following October 31 of each year.
  - c. The permittee shall complete one two-species (*Pimephales promelas* and *Ceriodaphnia dubia*) acute Whole Effluent Toxicity (WET) test, conducted on a 24-hour composite effluent sample taken during the months of **January 2011 and January 2013**. The results shall be submitted to the Department by the following March 31 of each year.

Whole Effluent Toxicity tests shall be conducted in accordance with the methods recommended by EPA: Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (the most recent edition) and Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (the most recent edition).

2. The permittee shall complete the toxic pollutant testing identified in 40 CFR Part 122, Appendix D, Table 2 and 3 on the S/N 003 effluent. The effluent sample shall be collected in **September 2012** and the results submitted by December 31, 2012.

Based on the results of the testing in 1. or 2. above or any other toxicity tests conducted on this discharge, this permit may be reopened and amended to include effluent limitations, or require additional testing, or require that a Toxicity Reduction Evaluation be conducted.

**D. REAPPLICATION**

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

Reapply for a Discharge Permit by: June 30, 2013.

The application shall include applicable requirements identified in 40 CFR Part 121.21, *Application for a permit*.

**E. OPERATING FEES**

This discharge is subject to operating fees. The permittee shall submit the operating fees in accord with the procedures provided by the Secretary.

**F. MONITORING AND REPORTING****1. Sampling and Analysis**

The sampling, preservation, handling, and analytical methods used shall conform to regulations published pursuant to Section 304(g) of the Clean Water Act, under which such procedures may be required. Guidelines establishing these test procedures have been published in the Code of Federal Regulations, Title 40, Part 136 (Federal Register, Vol. 56, No. 195, July 1, 1999 or as amended).

If applicable, *Escherichia coli* shall be tested using one of the following methods:

- a. "Most Probable Number" (MPN) method 9223B found in Standard Methods for the Examination of Water and Wastewater, 18th or subsequent approved edition(s). Premade formulations are available as Colilert and Colilert 18 from IDEXX Labs Inc., Westbrook, ME;
- b. EPA "membrane filtration" (MF) method 1603 using modified mTEC; or
- c. A single step membrane filtration (MF) method using mColiBlue 24 available from Hach Company, Loveland, CO.

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.

**2. Reporting**

The Permittee is required to submit monitoring results as specified on a Discharge Monitoring Report (Form WR-43). Reports are due on the 15th day of each month, beginning with the month following the effective date of this permit.

If, in any reporting period, there has been no discharge, the permittee must submit that information by the report due date.

Signed copies of these, and all other reports required herein, shall be submitted to the Secretary at the following address:

Agency of Natural Resources  
Department of Environmental Conservation  
Wastewater Management Division  
103 South Main Street, The Sewing Building  
Waterbury, Vermont 05671-0405

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;
- b. In the case of a partnership, by a general partner;
- c. In the case of a sole proprietorship, by the proprietor;
- 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.

### **3. 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;
- b. The dates and times the analyses were performed;
- c. The person(s) who performed the analyses;
- d. The analytical techniques and methods used including sample collection handling and preservation techniques;
- e. The results of all required analyses;
- f. The records of monitoring activities and results, including all instrumentation and calibration and maintenance records;
- g. The original calculation and data bench sheets of the operator who performed analysis of the influent or effluent pursuant to requirements of Section I.(A) of this permit.

The results of monitoring requirements shall be reported (in the units specified) on the Vermont reporting form WR-43 or other forms approved by the Secretary.

### **4. 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 Discharge Monitoring Report Form WR-43. Such increased frequency shall also be indicated.

## PART II

### 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 as provided for in Section 1274 and 1275 of the Vermont Water Pollution Control Act. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of 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 permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

#### 2. Noncompliance Notification

In the event the permittee is unable to comply with any of the conditions of this permit due, among other reasons, to:

- a. breakdown or maintenance of waste treatment equipment (biological and physical-chemical systems including, but not limited to, all pipes, transfer pumps, compressors, collection ponds or tanks for the segregation of treated or untreated wastes, ion exchange columns, or carbon absorption units),
- b. accidents caused by human error or negligence, or
- c. other causes such as acts of nature,

the permittee shall notify the Secretary within 24 hours of becoming aware of such condition or by the next business day and shall provide the Secretary with the following information, in writing, within five (5) days:

- i. cause of non-compliance;
- ii. a description of the non-complying discharge including its impact upon the receiving water;
- iii. anticipated time the condition of non-compliance is expected to continue or, if such condition has been corrected, the duration of the period of non-compliance;
- 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 non-compliance.

### 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 or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.
- b. The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to insure compliance with the conditions of this permit; and
- c. The operation and maintenance of this facility shall be performed only by qualified personnel. The personnel shall be certified as required under the Vermont Water Pollution Abatement Facility Operator Certification Regulations.

### 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 demonstrate the accuracy of the S/N 003 flow measurement device weekly and report the results on the monthly report forms. The acceptable limit of error is  $\pm 10\%$ .

The permittee shall analyze any additional samples as may be required by the Agency of Natural Resources to ensure analytical quality control.

### 5. **Bypass**

The diversion or bypass of facilities, necessary to maintain compliance with the terms and conditions of this permit, is prohibited, except where authorized under terms and conditions of an emergency pollution permit issued pursuant to 10 V.S.A. Section 1268.

### 6. **Duty to Mitigate**

The permittee shall take all reasonable steps to minimize or prevent any adverse impact to waters of the State resulting from non-compliance 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, calibration and maintenance of instrumentation, and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, and shall be submitted to Department representatives 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 accord 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 immediately applies for, and obtains, an emergency pollution permit under the provisions of 10 V.S.A., Chapter 47, Section 1268. The permittee shall notify the Department of the emergency situation by the next working day.

10 V.S.A., Chapter 47, Section 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, he 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 permit may be issued without prior public notice if the nature of the emergency will not provide sufficient time to give notice; provided that the secretary shall give public notice as soon as possible but in any event no later than five days after the effective date of the emergency pollution permit. 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;
- (5) the cause or reason for the emergency is not due to wilful or intended acts or omissions of the applicant."

Application shall be made to the Secretary of the Agency of Natural Resources, Department of Environmental Conservation, 103 South Main Street, Waterbury, Vermont 05671-0405.

#### **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 in which an effluent source or any records required to be kept under terms and conditions of the permit are located;
- b. to have access to and copy any records required to be kept under the terms and conditions of the permit;
- c. to inspect any monitoring equipment or method required in the permit; or
- d. to sample any discharge of pollutants.

#### **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. 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 at a minimum:

- a. a properly completed application form as 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.
  - 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, reports or information obtained under this permit program shall be available to the public for inspection and copying. However, upon a showing satisfactory to the secretary that any records, reports or information or part thereof, other than effluent data, would, if made public, divulge methods or processes entitled to protection as trade secrets, the secretary shall treat and protect those records, reports or information as confidential. Any records, reports or information accorded confidential treatment will be disclosed to authorized representatives of the state and the United States when relevant to any proceedings under this chapter.”

### **4. Permit Modification**

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

- a. violation of any terms or conditions of this permit;

- b. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

**5. Toxic Effluent Standards**

That 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 Federal 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 the permit, the secretary shall revise or modify the permit in accordance with the toxic effluent standard or prohibition and so notify the permittee.

**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**

Except as provided in, "Bypass" (Part II, paragraph A.5.), "Power Failure" (Part II, paragraph A.10.), and "Emergency Pollution Permits" (Part II, paragraph A.9.), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Civil penalties, as authorized under 10 V.S.A. §1274 and 10 V.S.A. §8010, shall not exceed \$10,000 a day for each day of violation. Criminal penalties, as authorized under 10 V.S.A. §1275, shall not exceed \$25,000 for each day of violation, imprisonment for up to six months, or both.

**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. 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.

## 11. Authority

This permit is issued under authority of 10 V.S.A. §1259 which states that: "No person shall discharge any waste, substance, or material into waters of the State, nor shall any person discharge any waste, substance, or material into an injection well or discharge into a publicly owned treatment works any waste which interferes with, passes through without treatment, or is otherwise incompatible with those works or would have a substantial adverse effect on those works or on water quality, without first obtaining a permit for that discharge from the Secretary", and under the authority of Section 402 of the Clean Water Act, as amended.

## PART 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.

**The Act** - The Vermont Water Pollution Control Act, 10 V.S.A. Chapter 47

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

**The Clean Water Act** - The federal Clean Water Act, as amended.

**Composite Sample** - 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** - 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 limitation 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.

**Grab Sample** - An individual sample collected in a period of less than 15 minutes.

**Incompatible Substance (Pollutant)** - 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 these works or on water quality. This includes all pollutants required to be regulated under the Federal Clean Water Act.

**Instantaneous Maximum** - A value not to be exceeded in any grab sample.

**Major Contributing Industry** - 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 Act; or (4) has a significant impact, either singly or in combination with other contributing industries, on a publicly owned treatment works or on the quality of effluent from that treatment works.

**Maximum Day** (maximum daily discharge limitation) - The highest allowable "daily discharge" (mg/l, lbs or gallons).

**Mean** - The mean value is the arithmetic mean.

**Monthly Average** - (Average monthly discharge limitation) - 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** - The National Pollutant Discharge Elimination System.

**Secretary** - The Secretary of the Agency of Natural Resources

**State Certifying Agency**      Agency of Natural Resources  
   Department of Environmental Conservation  
   Wastewater Management Division  
   103 South Main Street  
   Waterbury, Vermont 05671-0405

**Weekly Average** - (Average weekly discharge limitation) - 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.

AGENCY OF NATURAL RESOURCES  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
WASTEWATER MANAGEMENT DIVISION  
103 SOUTH MAIN STREET  
WATERBURY, VERMONT 05671-0405

FACT SHEET  
(December 2008)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO  
DISCHARGE TO WATERS OF THE UNITED STATES

NPDES NO: VT0000469  
PERMIT NO: 3-1118  
PROJECT ID NO: EJ96-0028

NAME AND ADDRESS OF APPLICANT:

Rock-Tenn Company  
PO Box 98  
Sheldon Springs, VT 05485

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Rock-Tenn Company  
369 Mill Street  
Sheldon Springs, Vermont

RECEIVING WATER: Missisquoi River

CLASSIFICATION: Class B. Class B waters are suitable for bathing and recreation, irrigation and agricultural uses; good fish habitat; good aesthetic value; acceptable for public water supply with filtration and disinfection.

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

The above named applicant applied on March 21, 2008 to the Vermont Department of Environmental Conservation for renewal of the permit to discharge into the designated receiving water. At this time the Department has made a tentative decision to reissue the discharge permit. The facility is engaged in the production of recycled boxboard using corrugated and non-corrugated medium furnishes. The discharges are treated process wastewater combined from paper process wastes and miscellaneous cooling waters (S/N 003) and, occasionally, non-contact cooling water from the emergency diesel generator (S/N 005). The discharge is to the Missisquoi River.



## II. Description of Discharge

A quantitative description of the discharge in terms of significant effluent parameters is based on state and federal laws and regulations, the discharge permit application, and the recent self-monitoring data.

## III. Limitations and Conditions

The effluent limitations of the permit, the monitoring requirements, and any implementation schedule (if required), may be found on the following pages of the permit:

Effluent Limitations:	Pages 2 and 3 of 14
Monitoring Requirements:	Pages 2 through 4 of 14

## IV. Permit Basis and Explanation of Effluent Limitation Derivation

Since March 1991 Rock-Tenn Company has owned and operated the Missisquoi Mill, a paperboard manufacturing mill, located in Sheldon Springs. In calendar year 2007 and in 2008 through April the facility has produced an average of 305 tons per day using furnish predominately classified as secondary fiber corrugated (approximately 7%) and non-corrugated.

The wastewater treatment system includes a 120 foot diameter primary clarifier and a 20 million gallon aerated lagoon which has an area dedicated to settling. In July 2001 a dissolved air flotation clarifier was installed to allow the facility to meet the permitted phosphorus effluent concentration limit of 0.8 mg/l. Over the past several years the facility has, by a variety of measures, attempted to minimize raw waste loadings to the waste treatment facility as well as fresh water usage.

The 7Q10 flow of the Missisquoi River used for calculation purposes for this permit is 31.3 CFS. The design flow of the facility is 2.5 MGD. The instream waste concentration (IWC) is 11%. For purposes of certain metals calculations, a hardness of 41 mg/l for the Missisquoi River was used.

The complete application, draft permit, and other information, including calculations, are on file and may be inspected at the VTDEC, Wastewater Management Division, Waterbury Office.

### **S/N 003: Treated Process Wastewater**

**Flow** - The effluent flow limitation remains at 2.5 MGD, monthly average. The facility maintains a continuous discharge.

**Biochemical Oxygen Demand (BOD<sub>5</sub>) and Total Suspended Solids (TSS)** - Guidance for the establishment of BOD and TSS limits for the pulp, paper and paperboard manufacturing processes is provided in 40 CFR Part 430. The facility produces boxboard from corrugated and non-corrugated wastepaper and is subject to the requirements under Subpart J - Secondary Fiber Non-Deink.

During the past permit period production has gradually increased from 276 tons per day (2003) to 305 tpd in 2007 and the first four months of 2008. The current production number of 305 tpd will be used for the purpose of establishing effluent limits in this permit. The ratio of corrugated to non-corrugated furnish is currently about 7% to 93%, although this has varied between 4.9% to 11.6% over the past five years.

Calculated categorical effluent limits for the *non-corrugating* medium furnish subdivision:

	<u>monthly average</u>	<u>daily maximum</u>
BOD	915 lbs/day	1830 lbs/day
TSS	1525 lbs/day	3050 lbs/day

Calculated categorical effluent limits for the *corrugating* medium furnish subdivision:

	<u>monthly average</u>	<u>daily maximum</u>
BOD	1708 lbs/day	3477 lbs/day
TSS	2806 lbs/day	5612 lbs/day

Thus, using an annual production of 305 tpd, a ratio of 7% to 93% corrugated to non-corrugated furnish and the criteria from Subpart J, calculated categorical effluent limits are:

	<u>monthly average</u>	<u>daily maximum</u>
BOD	971 lbs/day	1945 lbs/day
TSS	1614 lbs/day	3229 lbs/day

The Anti-Backsliding provision requires that when a facility is substantially in compliance with current limits, less stringent limits may not be applied to a discharge. Based on monitoring data the facility has remained consistently in compliance with the current BOD (739 lbs/day, monthly average and 1300 (summer) or 1487 (winter) lbs/day, maximum) and TSS (1226 lbs/day, monthly average and 2453 lbs/day, maximum) permit limits. Consequently the limits will remain as previously permitted. The monitoring frequency remains unchanged from the previous permit.

**pH** - The pH limitation remains at 6.5 - 8.5 Standard Units as specified in Section 3-01 B.9. in the Vermont Water Quality Standards. Monitoring remains at daily.

**Turbidity** - The instream water quality standard for turbidity is 25 NTU as specified in Section 3-04 B.1. of the Vermont Water Quality Standards. This permit, as with the previous permit, establishes a 200 foot mixing zone because the paper manufacturing

process often generates a treated effluent exceeding the instream water quality standard despite BPT/BCT treatment.

The Department has made the determination that conditions due to discharges of waste within any mixing zone shall:

- a. not result in a significant increase in public health risk when evaluated using reasonable assumptions about exposure pathways;
- b. not constitute a barrier to the passage or movement of fish or prevent the full support of aquatic biota, wildlife, and aquatic habitat uses in the receiving waters outside the mixing zone;
- c. not kill organisms passing through;
- d. protect and maintain the existing uses of the waters;
- e. be free from materials in concentrations that settle to form objectionable deposits;
- f. be free from floating debris, oil, scum, and other material in concentrations that form nuisances;
- g. be free from substances in concentrations that produce objectionable color, odor, taste, or turbidity; and
- h. be free from substances in concentrations that produce undesirable aquatic life or result in a dominance of nuisance species. (Water Quality Standards, Section 2-04 A.2.)

The hydroelectric facility, located just upstream from Rock-Tenn, releases a minimum of 200 cfs (129 MGD) of river water at the lower turbine outfall which mixes immediately with the Rock-Tenn S/N 003 discharge. Therefore a conservative limit (given the site specific conditions of the outfall) of 100 NTU (which assumes a 4:1 dilution) at the point of discharge has been established in the permit and will not violate water quality standards at the end of the mixing zone. Weekly monitoring is unchanged from the previous permit.

**Total Phosphorus** – The concentration limitation of 0.8 mg/l, monthly average, remains unchanged from the previous permit. The concentration limit is based on requirements in Title 10, Chapter 47 §1266a. Monitoring is proposed to be changed from monthly to weekly consistent with similarly sized facilities.

In addition, the 2002 “Lake Champlain Phosphorus Total Maximum Daily Load” established a phosphorus mass loading allocation for the Rock-Tenn WWTF utilizing an effluent concentration of 0.6 mg/l. That allocation (1.260 metric tons per year or 2777 pounds per year) is unchanged from the previous permit.

The annual total pounds is the sum of the twelve monthly totals, which are calculated by multiplying the total monthly flow x the monthly average phosphorus concentration x 8.34.

**Total Nitrogen** - Vermont DEC is currently in the process of proposing scientifically based nitrogen criteria for lakes and wadeable streams for review by the Vermont Water Resources Panel and the USEPA. In support of this effort the Department is including

requirements in certain discharge permits to monitor discharges for total nitrogen. Once adopted the total nitrogen criteria will be used to determine the potential of WWTF discharges to cause or contribute to eutrophication and adversely impact the aquatic biota downstream of the discharge. Monitoring is required monthly.

**Toxicity Testing** - 40 CFR Part 122.44(d)(1) requires the Department to assess whether the discharge causes, has the reasonable potential to cause, or contribute to an excursion above any narrative or numeric water quality criteria. Whole Effluent Toxicity and toxic pollutant testing are being required in accordance with the 1994 Vermont Toxic Discharge Control Strategy and federal regulations. The intent of the testing is to confirm the results of the WET testing conducted by the facility in November 2003 and June 2006 and of the toxic pollutant scan conducted in November 2003. Those results indicated that this discharge did not have the potential to cause an instream toxic impact. If the results of these tests indicate a reasonable potential to cause an instream toxic impact, the Department may require additional WET testing, establish a WET limit, or require a Toxicity Reduction Evaluation.

#### **S/N 005: Non-contact cooling water from the emergency diesel generator**

The discharge typically occurs for a total of a few hours each year, mainly to insure that the generator is functioning. For example, in 2006 and 2007 the discharge occurred for a total of 3.4 and 4.3 hours respectively.

The proposed permit continues to authorize this discharge. Monitoring for **Flow and Temperature** is required. The flow is limited to 2.5 MGD, daily maximum, *combined with S/N 003*. The temperature limit remains at 96° F as in previous permits and must be measured during each discharge. Also, the discharge is only authorized with a minimum flow of 200 cfs in the mill tailrace.

#### V. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit is from December 1 through December 31, 2008 during which time interested persons may submit their written views on the draft permit. All written comments received by 4:30 PM on December 31, 2008 will be retained by the Department and considered in the formulation of the final determination to issue, deny or modify the draft permit. The period of comment may be extended at the discretion of the Department.

Written comments should be sent to:

Vermont Agency of Natural Resources  
Department of Environmental Conservation  
Wastewater Management Division - Sewing Building  
103 South Main Street  
Waterbury, VT 05671-0405

Comments may also be faxed to: 802-241-2596.

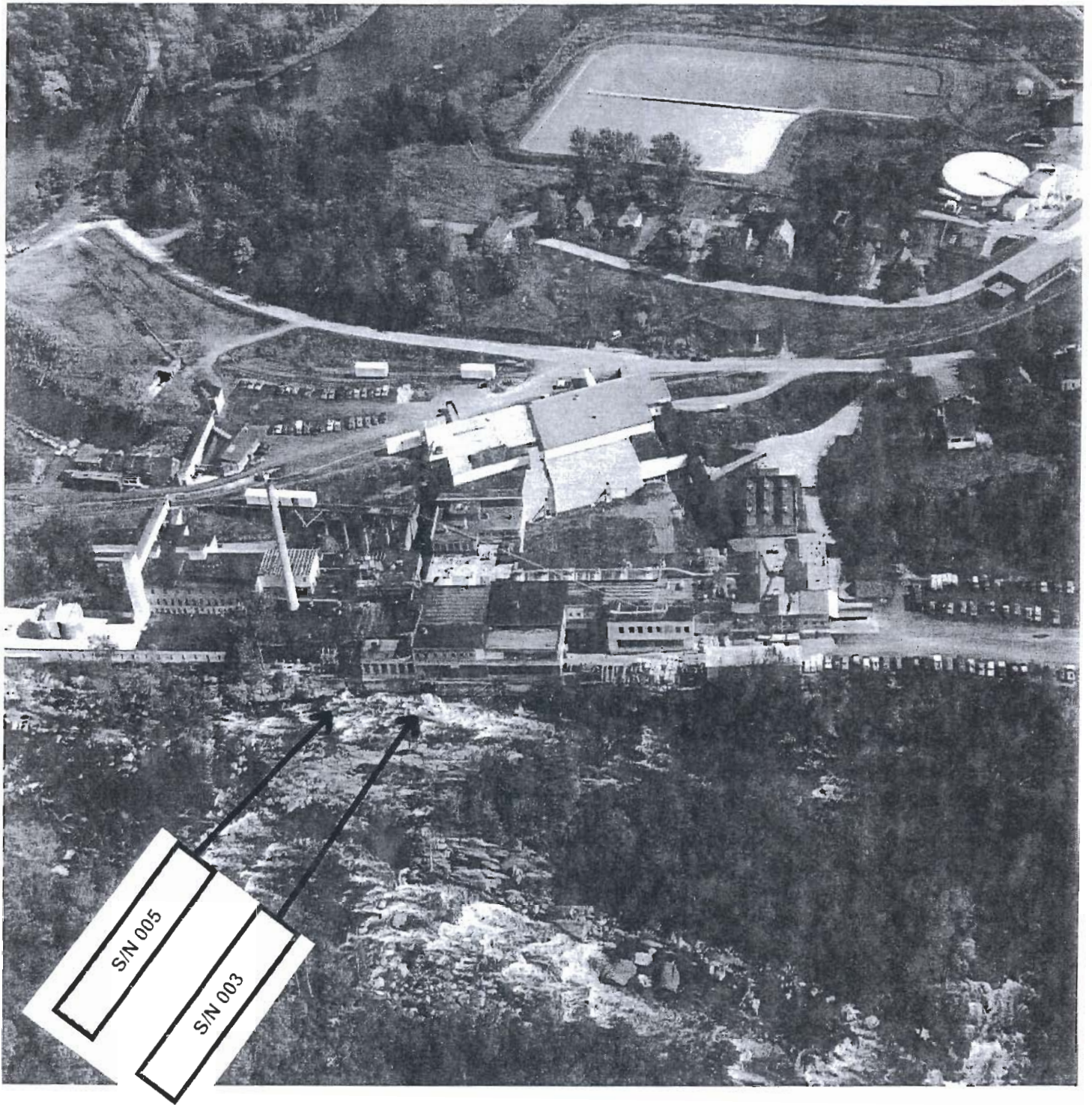
Any interested person or groups of persons may request or petition for a public hearing with respect to this draft permit. Any such request or petition for a public hearing shall be filed within the public comment period described above and shall indicate the interest of the party filing such request and the reasons why a hearing is warranted.

The Department will hold a hearing if there is significant public interest in holding such a hearing. Any public hearing brought in response to such a request or petition will be held in the geographical area of the proposed discharge or other appropriate area, at the discretion of the Department and may, as appropriate, consider related groups of draft permits. Any person may submit oral or written statements and data concerning the draft permit at the public hearing. The Department may establish reasonable limits on the time allowed for oral statements and may require the submission of statements in writing. All statements, comments, and data presented at the public hearing will be retained by the Department and considered in the formulation of the final determination to issue, deny, or modify the draft permit.

The complete application, draft permit, and other information are on file and may be inspected at the VTDEC, Wastewater Management Division, Waterbury Office. Copies will be made at a cost based on the current Secretary of State Official Fee Schedule for Copying Public Records from 8:00 AM to 4:30 PM, Monday through Friday. The draft permit and fact sheet may also be viewed on the Division's website at [www.anr.state.vt.us/dec/ww/wwmd.cfm](http://www.anr.state.vt.us/dec/ww/wwmd.cfm) .

*No comments were received during the public notice period.*





S/N 005

S/N 003