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_5) 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:

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

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

	monthly average	daily maximum
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:

	monthly average	daily maximum
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 .

No comments were received during the public notice period.

S/N 005
S/N 003