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Affirmative Action/Equal Opportunity Employer

#### PRETREATMENT PERMIT

issued to

Rand-Whitney Containerboard, L.P. (of The Kraft Group, LLC)

#### Location Address:

370 Route 163 Montville, Connecticut 06353

Facility ID: 086-049

Permit ID: SP0002032

Permit Expires: November 14, 2017

# **SECTION 1: GENERAL PROVISIONS**

- (A) This permit is re-issued in accordance with Section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), and Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended, and a modified Memorandum of Agreement ("MOA") dated June 3, 1981, by the Administrator of the United States Environmental Protection Agency which authorizes the State of Connecticut to administer a Pretreatment Program pursuant to 40 CFR Part 403.
- (B) RAND-WHITNEY CONTAINERBOARD, L.P. ("Permittee") shall comply with all conditions of this permit including the following sections of the RCSA which have been adopted pursuant to Section 22a-430 of the CGS and are hereby incorporated into this permit. Your attention is especially drawn to the notification requirements of subsection (i)(2), (i)(3), (j)(1), (j)(6), (j)(8), (j)(9)(C), (j)(11)(C), (D), (E), and (F), (k)(3) and (4) and (l)(2) of section 22a-430-3.

Section 22a-430-3: General Conditions

- (a) Definitions
- (b) General
- (c) Inspection and Entry
- (d) Effect of a Permit
- (e) Duty
- (f) Proper Operation and Maintenance
- (g) Sludge Disposal
- (h) Duty to Mitigate
- (i) Facility Modifications; Notification
- (j) Monitoring, Records and Reporting Requirements
- (k) Bypass
- (1) Conditions Applicable to POTWs
- (m) Effluent Limitation Violations (Upsets)
- (n) Enforcement
- (o) Resource Conservation
- (p) Spill Prevention and Control
- (q) Instrumentation, Alarms, Flow Recorders
- (r) Equalization

#### Section 22a-430-4: Procedures and Criteria

- (a) Duty to Apply
- (b) Duty to Reapply
- (c) Application Requirements
- (d) Preliminary Review
- (e) Tentative Determination
- (f) Draft Permits, Fact Sheets
- (g) Public Notice, Notice of Hearing
- (h) Public Comments
- (i) Final Determination
- (j) Public Hearings
- (k) Submission of Plans and Specifications. Approval.
- (1) Establishing Effluent Limitations and Conditions
- (m) Case by Case Determinations
- (n) Permit issuance or renewal
- (o) Permit Transfer
- (p) Permit revocation, denial or modification
- (q) Variances
- (r) Secondary Treatment Requirements
- (s) Treatment Requirements for Metals and Cyanide
- (t) Discharges to POTWs Prohibitions
- (C) Violations of any of the terms, conditions, or limitations contained in this permit may subject the Permittee to enforcement action, including but not limited to, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA. Specifically, civil penalties of up to twenty-five thousand dollars may be assessed per violation per day.
- (D) Any false statement in any information submitted pursuant to this permit may be punishable as a criminal offense under section 22a-438 or 22a-131a of the CGS or in accordance with Section 22a-6, under Section 53a-157b of the CGS.
- (E) The authorization to discharge under this permit may not be transferred without prior written approval of the Commissioner of Energy and Environmental Protection ("the Commissioner"). To request such approval, the Permittee and proposed Transferee shall register such proposed transfer with the Commissioner at least 30 days prior to the Transferee becoming legally responsible for creating or maintaining any discharge which is the subject of the permit transfer. Failure by the Transferee to obtain the Commissioner's approval prior to commencing such discharge(s) may subject the Transferee to enforcement action for discharging without a permit pursuant to applicable sections of the CGS and RCSA.
- (F) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- (G) An annual fee shall be paid for each year this permit is in effect as set forth in Section 22a-430-7 of the Regulations of Connecticut State Agencies.
- (H) This permitted discharge is consistent with the applicable goals and policies of the Connecticut Coastal Management Act (section 22a-92 of the Connecticut General Statutes).

#### **SECTION 2: DEFINITIONS**

- (A) The definitions of the terms used in this permit shall be the same as the definitions contained in Section 22a-423 of the CGS and Sections 22a-430-3(a) and 22a-430-6 of the RCSA.
- (B) In addition to the above, the following definitions shall apply to this permit:

"---" in the limits column on the monitoring table means a limit is not specified but a value must be reported on the DMR.

Final Permit No. SP0002032

"Average Monthly Limit" means the maximum allowable "Average Monthly Concentration" as defined in section 22a-430-3(a) of the RCSA when expressed as a concentration (e.g., mg/l). Otherwise, it means "Average Monthly Discharge Limitation" as defined in Section 22a-430-3(a) of the RCSA.

"Chlorophenolic-containing Biocides" are biocides that contain either pentachlorophenol or trichlorophenol compounds.

"Daily Concentration" means the concentration of a substance as measured in a daily composite sample, or the arithmetic average of all grab sample results defining a grab sample average.

"Daily Quantity" means the quantity of waste generated during an operating day.

"Department" means the Department of Energy and Environmental Protection.

"Instantaneous Limit" means the highest allowable concentration of a substance as measured by a grab sample, or the highest allowable measurement of a parameter as obtained through instantaneous monitoring.

"Maximum Daily Limit" means the maximum allowable "Daily Concentration" (defined above) when expressed as a concentration (e.g., mg/l). Otherwise, it means the maximum allowable "Daily Quantity" as defined above unless it is expressed as a flow quantity. If expressed as a flow quantity it means "Maximum Daily Flow" as defined in section 22a-430-3(a) of the RCSA.

"NA" as a Monitoring Table abbreviation means "Not Applicable".

"NR" as a Monitoring Table abbreviation means "Not Required".

"Quarterly" means in the months of March, June, September, and December.

"Range During Sampling" or "RDS", as a sample type, means the maximum and minimum of all values recorded as a result of analyzing each grab sample of: 1) a Composite Sample, or 2) a Grab Sample Average. For those permittees with continuous monitoring and recording pH meters, Range During Sampling shall mean the maximum and minimum readings recorded with the continuous monitoring device during the Composite or Grab Sample Average sample collection.

"Range During Month" or "RDM", as a sample type, means the lowest and the highest values of all of the monitoring data for the reporting month.

"Semi-Annual" means in the months of June and December.

#### SECTION 3: COMMISSIONER'S DECISION

- (A) The Commissioner has made a final determination and found that the continuance of the existing system to treat the discharge will protect the waters of the state from pollution. The Commissioner's decision is based on Application No. 199902202 for permit reissuance received on June 30, 1999 and the administrative record established in the processing of that application.
- (B) The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit, the above referenced application, and all approvals issued by the Commissioner or the Commissioner's authorized agent for the discharges and/or activities authorized by, or associated with, this permit as follows:
  - (1) From the issuance of this permit through and including October 31, 2012, the Commissioner hereby authorizes the Permittee to discharge in accordance with the terms and conditions of Permit No. SP0002032, issued by the Commissioner to the Permittee on December 29, 1994, the previous application submitted by the Permittee on August 5, 1992, and all modifications and approvals

issued by the Commissioner or the Commissioner's authorized agent for the discharge and/or activities authorized by, or associated with, Permit No. SP0002032, issued by the Commissioner to the Permittee on December 29, 1994.

- (2) From December 1, 2012 until this permit expires or is modified or revoked, the Commissioner hereby authorizes the Permittee to discharge in accordance with the terms and conditions of Permit No. SP0002032, issued by the Commissioner to the Permittee on the issuance date noted on the signature page of this permit, Application No. 199902202 received by the Department on June 30, 1999, and all modifications and approvals issued by the Commissioner or the Commissioner's authorized agent for the discharge and/or activities authorized by, or associated with Permit No. SP0002032, issued by the Commissioner to the Permittee on the issuance date noted on the signature page of this permit.
- (C) The Commissioner reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions that may be authorized under the Federal Clean Water Act or the Connecticut General Statutes or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Federal Clean Water Act or Connecticut General Statutes or regulations adopted thereunder, thereunder which are then applicable.

#### SECTION 4: EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- (A) The discharges shall not exceed and shall otherwise conform to specific terms and conditions listed below. The discharges are restricted by, and shall be monitored in accordance with, the tables below.
- (B) All samples shall be comprised of only those wastewaters identified in the tables. Therefore, samples shall be taken prior to combination with wastewaters of any other type and after all approved treatment units, if applicable. All samples taken shall be representative of the discharge during standard operating conditions.
- (C) In cases where limits and sample type are specified but sampling is not required, the limits specified shall apply to all samples which may be collected and analyzed by, the Department of Energy and Environmental Protection personnel, the Permittee, or other parties.

(THE REOUIREMENTS	OF THIS TABLE	ARE IN EFFECT	FROM PERMIT IS	Table A SUANCE UNTIL SIX MONTHS A	FTER THE START-UP DATE OF TH	IE SYSTEM DESCRIBED IN	PARAGRAPH 8(E))		
Discharge Serial Number: 001-A					Monitoring Lo	·····			
Wastewater Description: Stock cleaning wast	ewaters inclu	uding rejects	s from: Posifle	ow Cleaners, Uniflow C	Jeaners, Screening Wast	ewaters, Stock Prep	Cleaners; Clarifie	r Building Wastew	ater,
DAF Rejects, Building Fordrinier Wastewate									
Water, Potentially-contaminated Stormwater,	Boilout Wa	stewaters, S	crew Press Fi	Îtrate, Boiler Regenera	tion Backwash Water, Co	oling Tower Blowd	own, Non-contact	Cooling Water, Sec	al
Water, Condensate from Steam System, Boile								<b>.</b>	
Monitoring Location Description: Temperatu	re: Before tl	ne heat excha	angers; Flow:	Flowmeter in the Clarif	ier Building; Other: At th	e sampling location	prior to the DAFs		
Discharge is to: DSN 001									
	FLOW/TIME-BASED MONITORING INSTANTA					TANEOUS MONI	ITORING	evel <sup>3</sup>	
PARAMETER	UNITS	Average Monthly Limit	Maximum Daily Limit	Sample// Reporting Frequency <sup>2</sup>	Sample Type or Measurement to be Reported	Instantaneous Limit or Required Range	Sample// Reporting Frequency <sup>2</sup>	Sample Type or Measurement to be Reported	Minimum L
Flow, Instantaneous	gpm			Continuous	Daily Flow	NA	NR	NA	
Flow Rate (Average Daily) <sup>1</sup>	gpd		NA	Continuous	Daily Flow	NA	NR	NA	
Flow, Maximum during 24 hr period <sup>1</sup>	gpd	NA		Continuous	Daily Flow	NA	NR	NA	
Flow (Day of Sampling)	gpd	NA		Twice/Week	Daily Flow	NA	NR	NA	
Temperature, Daily Average (June 1-September 30)	°F	NA	NA	NR	NA		Continuous	Calculated <sup>4</sup>	
Temperature, Maximum (June 1-September 30)	°F	NA	NA	NR	NA		Continuous	Continuous <sup>5</sup>	
Temperature, Daily Average (October 1-May 31)	°F	NA	NA	NR	NA		Continuous	Calculated <sup>4</sup>	
Temperature, Maximum (October 1-May 31)	°F	NA	NA	NR	NA		Continuous	Continuous <sup>5</sup>	
Total Suspended Solids (TSS)	mg/l			Twice/Week	Daily Composite	NA	NR	NA	

#### TABLE A FOOTNOTES AND REMARKS

#### Footnotes:

<sup>1</sup> For this parameter the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow for each month.

<sup>2</sup> The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequency' is more frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

<sup>3</sup> Minimum levels specified in this table represent the concentrations at which quantification must be achieved and verified during the chemical analyses for those noted parameters. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

<sup>4</sup> This value must be calculated by summing every temperature reading obtained during the "day" and dividing that value by the number of temperature readings taken in that "day". Report the highest average monthly value on the DMR.

<sup>5</sup> Report the maximum instantaneous value on the DMR.

#### <u>Remarks</u>:

1. Abbreviations used for units are as follows: gpd means gallons per day; gpm means gallons per minute; mg/L means milligrams/liter; SU means Standard Units;°F means degrees Fahrenheit. Other abbreviations are as follows: NA means Not Applicable; NR means Not Reportable; RDS means Range During Sampling.

2. Collection of the influent sample shall precede collection of the effluent sample by one detention period. The operating record shall note the time that the influent and effluent samples are taken.

3. Supplemental discharge monitoring data shall be entered on Appendix A of this permit and submitted in accordance with the Reporting Requirements in Section 5 of this permit.

				Table B					
	OF THIS TABLE	ARE IN EFFECT F	ROM PERMIT ISSU	JANCE UNTIL SIX MONTHS	AFTER THE START-UP DATE OF T		N PARAGRAPH 8(E))		
Discharge Serial Number: 001-1					Monitoring L		~ ~ ~ ~	Y5 #1 2* XX7	
Wastewater Description: Stock cleaning waste	waters inclu	uding rejects j	from: Posiflor	v Cleaners, Uniflow	Cleaners, Screening Was	ewaters, Stock Prep	Cleaners; Clarifie	er Building Waster	water,
DAF Rejects, Building Fordrinier Wastewater	r, Press Wa	stewater, Whi	tewater, Com	pactor Filtrate, Wash	1-up Water, Press Shower	Overspray/Machin	e Shower Water, A	ES Filter Backwa	sh
Water, Potentially-contaminated Stormwater,	Boilout Wa	stewaters, Sc.	rew Press Fill	rate, Boiler Regener	ation Backwash Water, C	ooling Tower Blow	down, Non-contact	Cooling Water, S	eal
Water, Condensate from Steam System, Boile	r Water Tre	atment Syster	n Wastewater	s, Starch Make-dowi	n System Flush Water, Ta	nk and Chest Clean	ung Wastewaters	<b>O 1 1 1 1 1</b>	
Monitoring Location Description: <b>Temperatur</b> location after the DAFs	e: After the	last heat excl	nanger; <b>pH</b> : pl	H meter between the	CIM and the DAFs; Flow	: Flow meter in the	Clarifier Building;	Other: At the sam	pling
Discharge is to: Town of Montville Water Po	llution Con	trol Facility							
			FLOW/TI	ME-BASED MONI	TORING	INSTAN	TANEOUS MONI	TORING	l Minimum Level <sup>3</sup>
PARAMETER	UNITS			<u> </u>	a	· • • •		Sample Type	Г и
FARAMELER	UNITS	Average	Maximum	Sample//	Sample Type or	Instantaneous	Sample//	or	am
		Monthly	Daily	Reporting	Measurement to be	Limit or	Reporting	Measurement	- Ini
		Limit	Limit	Frequency <sup>2</sup>	Reported	Required Range	Frequency <sup>2</sup>	to be Reported	
Biochemical Oxygen Demand, 5-day (BOD <sub>5</sub> )	lb/day	14,000	18,700	Twice/Week	Daily Composite	NA	NR	NA	
Biochemical Oxygen Demand, 5-day (BOD <sub>5</sub> )	mg/l			Twice/Week	Daily Composite	NA	NR	NA	
Cyanide, Total	mg/l			Semi-annual	Daily Composite	NA	NR	NA	
Flow Rate (Average Daily) <sup>1</sup>	gpd	1,080,000	NA	Continuous	Daily Flow	NA	NR	NA	T
Flow, Maximum during 24 hr period <sup>1</sup>	gpd	NA	1,100,000	Continuous	Daily Flow	NA	NR	NA	1
Flow (Day of Sampling)	gpd	NA	1,100,000	Twice/Week	Daily Flow	NA	NR	NA	
Flow, Instantaneous	gpm	·		Continuous	Daily Flow	NA	NR	NA	
Oil & Grease, Total	mg/l	75	100	Weekly	Grab Sample Average	NA	NR	NA	
Pentachlorophenol	µg/L	ND	ND	Semi-annual	Daily Composite	NA	NR	NA	5
pH, Day of Sampling	SU	NA	NA	NR	NA	6.0 to 10.0	Twice/Week	RDS	
pH, Maximum	SU	NA	NA	NR	NA	10.0	Continuous	Continuous	
pH, Minimum	SU	NA	NA	NR	NA	6.0	Continuous	Continuous	
Phenols, Total	mg/l			Semi-annual	Daily Composite	NA	NR	NA	
Sulfate, Total	mg/l			Monthly	Daily Composite	NA	NR	NA	
Temperature, Daily Average	°F	NT A	NIA	NR	NA	95	Continuous	Calculated <sup>4</sup>	
(June 1-September 30)	r r	NA	NA	INK	INA	75	Continuous		
Temperature, Daily Maximum (2-Hour									
Rolling Average)	°F	NA	NA	NR	NA	105 <sup>7</sup>	Continuous	Calculated <sup>5</sup>	
(June 1-September 30)								ļ	_
Temperature, Daily Average	°F	NA	NA	NR	NA	95	Continuous	Calculated <sup>4</sup>	
(October 1-May 31)	1	147 1	142.k	1110	1 V/ X		Continuous		
Temperature, Maximum per Day	۰F	NA	NA	NR	NA	117 <sup>7</sup>	Continuous	Continuous <sup>6</sup>	
(October 1-May 31)	<u> </u>				2.7.2				
Fotal Dissolved Solids (TDS)	mg/l			Quarterly	Daily Composite	NA	NR	NA	
Total Suspended Solids (TSS)	lb/day	4,350	5,750	Twice/Week	Daily Composite	NA	NR	NA	—
Fotal Suspended Solids (TSS)	mg/l			Twice/Week	Daily Composite	NA	NR	NA	_
2,4,5-Trichlorophenol	μg/L	ND	ND	Semi-annual	Daily Composite	NA	NR	NA	2
2,4,6-Trichlorophenol	μg/L	ND	ND	Semi-annual	Daily Composite	NA	NR	NA	2

#### TABLE B FOOTNOTES AND REMARKS

#### Footnotes:

<sup>1</sup> For this parameter the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow for each month.

<sup>2</sup> The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

<sup>3</sup> Minimum levels specified in this table represent the concentrations at which quantification must be achieved and verified during the chemical analyses for those noted parameters. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

<sup>4</sup> This value must be calculated by summing every temperature reading obtained during the "day" and dividing that value by the number of temperature readings taken in that "day". Report the highest average daily value on the DMR.

<sup>5</sup> Report the highest two-hour average temperature recorded over a "day". The data used for the two-hour averaging shall be collected once every minute. Data collected over a period that overlaps a month shall be counted in the month that includes the higher number of data points in the two-hour averaging period.

<sup>6</sup> Report the maximum instantaneous value (i.e., the result of any individual sample).

<sup>7</sup> These are interim limits only. Final limits will be established in accordance with Paragraph 8(F) of the permit.

#### <u>Remarks</u>:

1. Abbreviations used for units are as follows: gpd means gallons per day; gpm means gallons per minute; mg/L means milligrams/liter; µg/l means micrograms/liter; lbs/day means pounds per day; .SU means Standard Units; °F means degrees Fahrenheit. Other abbreviations are as follows: NA means Not Applicable; ND means Non-Detectable; NR means Not Reportable; RDS means Range During Sampling.

2. Supplemental discharge monitoring data shall be entered on Appendix A of this permit and submitted in accordance with the Reporting Requirements in Section 5 of this permit.

3. The maximum daily BOD<sub>5</sub> limit of 18,700 lbs/day is a five-year temporary limit.

				Table C					$\neg$
	TS OF THIS TA	ABLE ARE IN EFF	ECT SIX MONTHS	AFTER START-UP DATE OF TH	E SYSTEM DESCRIBED IN PARAC		EXPIRATION)		
Discharge Serial Number: 001-A					Monitoring Lo			-	
Wastewater Description: Stock cleaning waste	waters incl	uding rejects	s from: Posifl	ow Cleaners, Uniflow C	Jeaners, Screening Wast	waters, Stock Prep	Cleaners; Clarifier	Building Wastewa	iter,
DAF Rejects, Building Fordtinier Wastewater	, Press Wa	stewater, WI	nitewater, Cor	npactor Filtrate, Wash	up Water, Press Shower	Overspray/Machine	Shower Water, AE	S Filter Backwash	7
Water, Potentially-contaminated Stormwater, Water, Condensate from Steam System, Boiler								.ooung water, sea	1
Monitoring Location Description: "Influent M			an masteria	is, starca mane-aowa	System & tush fruici, fui	in unu onesi oteun	ing musicimulers		
Discharge is to: DSN 001	untor mg 1	Jocativii							
			FLOW	TIME-BASED MONIT	FORING	INSTAN	ANEOUS MONI	TORING	<u> </u>
			FROM /	INTE-DASED MONT					Level <sup>3</sup>
PARAMETER	UNITS	Average	Maximum	Sample//	Sample Type or	Instantaneous	Sample//	Sample Type	I EI
		Monthly	Daily	Reporting	Measurement to be	Limit or	Reporting	Of	Minimum
		Limit	Limit	Frequency <sup>2</sup>	Reported	Required Range	Frequency <sup>2</sup>	Measurement	Mi
		<u>.</u>					2	to be Reported	
Biochemical Oxygen Demand, 5-day (BOD <sub>5</sub> )	mg/l			Twice/Week	Daily Composite	NA	NR	NA	$\square$
Flow, Instantaneous	gpm			Continuous	Daily Flow	NA	NR	NA	ļ
Flow Rate (Average Daily) <sup>1</sup>	gpd		NA	Continuous	Daily Flow	NA	NR	NA	ļ
Flow, Maximum during 24 hr period <sup>1</sup>	gpd	NA		Continuous	Daily Flow	NA	NR	NA	
Flow (Day of Sampling)	gpd	NA		Twice/Week	Daily Flow	NA	NR	NA	
pH, Day of Sampling	SU	NA	NA	NR	NA		Twice/Week	RDS	
pH, Maximum	SU	NA	NA	NR	NA		Continuous	Continuous	
pH, Minimum	SU	NA	NA	NR	NA		Continuous	Continuous	
Soluble BOD <sub>5</sub>	mg/L			Twice/Week	Daily Composite	NA	NR	NA	
Sulfate, Total	mg/L			Monthly	Daily Composite	NA	NR	NA	
Temperature, Daily Average (June 1-September 30)	°F	NA	NA	NR	NA		Continuous	Calculated <sup>4</sup>	
Temperature, Maximum (June 1-September 30)	°F	NA	NA	NR	NA .		Continuous	Continuous <sup>5</sup>	
Temperature, Daily Average (October 1-May 31)	°F	NA	NA	NR	NA		Continuous	Calculated <sup>4</sup>	
Temperature, Maximum (October 1-May 31)	°F	NA	NA	NR	NA		Continuous	Continuous <sup>5</sup>	
Total Suspended Solids (TSS)	mg/l			Twice/Week	Daily Composite	NA	NR	NA	

#### TABLE C FOOTNOTES AND REMARKS

#### Footnotes:

<sup>1</sup> For this parameter the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow for each month.

<sup>2</sup> The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample Frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

<sup>3</sup> Minimum levels specified in this table represent the concentrations at which quantification must be achieved and verified during the chemical analyses for those noted parameters. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

<sup>4</sup> This value must be calculated by summing every temperature reading obtained during the "day" and dividing that value by the number of temperature readings taken in that "day". Report the highest average monthly value on the DMR.

<sup>5</sup> Report the maximum instantaneous value on the DMR.

#### <u>Remarks</u>:

I: Abbreviations used for units are as follows: gpd means gallons per day; gpm means gallons per minute; mg/L means milligrams/liter; SU means Standard Units; F means degrees Fahrenheit. Other abbreviations are as follows: NA means Not Applicable; NR means Not Reportable; RDS means Range During Sampling.

2. Collection of the influent sample shall precede collection of the effluent sample by one detention period. The operating record shall note the time that the influent and effluent samples are taken.

3. Supplemental discharge monitoring data shall be entered on Appendix A of this permit and submitted in accordance with the Reporting Requirements in Section 5 of this permit.

				Table D					
	ITS OF THIS TA	BLE ARE IN EFFE	CT SIX MONTHS A	FTER START-UP DATE OF	THE SYSTEM DESCRIBED IN PARA		IT EXPIRATION)		
Discharge Serial Number: 001-1			2 D + 4	~~~ ~~ ~~	Monitoring L		<i>a a a</i>	Th +1 14 XX7	
Wastewater Description: Stock cleaning waster	waters inclu	iding rejects j	from: Posiflov	v Cleaners, Uniflow	Cleaners, Screening Was	tewaters, Stock Prep	) Cleaners; Clarifie	er Building Waster	vater,
DAF Rejects, Building Fordrinier Wastewater	, Press Was	stewater, Whi	tewater, Com	pactor Futrate, Was	n-up Water, Press Shower	Overspray/Machin	e Snower Water, A.	ES Futer Backwa Cooling Weter S	sn arl
Water, Potentially-contaminated Stormwater, Water, Condensate from Steam System, Boiler								Cooling water, S	eat
Monitoring Location Description: "Town Mon			n wastewater.	s, Staren Make-aow	n system riush water, 1a	ink ana Chesi Clean	ung wasiewaters		
Discharge is to: Town of Montville Water Pol									
			FLOW/TI	ME-BASED MONI	TORING	INSTANI	raneous moni	TORING	evel <sup>3</sup>
PARAMETER	UNITS	Average Monthly Limit	Maximum Daily Limit	Sample// Reporting Frequency <sup>2</sup>	Sample Type or Measurement to be Reported	Instantaneous Limit or Required Range	Sample// Reporting Frequency <sup>2</sup>	Sample Type or Measurement to be Reported	1 Minimum Level <sup>3</sup>
Ammonia, Nitrogen	mg/l			Monthly	Daily Composite	NA	NR	NA	
Biochemical Oxygen Demand, 5-day (BOD <sub>5</sub> )	lb/day	3,000 <sup>6</sup>	4,500 <sup>6</sup>	Twice/Week	Daily Composite	NA	NR	NA	
Biochemical Oxygen Demand, 5-day (BOD <sub>5</sub> )	mg/l			Twice/Week	Daily Composite	NA	NR	NA	
Cyanide, Total	mg/l			Semi-annual	Daily Composite	NA	NR	NA	
Flow Rate (Average Daily) <sup>1</sup>	gpd	1,080,000	NA	Continuous	Daily Flow	NA	NR	NA	
Flow, Maximum during 24 hr period <sup>1</sup>	gpd	NÁ	1,100,000	Continuous	Daily Flow	NA	NR	NA	
Flow (Day of Sampling)	gpd	NA	1,100,000	Twice/Week	Daily Flow	NA	NR	NA	
Flow, Instantaneous	gpm			Continuous	Daily Flow	NA	NR	NA	
Oil & Grease, Total	mg/l	75	100	Weekly	Grab Sample Average	NA	NR	NA	
Pentachlorophenol	μg/L	ND	ND	Semi-annual	Daily Composite	NA	NR	NA	5
pH, Day of Sampling	SU	NA	NA	NR	NA	6.0 to 10.0	Twice/Week	RDS	
pH. Maximum	SU	NA	NA	NR	NA	10.0	Continuous	Continuous	
pH. Minimum	SU	NA	NA	NR	NA	6.0	Continuous	Continuous	1
Phenols, Total	mg/l			Semi-annual	Daily Composite	NA	NR	NA	
Soluble BOD <sub>5</sub>	lb/day			Twice/Week	Daily Composite	NA	NR	NA	
Soluble BOD <sub>5</sub>	mg/L			Twice/Week	Daily Composite	NA	NR	NA	
Sulfate, Total	mg/l			Monthly	Daily Composite	NA	NR	NA	1
Temperature, Daily Average (June 1-September 30)	°F	NA	NA	NR	NA	95	Continuous	Calculated <sup>4</sup>	
Temperature, Maximum (June 1-September 30)	°F	NA	NA	NR	NA	104	Continuous	Continuous⁵	
Temperature, Daily Average (October 1-May 31)	°F	NA	NA	NR	NA	95	Continuous	Calculated <sup>4</sup>	
Temperature, Maximum (October 1-May 31)	°F	NA	NA	NR	NA	104	Continuous	Continuous⁵	
Total Dissolved Solids (TDS)	mg/l			Quarterly	Daily Composite	NA	NR	NA	
Total Suspended Solids (TSS)	lb/day	2,100 <sup>6</sup>	3,150 <sup>6</sup>	Twice/Week	Daily Composite	NA	NR	NA	
Total Suspended Solids (TSS)	mg/l			Twice/Week	Daily Composite	NA	NR	NA	
2,4,5-Trichlorophenol	μg/L	ND	ND	Semi-annual	Daily Composite	NA	NR	NA	2.5
2,4,6-Trichlorophenol	μg/L	ND	ND	Semi-annual	Daily Composite	NA	NR	NA	2.5

#### TABLE D FOONOTES AND REMARKS

#### Footnotes:

<sup>1</sup> For<sup>3</sup> this parameter the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow for each month.

<sup>2</sup> The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample Frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

<sup>3</sup> Minimum levels specified in this table represent the concentrations at which quantification must be achieved and verified during the chemical analyses for those noted parameters. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

<sup>4</sup> This value must be calculated by summing every temperature reading obtained during the "day" and dividing that value by the number of temperature readings taken in that "day". Report the highest average daily value on the DMR.

<sup>5</sup> Report the maximum instantaneous value on the DMR.

<sup>6</sup> These limits are interim limits only. Final limits will be determined upon evaluation of the efficiency of the anaerobic pretreatment system.

#### <u>Remarks</u>:

1. Abbreviations used for units are as follows: gpd means gallons per day; gpm means gallons per minute; mg/L means milligrams/liter;  $\mu$ g/l means micrograms/liter; lbs/day means pounds per day; SU means Standard Units; ° F means degrees Fahrenheit. Other abbreviations are as follows: NA means Not Applicable; ND means Non-Detectable; NR means Not Reportable; RDS means Range During Sampling.

2. The same analytical method shall be used to test for  $BOD_5$  and soluble  $BOD_5$ .

3. Supplemental discharge monitoring data shall be entered on Appendix A of this permit and submitted in accordance with the Reporting Requirements in Section 5 of this permit.

# SECTION 5: SAMPLE COLLECTION, HANDLING AND ANALYTICAL TECHNIQUES AND REPORTING REQUIREMENTS

(A) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved by the Environmental Protection Agency pursuant to 40 CFR 136 unless an alternative method has been approved in writing in accordance with 40 CFR 136.4 or as provided in section 22a-430-3(j)(7) of the RCSA. Chemicals which do not have methods of analysis defined in 40 CFR 136 shall be analyzed in accordance with methods specified in this permit. The following test methods shall be used to analyze the parameters identified below:

#### PARAMETER

#### METHOD OF ANALYSIS

Soluble  $BOD_5$ 

# Filter sample through a 0.45 micron filter and analyze the filtrate for $BOD_5$ using an approved method in 40 CFR 136

2,4,5-Trichlorophenol

#### EPA Method 1625

- (B) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136 unless otherwise specified.
- (C) The results of chemical analysis required above shall be entered on the Discharge Monitoring Report (DMR), provided by this office, and reported to the Bureau of Materials Management and Compliance Assurance at the following address. Except for continuous monitoring, any monitoring required more frequently than monthly shall be reported on an attachment to the DMR, and any additional monitoring conducted in accordance with 40 CFR 136 or other methods approved by the Commissioner shall also be included on the DMR, or as an attachment, if necessary. Appendix A of this permit shall be used for that purpose. The report shall also include a detailed explanation of any violations of the limitations specified. The DMR shall be received at this address by the last day of the month following the month in which samples are taken.

#### Bureau of Materials Management and Compliance Assurance Water Permitting and Enforcement Division (Attn: DMR Processing) Connecticut Department of Energy and Environmental Protection 79 Elm Street Hartford, CT 06106-5127

- (D) If this permit requires monitoring of a discharge on a calendar basis (e.g., monthly, quarterly, etc.) but a discharge has not occurred within the frequency of sampling specified in the permit, the Permittee must submit the DMR as scheduled, indicating "NO DISCHARGE". For those permittees whose required monitoring is discharge dependent (e.g., per batch), the minimum reporting frequency is monthly. Therefore, if there is no discharge during a calendar month for a batch discharge, a DMR must be submitted indicating such by the end of the following month.
- (E) NetDMR Reporting Requirements
  - Prior to one-hundred and eighty (180) days after the issuance of this permit, the Permittee may either submit monitoring data and other reports to the Department in hard copy form or electronically using NetDMR, a web-based tool that allows Permittees to electronically submit discharge monitoring reports (DMRs) and other required reports through a secure internet connection. Unless otherwise approved in writing by the Commissioner, no later than one-hundred and eighty (180) days after the issuance of this permit the Permittee shall begin reporting electronically using NetDMR. Specific requirements regarding subscription to NetDMR and submittal of data and reports in hard copy form and for submittal using NetDMR are described below:
    - a. Submittal of NetDMR Subscriber Agreement

On or before fifteen (15) days after the issuance of this permit, the Permittee and/or the person authorized to sign the Permittee's discharge monitoring reports ("Signatory Authority") as described in RCSA Section 22a-430-3(b)(2) shall contact the Department at <u>deep.netdmr@ct.gov</u>

and initiate the NetDMR subscription process for electronic submission of Discharge Monitoring Report (DMR) information. Information on NetDMR is available on the Department's website at <u>www.ct.gov/deep/netdmr</u>. On or before ninety (90) days after issuance of this permit the Permittee shall submit a signed and notarized copy of the Connecticut DEEP NetDMR Subscriber Agreement to the Department.

#### b. Submittal of Reports Using NetDMR

Unless otherwise approved by the Commissioner, on or before one-hundred and eighty (180) days after issuance of this permit, the Permittee and/or the Signatory Authority shall electronically submit DMRs and reports required under this permit to the Department using NetDMR in satisfaction of the DMR submission requirement of Section 5(C) of this permit.

- DMRs shall be submitted electronically to the Department no later than the 30th day of the month following the completed reporting period. All reports required under the permit, including any monitoring conducted more frequently than monthly or any additional monitoring conducted in accordance with 40 CFR 136, shall be submitted to the Department as an electronic attachment to the DMR in NetDMR. Once a Permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of DMRs or other reports to the Department. The Permittee shall also electronically file any written report of non-compliance described in Section 6 of this permit as an attachment in NetDMR. NetDMR is accessed from: http://www.epa.gov/netdmr.
- c. Submittal of NetDMR Opt-Out Requests

If the Permittee is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for electronically submitting DMRs and reports, the Commissioner may approve the submission of DMRs and other required reports in hard copy form ("opt-out request"). Opt-out requests must be submitted in writing to the Department for written approval on or before fifteen (15) days prior to the date a Permittee would be required under this permit to begin filing DMRs and other reports using NetDMR. This demonstration shall be valid for twelve (12) months from the date of the Department's approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to the Department using NetDMR unless the Permittee submits a renewed opt-out request and such request is approved by the Department.

All opt-out requests and requests for the NetDMR subscriber form should be sent to the following address or by email at <u>deep.netdmr@ct.gov</u>:

Attn: NetDMR Coordinator Connecticut Department of Energy and Environmental Protection 79 Elm Street Hartford, CT 06106-5127

(F) Copies of all DMRs shall be submitted concurrently to the local Water Pollution Control Authority ("WPCA") involved in the treatment and collection of the permitted discharge.

# SECTION 6: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS

- (A) If any sample analysis indicates that an effluent limitation specified in Section 4 of this permit has been exceeded, a second sample of the effluent shall be collected and analyzed for the parameter(s) in question and the results reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing) within 30 days of the exceedance.
- (B) The Permittee shall immediately notify the Bureau of Materials Management and Compliance Assurance and the local WPCA of all discharges that could cause problems to the Publicly Owned Treatment Works ("POTW"), including but not limited to slug loadings of pollutants which may cause a violation of the

POTW's NPDES permit, or which may inhibit or disrupt the POTW, its treatment processes or operations, or its sludge processes, use or disposal.

(C) In addition to the notification requirements specified in Section 1B of this permit, if any sampling and analysis of the discharge performed by the Permittee indicates a violation of limits specified in Section 4 of this permit, the Permittee shall notify the Bureau of Materials Management and Compliance Assurance within 24 hours of becoming aware of the violation.

# SECTION 7: COMPLIANCE CONDITIONS

The Commissioner may provide public notification, in a newspaper of general circulation in the area of the respective POTW, of permittees that at any time in the previous twelve months were in significant noncompliance with the provisions of this permit. For the purposes of this provision, a Permittee is in significant noncompliance if its violation(s) meet(s) one or more of the following criteria:

- Chronic violations: Those in which sixty-six (66%) percent or more of all measurements taken for the same pollutant parameter during a six-month period exceed (by any magnitude) the Average Monthly, Maximum Daily, or Maximum Instantaneous Limit(s).
- Technical Review Criteria violations: Those in which thirty-three (33%) or more of all of the measurements taken for the same pollutant parameter during a six-month period equal or exceed the Average Monthly, Maximum Daily, or Maximum Instantaneous Limit(s) multiplied by 1.4 for BOD, TSS, fats, oil, and grease, or 1.2 for all other pollutants except pH.
- Monitoring Reports: Failure to provide, within 45 days after the due date, required reports such as DMRs.
- Compliance Schedule: Failure to meet within 90 days after the schedule date, a compliance schedule milestone contained in or linked to a respective permit for starting construction, completing construction, or attaining final compliance.
- Noncompliance Reporting: Failure to accurately report noncompliance in accordance with provisions identified in Section 6 of this permit.
- Discretionary: Any other violation of an effluent limit that the Department determines has caused, alone or in combination with other discharges, a violation of the POTW's NPDES permit, inhibition or disruption of the POTW, its treatment processes or operations, or its sludge processes, use or disposal.
- Imminent Endangerment: Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment, or has resulted in the Department's exercise of its emergency authority under 40 CFR §403.8(f)(1)(vi)(B) to halt or prevent such a discharge.
- BMPs: Any other violation or group of violations, which may include a violation of Best Management Practices, which the Department determines will adversely affect the operation or implementation of the pretreatment program.

#### **SECTION 8: SPECIAL CONDITIONS**

- (A) Section 40 CFR 430.107 requires that Permittees not using chlorophenolic-containing biocides must certify to the permit-issuing authority that they are not using these biocides. This certification shall be submitted annually and is due on December 31<sup>st</sup> of each year that this permit is in effect. [See Appendix B.]
- (B) If the Permittee submits a notification to the Department under RCSA Section 22a-430-3i requesting approval for the permanent or temporary use of any chemical at its facility, the Permittee shall include as part of its submittal, an evaluation demonstrating that the subject chemical will not cause or contribute to interference or pass-through at the Montville Water Pollution Control Facility ("WPCF").

#### APPENDIX A

#### Supplemental Discharge Monitoring Data: DSN 001A

Month:

DAY	MOLI	FLOW (max)	BODs	Soluble BOD5	TSS	pH (min)	pH (max)	TEMP (MAXIMUM PER DAY)	TEMP (AVERAGE PER DAY)
'n			····· <b>··p</b>	S a	- Segura da Balharren - E	•	÷	T (MA) PER	PER II
	gpđ	gpm	mg/L	mg/L	mg/L	SU	SU	۴	°F
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2									
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

 Authorized Official (Print Name):
 Title:

 Signature:
 Date:

#### APPENDIX A

# Supplemental Discharge Monitoring Data: DSN 001

#### Month:

DAY	FLOW	FLOW (max)	BOD5	BODs	Soluble BOD5	Soluble BOD <sub>5</sub>	SSL	TSS	pH (mim)	pH (max)	OIL & GREASE	TEMP (MAXIMUM PER DAY)	TEMP (MAX, 2-HOUR ROLLING)	TEMP (AVERAGE PER DAY)
<u> </u>	gpd	gpm	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	.SU.,.	SU.	mg/L	•F	°F	•F
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Official (Print Name):	Title:
, ,	
Signature:	Date:

Final Permit No. SP0002032

#### APPENDIX B

#### Chlorophenolic Biocide Certification

In accordance with the requirements of 40 CFR 430.107, I hereby certify that [NAME OF COMPANY] does not utilize chlorophenolic-containing biocides in any of the processes at its facility located at [ADDRESS].

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Official (Print Name):	Fitle:
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Signature: \_\_\_\_\_ Date: \_\_\_\_\_

- (C) The Permittee shall "pig"<sup>1</sup> the pipeline that conveys the effluent from the Permittee's facility to the Montville WPCA at a mutually agreed frequency as requested by the Montville WPCF. Currently, this operation occurs approximately twice per week in the summer months and once per week in the nonsummer months.
- (D) The Permittee shall maintain compliance with the most current, Department-approved version of the "Surge Basin SOP".
- (E) In May 2012, the Permittee notified the Department that it intends to install an anaerobic pretreatment system to treat its wastewater. On June 1, 2012, the Department approved the conceptual design for this project based on the submittal entitled *Anaerobic Pretreatment System Evaluation*, May 2012, by Woodard and Curran. Submission of complete and detailed plans and specifications are pending. Within six months of the start-up date of the anaerobic pretreatment system, the Permittee's discharge, DSN 001, shall meet the requirements set forth in Tables C & D of this permit.
- (F) The Permittee shall conduct an evaluation in order to establish final temperature limits for its pretreatment system. Within sixty days of issuance of this permit, the Permittee shall submit a scope of study for the Commissioner's review and written approval that outlines the manner in which the evaluation will be performed. Within thirty-six months of issuance of this permit, the Permittee shall submit the results of its evaluation for the Commissioner's review and written approval. At a minimum, this evaluation shall be made in consideration of: influent/effluent temperature data, design capacity and performance of the heat exchangers, seasonal source water usage, production schedules, and potential treatment system modifications. Based upon this evaluation, the Permittee shall propose final temperature effluent limits. The Permittee must demonstrate that its proposed final limits will be protective of the Montville WPCF at all times. If necessary, the interim temperature limits in Table B of the permit shall be modified in accordance with RCSA Section 22a-430-4(p)(5)(B) to incorporate final temperature limits.
- (G) Consistent with the September 5, 2012 letter from the Town of Montville's consultant, Fay, Spofford & Thorndike, the maximum daily BOD<sub>5</sub> limit of 18,700 lbs/day is a five-year temporary limit. On November 13, 2017, a maximum daily BOD<sub>5</sub> limit of 16,000 lbs/day shall take effect.
- (H) Any document, other than a discharge monitoring report, required to be submitted to the Commissioner under this section of the permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

Christine Gleason, Sanitary Engineer Department of Energy and Environmental Protection Bureau of Materials Management and Compliance Assurance Water Permitting and Enforcement Division 79 Elm Street Hartford, CT 06106-5127

This permit is hereby issued on

11/15/12

MACKY MeCLEARY Deputy Commissioner

MM:CMG copy: Town of Montville WPCF

<sup>&</sup>lt;sup>1</sup> "Pig" means the practice of using a "pig" (i.e., a tool/device that is sent down the pipeline which allows for the inside of the pipeline to be cleaned/scoured) to clean out the pipeline.

APPLICANT	RAND-WHITNEY CONTAINERBOARD, L.P.
SPDES PERMIT NO.	SP0002032
APPLICATION NO.	199902202
DATE APPLICATION RECEIVED	June 30, 1999
FACILITY ID.	086-049
LOCATION ADDRESS	370 Route 163 Montville, Connecticut 06353
FACILITY CONTACT	Paul Schaffman, P.E., Director of Regulatory Affairs Phone: 860-425-3712 FAX: 860-848-8900 E-mail: <u>PAULS@rwcb.com</u>
MAILING ADDRESS	P.O. Box 336 Montville, Connecticut 06353
DMR CONTACT	Paul Schaffman
BILLING CONTACT	Paul Schaffman
PERMIT TERM	5 years
PERMIT CATEGORY	Significant Industrial User Categorical Industrial User (40 CFR 430, Subpart J)
PRIMARY SIC CODE	2631 (Paperboard Mills)
PERMIT TYPE	Renewal
OWNERSHIP	Private
POTW THAT RECEIVES DISCHARGE	Town of Montville Water Pollution Control Facility [Thames River]
DEP STAFF ENGINEER	Christine Gleason (860/424-3278) <u>christine.gleason@ct.gov</u>

# FACT SHEET SPDES PERMIT RENEWAL

# PERMIT FEES

Application Filing Fee: \$700. Paid on June 30, 1999 Application Processing Fee: \$12,925.00 (Invoice 76261). Paid on January 22, 2009

# Annual Fee:

			UAL
DISCHAL	WASTEWATER CATEGO		
CODE			
	(per 22a-430-7)		
		(per 22	

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501054Z	Pulp & Paper Mills (Posiflow Cleaner Wastewater, Uniflow Cleaners Wastewater, Screen Reject Wastewater, Stock Prep Cleaner Reject Wastewater, Fordrinier Wastewater, Press Wastewater, Whitewater, Compactor filtrate, Wash-up water, Press Shower Overspray/Machine Shower Water, AES Filter Backwash Water, Potentially-contaminated Stormwater, Boilout Wastewaters, Screw Press Filtrate)	>50,000	001	8,425.00
5060000	Water Production Wastewater (Boiler Regeneration Backwash Water)		001	660
5170000	Blowdown from Heating & Cooling Equipment (Cooling Tower Blowdown)	***	001	4337.50
502000a	Cooling Water (Non-Contact) (Non-contact Cooling Water, Seal Water, Steam Condensate, Boiler Water Treatment System Condensate, Starch Make-down System Flush Water)	0-100,000	001	660
TOTAL				\$13,562.50

# APPLICANT

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Rand-Whitney Containerboard, L.P. is seeking a renewal of its SPDES permit (SP0002032) for authorization of the discharge of treated wastewaters generated from its linerboard processing operations. On June 30, 1999, the Department received Application 199902202 for the subject SPDES permit. This application was noticed in the *Norwich Bulletin* on July 2, 1999. On October 7, 1999, the application was determined to be timely and administratively sufficient.

DSN .	PROPOSED AVERAGE MONTHLY FLOW (gpd)	PROPOSED MAXIMUM DAILY FLOW (gpd)	PROPOSED WASTESTREAMS	TREATMENT TYPE(S)	DISCHARGE TO
001-A			Stock cleaning wastewaters including rejects from: Posiflow Cleaners, Uniflow Cleaners, Screening Wastewaters, Stock Prep Cleaners; Clarifier Building Wastewater, DAF Rejects, Building Fordrinier Wastewater, Press Wastewater, Whitewater, Compactor Filtrate,	Equalization; Neutralization	001-1
001-1	1,080,000	1,100,000	Wash-up Water, Press Shower Overspray/Machine Shower Water, AES Filter Backwash Water, Potentially-contaminated Stormwater, Boilout Wastewaters, Screw Press Filtrate, Boiler Regeneration Backwash Water, Cooling Tower Blowdown, Non-contact Cooling Water, Seal Water, Condensate from the Steam System, Boiler Water Treatment System Wastewaters, Starch Make-down System Flush Water, Tank and Chest Cleaning Wastewaters	Equalization; Neutralization; Solids removal; Heat removal	Town of Montville's collection system

The applicant seeks	authorization	for the	following:

#### II. BACKGROUND/PERMIT HISTORY

Rand-Whitney Containerboard, L.P. (RWC), a part of the Kraft Group, operates a linerboard mill in Montville. The wastewater that is generated from the mill is treated on-site and discharged into the Town of Montville's Water Pollution Control Facility (WPCF) by way of a dedicated sewer line. This discharge is subject to the terms and conditions of SP0002032 which was issued on December 29, 1994. General permits exist for other wastewater discharges, including stormwater (GSI000723), water treatment wastewater (GWT000231), and miscellaneous wastewaters (GMI000086).

In the early 1990s, RWC proposed construction of a mill in Montville for processing linerboard from old corrugated containers (OCC). In July 1992, it submitted an application to obtain a permit to discharge the wastewater from its mill to the Montville WPCF. The application sought authorization for the discharge of an average of 1,080,000 gallons per day of wastewater generated from the pulping, cleaning, stock preparation, and paper forming operations, as well as discharges from ancillary operations, including cooling water, cooling tower blowdown, boiler blowdown, and water production wastewaters. The raw wastewater, as represented in the permit application, was expected to have an average 5-day Biochemical Oxygen Demand (BOD<sub>5</sub>) of 10,400 lbs/day, an average Total Suspended Solids (TSS) of 8,000 lbs/day, temperature ranging from 60-90 °F, and an average sulfate concentration of 500 mg/L. The application also included a conceptual design for a system which would treat this raw waterwater prior to being conveyed to the Montville WPCF.

In June 1993, as construction of the mill proceeded, a revised permit application was submitted. This application revised the proposed linerboard production from 400 tons/day to 450 tons/day and also revised the BOD<sub>5</sub> and TSS projections for the raw wastewater (i.e., the raw wastewater would contain an average BOD<sub>5</sub> of 16,300 lbs/day and an average TSS of 4,350 lbs/day). This application also provided additional information as to the type of treatment the raw wastewater would receive. Specifically, it indicated that two Krofta dissolved air flotation (DAF) units would be installed to treat the wastewater prior to discharge to the Montville WPCF. Treated effluent from the DAFs would then be directed via a dedicated pipeline to the Montville WPCF where it would be treated in the WPCF's Extended Aeration (EA) System and ultimately in the Sequencing Batch Reactor (SBR) system yet to be constructed. The projected plans also provided for the Montville WPCF to partially treat and return a portion of RWC's discharge ("return water") which would be used by RWC as process water in its operations. In June 1993, the Department drafted and noticed RWC's discharge permit based on these projections. Soon thereafter, the Town of

Montville allowed RWC a higher BOD<sub>5</sub> raw wastewater limit (i.e., 16,300 lbs/day average monthly and 18,700 lbs/day maximum daily).

As the construction activities progressed, certain agreements were finalized between RWC and the Town of Montville. In June 1993, two agreements were entered into: the Amended and Restated Wastewater Treatment Agreement ("Wastewater Treatment Agreement"), which set forth the terms and conditions concerning the pre-treatment of RWC's discharge, and the Second Amended and Restated Water Supply Agreement ("Water Supply Agreement") which set forth the terms and conditions concerning the quality and quantity of the return water supplied to RWC. Among other things, the Wastewater Treatment Agreement provided for the Town to construct two DAFs in a building on RWC's property ("Pre-Treatment Facility") and to construct two dedicated pipelines ("Pipelines"), one for the conveyance of RWC's wastewater from the Pre-Treatment facility to the Montville WPCF and the other for the return water from the Montville WPCF to RWC. The Wastewater Treatment Agreement also contained certain limits that RWC's wastewater would need to meet prior to discharge to the Montville WPCF (i.e., after treatment in the DAFs). In September 1994, construction was completed on the two Town-owned, RWCoperated DAFs; the terms and conditions of the operation and maintenance of the units were set forth in the Operation and Maintenance Agreement. Toward the end of 1994, the construction of the Pipelines and the three SBRs at the Montville WPCF were nearly completed. In December 1994, RWC's sewer discharge permit, SP0002032, was issued; it included the higher raw wastewater BOD<sub>5</sub> limits that the Town approved in June 1993 and required monitoring at a point prior to treatment of the wastewater in the DAFs<sup>1</sup>.

In January 1995, operations began at the mill. As planned, return water was supplied to RWC from the Montville WPCF for use in various operations at the mill. Within the first year of operation, however, RWC experienced some operational issues at its facility that it claimed were related to the quality of the return water (e.g., equipment/piping corrosion, impaired boiler operations, the need for increased chemical consumption). Consequently, an alternative source of supply water was sought. In 1997, RWC obtained a diversion permit which allowed for the withdrawal of up to 803,000 gpd of water from the Oxoboxo Brook during non low-flow conditions. With the diversion permit in place, Oxoboxo Brook water would be the main water source from November to June and return water would be the main water source in the summer months.

As mill operations got underway, other issues arose:

**BOD**<sub>5</sub> and TSS Loading in RWC's Effluent: As noted above, two DAFs were installed at the RWC site to remove BOD<sub>5</sub> and TSS in the raw wastewater. The design criteria for this system was 90% solids removal and 35% BOD<sub>5</sub> removal as set forth in the Water Supply Agreement. However, upon start-up of the system, the anticipated levels of removal were not met. As early as mid-1995, various operational, chemical, and mechanical measures, were undertaken in an attempt to meet the level of BOD<sub>5</sub> and TSS effluent quality that had been anticipated. This resulted in some success with additional TSS removal. However, the projected BOD<sub>5</sub> removal levels were never fully met, due in part, because the BOD<sub>5</sub> in RWC's effluent was soluble BOD<sub>5</sub> and the system was not designed to remove soluble BOD<sub>5</sub>. In 1996, the Town assigned all rights under the Krofta contract to RWC and the Wastewater Treatment Agreement was modified to increase the average monthly BOD<sub>5</sub> limit to 14,000 lbs/day and the maximum daily limit to 16,000 lbs/day.

At or around this time, the Montville WPCF began experiencing problems meeting the BOD<sub>5</sub> and TSS limits in its NPDES permit. In order to determine the source of the problems, RWC was issued a NOV requiring that it evaluate the characteristics of its discharge in order to determine if or how its discharge was impacting the treatment facility. In response to the NOV, RWC retained Malcolm-Pirnie (MP) to conduct an evaluation of the treatability of RWC's effluent. MP evaluated RWC's operations, the TSS and BOD<sub>5</sub> loading and variability of the effluent, and the operations at the Montville WPCF. MP concluded that the RWC wastewater could be effectively treated for BOD<sub>5</sub> and TSS and that there was nothing in RWC's wastewater that was determined to be inhibitory or could cause pass-through at the Montville WPCF. MP proposed no changes to the management of RWC's wastewater, but did suggest that the performance difficulties at the Montville WPCF lay with the operation of the facility itself and suggested that certain operational changes be undertaken at the Montville WPCF to eliminate/reduce these problems. The Montville WPCF's consultant, Fay Spofford, and Thorndike (FST) responded to the suggestions in this

<sup>&</sup>lt;sup>1</sup> RWC is currently monitoring its wastewater at two different locations: The Town of Montville has established its compliance monitoring point after the DAFs ("Town Monitoring Point"); the compliance monitoring point in SP0002032 is located before the DAFs ("DEP Monitoring Point").

report by noting that the performance difficulties at the Montville WPCF were due to the excessive BOD<sub>5</sub> loadings and variations in the RWC wastewater. FST made recommendations to RWC to improve facility performance so that the Montville WPCF would be able to meet its NPDES limits. While both reports arrived at differing conclusions as to the source of the problems at the treatment facility, each did, however, conclude that additional treatment capacity at the Montville WPCF would at least partially address the BOD<sub>5</sub> and TSS exceedances. In 1999, a fourth SBR was constructed at the Montville WPCF. This resulted in an improvement in Montville's effluent quality with respect to BOD<sub>5</sub> and TSS. However, the issue of the variability of BOD<sub>5</sub> in RWC's effluent remained outstanding.

In November 1999, RWC was requested to provide additional information to supplement the existing reports on BOD<sub>5</sub> variability in its wastewater. Specifically, RWC was directed to investigate the source of the  $BOD_5$  in its wastewater (i.e., from OCC or chemical additions). determine the impact that the internal wastestreams have on the variability of the loading, determine the hour-to-hour/day-to-day variability of the discharge, and determine what impact the  $BOD_5$  variability and strength have on the operations of the Montville WPCF. In February 2000, RWC submitted a preliminary response to the November request. This evaluation attempted to identify the source of the  $BOD_5$  in the discharge, as well as to determine the hourly variance of BOD<sub>5</sub> during normal and shutdown periods. The results of this study indicated that the source of the BOD<sub>5</sub> is from the OCC and not the chemicals used in the process. Specifically, the study determined that the source of BOD<sub>5</sub> was primarily from the starch-based glue used on the boxes. and to a lesser extent, the organic material in the OCC fibers. In addition, RWC evaluated the variability of the BOD<sub>5</sub> in the effluent during production, as well as during shutdowns. This report was followed up by another, more comprehensive report submitted in January 2001 by MP. This report evaluated the variability of the BOD<sub>5</sub> by investigating the individual sources of BOD<sub>5</sub> in the wastestreams generated at the site during routine operations and those generated during shutdown/clean-out operations. The report also evaluated the statistical relationships between the operational variables. The report concluded that the main factor in BOD<sub>5</sub> variability is the mill's production rate. The report did not propose any specific changes to be made to address this issue, but did request a higher maximum BOD<sub>5</sub> limit. The Montville WPCF, through its consultant, continued to note that proper operation of the treatment facility was not achievable due to the variable flows and loading from RWC. By 2002, however, two additional SBRs (SBRs 5 & 6) were installed at the Montville WPCF in anticipation of increased flows from Mohegan Sun Casino. While the Montville WPCF continued to employ strategies to deal with the impacts of the RWC discharge, this additional capacity allowed the treatment facility to better manage the discharge. Gradually, as treatment efficiencies improved, Montville was able to meet its permit limits. However, the issue of whether pre-treatment was necessary to address the variability in RWC's wastewater remained outstanding.

In late 2002, RWC was informed that it needed to investigate pre-treatment measures to address the BOD<sub>5</sub> variability in its discharge. In January 2003, RWC proposed installation of an equalization tank at its site and the use of Aerated Equalization to treat the soluble BOD, in its discharge. However, from late 2003 to early 2004, RWC pilot tested a Moving Bed Biofilm Reactor (MBBR) to determine if it would be a more effective alternative instead. The results of the pilot study indicated that a soluble BOD<sub>5</sub> reduction of about 20% may be achieved. By October 2004, RWC proposed the use of an MBBR system to address the BOD<sub>5</sub> variability but this proposal planned for the MBBR system to be installed at the Montville WPCF and operated by RWC. This operating arrangement proved to be infeasible and by 2005, the MBBR was ruled out as a treatment alternative. In May 2010, through Consent Order WC 5516, RWC was required to further evaluate the need for equalization in order to address the variability of its wastewater. RWC's consultant, Woodard and Curran (W&C) re-evaluated the past studies and evaluated existing conditions at the Montville WPCF and determined that equalization alone would not provide any real benefit to the treatment facility. RWC continues, however, to investigate treatment alternatives as set forth in the June 2011 Memorandum of Understanding with the Town of Montville entitled "Exploration of Treatment Options". Currently RWC is investigating the possibility of an anaerobic digester to treat its wastewater. This project is on-going.

Issues with the Dedicated Pipeline, Odor, & Filamentous Bacteria Issues at the Montville WPCF: Within several months of start-up of the mill, the Montville WPCF began experiencing odor problems. The source of the odors was determined to be the RWC discharge. Upon further investigation, it was determined that higher than expected sulfate levels in the RWC discharge,

coupled with the anaerobic conditions present in the dedicated pipeline, were causing the formation of sulfide-bearing compounds in the pipeline. The initial instances of odor were addressed by the addition of potassium permanganate at RWC to reduce sulfate levels. This was followed-up by "pigging" the dedicated pipeline. These remedies provided only limited mitigation of the odor problems. In addition to the problems with odor, the WPCF, over time, began to experience problems with filamentous bacteria in its SBRs. FST attributed the WPCF's problems with excess filamentous bacteria on the elevated temperature, nutrient deficiency, and sulfide content in RWC's discharge. In order to address the sulfide issue, the WPCF proposed a sulfide control program consisting of the addition of calcium nitrate to RWC's wastewater in order to reduce the filamentous population in the SBR basin and to mitigate odor problems at the WPCF. In addition, by late 1999, a daily pipeline pigging trial was undertaken in an attempt to reduce the levels of sulfide at the pipeline exit. However, odor and other problems persisted and by late 1999 through early 2000, the Montville WPCF was evaluating operational modifications to address these issues. By 2002, the issue of the odor was substantially addressed by the installation of two wet scrubbers at the WPCF. However, the issue of filamentous bacteria remained outstanding. This and other problems at the treatment facility led the Town of Montville to issue a NOV to RWC in December 2002, requiring that it address those conditions associated with its discharge (e.g., sulfur-bearing compounds, etc.) which were causing the excessive filamentous growth at the WPCF. In December 2002, RWC proposed to address the issue of sulfur compounds in its discharge by adding hydrogen peroxide to its pre-treated wastewater in order to increase dissolved oxygen levels and thereby reduce the generation of sulfide. This was followedup by a proposal in 2004 to trial a caustic flushing program designed to reduce the amount of fermentation occurring in the pipeline. Yet another report was submitted in 2004 proposed treatment for RWC's wastewater in an MBBR system in order to address the sulfur-bearing compounds. None of these alternatives materialized. However, the additional capacity provided by SBRs 5 & 6 and the routine use of polymer at the WPCF allowed for better control of the filamentous bacteria so that the bulking issues were no longer a problem.

In January 2006, there was a break in the pipeline that conveys RWC's effluent to the WPCF. The break occurred in a section of the pipe located at the RWC facility. Corrosion Probe, Inc. (CPI) investigated this pipeline, as well as the parallel return water pipeline. It also tested the soils at various locations along the pipeline route. CPI concluded that the cause of the break was external (i.e., caused by the surrounding soils). This was confirmed by soil testing conducted in several areas along the pipelines. Visual inspection of the pipelines also indicated that the effluent pipeline contained scale in the break area, while the supply pipeline did not. CPI concluded that the higher temperature of the water in the effluent line versus the supply line could have contributed to this situation. To date, the dedicated wastewater line continues to be pigged by RWC staff once a week in the non-summer months and twice a week in the summer months.

Thermal Issues Associated with RWC's Effluent: As noted above, the permit applications submitted in 1992/1993 projected that the temperature of RWC's wastewater would be between 60-90 °F. However, the actual temperature was considerably higher. In 1996, the WPCF conducted temperature monitoring of RWC's wastewater at the outlet of the dedicated pipeline. This monitoring indicated that the temperature (from May to July) varied from 99.7 °F to 115.7 °F. By 1997, plans were initiated by the Montville Water Pollution Control Authority (WPCA) to control the temperature in RWC's discharge. Several options were identified by Camp Dresser & McGee (CDM), the Town's consultant. Ultimately, a heat exchanger located at the RWC property was the agreed-upon option. The terms and conditions of the installation, maintenance, and design capacity of the heat exchanger were finalized through a Standstill Agreement executed in March 1998 by RWC and the Town of Montville. The Standstill Agreement provided for the WPCA to install a heat exchanger at the RWC site designed to reduce the temperature of RWC's effluent to no more than 97 °F; RWC was obligated to maintain the heat exchanger as set forth in the Standstill Agreement. In July 1998, the heat exchanger (an Alpha Laval spiral heat exchanger) was installed at the RWC facility. An initial evaluation was conducted soon after the heat exchanger was installed which indicated that it appeared to be performing as intended. However, problems with the heat exchanger's performance began to occur soon thereafter. In October 1998, CDM conducted a site inspection at RWC to evaluate the performance of the heat exchanger system. That inspection revealed that the amount of solids in the influent to the heat exchanger exceeded the design constraints specified in the Standstill Agreement. This, and other related operational problems, were causing a decrease in thermal performance. By mid-2000, the heat exchanger had deteriorated to the point where major maintenance was necessary. By December 2000, RWC contracted with an engineering firm, Neill & Gunter, (N&G) to fix and/or re-design the heat exchanger. Based on recommendations from N&G, RWC proposed to install a new plateand-frame heat exchanger with the existing, repaired Alpha Laval serving as a backup. RWC proposed that the design criteria for the new plate-and-frame heat exchanger would meet the 97 °F limit set forth in the Standstill Agreement. However, the Montville WPCF indicated that the 97 °F limit identified in the Standstill Agreement was based on "limited data and assumptions" and it wanted the proposed heat exchanger to be designed to treat the wastewater to 85 °F. Regardless, in June 2001, RWC installed (at risk) a Mueller plate-and-frame heat exchanger designed to achieve an average daily temperature of 97 °F; the Alfa Laval was designated as the back-up. Despite installing the new heat exchanger, the WPCF was still experiencing problems associated with elevated temperature. As a result, RWC was required to investigate a long-term option for controlling the temperature of its effluent. RWC directed its consultant, W&C, to evaluate the temperature of its effluent, as well as the effects of the temperature on the operations at the Montville WPCF, and propose certain long-term alternatives. As a result of this evaluation, W&C proposed the installation of a new closed loop evaporative cooling tower and another heat exchanger. By 2008, RWC replaced the Alpha Laval with a second Mueller plate-and-frame heat exchanger; no approval appears to exist for this heat exchanger. In May 2010, through Consent Order WC 5516, RWC was required to further evaluate the need for temperature reduction for its effluent. In response to this requirement, W&C conducted another evaluation to investigate the cooling options for RWC's effluent. Based on this evaluation, W&C recommended installation of a third Mueller plate-and-frame heat exchanger. This heat exchanger became operational in July 2011.

Spills at RWC: In addition to the above-noted issues, spills from the RWC facility began to occur soon after operations began in January 1995. In August 1995, the DEP issued RWC a Notice of Violation (NOV) for, among other things, three process water spills that entered Oxoboxo Brook. In response to this NOV, RWC's consultant submitted a report in December 1995 which proposed to install additional containment capacity at the facility in an effort to address any future spills. Specifically, it proposed to install spill curbing in the OCC and Paper Machine ("PM") Basements and to install a "Surge Basin". The construction of the spill curbing and the installation of the Surge Basin was completed in 1996, however, spills continued to occur. In July 1998, RWC was issued a Consent Order (WC 5253) as the result of nine spills that occurred from August 1996 to September 1997. The consent order required RWC to investigate the source of the spills and to take necessary remedial actions to prevent future occurrences of spills. In 1999, RWC submitted a report designed to prevent any future process water spills from occurring at the facility. The report proposed certain facility/operational changes, including: installation of a U-drain and sump in the OCC Warehouse, changes to the Surge Basin discharge piping, process control modifications, upgrading the sump pump system, installing curbing at the Pre-Treatment Building, and increasing the pumping capacity to the sewer main. However, seven additional spills occurred after submission of this report, so in 2002, RWC submitted a supplemental report to address the additional spills that had occurred since submission of the original report. In 2004, another spill occurred and this required a further evaluation, as required by the Consent Order, WC 5253. In response to this requirement, W&C submitted a report in November 2005 (Conceptual Engineering Design Report) which summarized its evaluation of the existing measures in place to address spills and made recommendations for future improvements. The report concluded that existing spill prevention measures on-site appeared appropriate and recommended only that the Surge Basin SOP be revised to modify the sequence in which the structures used to contain excess wastewater were to be used. The recommendation made to revise the Surge Basin SOP was incorporated into the March 2010 Consent Order, WC 5516. However, after issuance of this Consent Order, W&C proposed an alternative revision to the Surge Basin SOP (i.e., to install an overflow pipe that would by-pass the valve that directs excess water from the PM Basement to the Surge Basin). On March 3, 2011, the Department approved this alternative and installation has been completed. To date, one spill (related to the cooling tower) has been reported since issuance of the Consent Order.

**Current Status of Issues**: Resolution of the issues noted above has precluded re-issuance of SP0002032 until now. The problems caused by these issues have been reduced/eliminated either through actions taken by the Montville WPCF, in terms of upgrading its facility, or by actions taken by RWC to address the requirements of the recent Consent Order. The Montville WPCF currently operates 6 SBRs which allows it enough treatment capacity to manage the BOD<sub>5</sub> and temperature loads in the RWC discharge. The

Montville WPCF has been successfully treating RWC's wastewater for several years now and it has not had a BOD<sub>5</sub> permit violation in several years.

#### III. ISSUES RELATED TO THE APPLICATION

#### A. FEDERALLY-RECOGNIZED INDIAN LAND

As provided in the permit application, the site is not located on federally-recognized Indian land.

#### B. COASTAL AREA/COASTAL BOUNDARY

The site is located in a coastal area, but not located within a coastal boundary. Renewal of this permit will not adversely impact coastal resources.

#### C. ENDANGERED SPECIES

The site is not located within an area identified as a habitat for endangered, threatened or special concern species.

#### D. AQUIFER PROTECTION AREAS

The site is not located in a town required to establish aquifer protection areas.

#### E. CONSERVATION OR PRESERVATION RESTRICTION

According to the Permittee, the property is not subject to a conservation or preservation restriction.

#### F. PUBLIC WATER SUPPLY WATERSHED

The site is not located within a public water supply watershed.

#### **IV.** NATURE OF THE BUSINESS GENERATING THE DISCHARGE

RWC is in the business of recycling cardboard. The primary SIC code, as provided by the applicant, is: 2631 (Paperboard Mills).

#### V. FACILITY DESCRIPTION

RWC is located in a mixed residential/commercial/industrial area in Montville and has operated at the site since 1995. Rand-Whitney Containerboard Limited Partnership owns and operates the papermill; Rand-Whitney Realty, LLC owns the land and the other buildings on-site. [See Attachment 1 for site map]. RWC is in the business of processing old corrugated containers (OCC) into linerboard. RWC reportedly produces approximately 650 tons of linerboard per day of varying weights. In addition to OCC, small amounts of baled "double-lined Kraft" (i.e., the box clippings generated by corrugated box plants) and "carrier stock" (i.e., boxes used for packing soft drink cans) are also processed through the facility. The waste paper is received into the facility in baled form, temporarily stored in the OCC Warehouse, and then processed as follows:

#### **Papermill Operations:**

**OCC Operations**: OCC bales are conveyed into the Pulper where they are combined with chemicals and hot water in order to break down the fibers in the cardboard. Following pulping, this stream is cleaned in a series of centrifugal cleaners and rotating mechanical screens. The rejects streams generated from the cleaning/screening operations (Posiflow Cleaners, Uniflow Cleaners, Screen Rejects) are directed to the "Rejects Collection Tank" (RCT); the accepts stream is thickened to a consistency of approximately 7-8% solids in the OCC Thickener Tank and is then conveyed to the "High Density" (HD) Storage Chest for subsequent use in the paper machine operations. Solid waste is also generated from the OCC operations, primarily from the Pulper. The solid waste/trash that is generated is de-watered, if necessary, and shipped off-site; any wastewater generated in this process is directed back to the Pulper for re-use by way of the OCC sump.

**Paper Machine (PM) Operations:** Stock from the HD Chest is conveyed to the Stock Prep Tank where various sizing and strengthening chemicals are added to the stock. The stock is then diluted and mechanically cleaned prior to conveyance into the Fordrinier. The reject stream generated from the Stock Prep Tank is directed into the RCT; the prepared stock is conveyed to the Fordrinier for further processing. The Fordrinier forms the stock into a two-ply sheet of paper which is applied to a continuous wire that is transported over drainage boxes to remove water so that the consistency of the paper is approximately 20% solids. The wastewater removed in the process is collected in the "Save-All" and "AES Filter" and is re-used internally. The paper sheet is further dewatered in the Press to a consistency of approximately 40-50% solids. The wastewater from this operation is also collected in the "Save-All" and "AES Filter" for further re-use. The paper is then dried, wound on spools, and shipped off-site.

Water Use and Management: The source water used at the mill consists of either return water provided by the Montville WPCF or water from Oxoboxo Brook. In the non-summer months (October to May), the mill water mix ranges from 1:1 to 4:1; in the summer months, the mill is predominantly on return water. RWC currently has a Diversion Permit which allows for the withdrawal of up to 804,000 gpd of Oxoboxo Brook water. Water from Oxoboxo Brook is withdrawn though a single intake structure equipped with a standard 3/8" screen. The water that is withdrawn is filtered through a bank of sand filters and directed into the "Raw Water Blend Tank" where it is then combined with the return water, and treated with a biocide. From there, this water is then directed to the appropriate areas on-site.

The mill is designed to re-use a majority of the process water that it generates. Water from the PM Operations is collected in the "Save-All" and the "AES Filter", where the water is filtered and then pumped into the "Excess Whitewater Tank" where it can be re-used in various operations in the mill. Additionally, process water that overflows the various tanks and chests in the mill collects in the OCC Basement or the PM Basement which each contain lateral drains ("U-drains") which are connected to a sump which collects this overflow water. Under "normal conditions", the water collected in these sumps is directed back for re-use, generally to the Pulper. However, the contents of the sumps can also be directed to the RCT, if necessary. Under "excess water conditions", the water from the OCC and PM Basements gravity flow to the Surge Basin, a 100,000 gallon above-ground tank located outside the OCC Area. In addition to the U-drains and sump in the OCC and PM basements, there is also a U-drain and sump in the OCC Warehouse which is designed to prevent water from exiting the facility if the OCC basement floods.

**Cooling Towers & Heat Exchangers:** There is a cooling tower on-site ("Paper Machine Cooling Tower") that is used to provide cooling for various mechanical and hydraulic systems throughout the mill. There is another cooling tower on-site that until 2011 had been used to provide cooling for the vacuum pumps on-site. It is now used to provide cooling for the heat exchangers associated with the effluent cooling, as necessary (i.e., in the summer months). This cooling tower has a blowdown associated with it which is directed to the OCC U-drains.

There are presently three Mueller plate-and-frame heat exchangers on-site used to cool the effluent prior to discharge to the Montville WPCF. The present operating configuration is as follows: June through September mode ("Summer Mode"): cooling tower on and one primary heat exchanger and one secondary heat exchanger both on-line with the third heat exchanger off-line, but in standby mode to be used as a back-up; October through May ("Maximum Heat Recovery Mode"): one primary heat exchanger and one secondary heat exchanger both on-line with the third heat exchanger off-line, but in standby mode to be used as a back-up; October through May ("Base Wastewater Cooling Mode"): one heat exchanger on-line only.

Mill Maintenance: Both scheduled and unscheduled maintenance operations occur on the OCC equipment and the paper machines. The majority of the maintenance operations are unscheduled with scheduled maintenance occurring every 7-8 weeks for approximately 16 hours. Maintenance operations can consist of any number of activities including maintenance, repair, or replacement of equipment. Certain maintenance-related activities can generate wastewater (e.g., wash-up water). In addition, a "boilout" operation is periodically (i.e., approximately once per year) performed as part of mill maintenance activities. This operation involves circulating a caustic cleaning solution through the

PM machines (i.e., headboxes/Fordrinier) for several hours in order to remove scale from the paper machine parts. The spent caustic material would then be neutralized and discharged into the wastewater collection system.

#### Miscellaneous Operations/Activities:

**Co-generation Operations:** In 2005, a dual-fuel co-generation unit (~14 MW) was installed at the RWC facility. The unit is located in a separate building beside the mill. This unit replaced the existing boiler at the site. The electricity generated by the co-generation unit is used for on-site operations; a small amount of electricity is reportedly distributed off-site. Steam is also generated from the unit; the steam is used on-site for various operations, including heating process water and process air heating. Feed water for the co-generation unit is provided by Oxoboxo Brook. This water is treated prior to use in the Boiler Water Treatment Room; treatment consists of carbon filtration, de-aeration, and cation exchange. Wastewater generated from the backwash of the carbon filters and the regeneration of the cation exchange columns is discharged into the PM U-drains. Other miscellaneous discharges associated with the operation of the co-generation unit discharge to the sewer, but through a connection point separate from the papermill wastewater discharge point.

Secondary Boiler: There is a separate boiler on-site used to provide heating to the "old" building at the mill. Well water is used for make-up to this boiler. The discharges associated with the operation of this boiler (e.g., boiler blowdown, sand filter backwash) discharge to the sewer but through a connection point separate from the papermill wastewater discharge point.

Quality Control Labs: There are two quality control labs near the paper machine; these are used for testing paper stock/quality. The wastewater generated from these labs is discharged to the sewer, but through a connection point separate from the papermill wastewater discharge point. There is also another lab on-site used for testing TSS in the wastewater. The wastewater generated from this lab is discharged into the sanitary sewer system.

**Stormwater Management:** The majority of the stormwater from the facility is directed to Oxoboxo Brook via GSI000723. In 2002, a stormwater diversion trench was installed near the compactor area in order to reduce the potential for discharging stormwater to Oxoboxo Brook that could contain plastic or paper debris from the compactor area. The system is designed to collect the first one inch from a storm event and direct it into the OCC Basement and then into the Pulper. Any stormwater in excess of an inch is directed to Oxoboxo Brook.

A summary of the wastestreams generated at the site is as follows:

WASTESTREAM	DESCRIPTION	
Posiflow Cleaner Wastewater	Wastewater generated from cleaning/screening the paperstock in the	
Uniflow Cleaner Wastewater	centrifugal cleaners and the rotating mechanical screens.	
Screen Reject Wastewater		
Stock Prep Cleaner Reject Wastewater	Wastewater generated from cleaning the paperstock in the centrifugal cleaners	
Clarifier Building Wastewater	Inadvertent spills, leaks from the DAF system	
DAF Rejects	Sludge from the DAF system	
Fordrinier Wastewater	Wastewater that is removed from the stock as it is processed through the Fordrinier. Under normal operations, this wastewater is re-used via the Save-All. However, this wastewater could be directed into the discharge collection system.	
Press Wastewater	Wastewater that is removed from the paper sheet as it is processed through the Press. Under normal operations, this wastewater is re- used via the Save-All or discharged to the PM U-drains for re-use in the Pulper. However, this wastewater could be directed into the discharge collection system.	
Whitewater	Process water that is used as a source of shower water for the Rotary Screen Thickener. Under abnormal operating conditions, the contents of the "Excess Whitewater Tank" will overflow to the CTM tank.	
Compactor Filtrate	Wastewater generated as a result of compacting trash from the Pulper. Under normal conditions, the filtrate is directed to the OCC sump for re-use in the Pulper. However, this wastewater could be directed into	

# Wastestreams that discharge via DSN 001:

WASTESTREAM	DESCRIPTION
	the discharge collection system.
Seal Water	Water that is generated from the various mechanical seals at the facility is directed into the PM Basement U-drain for re-use. However, this wastewater could be directed into the discharge collection system.
Steam Condensate	Steam condensate from several areas in the mill are directed into the OCC Sump and re-used in the Pulper. However, this wastewater could be directed into the discharge collection system.
Starch Make-down System Flush Water	Water is flushed from the starch make-down system at the beginning of each batch of starch that is "cooked". The flush water, which reportedly does not contain any starch, is directed to the OCC U- drains under normal operating conditions. However, this wastewater could be directed into the discharge collection system.
Wash-up Water	Whitewater is used in the wash-up hoses throughout the facility in order to clean paper fiber/stock from the floors. This water is directed to the U-drains under normal operating conditions. However, this wastewater could be directed into the discharge collection system.
Press Shower Overspray/Machine Shower Water	Showers, fed by make-up water, are used to clean the fabrics that carry the paper sheet through the Fordrinier and the Press. This wastewater is directed to the PM-U drains and under normal operating conditions will be re-used.
AES Filter Backwash Water	The process water used for the showers and seals is filtered in the AES before use. The bank of filters used in this process is backwashed 3-4 times per day and the backwash water is discharged into the PM U-drains.
Non-contact Cooling Water	A small amount of non-contact cooling water is used to cool the paper scanner and is discharged into the PM U-drains.
Boiler Water Treatment System Condensate	Condensate and feed water from the boiler is discharged through several sampling ports into the PM-U drains.
Cooling Tower Blowdown	Blowdown from the Cooling Tower (former "Vacuum Pump Cooling Tower") in directed into the U-drains.
Boiler Regeneration Backwash Water	Wastewater generated from the backwash of the carbon filters and the regeneration of the cation exchange columns is discharged into the PM U-drains.
Potentially-contaminated Stormwater from the Compactor Area	The first inch of stormwater from the compactor area stormwater diversion trench is collected in the OCC sump and can be directed to the Pulper, for use, or into the collection system.
Boilout Wastewaters	A caustic solution is circulated through the paper machines to allow for scale deposits on the machine parts to be removed. As part of the process, a de-foaming solution is also used. The caustic solution is neutralized with muriatic acid and the solutions are discharged to the RCT.
Screw Press Filtrate	The screw press is used to de-water the belt press rejects. The filtrate generated from this operation is directed to the CTM Tank.
Tank and Chest Cleaning Wastewaters	The process tanks/chests are occasionally drained and cleaned (usually during schedule outages). These wastewaters (consisting of paper stock and water) are routed to collection system via the U-drains.

# Wastestreams that discharge via General Permits:

WASTESTREAM	DESCRIPTION	GENERAL PERMIT
Co-generation Boiler Blowdown	Blowdown from the co-generation boiler	GMI000086
Boiler Blowdown Sample Cooler Condensate	Condensate associated with the sample cooler	GMI000086
Exhaust Stack Sample Cooling Condensate	Condensate associated with the sample cooler	GMI000086
Air Compressor Condensate	Condensate from the air compressor	GMI000086
Building Maintenance Wastewater	Wastewater generated from the washdown of the turbine and related equipment	GMI000086
Secondary Containment Stormwater	Stormwater that collects in the outside fuel/chemical containment area	GMI000086
Building Heat Boiler Blowdown	Blowdown from the secondary boiler	General Permit for the Discharge of Minor Boiler Blowdown Wastewater

WASTESTREAM	DESCRIPTION	<b>GENERAL PERMIT</b>
Sand Filter Backwater	Backwash associated with the sand filters used to filter the Oxoboxo Brook water	GWT000231
Backwash	Backwash associated with the system used to filter the well water	······
	Wet End Lab: Test Paper Stock Drainage	
'	Dry End Lab: Test Paper Absorption Properties	
Laboratory Wastewater	Environmental Lab: Test TSS of wastewater	
	Cogen Water Quality Lab: Test quality of the boiler water	

GMI000086 is issued to Northeast Generation Services

See Attachment 2 for the Line Diagram and Attachment 3 for the Chemical Inventory.

# VI. THE ON-SITE WASTEWATER TREATMENT SYSTEM

The wastewaters from the various on-site operations collect in the 4,000 gallon Rejects Collection Tank (RCT). Polymer is added to the wastewater in the RCT and it is conveyed to a Rotary Screen Thickener to remove solids. [The Rotary Screen Thickener was installed in 2011 to replace the Belt Filter Press]. The wastewater is then directed to a Screw Press which further de-waters the wastewater. Solids from the Screw Press are collected and shipped off-site; effluent from the Screw Press is directed to the 9,000 gallon "Collection, Transfer, Monitoring" (CTM) tank where pH adjustment, if necessary, is performed. The effluent from the CTM tank is transferred out the mill into the "Pre-Treatment Facility" to be treated in one of the two 3,000 gallon Krofta DAFs on-site. DAF rejects are collected in a holding tank and subsequently directed into the RCT and then to the Rotary Screen Thickener for solids removal. Treated wastewater from the DAF flows by gravity to a 3,000 gallon holding tank, to the Mueller plate-and-frame heat exchanger(s) for cooling, and back up to the Pre-Treatment Facility where the wastewater enters the dedicated pipeline to the Montville WPCF via DSN 001. This is a continuous discharge (24 hours per day 7 days a week); the average discharge flow is approximately 770,000 gallons per day.

# VII. EFFLUENT QUALITY DATA

See Attachment 4 for effluent quality data for RWC.

See Attachment 5 for effluent quality data for the Montville WPCF.

# VIII. EFFLUENT VIOLATIONS

Based on a review of the DMRs from 2009-2011, the following violations were identified:

MONTH/YEAR	DSN	PARAMETER VIOLATED	TYPE OF LIMIT	PERMITTED LIMIT	REPORTED VALUE
April 2010	001	pH, Day of Sampling	Grab	6.0 SU	3.9 SU
REASON: 🗌 Equ	ipment Re	lated 🔲 Operator Error	🗌 Other 🖾 Unknown	en en sensen en e	
No information pr	ovided.				······································

MONTH/YEAR	DSN	PARAMETER VIOLATED	TYPE OF LIMIT	PERMITTED LIMIT	REPORTED VALUE
August 2010	001	Total Suspended Solids	Average Monthly	4,350 lbs/day	6,488 lbs/day
REASON: 🛛 Equ	ipment Re	lated 🔲 Operator Error	□ Other □ Unknown		
The source of the This caused the de tank.	exceedend watering	te was determined to be belt to crease, allowing h	caused by the mis-align higher than normal amou	ment of the belt press unts of paper fiber to o	roll on the belt press. lischarge to the CTM

MONTH/YEAR	DSN	PARAMETER VIOLATED	TYPE OF LIMIT	PERMITTED LIMIT	REPORTED VALUE
August 26, 2010 August 31, 2010	001	Total Suspended Solids	Maximum Daily	9,050 lbs/day	9,073 lbs/day 11,667 lbs/day
en name trata a trata de construir de la construcción de la construcción de la construcción de la construcción	an	ated 🔲 Operator Error	a de la construcción de la constru	يتووي ومعتقد ومنتجا فتصور والمتحد والمتحد والمكري وروادي	· · · · · · · · · · · · · · · · · · ·
The source of the	exceedenc	e was determined to be	caused by the mis-align	ment of the belt press	roll on the belt press

This caused the dewatering belt to crease, allowing higher than normal amounts of paper fiber to discharge to the CTM tank.

MONTH/YEAR	DSN	PARAMETER VIOLATED	TYPE OF LIMIT	PERMITTED LIMIT	REPORTED VALUE
February 2011	001	BOD <sub>5</sub>	Maximum Daily	18,700 lbs/day	19,892 lbs/day
REASON:  Equ No information pr		ited Operator Error	🗌 Other 🖾 Unknown	a, m. e. , m. er en	an gan an a

MONTH/YEAR	DSN	PARAMETER VIOLATED	TYPE OF LIMIT	PERMITTED LIMIT	REPORTED VALUE
May 2011	001	BOD <sub>5</sub>	Maximum Daily	18,700 lbs/day	19,052 lbs/day

REASON: 🗌 Equipment Related 🔲 Operator Error 🔲 Other 🖾 Unknown

Information submitted with the DMR indicated that several possible sources of the elevated levels of BOD<sub>5</sub> had been investigated but nothing conclusive was identified.

MONTH/YEAR	DSN	PARAMETER VIOLATED	TYPE OF LIMIT	PERMITTED LIMIT	REPORTED VALUE
July 2011	001	BOD <sub>5</sub>	Maximum Daily	18,700 lbs/day	18,951 lbs/day
REASON: Equipment Related Operator Error Other Unknown					

Information submitted with the DMR indicated that several possible sources of the elevated levels of BOD<sub>5</sub> had been investigated (e.g., summertime water use conditions, process starch usage, replacement of the belt filter press, lab test variability) but nothing conclusive was identified.

# IX. HISTORIC ENFORCEMENT (RELATED TO WASTEWATER ISSUES ONLY):

See Attachment 6.

# X. SPILL HISTORY

See Attachment 7.

# XI. EFFLUENT GUIDELINES

RWC produces linerboard from corrugated containers (i.e., it is engaged in the production of paperboard from wastepaper). The discharge associated with this operation, DSN 001, is subject to 40 CFR 430 ("The Pulp, Paper, & Paperboard Point Source Category"), Subpart J ("Secondary Fiber Non-Deink Subcategory"). RWC initiated this discharge after January 6, 1981. Therefore, the Pretreatment Standards for New Sources (PSNS) at 40 CFR 430 apply to the discharge.

# XII. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

	ESOURCES USED TO DRAFT PERMIT	INFORMATION USED	DISCHARGE POINT(S)
$\boxtimes$	Federal Effluent Limitation Guideline (ELG)	40 CFR 430.107, July 1, 2011	DSN 001
$\boxtimes$	Performance Standards	Thermal data	DSN 001
	Federal Development Document		
	Treatability Manual		
$\boxtimes$	Department File Information	DMRs	DSN 001
$\square$	Other	Agreements with the Town	DSN 001

BASIS FOR LIMITS, STANDARDS OR CONDITIONS		REGULATION	DISCHARGE POINT(S)
	Pretreatment Standards for Existing Sources (PSES)		
$\boxtimes$	Pretreatment Standards for New Sources (PSNS)	40 CFR 430.107	DSN 001
$\square$	General Pretreatment Standards	40 CFR 403	DSN 001
$\boxtimes$	Case-by-Case Determination using Best Professional Judgment (BPJ)	22a-430-4(m) 22a-430-4(t)	DSN 001

- A. WASTESTREAMS AUTHORIZED FOR DISCHARGE: DSN 001: Stock cleaning wastewaters including rejects from: Posiflow Cleaners, Uniflow Cleaners, Screening Wastewaters, Stock Prep Cleaners; Clarifier Building Wastewater, Building Fordrinier Wastewater, Press Wastewater, Whitewater, Compactor Filtrate, Wash-up Water, Press Shower Overspray/Machine Shower Water, AES Filter Backwash Water, Potentially-contaminated Stormwater, Boilout Wastewaters, Screw Press Filtrate, Boiler Regeneration Backwash Water, Cooling Tower Blowdown, Non-contact Cooling Water, Seal Water, Condensate from the Steam System, Boiler Water Treatment System Wastewaters, Starch Make-down System Flush Water, Tank and Chest Cleaning Wastewaters
- B. MONITORING PARAMETERS & LIMITS: DSN 001 consists of the wastewater generated from the papermill operations, which includes both process and non-process wastewaters. This is a continuous discharge and a new source. The discharge is subject to the requirements at 40 CFR 430.107. The discharge is also subject to certain permit limitations set forth in the Wastewater Treatment Agreement. A summary of the limits are noted below:

DSN 001								
PARAMETER	UNITS	40 CFR 430.107 NEW SOURCE		Schedule 3.1(a) of the Wastewater Treatment Agreement (1996 Modification)				
		Average Monthly	Maximum Daily	Average Monthly	Maximum Daily			
Biochemical Oxygen Demand (BOD <sub>5</sub> )	lbs/day			14,000	16,000*			
Flow	gpd	***		1,080,000	1,100,000			
Pentachlorophenol	mg/L			ND	ND			
pH	SU			6.0	9.0			
Suspended Solids (SS)	lbs/day			4,350	5,750			
Total Oil and Grease	mg/L		***	75	100			
Trichlorophenol	mg/L	775		ND	ND			
Total Dissolved Solids (TDS)	mg/L			monitor only	monitor only			

DSN 001

While the Wastewater Treatment Agreement does presently include a limit of 16,000 lbs/day, RWC requested an increase to 18,700 lbs/day on August 22, 2012. The Town of Montville subsequently engaged its consultant, FST, to conduct an evaluation as to whether a BOD<sub>3</sub> loading of 18,700 lbs/day from RWC would have negative impacts on Montville's treatment facility. FST's evaluation, dated September 5, 2012, indicates that no impacts would likely be expected on a temporary basis (i.e., a 5-year time frame) should RWC be authorized to discharge up to 18,700 lbs/day of BOD<sub>5</sub>.

Comments on specific issues are as follows:

**Sampling Points:** Under SP0002032, the sample monitoring point is located prior to the DAFs ("DEP Monitoring Point"). However, the monitoring point identified in the Water Treatment Agreement ("Town Monitoring Point") is located after the DAFs. For consistency, both sampling points will now be located at the same point (i.e., "Town Monitoring Point") and will be known as DSN 001. The "DEP Monitoring Point" will continue to be used to measure the influent to the treatment system and will now be known as DSN 001A.

**BOD**<sub>5</sub>: The average BOD<sub>5</sub> measured at the "Town Monitoring Point" from 2007 to June 2011 has ranged from 8,359 lbs/day to 14,044 lbs/day; the maximum BOD<sub>5</sub> measured at the "Town Monitoring Point" from June 2007 to June 2012 has ranged from 11,137 lbs/day to 18,679 lbs/day. During this timeframe, RWC has been meeting the BOD<sub>5</sub> limits (of 14,000 lbs/day average monthly and 16,000 lbs/day maximum daily) at this point 98% and 98.7% of the time, respectively. [See Attachment 8]. The BOD<sub>5</sub> limits in the proposed permit will be 14,000 lbs/day (average monthly) and 18,700 lbs/day (maximum daily). The maximum daily BOD<sub>5</sub> limit is consistent with FST's September 5, 2012 letter.

**Soluble BOD**<sub>5</sub>: A significant portion of the BOD<sub>5</sub> content in the effluent is soluble BOD<sub>5</sub>. Testing for soluble BOD<sub>5</sub> shall be conducted to monitor this level after treatment for BOD<sub>5</sub> is installed.

**Total Suspended Solids (TSS):** The average TSS measured at the "Town Monitoring Point" from 2007 to June 2011 has ranged from 161 lbs/day to 1,037 lbs/day; the maximum TSS measured at the "Town Sampling Point" from 2007 to June 2011 has ranged from 277 lbs/day to 5,659 lbs/day. During this timeframe, RWC has been meeting the TSS limits (of 4,350 lbs/day average monthly and 5,750 lbs/day maximum daily) at this point 100% of the time. [See Attachment 9]. The TSS limits presently set forth in the Wastewater Treatment Agreement will be the TSS limits in the permit.

**Total Dissolved Solids (TDS)**: TDS will continue to be measured in the effluent. From 2007 to June 2011 the level of TDS in the effluent ranged from 5,351 mg/L to 6,740 mg/L.

**Temperature**: There is a thermal component to the discharge and therefore, effluent limits for temperature will be included in this permit. RWC currently has three plate-and-frame heat exchangers on-site. They are presently operated under one of the following proposed operational modes: Summer Mode, Maximum Heat Recovery Mode, and Base Wastewater Cooling Mode. The temperature limits included in the permit are interim limits and will be in place only until such time as final limits are determined. These interim temperature limits were determined as follows:

Average Daily Limit: The Standstill Agreement established temperature limits for RWC's influent and effluent. Specifically, it noted that the temperature of the effluent discharged to the Town "...must not exceed 97 °F". This limit has been interpreted to mean "average daily". The 97 °F limit, established in 1998, was based on the use of one heat exchanger (Alfa Laval). Presently, this unit is no longer in service and has been replaced by the plate-and-frame heat exchangers. Therefore, it would be expected that a limit lower than 97 °F could be achieved. RWC proposed 95 °F. The data generated from August 2011 through September 2011 supports 95 °F as an interim limit. Therefore, 95 °F will be the interim average daily temperature limit. [See Attachment 10].

**Maximum Daily Limit**: The maximum temperature data from August 2011 to September 2011 ranged from 85.6 °F to 107.8 °F and the maximum temperature data from October 2011 to November 2011 ranged from 90.8 °F to 117.9 °F. The pretreatment prohibition at 40 CFR 403.5(b)(5) states that no discharge shall contain "...Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW Treatment Plant exceeds 40 °C (104 °F), unless the Approval Authority, upon request of the POTW, approves alternate temperature limits." Alternate temperature limits have been approved in this case. The maximum temperature limits are: 105 °F (summer months) and 117 °F (non-summer months). These limits are based on a statistical evaluation of the data generated since installation of the third heat exchanger; the summer limit is a maximum value of a two-hour rolling average and the non-summer limit is an instantaneous maximum value. [See Attachments 11 and 12].

**Pentachlorophenol & Trichlorophenol**: Section 40 CFR 430.107 requires production-based maximum daily limits on pentachlorophenol and trichlorophenol if the Permittee uses chlorophenolic-containing biocides at its facility. The Permittee indicates that it does not use chlorophenolic-containing biocides at its facility. [The Permittee has been monitoring its

discharge during this permit term for pentachlorophenol and trichlorophenol and neither compound has been detected at the reported minimum level]. The Water Treatment Agreement, however, requires that these parameters be monitored and that the results obtained be "non-detect". Therefore, SP0002032 will continue to require monitoring for these parameters with limits of "non-detect".

**pH**: The effluent will continue to be monitored for pH consistent with the standard limits for discharges to the sewer: 6.0 SU to 10.0 SU.

**Phenols**: Phenols will now be included for monitoring in this permit. Attachment O of the permit application indicates that the total phenols level in the effluent is 2.4 mg/L.

**Oil & Grease:** The effluent will continue to be monitored for oil and grease with limits consistent with the Water Treatment Agreement. From 2007 to 2011, the level of oil and grease in the effluent ranged from 20 mg/L to 100 mg/L.

**Total Sulfate**: Sulfate will now be included for monitoring in this permit as it could be present in the discharge. Attachment O of the permit application indicates that sulfate levels in the effluent range from 520 mg/L to 1,300 mg/L.

**Total Cyanide**: Cyanide will now be included for monitoring in this permit as it could be present in the discharge (i.e., by way of the Spectrum RX3801).

C. MONITORING FREQUENCY: The Monitoring Schedule set forth in RCSA 22a-430-3 prescribes a frequency of weekly for DSN 001 based on the category of discharge ("Pulp and Paper Mills") and the average permitted monthly flow (>50,000 gpd). RWC is presently testing the BOD<sub>5</sub> and TSS twice per week in accordance with the Water Treatment Agreement. This will therefore continue to be the monitoring frequency in this proposed permit. Monitoring for the other parameters in the discharge will be weekly in accordance with the Monitoring Schedule, unless a particular parameter warrants a less frequent schedule. The minimum frequency of monitoring shall be semi-annual as set forth in 40 CFR 403.12(e).

#### XII. SPECIAL CONDITIONS

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- A. CERTIFICATION: Section 40 CFR 430.107 requires that Permittees not using chlorophenoliccontaining biocides must certify to the permit-issuing authority that they are not using these biocides.
- **B. NOTIFICATION:** If the Permittee submits notification seeking approval for the use of any new chemicals at the site, the Permittee shall, with that notification, provide information that evaluates the impact (e.g., interference, pass-through, etc.), that the use of that chemical would have on the Montville WPCF.
- C. **PIPELINE CLEANING:** The Permittee currently "pigs" the dedicated wastewater discharge pipeline twice per week in the summer months and once per week in the non-summer months in order to minimize the build-up of any solids in the line. This activity shall continue at these frequencies or any alternate frequency prescribed by the Montville WPCF.
- **D. SURGE BASIN OPERATION:** The Surge Basin provides for management of "excess water" in the mill. The operation of the Surge Basin occurs in accordance with the Surge Basin SOP. The most current, Department-approved Surge Basin SOP shall be maintained in full effect.
- E. ANAEROBIC DIGESTER: The Permittee is planning on installing an anaerobic digester to treat its wastewater. Should this occur, the Permittee will be required to comply with certain additional requirements.
- F. TEMPERATURE STUDY: The Permittee's effluent includes a thermal component. Consequently, the proposed permit will contain limits for temperature for DSN 001. In July 2011, the Permittee installed a third heat exchanger to treat its effluent prior to discharge to the Montville WPCF. Because this unit was only recently installed, there is only a limited amount of data available to determine temperature limits. Therefore, in order to develop final limitations for temperature, the

Permittee shall collect additional data so that final temperature limits can be established. If the Permittee installs the proposed anaerobic digester at the site, then an evaluation of the temperature-reducing capabilities of this system should be determined.

**G. BOD**<sub>5</sub> **LIMIT:** The BOD<sub>5</sub> limit of 18,700 lbs/day is a five-year temporary limit, consistent with the findings of an evaluation conducted by the Town of Montville's consultant, Fay Spofford & Thorndike, and summarized in a letter dated September 5, 2012.

### XIII. COMMENTS RECEIVED DURING THE COMMENT PERIOD

The draft permit was public noticed in the New London Day on September 27, 2012 for a thirty-day comment period.

The only comment received by the Department came from the applicant and involved a proposed language change concerning Paragraph 8(G) of the permit. Specifically, the applicant proposed that this paragraph be revised as follows:

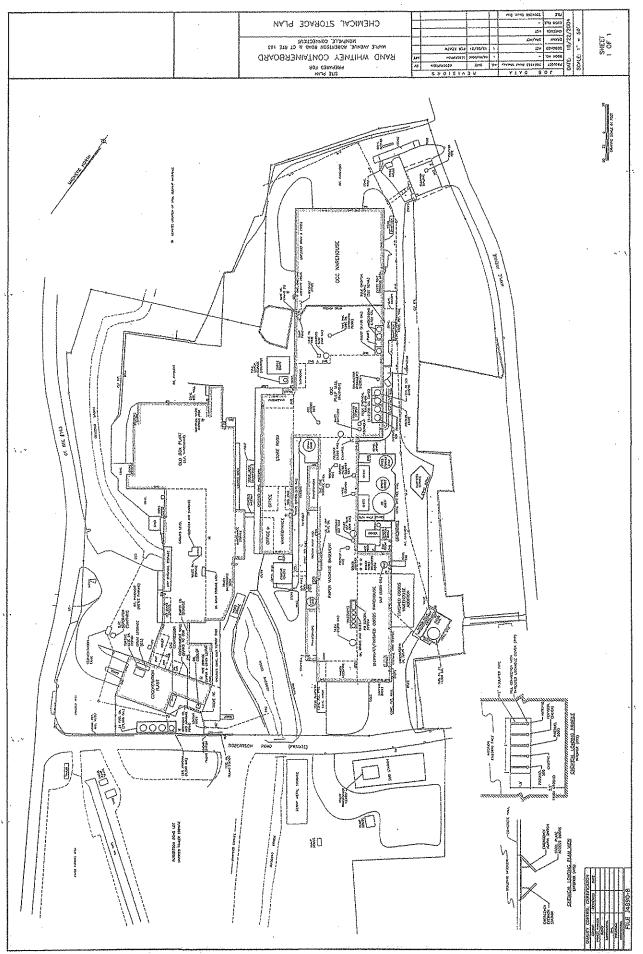
"Consistent with the September 5, 2012 letter from the Town of Montville's consultant, Fay, Spofford & Thorndike, the maximum daily  $BOD_5$  limit of 18,700 lbs/day is a five-year temporary limit. Upon expiration of this permit, a maximum daily  $BOD_5$  limit of 16,000 lbs/day shall take effect unless an alternative limit is proposed by the Permittee and approved by the Commissioner."

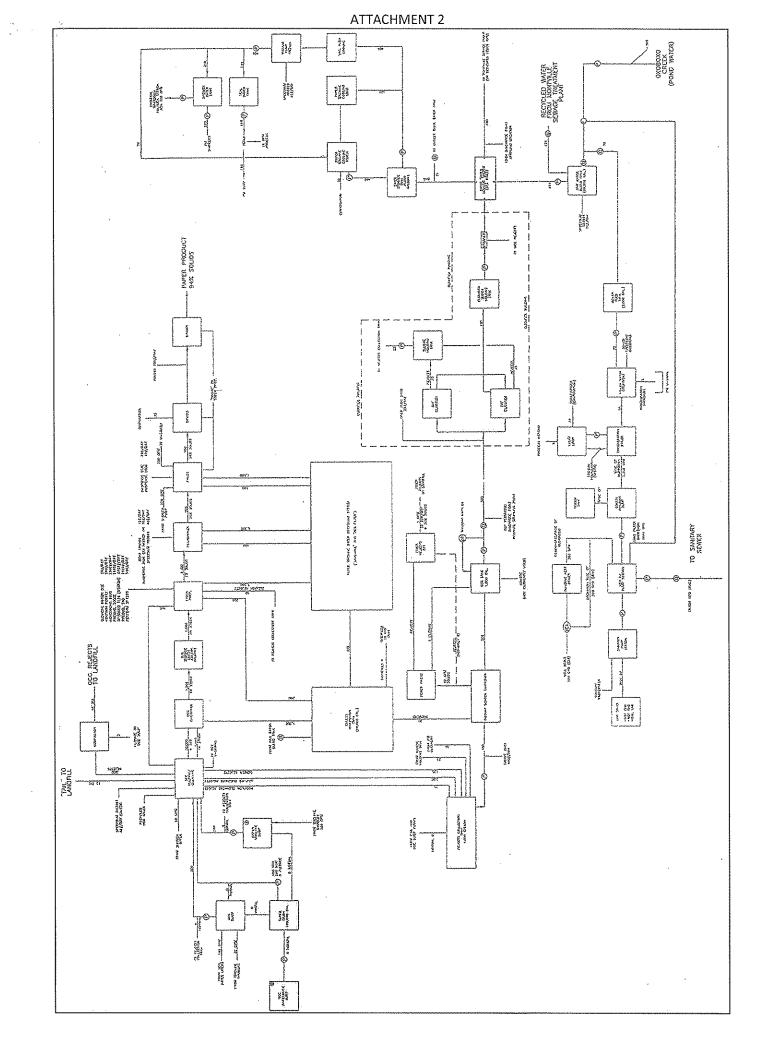
The Bureau of Materials Management and Compliance Assurance staff has reviewed the written comment and does not feel that the tentative determination/draft permit should be modified as proposed. The Town of Montville has conditionally approved the BOD<sub>5</sub> increase for a five-year term only. Should the Town be willing to extend the term of the BOD<sub>5</sub> increase beyond the current five year term, the applicant can seek a modification of its permit prior to its expiration. However, a change was made to Paragraph 8(G) in order to clarify the exact date on which the temporary limit expires. This paragraph now reads:

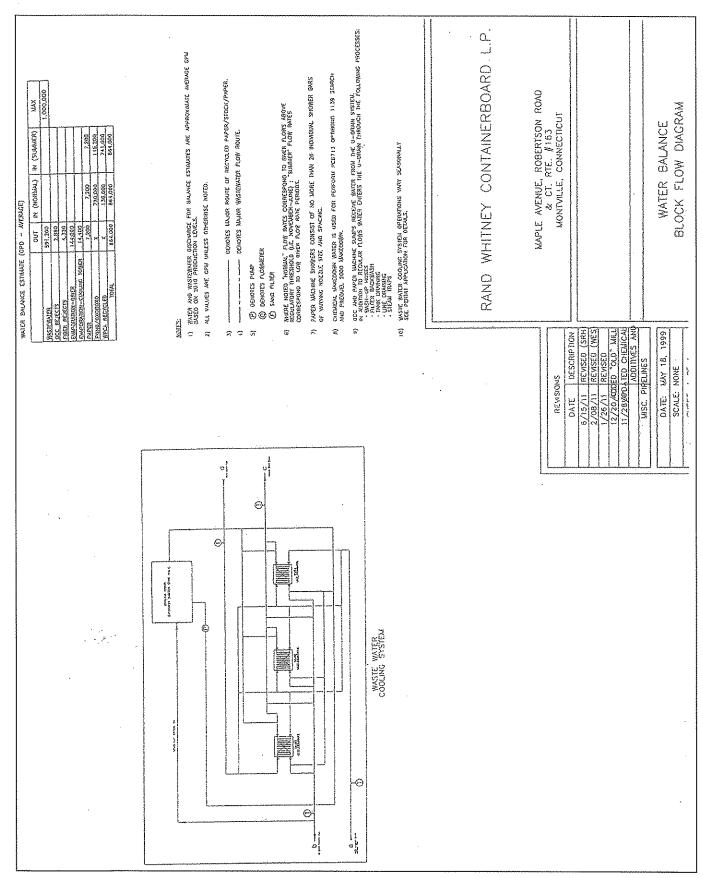
"Consistent with the September 5, 2012 letter from the Town of Montville's consultant, Fay, Spofford & Thorndike, the maximum daily  $BOD_5$  limit of 18,700 lbs/day is a five-year temporary limit. On November 13, 2017, a maximum daily  $BOD_5$  limit of 16,000 lbs/day shall take effect."

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Description	Product Cur	rently in Use	Other Ingredients		Tank/Tote		Notes	Apendix B or D
	Trade Name	Manufacturer	(per MSDS)	Approx. Size	Use Location	Daily usage		substances
Fuel Oil	#2 Fuel Oil	Various		49,500 Gal. Tank	Outside Roll Warehouse	As Needed		No
Fuel Oil	#2 Fuel Oil	Various	·	270 Gal. Tank	Outside Roll Warehouse	As Needed	· · · · · · · · · · · · · · · · · · ·	No
Fuel Oil	#2 Fuel Oil	Various		3 - 29,000 Gal. Tanks	Cogen Tank Farm	As Needed		No
Aqua Ammonia	## 1 dei Oli	H.K. Krevit	19% Aqueous Ammonia	9.200 Gal. Tank	Cogen Tank Farm	As Needed		No
Sodium Hydroxide	Caustic	H.K. Krevit	25-50% NaOH in water	9,200 Gal. Tank	OCC Basement	As Needed		No
Size	Prequel 2000	Ashland		9,200 Gal. Tank	OCC Basement	1560 #/day	Synthetic Rosin	No
Size Emustion	Prequel 500	Ashland		9,200 Gal. Tank	OCC Basement	1560 #/day	Starch solution	No
Strength Aid	Hercobond 6800	Ashland		2 -6,100 Gal Tanks	OCC Warehouse	936 #/day		No
Felt Cleaner	Busperse 213E	Buckman	KOH, dietylene glycol monobutyl ethe		OCC Warehouse	100 #/day		No
Retention aid	NP2180	Eka	Amorphous Silica	9200 Gai, Tank	PM Basement	450 #/dav		No
Cationic Starch	Optibond 1139	National Starch		100,000 lbs Silo	By Surge Basin	14040 #/dav	Also in 2000 # bags	No
Frictionizer	PA 5990	Eka	Silica, Glycerin	4000 Gal. Tank	PM Basement	800 #/day	Also stored in drums	No
Dye	Elcozine Brown	Greenville colorants	Proprietary dyes + acetic acid	300 Gal. Tote	OCC Basement	56 #/day	Also stored in 300 gal. Totes	No
Polymer	Perform PC8713	Ashland	Cationic Polymer	1000 Gal Tank	OCC Basement	273 #/day		No
Polymer	Drewfloc 2410	Ashland	a	300 Gal. Tote	Clarifier Bldg.	25 #/day		No
?olymer	Drewfloc 2433	Ashland	b	300 Gal Tote	OCC Basement	405#/day		No
Cleaner	Busperse 2036	Buckman	Surfactant, Caustic	300 Gal Tote	PM Basement	As Needed		No
Foam Control	Protocol CB2010	Ashland	Peg Ester, Polymer	300 Gal Tote	PM Basement	As Needed		No
Wire Passivation	Zenix FP5500	Ashland	Cationic Polymer	300 Gal Tote	PM Basement	15 #/day		No
Biocide	Spectrum xd 3899	Ashland	Ammonium bromide	300 Gal Tote	OCC Basement	As Needed		No
Biocide	Spectrum rx3801	Ashland		300 Gal Tote	OCC Basement	60 #/day		No
Boiler Chelant	Optisperse AP0200	Ashland	c	300 Gal Tote	Boiler Water Treat Room	As Needed		No
Boiler Amine	Steamate PAS4000	Ashland	d	300 Gal Tote	Boiler Water Treat Room	As Needed		No
Cooling tower treatment	Drew 2301	Ashland	e.	300 Gal Tote	Cooling Tower	10#/day		No
leat transfer fluid	Intercool NFE	Interstate chemical	Ethylene glycol	55 gallon drums	Heating loop	As Needed		No
Dxygen Scavenger	Cortrol IS1050	Ashland	{	55 gallon drums	Boiler Water Treat Room	As Needed		No
Boiler Treatment Salt	n/a	Various	Sodium Chloride	3000 Gal. Tank	Boiler Water Treat Room	As Needed	<u> </u>	No
uricant/Hydraulic Oil	Various	Various	No	Tanks, Totes + Drums	PM Basement	As Needed	Also OCC Warehouse	No
Sodium Hypochlorite	various	Various		300 Gal Tote	OCC Basement	As Needed		No

## Rand-Whitney Containerboard LP: Process Chemicals and Fuel used 1-2011

Additional "other" constituents listed on MSDS:

a. Cationic PolymerAlcohols (C12-C18), ethoxylated b.ALCOHOLS, C12-18, ETHOXYLATED >1<2.5MOLE

c. Nitrilotriacetic Acid, Sodium Molybdate, Sodium Nitrate

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d. Cyclohexylamine, methoxypropylamine

e. WATER ORGANIC SALT ACRYLIC POLYMER ORGANIC SALT POLYMER SALT

## ATTACHMENT 4: EFFLUENT QUALITY DATA

RAND WHITNEY CONTAINERBOARD LP

Units		second second second second limits				)07	econalision I	-900/000005-000	2	2008~~~	enel and realized	191	115 - 211 - <b>7</b> 1	-2	009 ~~~	ter server	80	entronico anti-	-see	2010	2187	1000 C	~2011	(to	Septen	ibei	ð.
PARAMETER	Units	AVE	мах	AVE OR Min pH	1 6 1	MAX OR Max pH	Dordendi D	AVE OR Min pH	Excedences	MAX OR Max pH	Exceedences	- 10 M	/E OR lin pH	Exceedences	MAX OR Max pH	Exceedences	n	AVE OR Min pH	Exceedances	MAX OR Max pH	Exceedences	R	AVE OR Min pH	Erceedences	MAX OR Max pH	Exceedances	
BOD <sub>5</sub>	mg/L		3,105	2,387		3,510	1 96	2,360		3,228	2 96	1	1,922		2,718	0 9	96	2,013		2,858	0	96	2,132		2,982	0	18
80Ds	ibs/day	16,300	18,700	13,292	0	17,590	0 96	12,915	0	18,556	0 96		1,794	0	16,762	0 8	96	12,342	0	16,488	ō	96	13,395	0	19,892	3	18
TSS	mg/L		1,500	232		1,355	0 96	306	Π	860	0 96		337		1,000	0 9	96	425	0	1,940	1	96	288	0	840	0	16
TSS	lbs/day	4,350	9,050	1,293	0	6,904	0 96	1,667	0	6,226	0 96		2,049	0	6,173	0 0	96	2,639	1	11,667	1	96	1,821	0	5,969	10	18
Flow, Monthly	gpd	1,080,000	1,100,000	NR		NR		NR		NR		72	29,304	0	1,036,000	0 (	CN	710,261	0	909,000	0	CN	744,446	0	973,000	0	Tc
Flow, Day of Sampling	gpd		1,100,000			871,000	0 96			870,000	0 96				984,000	0 9	96			909,000	0	96			973,000	0	1
Flow, Instantaneous	gpm		—	501		868	96	471		807	96		537		1,050	(	96	528		869	<b>—</b>	96	545		994	1	Ťē
pH, Continuous	SU	6.0	10.0	6.1	0	9.9	0 CN	6,3	0	9.1	0 CN		6.4	0	9.4	0 0	CN	6,6	0	9.0	0	CN	7.0	0	8.6	0	10
pH, Oay of Sampling	<u>su</u>	6.0	10,0	6.3	0	9.9	0 96	6.0	0	10.0	0 96		6.4	0	9.4	0 0	96	3.9	1	9.9	0	96	7.0	0	9.3	0	12
Oil & Grease, Total	mg/L	-	100	21		94	0 96	30		100	0 96		21	0	100	0 !	96	14	0	94	0	96	11	0	28	10	T
Total Dissolved Solids	mg/L	****	—	6,231		6,740	4	4,986		6,290	4		4,774		5,228		4	5,161	<b></b>	5,916		4	5,600	[]	6,532 ·	1-	T
Settleable Solids	mg/L		***	14		48	96	15		60	96		30		115	1	96	26		395	Ī	96	11		130	1	18
Pentachlorophenol	µg/L	0.00	0.00	0.00	0	0.00	0 1	0.00	0	0.00	0 1		0.00	0	0.00	0	1	0.00	0	0.00	0	1	0.00	0	0.00	0	T
Trichlorophenol	µg/L	0.00	0.00	0.00	0	0.00	0 1	0.00	0	0.00	0 1	1	0.00	0	0.00	0	1	0.00	Δ.	0.00	Ιo	1	0.00	6	0.00	10	t

								DS	N 001				2.2.								ácója	
		Lb	nlts		2007	yariyanni Kalenni Sola		2008			20	)09			2(	)10		2	201	i (to i	mid-Ju	ine)
PARAMETER	Units	AVE	MAX	AVE	MAX	u Etceréte	AVE	MAX	Licedences U	AVE	Extendences	MAX	n	AVE	Etceodences	мах	Elcandences	1	AVE	Excertences	MAX	and a second
BOD;	lbs/day	14,000	16,000	11,426	0 16,056	1 104	11,645	0 16,39	1 103	10,359	0	14,209	0 104	11,101	0	14.377	0 10	03	11.760	0	16.947	0 52
BOD <sub>6</sub> Removal (Average)	%		NA		14			10			1	11				9	,			لستسما	9	
BOD <sub>5</sub> Removal (Range)	%				0-43	1		0-36			0-	-30			Û	-79				0-	46	
Flow	gpd	1,080,000	1,100,000	611,904	0 797,00	0 CN	608,650	0 800,00	0 0 CN	680,567	0	934,000	O CN	682,269		876,000	100	N	704,865	- نح - ح	906.000	LO LON
TSS	lbs/day	4,350	5,750	317	0 776	0 104	248	0 895	0 103	311	0	1,161	0 104	376	0	1,135	0 1	03	417		5,659	0 52
TSS Removal (Average)	%		NA		73			81				79				78		1		سات 8		1 0 1 06

## ATTACHMENT 5: INFLUENT/EFFLUENT QUALITY DATA

MONTVILLE WATER POLLUTION CONTROL FACILITY

		Lin	nits
PARAMETER	Units	AVE	МАХ
BOD₅	lbs/day	24,000	36,000
80D <sub>5</sub>	mg/L		
TSS	mg/L		

	20	09	
AVE	Exceedences	MAX	Exceedences
14,749	0	26,918	0
634			
276			

	20	10	
AVE	Exceedences	MAX	Exceedences
17,377	0	28,123	0
770			
298			

2011	(to	October	) ().
AVE	Exceedences	МАХ	Exceedences
17,555	0	35,453	0
778			
272			

			Lin	Limits			09		2010				
	PARAMETER	Units	AVE	MAX	AVE OR Min pH	Exceedences	MAX OR Max pH	Exceedences	AVE OR Min pH	Exceedences	MAX OR Max pH	Exceedences	
	BOD₅	mg/L	30	45	8	0	15	0	9	0	22	0	(4)
	Chlorine, Total Residual	mg/L		1.5	0.7	0	1.2	0	0.5	0	0,9	0	
	Fecal coliform	#			11.3	1	50		15.2	1	113		
	Flow	MGD	4,5		2.0	0	3.5		1.8	0	8.4		
EFFLUENT	pH	SU	6.0	-9.0	6.7	0	7.7	0	6.5	0	7.7	0	
5	TSS	mg/L	30	45	6.9	0	25	0	6.4	0	22	0	
Ľ	Total Nitrogen	lbs/day			89	1			82				
Ľ.	Toxicity, Daphnia pulex	%	NOAE	L=100		100	<b>6</b>			98-10	0		-
ш	Toxicity, Pimephales promelas	%	NOAE	L=100		98-10	0			98-10	<u>۸</u>		

Percent TSS Removal	85%	
Percent BOD <sub>5</sub> Removal	85%	
PARAMETER	Units Min	
DADAMENTO		
	· 상황(영화) · 가장(영화)	imits

Min	Exceedences	09	
98	0	- Mart Have Brands	
97	0		l

	20	10	345
Min	Exceedences		
98	0		
96	0		

2011	(to	2011 (to October)									
AVE OR Min pH	Exceedences	MAX OR Max pH	Exceedences								
15	0	24	0								
0.6	0	1.1	0								
13.6		53									
1.9	0	3.3									
6.9	0	7.9	0								
8.8	0	24	0								
133											
Ş											
	94-97										

2011	(to	October)	
Min	Exceedences		an a
97	0		
95	0		

### ATTACHMENT 6 SUMMARY OF ENFORCEMENT: 1995-present

DATE: August 29, 1995 ENFORCEMENT: Notice of Violation

1. Discharged wastewater associated with paper manufacturing operations to the Oxoboxo Brook.

2. Maintained a by-pass of collection or treatment facilities.

an an Ar

3. Failed to properly operate and maintain the wastewater collection system.

4. Failed to maintain practices, procedures, and facilities designed to prevent, minimize, and control spills, leaks, or other unplanned releases.

5. Failed to provide adequate equalization to prevent upsets, malfunctions or instances of non-compliance resulting from variations in wastewater strength or flow rate.

6. Failed to monitor for Total Dissolved Solids on a quarterly basis.

7. Failed to obtain prior approval for discontinuing the use of the polymer addition system associated with the sludge dewatering operations.

DATE: May 15, 1998 ENFORCEMENT: Notice of Violation (NOV WR SW 98 104). 1. Failed to submit stormwater monitoring results for October 1, 1996-September 30, 1997.

Issued to address the nine spills from the facility.

DATE: May 24, 2000 ENFORCEMENT: Notice of Violation (NOV WR SW 00 136) 1. Failed to sample stormwater for the required parameters.

DATE: June 1, 2001 ENFORCEMENT: Notice of Violation (NOV WR IN 01 030)

1. Failed to collect a flow-proportioned sample.

2. Maintained no or incomplete records of facility monitoring.

3. Failed to report the results of all discharge monitoring (extra BOD and TSS not reported).

4. Failed sample TSS and O&G in the correct location.

DATE: September 19, 2001 ENFORCEMENT: Notice of Violation (NOV WR IN 01 08 RL)
1. Failed to notify for a by-pass.

DATE: November 5, 2002 1. Failed to analyze samples using required methods for pentachlorophenol and trichlorophenol. 2. Failed to maintain good housekeeping at the facility.

DATE: March 15, 2010 ENFORCEMENT: Consent Order (WC 5516) Issued for treatment performance problems; failure to notify for changes to wastewater quality; effluent violations; spills; failure to operate and maintain the facility in order to avoid spills; failure to notify for facility modifications; failure to monitor the discharge in accordance with the terms and conditions of the permit

SPILLS: 1995-2011

		·	
<b>DATE</b> : July 5, 1995	AMOUNT: 90 gailons	REASON:	Equipment Malfunction     Operator Error     Housekeeping     Other
DESCRIPTION: An operator left the con	trol valve to the Coarse Screen R	ejects Collection Ta	nk in manual mode instead of
automatic mode. This resulted in the ta	ank overflowing when it reached	capacity. The proc	ess water from the tank flooded the
OCC Basement and then the OCC Ware	house where it exited the buildin	ng and entered Oxo	boxo Brook through a storm drain.
	·		
<b>DATE:</b> July 5, 1995	AMOUNT: 10 gallons	REASON:	Equipment Malfunction     Operator Error     Housekeeping     Other
<b>DESCRIPTION:</b> An operator left the CTM valve completely opening up allowing 1 the dedicated sewer line is only about 2 wastewater into Oxoboxo Brook via a s	.,700 gpm of water to be pumpe I,300 to 1,400 gpm, an overflow	d from the Pre-Trea	tment Building. Since the capacity of
			· ·
<b>DATE</b> : August 7, 1995	AMOUNT: 3,120 gallons	REASON:	Equipment Malfunction Operator Error Housekeeping Other
<b>DESCRIPTION:</b> A loss of power to the m OCC Basement to get flooded which res Some of the process water ended up in	sulted in process water from the	OCC Basement to b	e released outside the building.
			······
DATE: November 27, 1996	AMOUNT: 600 gallons	REASON:	Equipment Malfunction     Operator Error     Housekeeping     Other
<b>DESCRIPTION</b> : As a result of a power lo could not be effectively transferred to t solids and plastics. As a result, process Brook.	he Surge Basin because the U-d	rains in the OCC bas	ement were clogged with paper
<b>DATE:</b> November 27, 1996	AMOUNT: 4,500 gallons	REASON:	Equipment Malfunction Operator Error Housekeeping Other
<b>DESCRIPTION:</b> As a result of the power failed open and could not be closed due overflowing an associated sump. The p gallons of cooling water discharged to (	e to a damaged control circuit. T pump in the sump could not keep	his resulted in cooli	ng water from the system
DATE: December 3, 1996	AMOUNT: 2,250 gallons	REASON:	Equipment Malfunction Operator Error Housekeeping Other
<b>DESCRIPTION:</b> An exterior valve associa 2,250 gallons of process water was disc			proke due to freezing. Approximately
		[	
DATE: December 3, 1996	AMOUNT: 600 gallons	REASON:	Equipment Malfunction     Operator Error     Housekeeping     Other

DESCRIPTION: During facility start-up, a	valve was left closed instead of	being opened.	This resulted in approximately 600	,
gallons of process water discharged out	side of the facility.			

SPILLS: 1995-2011

<b>DATE</b> : January 13, 1997	AMOUNT: 6,000 gallons	REASON:	Equipment Malfunction Operator Error Housekeeping Other
<b>DESCRIPTION:</b> During a facility shutdow floor and out of the facility. Approxima			process water to overflow onto the
<b>DATE</b> : July 7, 1997	AMOUNT: 100 gallons	REASON:	Equipment Malfunction Operator Error Housekeeping Other
<b>DESCRIPTION:</b> A purge valve that allow pump in the area could not keep up wit in an overflow outside the building. Ap system.	th the added amount of sludge/v	vastewater that ente	ered the associated sump resulting
	Γ		1 K-71
<b>DATE</b> : August 15, 1997	AMOUNT: 6,000 gallons	REASON:	Equipment Malfunction     Operator Error     Housekeeping     Other
<b>DESCRIPTION:</b> The facility's air comprese keep up with the excess amount of coo water overflowed the sump and entere	ling water entering the system.	A discharge of appro	
DATE: September 21, 1997	AMOUNT: 300 gallons	REASON:	Equipment Malfunction  Constant of Constan
<b>DESCRIPTION:</b> A valve was stuck in the Basement. The Surge Basin was not co Consequently, the process water overfl	mpletely utilized resulting in the	U-drains in the base	ss water to discharge into the OCC ment to became overwhelmed.
DATE: September 25, 1997	AMOUNT: 100 gallons	REASON:	Equipment Malfunction  Operator Error Housekeeping Other
<b>DESCRIPTION:</b> A pump failed to operate Surge Basin was not completely utilized process water overflowed the berms, e	resulting in the U-drains in the	basement to became	
	T		
<b>DATE</b> : July 27, 1998	AMOUNT: 2,500 gallons	REASON:	Equipment Malfunction     Operator Error     Housekeeping     Other
<b>DESCRIPTION</b> : The cooling water return Tower". Approximately 2,500 gallons c		rflow of cooling wat	er from the "Vacuum Pump Cooling
<b>DATE</b> : August 25, 1998	AMOUNT: 300 gallons	REASON:	Equipment Malfunction Operator Error Housekeeping Other
DESCRIPTION: Loss of level indication in	n the flat box seal tank caused by	/ a blown fuse result	ed in the tank overflowing and

causing process wastewater to enter the PM Basement. The excess water then flowed from the Surge Basin to the OCC Basement instead of the RCT. This caused the OCC Basement to overflow into the OCC Warehouse and out to Oxoboxo Brook.

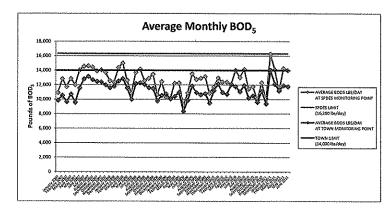
#### . **ATTACHMENT 7** SPILLS: 1995-2011

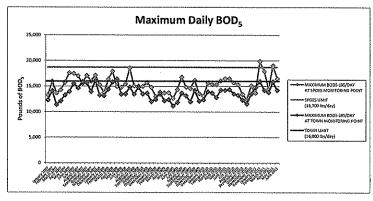
<b>DATE</b> : January 8, 1998	AMOUNT: 300-500 gallons	REASON:	Equipment Malfunction Operator Error Housekeeping Other
<b>DESCRIPTION</b> : A leak in the Surge Basin in the discharge of process water onto		coupling on the ou	
DATE: December 2, 1999	AMOUNT: ?	REASON:	Equipment Malfunction Operator Error Housekeeping Other
<b>DESCRIPTION:</b> A fire in the paper dryer operators' attention was directed to ad resulted in wastewater being directed f containment curbing and entered Oxob	dressing the fire and staff was no rom the PM Basement to the ou	ot aware that the Si tside tank farm who	urge Basin valve was closed. This
<b>DATE</b> : November 17, 2000	AMOUNT: 500-750 gallons	REASON:	Equipment Malfunction Operator Error Housekeeping Other
<b>DESCRIPTION:</b> A transfer pump associa to overflow into a nearby storm drain w			ailed causing the cooling tower sump
<b>DATE</b> : May 22, 2001	AMOUNT: 300 gallons	REASON:	Equipment Malfunction Operator Error Housekeeping Other
DESCRIPTION: The failure of the mill's I water to overflow out the Winder Bay I			
DATE: September 12, 2001	AMOUNT: 100 gallons	REASON:	Equipment Malfunction
<b>DESCRIPTION</b> : The "Save-All" clogged c been transferred to the Surge Basin wa then exited the Winder Bay Door into e	s transferred resulting in excess	water remaining in	the PM Basement. The excess water
<b>DATE</b> : May 13, 2004	AMOUNT: 40 gallons	REASON:	<ul> <li>Equipment Malfunction</li> <li>Operator Error</li> <li>Housekeeping</li> <li>Other</li> </ul>
<b>DESCRIPTION</b> : Process water entered t that had been left open. Some of the L uncontained portion of the OCC Wareh	J-drains were clogged with paper	which resulted in t	the process water to flow into the
<b>DATE:</b> January 28/29, 2006	AMOUNT: 2,500 gallons	REASON:	Equipment Malfunction     Operator Error     Housekeeping     Other
<b>DESCRIPTION:</b> The nozzle used to recirc contained area.	culate wastewater in the Surge B	asin rotated and di	rected process water outside of the

SPILLS: 1995-2011

<b>DATE</b> : October 10, 2008	<b>AMOUNT</b> : 6,000-7,000 gallons	REASON:	<ul> <li>Equipment Malfunction</li> <li>Operator Error</li> <li>Housekeeping</li> <li>Other</li> </ul>
<b>DESCRIPTION:</b> The level sensor on the overflowed and this resulted in appr			
DATE: March 2009	AMOUNT: 12,000 gallons	REASON:	<ul> <li>Equipment Malfunction</li> <li>Operator Error</li> <li>Housekeeping</li> <li>Other</li> </ul>
DESCRIPTION: The valve to an exteri released. Approximately 6,000 gallo		oximately 12,000 g	gallons of process water to be
<b>DATE</b> : May 28, 2011	AMOUNT: 50 gallons	REASON:	<ul> <li>Equipment Malfunction</li> <li>Operator Error</li> <li>Housekeeping</li> <li>Other</li> </ul>

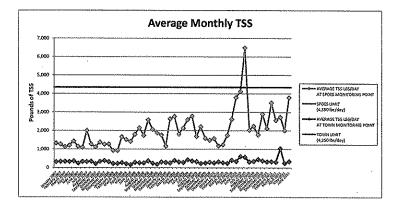
## ATTACHMENT 8 BODs DATA

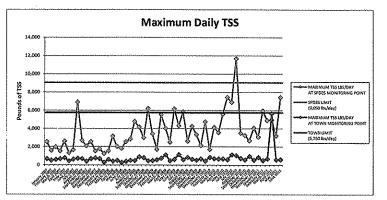




	AVERAGE SOD;	AVERAGE BOD;	I I	watewold app,	MARMUM 800,
	LES/DAY AT SPOTS	105/DAV		155/DAY	185/DAT
	PACHEROSING	MONRÓRING		MONITORING	MONITOPING
	2010/7	\$0IN1,		POINT	POINT
LIMITS:	15,300	14,000		18,700	16,000
Sendary 2007	10,905	9,858		13,284	12,307
February 2007	12,805	10,534		15,947	14,108
March 2007	11,729	9,659		13,645	11,490
April 2007	12,850	10,695		14,259	12,119
May 2007	11,981	9,568		15,734	13,270
June 2007	14,009	11,560		17,590	13,945
July 2007	14,935	12,798		17,469	15,516
August 2007	14,593	13,158		15,987	14,640
September 2007	14,429	12,693		15,493	15,881
October 2007	13,903	12,449		17,068	15,678
November 2007	14,046	12,386	ſſ	15,990	13,949
December 2007	13,718	11,992		17,129	16.056
January 2008	12,551	11,586		15,251	13,246
February 2008	12.346	11,613	11	13,713	13,146
March 2008	14,361	12,507	11	16.366	14,392
April 2008	15,004	12,854		17,920	15.825
May 2008	12,628	21,581		14,918	16,395
June 2008	10,798	9,999	l ŀ	14,776	13,428
July 2008	13,753	12,170	l ŀ	15,449	13,488
August 2008	14,150		ŀ		14,837
		\$2,279	ŀ	18,556	
September 2008 October 2008	12,566	12,035	╡┟	15,061	13,458
	12,871	11,592		14,990	14,773
November 2008	13,471	11,493		14,957	13.498
December 2008	10,640	9,790		15,723	13,647
January 2009	12,449	10,550		14,776	12.025
February 2009	10,289	\$0,753		12,963	12,402
March 2009	10,122	10,081		13,427	13,855
April 2009	12,230	10,404		13.681	12,172
May 2009	12,265	10,961		13,739	12,382
June 2009	9,132	8,359		12,608	31,137
July 2009	10,901	9,894		14,360	11,840
August 2009	13,517	11,848	ļļ	16,762	13,676
September 2009	12,765	366,01		14,816	13,144
October 2009	12,919	10,650		14,953	11,980
November 2009	18,138	10,800		16,140	14,209
December 2009	10,870	9,511		13,566	12,107
January 2010	11,708	\$1,209	lſ	13,096	12,373
February 2010	12,951	12,146	ľ	15,678	13,933
March 2010	12,395	10,964		15,363	13,693
April 2010	12,460	10,711	11	15,321	12,813
May 2010	12,083	12,060		16,073	14,232
lune 2010	14,004	11,767		16,488	14,224
July 2010	13,013	11,074		16,480	14,377
August 2010	14,131	11,906		15,703	
September 2010	11,436				13,508
		10,182	l ŀ	15,805	13,261
Öctober 2010 November 2010	9,901	10,502	I ŀ	13,424	12,315
		9,628		12,387	11,585
December 2010	12,314	11,129		15,125	13,511
January 2011	10,075	9,391		13,676	14,765
February 2011	16,253	14,044		19,892	15,947
March 2011	14,094	12,095		17,924	14,205
April 2011	11,164	11,266		14,487	13,802
May 2011	14,266	31,895		19,052	15,903
Juna 2011	14,004	11,767	IL	16,488	14,224
Minimum:		8,359			11,137
Maximum:		14,044			16,395

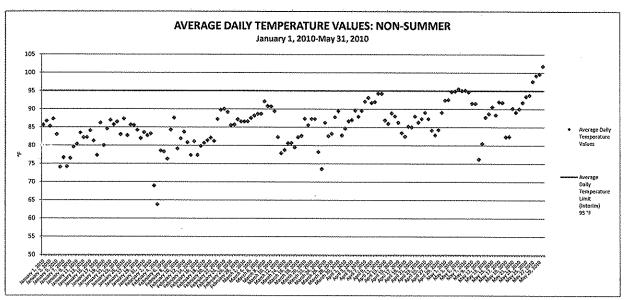
### ATTACHMENT 9 TSS DATA

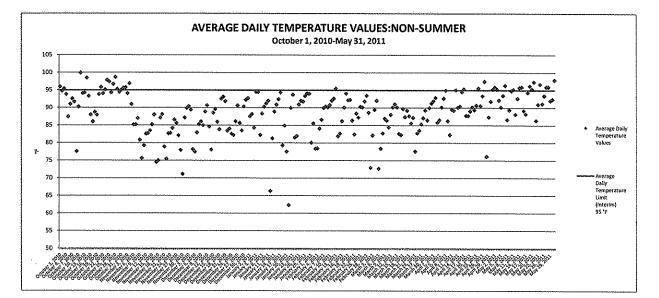


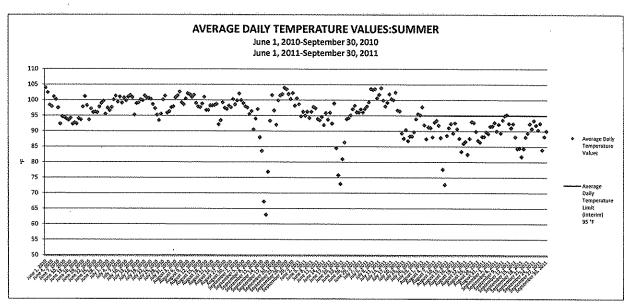


1	AVERAGE 155	AVERAGE TSS	MARMUM 755	MAXIMUM TIS
	LBS/DAY AT SPORT	185/GAY	LESPOAT AT SPORS	LES/DAY AT TOWN
	\$60N/CORING	MONITORING	MORITORING	MONIFORING
LIMITS:	POINT	POINT	POINT	POUNT
	4,950	4,350	9,050	5,750
January 2007	1,315	315	2,5\$1	670
February 2007	1,261	326	1,588	517
March 2007	1.121	332	1,988	596
April 2007	1,200	324	1,512	669
May 2007	1,422	363	2,608	776
June 2007	1,235	237	1,321	434
July 2007	1,083	327	1,660	620
August 2007	1,998	322	6,904	709
September 2007	1,257	335	2,690	686
October 2007	1,105	208	2,081	· 399
November 2007	1,369	333	2,568	672
Occember 2007	1,253	376	1,533	759
January 2008	2,267	320	1,772	674
February 2008	917	219	1,253	287
Morch 2008	903	219	1,550	600
April 2008	2,660	266	3,169	416
May 2008	3,508	204	2,024	\$06
June 2008	1,408	161	1.810	277
July 2008	1,791	283	2,554	403
August 2008	2,153	255	2,863	513
September 2008	1,732	2.52	4,799	482
October 2008	2,578	362	4,167	895
November 2008	2,060	239	3,005	797
December 2008	1,872	180	5,226	
				461
January 2009 February 2009	1,759	306	3,435	488
			1,717	580
March 2009	2,634	257	5,562	. 742
April 2009	2,769	391	4,041	1,116
May 2009	1,810	308	2,507	467
June 2009	2,134	282	6,173	623
July 2009	2,591	432	4,310	1,161
August 2009	2,784	363	5,855	591
September 2009	1,685	326	2,630	834
October 2009	2,212	230	4,257	623
November 2009	1.579	257	3,361	531
December 2009	1,477	293	2,154	677
ianuary 2010	1,971	258	4,767	445
February 2010	1,173	318	1,712	841
March 2010	1,230	269	4,139	705
April 2010	1,745	242	3,577	673
May 2010	2,614	404	5,638	673
June 2010	3,789	335	7,441	\$96
July 2010	4,114	605	6,896	1,135
August 2010	6,488	\$69	31,667	1,033
September 2010	2,022	315	3,510	733
October 2010	2,246	345	3,271	563
November 2010	1,770	448	2,683	967
December 2010	2,906	377	4,090	537
Johnary 2011	2,115	321	3,085	844
February 2011	3,508	329	5,969	505
March 2011	2,559	303	4.913	619
April 2011	2,735	1,037	4,974	5,659
May 2011				
iune 2011	2,005 3,789	240	3,216	574
1046 2011	3,769	335	7,443	596
Minimum:		161		277
Moximum:		1,037		5,659
Meets:	98	100	86	100

ATTACHMENT 10 AVERAGE DAILY TEMPERATURE VALUES







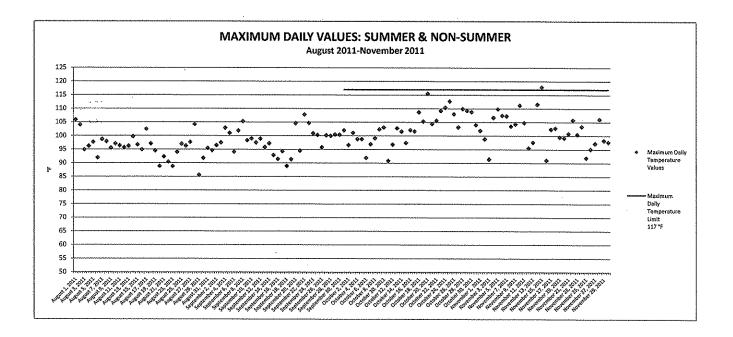
### ATTACHMENT 10 AVERAGE DAILY TEMPERATURE VALUES

January 2, 2010 January 2, 2010 January 5, 2010 January 5, 2010 January 5, 2010 January 5, 2010 January 1, 2010 January 2, 2010 February 1, 2010 February 2, 2010 Match 3, 2010 Match 3, 2010 Match 3, 2010 Match 2, 2010 Match 3, 2010 Match 2, 2010 Apell 1, 2010 Apell 1, 2010 Apell 2, 2010 Apell 2, 2010 Match 3, 2010 Match 2,	2000 2000	Cickeber 1, 2010 Cickeber 2, 2010 Cickeber 3, 2010 Cickeber 3, 2010 Cickeber 3, 2010 Cickeber 3, 2010 Cickeber 3, 2010 Cickeber 13, 2010 Cickeber 12, 2010 Cickeber 12, 2010 Cickeber 12, 2010 Cickeber 12, 2010 Cickeber 12, 2010 Cickeber 22, 2010 Cickeber 22, 2010 Cickeber 22, 2010 Cickeber 22, 2010 Cickeber 22, 2010 Cickeber 23, 2010 Cickeber 23, 2010 Cickeber 23, 2010 Cickeber 24, 2010 Normeber 14, 2010 Discember 24, 2011 January 7, 2011 February 7, 2011 February 7, 2011 February 7, 2011 January 7, 2011 January 7, 2011 January 7, 2011 January 7, 2011 January 7, 2011 February 7, 2	212 212 212 212 212 212 212 212	March 1, 2011 March 2, 2011 March 4, 2011 March 4, 2011 March 4, 2011 March 5, 2011 March 12, 2011 March 12, 2011 March 13, 2011 March 13, 2011 March 14, 2011 March 13, 2011 March 14, 2011 March 14, 2011 March 23, 2011 March 23, 2011 March 24, 2011 March 25, 2011 March 25, 2011 March 26, 2011 March 26, 2011 March 27, 2011 March 27, 2011 March 28, 2011 April 1, 2011 April 1, 2011 April 1, 2011 April 2, 2011 April 1, 2011 April 1, 2011 April 12, 2011 April 22, 2011 April 22, 2011 March 27, 2011 March 27, 2011 April 22, 2011 April 22, 2011 April 22, 2011 March 27, 2011 March 22, 2011 March 23, 2011 March 23, 2011 March 24, 2011 March 25, 2011 March 25, 2011 March 25, 2011 March 26, 2011 March 26, 2011 March 26, 2011 March 27, 2011 March 27, 2011 March 27, 2011 March 22, 2011 March 24, 2011 March 24, 2011 March 25, 2011 March 26,	12007 12	June 1, 2010 June 2, 2010 June 4, 2010 June 6, 2010 June 6, 2010 June 6, 2010 June 6, 2010 June 6, 2010 June 6, 2010 June 12, 2010 June 23, 2010 June 23, 2010 June 23, 2010 June 23, 2010 June 23, 2010 June 32, 2010 July 12, 2010 July 22, 2010 July 23, 2010 July 24, 2010 July 24, 2010 July 24, 20	1044.0 1044.0 1024.6 1024.6 1024.6 1024.6 1024.6 1024.6 1024.6 1024.6 1024.6 1024.6 1024.6 1024.6 1024.6 1025.7 10	June 1, 2011 June 2, 2011 June 3, 2011 June 5, 2011 June 6, 2011 June 6, 2011 June 6, 2011 June 10, 2011 June 10, 2011 June 10, 2011 June 11, 2011 June 12, 2011 June 12, 2011 June 12, 2011 June 12, 2011 June 13, 2011 June 13, 2011 June 14, 2011 June 23, 2011 June 23, 2011 June 23, 2011 June 25, 2011 June 26,	2002 2002 2002 2005	
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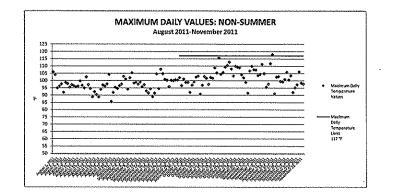
Quốc đ

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ATTACHMENT 11 MAXIMUM DAILY TEMPERATURE VALUES

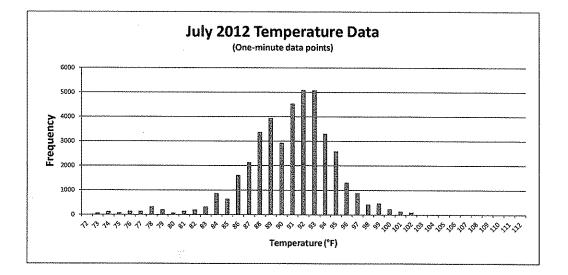


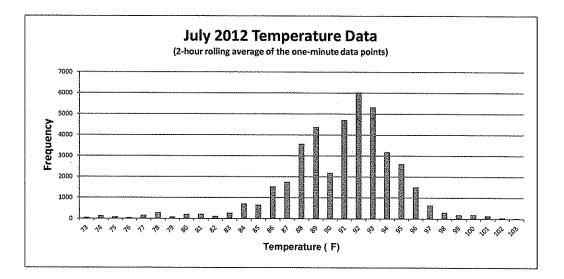
## ATTACHMENT 11 MAXIMUM DAILY TEMPERATURE VALUES (NON-SUMMER)



	00	TOBER 1, 2011 TO NOVEMBER 30, 2011
	Maximum Daily	
	Temperature Values	
October 1, 2011	102.0	
October 2, 2011 October 3, 2011	96.6 101.1	7
October 4, 2011	98.8	6
October 5, 2011	98,8	5
October 6, 2011	91.9	
October 7, 2011	96.9	
October 8, 2011 October 9, 2011	99.1 102.4	│3 <del>│──<mark>╏</mark>─────<b>─────────────────────────────</b></del>
October 10, 2011	102.4	
October 11, 2011	90.8	
October 12, 2011	96.8	
October 13, 2011	102.8	елелиникана 0 <del>18.4</del>
October 14, 2011 October 15, 2011	101.6 97.4	·····
October 16, 2011	102.1	
October 17, 2011	101.7	
October 18, 2011	108.7	Column1
October 19, 2011	105.3	
October 20, 2011 October 21, 2011	115,5 104,4	Moan 102.629508 Standard Erro 0.77243262
October 22, 2011	104.4	Standard End 0.77243252 Median 102.4
October 23, 2011	109,2	Mode 98.8
October 24, 2011	110.4	Standard Devi 6.03289163
October 25, 2011	112.7	Sample Varia: 36.3957814
October 26, 2011 October 27, 2011	108.0 103.2	Kurtosla -0.14997625 Skewness 0.11498178
October 28, 2011	109.9	Range 27.1
October 29, 2011	109.3	Minimum 90.8
October 30, 2011	108.8	Maximum 117.9
October 31, 2011	104.0	Sum 6260.4
November 1, 2011	101.9 98.8	Count 61
November 2, 2011 November 3, 2011	96.0 91.4	
November 4, 2011	106.7	99%= 116.7
November 5, 2011	109.8	
November 6, 2011	107.5	
November 7, 2011	107.3	
November 8, 2011 November 9, 2011	103.5 104.3	
November 10, 2011		
November 11, 2011	104.8	
November 12, 2011	95.5	
November 13, 2011	97.6	
November 14, 2011 November 15, 2011	111.6 117.9	
November 16, 2011		
November 17, 2011		
November 18, 2011		
November 19, 2011		
November 20, 2011 November 21, 2011		
November 22, 2011		
November 23, 2011		
November 24, 2011	103.4	
November 25, 2011		
November 26, 2011 November 27, 2011		
November 28, 2011		
November 29, 2011		
November 30, 2011		
]		
MIN: MAX:		
19840.	116.9	

ATTACHMENT 12 MAXIMUM DAILY TEMPERATURE VALUES (SUMMER)





Count=	41446
Range=	73 °F to 103 °F
Standard Deviation =	3.97
Mean=	92
Z-SCOF099.87	3.00
Maximum limit for 2-hour rolling average=	105 °F

[Limit = Mean+(Z-score\*Standard Deviation)]