NPDES PERMIT/STATE PERMIT

issued to

Windsor-Stevens, Inc.
P.O. Box 500
Poquonock, CT 06064

Location Address:
99 Stevens Mill Rd
Windsor, CT 06095

Facility ID: 164-012

Permit ID: CT0003441 and SP0002436

Receiving Stream:	**Stream Segment I.D. No.:**
Farmington River	CT4300-00_01
Rainbow Brook	CT4300-50_01

Permit Expires: June 10, 2014

SECTION 1: GENERAL PROVISIONS

(A) This permit is reissued 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 section 402(b) of the Clean Water Act, as amended, 33 USC 1251, et. seq., and pursuant to an approval dated September 26, 1973, by the Administrator of the United States Environmental Protection Agency for the State of Connecticut to administer an N.P.D.E.S. permit program.

(B) **Windsor-Stevens, Inc.**, ("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)(10)(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
(l) 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.
(l) 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.

(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 Environmental Protection ("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) No provision of this permit and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by the Permittee pursuant to this permit will result in compliance or prevent or abate pollution.

(G) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.

(H) 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.

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 section 22a-430-3(a) and 22a-430-6 of the RCSA, except for "No Observable Acute Effect Level (NOAEL)" which is redefined below.

(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.

"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.

"Critical Test Concentration (CTC)" means the specified effluent dilution at which the Permittee is to conduct a single-concentration Aquatic Toxicity test.

"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 Composite" means a composite sample taken over a full operating day consisting of grab samples collected at equal intervals of no more than four (4) hours and combined proportionally to flow.

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

"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.

"In stream Waste Concentration (IWC)" means the concentration of a discharge in the receiving water after mixing has occurred in the allocated zone of influence.

"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”.

"No Observable Acute Effect Level (NOAEL)" means any concentration equal to or less than the critical test concentration in a single concentration (pass/fail) toxicity test conducted pursuant to section 22a-430-3(j)(7)(A)(i) RCSA demonstrating greater than 50% survival of test organisms in 100% (undiluted) effluent and 90% or greater survival of test organisms at the CTC.

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

"Range During Sampling" (“RDS”), as a sample type, means the maximum and minimum of all values recorded as a result of analyzing each grab sample.

"Semi-Annual" in the context of process wastewater discharge (DSN-002) sampling frequency, means

sampling is required in the months of January and July. In the context of a groundwater monitoring, (DSNs 301-A, 301-B, and 301-C), shall mean that the samples must be taken in the months of April and September.

"µg/l" means micrograms per liter.

SECTION 3: COMMISSIONER'S DECISION

(A) The Commissioner has issued a final determination and found that 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 Nos. 199804955 and 200203255 for permit reissuance and permit issuance respectively, received on November 25, 1998 and August 6, 2002, and the administrative record established in the processing of those applications.

(B) The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit, the above referenced applications, 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.

(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 which may be authorized under the Federal Clean Water Act or the CGS 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 CGS or regulations adopted thereunder which are then applicable.

SECTION 4: GENERAL EFFLUENT LIMITATIONS

(A) No discharge shall contain, or cause in the receiving stream, a visible oil sheen or floating solids; or, cause visible discoloration or foaming in the receiving stream.

(B) No discharge shall cause acute or chronic toxicity in the receiving water body beyond any zone of influence specifically allocated to that discharge in this permit.

(C) The temperature of any discharge shall not increase the temperature of the receiving stream above 85^{o}F, or, in any case, raise the normal temperature of the receiving stream more than 4^{o}F.

SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(A) The discharges shall not exceed and shall otherwise conform to the specific terms and conditions listed below. The discharges are restricted by, and shall be monitored in accordance with, the tables below:

Table A	
Discharge Serial Number: 001-1	**Monitoring Location: 1**
Wastewater Description: spring water and overflow of the intake water from the Farmington River	
Monitoring Location Description: No monitoring is required	
Maximum Daily Flow: 576,000 gpd	
Table A Remarks: This discharge consists of the Farmington River overflow when the Permittee is not using any river water in the mill.	

Table B (GROUNDWATER MONITORING)

Discharge Serial Numbers: 301-A (RIZ-1), 301-B (WS2), 301-C (RIZ-2). See Footnote 1 | Monitoring Location: I

Wastewater Description: treated non-integrated heavy paper mill and backwash showers wastewaters to the groundwater infiltration from three settling basins

Monitoring Location Description: At the up-gradient well(RIZ-1) and down-gradient groundwater monitoring wells WS2 and RIZ-2

PARAMETER	UNITS	MINIMUM FREQUENCY OF SAMPLING	SAMPLE TYPE	Minimum Level Test (Refers to Section 6(A)(3) of this permit)
Groundwater Depth	Ft, in	Semi-annual	Instantaneous	
BOD_5	mg/l	Semi-annual	Grab	
Bis(2-ethylhexyl)phthalate[1]	µg/l	Semi-annual	Grab	*
Copper, Total	mg/l	Semi-annual	Grab	*
Di-isononylphthalate	µg/l	Semi-annual	Grab	*
Lead, Total	mg/l	Semi-annual	Grab	*
Nitrogen, Nitrate	mg/l	Semi-annual	Grab	*
Nitrogen, Nitrite	mg/l	Semi-annual	Grab	*
Nitrogen, Total Kjeldahl	mg/l	Semi-annual	Grab	*
pH	S.U.	Semi-annual	Instantaneous	
Phosphorus, Total	mg/l	Semi-annual	Grab	*
Total Suspended Solids	mg/l	Semi-annual	Grab	
Zinc, Total	mg/l	Semi-annual	Grab	*

Table B Footnotes:

[1] Bis(2-ethylhexyl)phthalate shall be sampled semi-annually at the up-gradient well DSN 301-A (RIZ-1). If in the first year after permit issuance, the results are below the surface water protection criteria (59 µg/l), testing for this parameter is no longer required for the groundwater monitoring.

Table C

Discharge Serial Number: 002-1 | **Monitoring Location: 1**

Wastewater Description: treated non-integrated heavy paper mill and backwash showers wastewaters, and groundwater infiltration from two unlined settling basins

Monitoring Location Description: At the discharge of the lagoon # 2

Allocated Zone of Influence (ZOI): 334,193 gph | **In stream waste concentration (IWC): 4.7 %**

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test[3]
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency [2]	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency[2]	Sample Type or measurement to be reported	
Aquatic Toxicity, Daphnia pulex LC_{50}[4]	%	NA	>100%	Semi-Annual	Daily Composite	LC_{50} >33%	NR	Grab	
Aquatic Toxicity, Pimephales promelas LC_{50}[4]	%	NA	>100%	Semi-Annual	Daily Composite	LC_{50} >33%	NR	Grab	
Aluminum, Total [5]	mg/l	0.15	0.30	Semi-Annual	Daily Composite	0.40	NR	Grab	*
BOD_5	mg/l	20.0	40.0	Weekly	Daily Composite	50.0	NR	Grab	
Copper, Total[5]	mg/l	0.1	0.2	Monthly	Daily Composite	0.25	NR	Grab	*
Di-isononylphthalate[5]	mg/l	NA	---	Semi-Annual	Daily Composite	NA	NR	Grab	*
Flow, Average and Maximum [1]	gpd	396,000	506,000	Continuous/Monthly	Daily Flow	NA	NR	NA	
Flow, Day of Sampling	gpd	NA	506,000	Weekly	Daily Flow	NA	NR	NA	
Lead, Total[5]	mg/l	NA	---	Monthly	Daily Composite	NA	NR	Grab	*
Oil and Grease, Total	mg/l	NA	NA	NR	NA	10.0	Monthly	Grab	
Pentachlorophenol[6]	µg/l	8.2	16.5	Annually	Daily Composite	16.5	NR	Grab	
pH[7], Monthly	S.U.	NA	NA	NR	NA	6.0 – 9.0	Monthly	RDM	
pH, Day of Sampling	S.U.	NA	NA	NR	NA	6.0 – 9.0	Weekly	RDS	
Total Suspended Solids[5]	mg/l	20.0	40.0	Weekly	Daily Composite	50.0	NR	Grab	
Trichlorophenol[6]	µg /l	6.5	13.0	Annually	Daily Composite	13.0	NR	Grab	
Zinc, Total[5]	mg/l	0.69	1.38	Monthly	Daily Composite	1.73	NR	Grab	*

Table C Footnotes:

[1] For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow for each month.

[2] 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'.

[3] Minimum Level Test refers to Section 6(A)(3) of this permit.

[4] Record the LC_{50} value result on the DMR.

[5] Indicates that testing for this parameter shall be performed on the same sample used for aquatic toxicity testing.

[6] In accordance with section 40 CFR 430.114 of the federal regulations, the Permittee is authorized to forego monitoring of pentachlorophenol and trichlorophenol. These chemicals shall not be used in any of the facility operations. The Permittee shall attach an annual statement to the Discharge Monitoring Report (DMR) for the month of January, on a form provided (Attachment A), certifying there has been no use of pentachlorophenol and trichlorophenol at the facility since filing of the last certification. Additionally, in the event that any of these chemical parameters are found to be present or are expected to be present based on changes that occur in the Permittee's operations, the Permittee shall notify the Department and must immediately comply with the monitoring requirements provided in the table above.

[7] For this parameter, the Permittee shall monitor the discharge effluent pH four times a day when process discharges are occurring and shall report the minimum and maximum pH for each sampling month. When process discharges are not occurring, the Permittee is allowed to monitor pH at the V-notch weir box inside the mill.

(1) All samples shall be comprised of only the wastewater described in these tables. Samples shall be collected prior to combination with receiving waters or wastewater of any other type, and after all approved treatment units, if applicable. All discharge samples collected shall be representative of the discharge during standard operating conditions.

(2) In cases where limits and sample type are specified but sampling is not required by this permit, the limits specified shall apply to all samples, which may be collected and analyzed by the Department of Environmental Protection personnel, the Permittee, or other parties.

(3) The limits imposed on the discharges listed in this permit take effect on the issuance date of this permit, hence any sample taken after this date which, upon analysis, shows an exceedance of permit limits will be considered non-compliance.

The monitoring requirements begin on the date of issuance of this permit if the issuance date is on or before the 12th day of a month. For permits issued on or after the 13th day of a month, monitoring requirements begin the 1st day of the following month.

SECTION 6: SAMPLE COLLECTION, HANDLING AND ANALYTICAL TECHNIQUES

(A) Chemical Analysis

(1) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved pursuant to the 40 CFR 136 unless an alternative method has been approved in writing pursuant to 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.

(2) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136 unless otherwise specified.

(3) The Minimum Levels specified below represent the concentrations at which quantification must be achieved and verified during the chemical analyses for the parameters identified in Section 5 Tables B and C. 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.

Parameter	Minimum Level
Aluminum	10.0 ug/L
Bis(2-ethylhexyl)phthalate	5.0 ug/L
Copper	5.0 ug/L
Di-isononylphthalate	5.0 ug/L
Lead	5.0 ug/L
Nitrogen, Nitrate	20.0 ug/L
Nitrogen, Nitrite	20.0 ug/L
Nitrogen, Total Kjeldahl	50.0.ug/L
Phosphorus	10.0 ug/L
Zinc	10.0 ug/L

(4) The value of each parameter for which monitoring is required under this permit shall be reported to the maximum level of accuracy and precision possible consistent with the requirements of this section of the permit.

(5) Effluent analyses for which quantification was verified during the analysis at or below the minimum levels specified in this section and which indicate that a parameter was not detected shall be reported as "less than x" where 'x' is the numerical value equivalent to the analytical method detection limit for that

analysis.

(6) Results of effluent analyses which indicate that a parameter was not present at a concentration greater than or equal to the Minimum Level specified for that analysis shall be considered equivalent to zero (0.0) for purposes of determining compliance with effluent limitations or conditions specified in this permit.

(B) Acute Aquatic Toxicity Test

(1) Samples for monitoring of Aquatic Toxicity shall be collected and handled as prescribed in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012).

(a) Composite samples shall be chilled, as they are collected. Grab samples shall be chilled immediately following collection. Samples shall be held at 4 degrees Centigrade until Aquatic Toxicity testing is initiated.

(b) Effluent samples shall not be dechlorinated, filtered, or, modified in any way, prior to testing for Aquatic Toxicity unless specifically approved in writing by the Commissioner for monitoring at this facility.

(c) Chemical analyses of the parameters identified in Section 5 Table C shall be conducted on an aliquot of the same sample tested for Aquatic Toxicity.

(i) At a minimum, pH, specific conductance, total alkalinity, total hardness, and total residual chlorine shall be measured in the effluent sample and, during Aquatic Toxicity tests, in the highest concentration of test solution and in the dilution (control) water at the beginning of the test and at test termination. Dissolved oxygen, pH, and temperature shall be measured in the control and all test concentrations at the beginning of the test, daily thereafter, and at test termination.

(d) Tests for Aquatic Toxicity shall be initiated within 36 hours of sample collection.

(2) Monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (invertebrate) above shall be conducted for 48-hours utilizing neonatal Daphnia pulex (less than 24-hours old)

(3) Monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (vertebrate) above shall be conducted for 48-hours utilizing larval Pimephales promelas (1-14 days old with no more than 24-hours range in age).

(4) Tests for Aquatic Toxicity shall be conducted as prescribed for static non-renewal acute tests in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012), except as specified below.

(a) Definitive (multi-concentration) testing, with LC_{50} as the endpoint, shall be conducted to determine compliance with limits on Aquatic Toxicity and monitoring conditions and shall incorporate, at a minimum, the following effluent concentrations:

(i) For Aquatic Toxicity Limits expressed as LC_{50} values of 33% or greater: 100%, 75%, 50%, 25%, 12.5%, and 6.25%

(b) Organisms shall not be fed during the tests.

(c) Copper nitrate shall be used as the reference toxicant in tests with freshwater organisms.

(d) Synthetic freshwater prepared with deionized water adjusted to a hardness of 50 mg/L (plus or minus 5 mg/L) as CaCO3 shall be used as dilution water in tests with freshwater organisms.

(5) Compliance with limits on Aquatic Toxicity shall be determined as follows:

(a) For limits expressed as a minimum LC_{50} value, compliance shall be demonstrated when the results of a valid definitive Aquatic Toxicity test indicates that the LC_{50} value for the test is greater than the Aquatic Toxicity Limit.

(C) The Permittee shall annually monitor the chronic toxicity of the DSN 002-1 in accordance with the following specifications.

(1) Chronic toxicity testing of the discharge shall be conducted annually during July, August, or September of each year.

(2) Chronic toxicity testing shall be performed on the discharge in accordance with the test methodology established in "Short term Methods For Estimating The Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms" (EPA-821-R-02-012) as referenced in 40 CFR 136 for Cerio daphnia survival and reproduction and Fathead Minnow larval survival and growth.

(3) Chronic toxicity tests shall utilize a single concentration test of 100% effluent.

(4) Farmington River water collected immediately upstream of the area influenced by the discharge shall be used as site water control (0% effluent) for the toxicity tests.

(5) A laboratory water control consisting of synthetic freshwater prepared in accordance with EPA-821-R-02-012 at a hardness of 50±5 mg/l shall be included in the test protocol in addition to the site-water control.

(6) Daily composite samples of the discharge and grab samples of the Farmington River for use as site water control and dilution water shall be collected on: day 0, for test solution renewal on day 1 and day 2 of the test; day 2, for test solution renewal on day 3 and day 4 of the test; and day 4, for test solution renewal on day 5, 6, and 7 of the test. Samples shall not be filtered, dechlorinated, pH or hardness adjusted, or chemically altered in any way.

(7) All samples of the discharge and the Farmington River water used in the chronic toxicity test shall, at a minimum, be analyzed and results reported in accordance with the provisions listed in Section 6(A) of this permit for the following parameters:

pH	Copper (Total recoverable and dissolved)
Hardness	Formaldehyde *
Alkalinity	Lead, Total (Total recoverable and dissolved)
Aluminum	Nitrogen, Ammonia (total as N)
BOD_5	Nitrogen, Nitrate (Total as N)
Chlorine, (Total residual)	Solids, Total Suspended
Conductivity	Zinc, (Total recoverable and dissolved)
Bis(2-ethylhexyl)phthalate*	

* For the above referenced parameters, if in the first three years after permit issuance, the results are below detection limits, testing for these parameters is no longer required for the chronic toxicity test.

SECTION 7: REPORTING REQUIREMENTS

(A) The results of chemical analyses and any aquatic toxicity test 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 (Attn: DMR Processing) at the following address. 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 collected.

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

(B) Complete and accurate aquatic toxicity test data, including percent survival of test organisms in each replicate test chamber, LC_{50} values and 95% confidence intervals for definitive test protocols, and all supporting chemical/physical measurements performed in association with any aquatic toxicity test, including measured daily flow and hours of operation for the 30 consecutive operating days prior to sample collection if compliance with a limit on Aquatic Toxicity is based on toxicity limits based on actual flows described in Section 7, shall be entered on the Aquatic Toxicity Monitoring Report form (ATMR) and sent to the Bureau of Water Protection and Land Reuse at the following address. The ATMR shall be received at this address by the last day of the month following the month in which samples are collected.

Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity)
Connecticut Department of Environmental Protection
79 Elm St.
Hartford, CT 06106-5127

(C) 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 and ATMR, 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.

(D) A complete and thorough report of the results of the chronic toxicity monitoring specified in Section 6 (C) shall be prepared as outlined in Section 10 of EPA-821-R-02-013 and submitted to the Department for review on or before 60 days after test completion to the address specified in Section 7(B) of this permit.

SECTION 8: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS

(A) If any sample analysis indicates that an Aquatic Toxicity effluent limitation in Section 5 of this permit has been exceeded, or that the test was invalid, another sample of the effluent shall be collected and tested for Aquatic Toxicity and associated chemical parameters, as described above in Section 5 and Section 6, and the results reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing), at the address listed above, within 30 days of the exceedance or invalid test. Results of all tests, whether valid or invalid, shall be reported.

(B) If any two consecutive test results or any three test results in a twelve month period indicates that an Aquatic Toxicity Limit has been exceeded, the Permittee shall immediately take all reasonable steps to eliminate toxicity wherever possible and shall submit a report to Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity) for the review and approval of the Commissioner in accordance with section 22a-430-3(j)(10)(c) of the RCSA describing proposed steps to eliminate the toxic impact of the discharge on the receiving water body. Such a report shall include a proposed time schedule to accomplish toxicity reduction and the Permittee shall comply with any schedule approved by the Commissioner.

(C) The Permittee shall notify the Bureau of Materials Management and Compliance Assurance, Water Permitting

and Enforcement Division, within 72 hours and in writing within thirty days of the discharge of any substance listed in the application but not listed in the permit if the concentration or quantity of that substance exceeds two times the level listed in the application.

This permit is hereby issued on June 11, 2009

/S/AMEY MARRELLA
ACTING COMMISSIONER

AM/EH

Certification: Waiver of Monitoring

Attachment A

"Based on my inquiry of the person or persons directly responsible for managing compliance with the Effluent Limitations Representing the Degree of Effluent Reduction Attainable by the Application of the Best Available Technology Economically Achievable (BAT) 40CFR 430.114 Pulp, Paper, and Paperboard Category. I certify that, to the best of my knowledge and belief, there has been no use of **pentachlorophenol** and **trichlorophenol** at the facility since filing of the last certification.

Authorized Official : _____ ***Title:*** _____

Signature:_____ ***Date:***_____

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Windsor-Stevens, Inc.

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: CT0003441 *APPLICATION #: 199804955* *FACILITY ID. 164-012*

PERMIT #: SP0002436 *APPLICATION #: 200203255* *FACILITY ID. 164-012*

Mailing Address:						***Location Address:***					
Street:	*P.O. Box 500*					***Street:***	*99 Stevens Mill Road*				
City:	*Poquonock*	***ST:***	***CT***	***Zip:***	*06064*	***City:***	*Windsor*	***ST:***	***CT***	***Zip:***	*06095*
Contact Name:	*Ralph Tropeano. V.P Manufacturing*					***DMR Contact***	*Ralph Tropeano. V.P Manufacturing*				
Phone No.:	*(860) 683 -1515*					***Phone No.:***	*(860) 683 -1515*				

PERMIT INFORMATION

DURATION *5 YEAR _X_* *10 YEAR ___* *30 YEAR _____*

TYPE *New _* *Reissuance _X_* *Modification ____*

CATEGORIZATION *POINT (X)* *NON-POINT ( )* *GIS # __*

NPDES (X) *PRETREAT ( )* *GROUNDWATER(UIC) ( )* *GROUNDWATER (OTHER) (X)*

NPDES MAJOR (MA) _____
NPDES SIGNIFICANT MINOR or PRETREAT SIU (SI) __X____
NPDES or PRETREATMENT MINOR (MI) __X____

PRETREAT SIGNIFICANT INDUS USER (SIU) _____
PRETREAT CATEGORICAL (CIU) _____

POLLUTION PREVENTION MANDATE __ *ENVIRONMENTAL EQUITY ISSUE ____*

COMPLIANCE ISSUES

COMPLIANCE SCHEDULE __ YES *NO _X_ (If yes check off what it is in relation to.)*

POLLUTION PREVENTION ___ TREATMENT REQUIREMENT____WATER CONSERVATION

WATER QUALITY REQUIREMENT __ *REMEDIATION __* *OTHER _____*

IS THE PERMITTEE SUBJECT TO A PENDING ENFORCEMENT ACTION? NO__X__ YES __

OWNERSHIP CODE

Private X Federal __ State __ Municipal (town only) __ Other public ____

DEP STAFF ENGINEER: *Enna Herrera*

PERMIT FEES

Discharge Code	*DSN Number*	*Annual Fee*
101054N	***001-1***	***$ 0.00***
101054	***002-1***	***$ 8,175.00***
301054N	***301-A-C***	***$ 0.00***

FOR NPDES DISCHARGES

DSN Number	*Receiving Water*	*Drainage basin Code*	*Present/Future Water Quality Standard*
001-1	*Rainbow Brook*	*4300-50*	*B/A*
002-1	*Farmington River*	*4300-00*	*B*

FOR GROUNDWATER STATE PERMITS:

Drainage basin Code: 4300 Water Quality Standard: GB Total Wells 3 Well Type Monitoring

NATURE OF BUSINESS GENERATING DISCHARGE

Windsor-Stevens, Inc. produces high strength electrical insulation for electrical, automotive, and mechanical uses.

PROCESS AND TREATMENT DESCRIPTION (by DSN)

DSN 001-1: No treatment is required
DSN 002-1: Two settling basins
DSN 301-A, 302-B, 303-C: Groundwater discharge. Monitoring wells

RESOURCES USED TO DRAFT PERMIT

X Federal Effluent Limitation Guideline 40 CFR 430, Subpart K
Fine and Lightweight Papers from Purchased Pulp

__ Performance Standards

X Federal Development Document Pulp, Paper and Paperboard Mills
name of category

__ Treatability Manual

X Department File Information

X Connecticut Water Quality Standards

X Anti-degradation Policy

__ *Coastal Management Consistency Review Form*

_X_ *Other – Explain (See General Comments)*

BASIS FOR LIMITATIONS, STANDARDS, OR CONDITIONS

_X_ *Case-by-Case Determination and Best Professional Judgment (See General Comments)*

DSN 002-1: BOD_5, oil/grease, di-isononylphthalate, and total suspended solids

DSN 301-A, 301-B, 303-C: BOD_5, bis(2-ethylhexyl)phthalate, copper, di-isononylphthalate, lead, nitrate, nitrite, and total kjeldahl nitrogen, pH, phosphorus, total suspended solids, and zinc

_X_ *In order to meet in-stream water quality (See General Comments)*

DSN002-1: LC_{50},, total aluminum, copper, lead, pentachlorophenol, trichlorophenol, and zinc

_X_ *Anti-degradation policy*

GENERAL COMMENTS

The need to include water quality based discharge limitations in this permit was evaluated to be consistent with Connecticut Water Quality Standards and criteria, pursuant to 40 CFR 122.44(d). Each parameter was evaluated for consistency with the available aquatic life criteria considering the zone of influence allocated to the facility where appropriate. The statistical procedures outlined in the EPA Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001) were employed to calculate these limits. The calculated limits were then compared to the available effluent data. A comparison of the calculated limits to the effluent data suggests a statistical probability of exceeding such limits. Therefore, water quality based limits were included in this permit for aluminum, copper, lead, pentachlorophenol, trichlorophenol, and zinc.

The differences between the effluent limitations and monitoring requirements of the existing permit and this permit renewal are as follows:

For DSN 002-1: The existing permit issued on June 16, 1994, contains monitoring requirements for the following parameters: aluminum, ammonia, copper, lead, oil and grease, sulfate, formaldehyde, phenol, total residual chlorine, surfactants, total dissolved solids, and zinc. A review of the Windsor-Stevens' DMRs in the last five (5) years indicated that results for ammonia, total dissolved solids, and sulfate have been consistently at low levels. Also, the results for this same time frame for total residual chlorine (TRC), formaldehyde, phenols, and surfactants have been consistently below detection levels. Therefore, DEP staff is recommending that effluent monitoring requirements for these parameters not be included in this permit renewal, except for TRC and formaldehyde, which will be monitored annually as part of chronic toxicity monitoring.

<u>BOD_5, total oil and grease, pH, and total suspended solids</u>: All of these parameters are found in the existing permit.

BOD_5 and TSS: Federal limitations for BOD_5 and TSS were calculated in accordance with 40 CFR 430, Subparts K. However, the calculated values exceed performance-based limits for DSN002-1. Therefore, a case-by-case determination using best professional judgment was used to develop limits for these parameters. Section 22a-430-4(s) of the RCSA was used as guidance in establishing limitations for total oil and grease and TSS. BOD_5 effluent limitations were set up the same as the TSS limits values. Best practicable control technology (BPT), best conventional pollutant control technology (BCT), and 40 CFR 133 Secondary Treatment Regulation were used as guidance in establishing limitations for pH. Wastewater discharges from the production of paperboards are regulated under 40 CFR 430, Pulp, Paper, and Paperboard Category. Section 430.114 identifies the following parameters for regulation: pentachlorophenol and trichlorophenol only if these chemicals are being used. DEP staff is recommending that Windsor-Stevens be authorized to forego monitoring of the two regulated pollutants. The Permittee shall attach an annual statement to the Discharge

Monitoring Report (DMR) for the month of January, on a form provided (Attachment A), certifying there has been no use of pentachlorophenol and trichlorophenol at the facility. Additionally, in the event that any of these chemical parameters are found to be present or are expected to be present based on changes that occur in the Permittee's operations, the Permittee shall notify the Department and must immediately comply with the monitoring requirements provided in the Table C.

Semiannual monitoring requirements were added to this permit for Di-isononylphthalate (DISNP, plasticizers) due to the potential for this constituent to be present in the discharges.

An annual chronic test is also included in this permit renewal to ensure that this discharge is not causing chronic toxicity in the receiving water body.

Groundwater at the site is classified as GB. The Department's policy in areas where groundwater is classified as GB is, in part, to regulate discharges to the groundwater in order to prevent further degradation of groundwater quality. This is consistent with Standards GW4 and GW12 (D) of the Connecticut Water Quality Standards.

Windsor-Stevens directs its paper manufacturing wastewaters to two unlined settling lagoon in series. Also, sludge is moved from these two lagoons once per year and placed in a third earthen lagoon for dewatering and drying for a period of a year and this material is reused as an agricultural soil amendment. Because these lagoons are unlined, paper manufacturing wastewaters are discharging to the groundwaters of the state. This permit renewal includes language and monitoring requirements, which will authorize these groundwater discharges. Historically, previous permits did not address this issue.

During the technical review of the Windsor-Stevens renewal application, DEP staff requested the Applicant conduct a hydrogeologic investigation at the facility and submit a report to supplement their groundwater discharge. As part of the investigations, two rounds of groundwater monitoring were conducted in July and September 2008. A review of the report and groundwater sampling results revealed that none of the parameters detected in groundwater were found to exceed the CT Remediation Standard Regulations.

DEP staff from the Remediation Division, Bureau of Water Protection and Land Reuse (WPLR), worked with Water Permitting and Enforcement Division (WPED) engineers on the review of the hydrogeologic investigations. Based on Remediation staff recommendations, the renewal permit contains semi-annual groundwater monitoring requirements in Section 5(A). Specifically, one up-gradient (RIZ-1) and two down-gradient (WS-2 and RIZ-2) wells were selected for groundwater monitoring. ***Bis(2-ethylhexyl)phthalate*** *shall be sampled semi-annually at the up-gradient well DSN 301-A (RIZ-1). If in the first year after permit issuance, the results are below the surface water protection criteria (59 µg/l), testing for this parameter is no longer required for the groundwater monitoring.*

Section 6(C)(7) requires formaldehyde and Bis(2-ethylhexyl) phthalate monitoring for chronic testing. If in the first three years after permit issuance, the results are below detection limits, testing for these parameters is no longer required for the chronic toxicity test.

Because the lagoons are unlined, DEP staff wanted to examine whether or not groundwater could be diluting the discharge, in violation of federal and state law. After review of the hydrogeologic conditions provided by the Permittee, WPED staff concluded that this potential dilution is insignificant.