COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. VA0029521

Effective Date:	February 8, 2013
Expiration Date:	January 31, 2018

AUTHORIZATION TO DISCHARGE UNDER THE
VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM
AND
THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application and with this permit cover page, and Parts I and II of this permit, as set forth herein.

Owner:	Hanover County Department of Public Utilities
Facility Name:	Doswell Wastewater Treatment Plant
County:	Hanover
Facility Location:	15468 Theme Park Way, Doswell

The owner is authorized to discharge to the following receiving stream:

Stream:	North Anna River
River Basin:	York River
River Subbasin:	N/A
Section:	3
Class:	III
Special Standards:	None

Deputy Regional Director, Piedmont Regional Office

08 FEBRUARY 2013

Date

A. LIMITATIONS AND MONITORING REQUIREMENTS – Outfall 001

1. During the period beginning with the permit's effective date and lasting until the wastewater treatment facility at the Bear Island Paper Company (hereinafter referred to as Bear Island) is expanded to a design average flow of 5.75 MGD or until the permit's expiration date, whichever occurs first, the permittee is authorized to discharge from outfall serial number 001 – combined waste streams from the Doswell and Bear Island wastewater treatment facilities. (The effluent from the Doswell Wastewater Treatment Facility is combined, prior to discharge to the North Anna River, with the effluent from the Bear Island Wastewater Treatment Facility.)

a. Such discharges shall be limited and monitored at Outfall 001 by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
	MONTHLY AVERAGE		WEEKLY AVERAGE		MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
	mg/L	kg/d	mg/L	kg/d				
Flow (cfs) of North Anna River at gage above Little River near Doswell, Virginia	NA		NA		NA	NA	Continuous [1]	Recorded [1]
Flow (cfs) of North Anna River at Route 30 gage near Doswell, Virginia	NA		NA		NA	NA	Continuous [1]	Recorded [1]
Effluent Flow (MGD)	NL		NL		NA	NL	Continuous	TIRE [2]
pH (Standard Units)	NA		NA		6.0	9.0	1 / Day	Grab
BOD_5	NL	NL	See A.1.c.	See A.1.c.	NA	2393 kg/d	3 Days / Week	24 HC
Total Suspended Solids (TSS)	NL	NL	See A.1.d.	See A.1.d.	NA	2393 kg/d	3 Days / Week	24 HC
Dissolved Oxygen (mg/L)	NA		NA		6.5	NL	1 / Day	Grab
Total Kjeldahl Nitrogen	NL	NL	13.0	NL	NA	NA	3 Days / Week	24 HC
Temperature (^oF)	NL		NA	NA	NA	NL	1 / Day	Immersion Stabilization

"NA" means not applicable.
"NL" means no limitation is established. Monitoring and reporting, however, are required.
"24 HC" means 24-hour composite.

[1] See Special Condition I.B.4

[2] Totalizing, Indicating, and Recording Equipment

b. There shall be no discharge of floating solids or visible foam in other than trace amounts.

c. The average of BOD_5 values over a calendar week shall not exceed the more stringent of the following two equations:

(1)

$$C = \frac{\sum_{i=n}^{n} \frac{3.4\, Q_{GAGE}}{Q_E}}{n}$$

Where C = effluent BOD_5 concentration (mg/L) based on the assimilation capacity of the North Anna River
Q_{GAGE} = mean daily stream flow (cfs) at the North Anna River gaging station above the Little River (see Special Condition I.C.4)
Q_E = daily effluent flow (cfs) at Outfall 001 [cfs = MGD x 1.547]
n = number of samples per week

(2)

$$L_W = \frac{\sum_{i=n}^{n} \frac{30\, Q_H + 50\, Q_B}{Q_H + Q_B}}{n}$$

Where L_W = effluent BOD_5 concentration (mg/L) based on minimum treatment requirements.
Q_H = daily flow from the Doswell Wastewater Treatment Plant (Outfall 101)
Q_B = daily flow from the Bear Island Wastewater Treatment Facility (Outfall 201)
n = number of samples per week

(3) The more stringent of (1) or (2) above establishes the effluent BOD_5 limitation except when stream flow at the gaging station above the Little River is less than 45 cfs. At 45 cfs and less, the effluent BOD_5 limitation is the more stringent of (1) with Q_{GAGE} set equal to 45 cfs or (2) above. The permittee shall continue to calculate C based on the actual stream flow at Q_{GAGE} and report those flows and values of C on Attachment A.

Additionally, when stream flow at the gaging station above the Little River is at 45 cfs and less, the total BOD_5 loading shall not exceed 690 pounds per day (312 kg/d) and the total TKN loading shall not exceed 507 pounds per day (229 kg/d).

(4) Notwithstanding the above, the effluent BOD_5 quantity discharged shall not exceed 5,275 pounds per day (2,393 kg/d) at any time.

d. The average of daily TSS values over a calendar week shall not exceed the value established by the following equation:

(1)

$$L_W = \frac{\sum_{i=n}^{n} \frac{30\, Q_H + 50\, Q_B}{Q_H + Q_B}}{n}$$

Where L_W = effluent TSS concentration (mg/L) based on minimum treatment requirements.
Q_H = daily flow from the Doswell Wastewater Treatment Plant (Outfall 101)
Q_B = daily flow from the Bear Island Paper Company Wastewater Treatment Facility (Outfall 201)
n = number of samples per week

(2) Notwithstanding the above, the effluent total suspended solids quantity discharged shall not exceed 5,275 pounds per day (2,393 kg/d) at any time.

e. A calendar week average shall be calculated by determining each monitored day's BOD_5 and Total Suspended Solids (concentrations and quantities) and averaging the individual values for each parameter (i.e., it is not correct to take an average stream flow and an average effluent flow over the 7-day period to determine average concentration or quantity). If any month ends in an incomplete calendar week, the report for that week shall be included in the following monthly reporting period.

f. In the event that stream flow is determined using the Route 30 gaging station, the following control equation shall be used:

(1)

$$C = \frac{\sum_{i=n}^{n} \frac{3.4\,(Q_S - Q_{BIPCO} - 2.6)}{Q_E}}{n}$$

Where C = effluent BOD_5 concentration (mg/L) based on the assimilation capacity of the North Anna River
Q_S = mean daily stream flow (cfs) at the Route 30 gaging station (see Special Condition I.B.4)
Q_{BIPCO} = daily rate (cfs) of withdrawal by Bear Island
Q_E = daily effluent flow (cfs) [cfs = MGD x 1.547]
n = number of samples per week

(2) The more stringent of I.A.1.f.(1) above or I.A.1.c.(2) establishes the effluent BOD_5 limitation except when stream flow at the gaging station on the North Anna River at Route 30 is less than 39 cfs. At 39 cfs and less, the effluent BOD_5 limitation is the more stringent of (1) above with Q_S set equal to 39 cfs or I.A.1.c.(2). The permittee shall continue to calculate C based on the actual stream flow at Q_S and report those flows and values of C on Attachment A.

(3) Additionally, when stream flow at the gaging station above the Little River is at 39 cfs and less, the total BOD_5 loading shall not exceed 690 pounds per day (312 kg/d) and the total TKN loading shall not exceed 507 pounds per day (229 kg/d).

g. In addition to any Total Nitrogen or Total Phosphorus concentration limits (or monitoring requirements without associated limits) listed above, the Doswell Wastewater Treatment Facility and the Bear Island Wastewater Treatment Facility have Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration numbers VAN030051 and VAN030133, respectively, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia. All total phosphorus, total nitrogen, nitrate/nitrite as N, and orthophosphate data collected pursuant to that general permit will be reported in

accordance with the requirements of the general permit and do not have to be reported under this individual permit.

h. The effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

A. LIMITATIONS AND MONITORING REQUIREMENTS – Outfall 101

2. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 101 – effluent from the Doswell Wastewater Treatment Plant

After the expansion of the Bear Island wastewater treatment facility to a design average flow of 5.75 MGD, these limitations shall be applicable at all times that the Doswell effluent is not being treated and reused by Bear Island. The Doswell effluent shall always be discharged with the Bear Island effluent except when Bear Island is not discharging. When Bear Island is not discharging, a direct discharge from Doswell shall be in accordance with the requirements in Parts I.A.2. and I.A.4. of this permit. Where the same parameter is addressed in both Parts I.A.2. and I.A.4., the more stringent of the limitations shall be the applicable limitation.

a. Such discharges shall be limited and monitored at Outfall 101 by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
	MONTHLY AVERAGE		WEEKLY AVERAGE		MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
	mg/L	kg/d	mg/L	kg/d				
Flow (MGD) [1]	NL		NL		NA	NL	Continuous	TIRE
BOD_5	30 [2]	NL	45	NL	NA	NA	1 / Week	24 HC
Total Suspended Solids	30 [2]	NL	45	NL	NA	NA	1 / Week	24 HC
E. coli (n / 100 ml)	126 [3]		NA		NA	NL	3 Days / Week [4]	Grab
Total Kjeldahl Nitrogen	NL	NL	NL	NL	NA	NA	1 / Month	24 HC

[1] The design flow of this treatment facility is 1.0 MGD.

[2] This limitation is expressed in two significant figures.

[3] Geometric mean

[4] Samples shall be collected between 10:00 AM and 4:00 PM.

b. At least 85% removal for BOD_5 and TSS must be attained for the effluent at Outfall 101.

c. In addition to any Total Nitrogen or Total Phosphorus concentration limits (or monitoring requirements without associated limits) listed above, the Doswell Wastewater Treatment Facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN030051, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia. All total phosphorus, total nitrogen, nitrate/nitrite as N, and orthophosphate data collected pursuant to that general permit will be reported in accordance with the requirements of the general permit and do not have to be reported under this individual permit.

A. LIMITATIONS AND MONITORING REQUIREMENTS – Outfall 201

3. During the period beginning with the permit's effective date and lasting until the wastewater treatment facility at Bear Island is expanded to a design average flow of 5.75 MGD or until the permit's expiration date, whichever occurs first, he permittee is authorized to discharge from outfall serial number 201 – effluent from the Bear Island Wastewater Treatment Facility.

a. Such discharges shall be limited and monitored at Outfall 201 by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
	MONTHLY AVERAGE		WEEKLY AVERAGE		MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
	mg/L	kg/d	mg/L	kg/d				
Flow (MGD)	NL		NL		NA	NL	Continuous	TIRE
BOD_5	NL	NL	NL	NL	NA	NA	1 / Week	24 HC
Total Suspended Solids	NL	NL	NL	NL	NA	NA	1 / Week	24 HC
Total Kjeldahl Nitrogen	NL	NL	NL	NL	NA	NA	2 / Month	24 HC

b. In addition to any Total Nitrogen or Total Phosphorus concentration limits (or monitoring requirements without associated limits) listed above, the Doswell Wastewater Treatment Facility and the Bear Island Wastewater Treatment Facility have Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN030133, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia. All total phosphorus, total nitrogen, nitrate/nitrite as N, and orthophosphate data collected pursuant to that general permit will be reported in accordance with the requirements of the general permit and do not have to be reported under this individual permit.

A. LIMITATIONS AND MONITORING REQUIREMENTS – Outfall 001*

4. Upon certification by the staff of the Department of Environmental Quality that the expansion of the wastewater treatment facility at Bear Island to a design average flow of 5.75 MGD is ready to be placed into service and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 001 [1] – combined waste streams from the Doswell and Bear Island wastewater treatment facilities. (The Doswell effluent shall always be discharged with the Bear Island effluent except when Bear Island is not discharging. When Bear Island is not discharging, a direct discharge from Doswell (Outfall 101) shall be in accordance with the requirements in Parts I.A.2. and I.A.4. of this permit. Where the same parameter is addressed in both Parts I.A.2. and I.A.4., the more stringent of the limitations shall be the applicable limitation.)

a. Such discharges shall be limited and monitored at Outfall 001 by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
	MONTHLY AVERAGE		WEEKLY AVERAGE		MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
	mg/L	kg/d	mg/L	kg/d				
Flow of North Anna River at gage above Little River near Doswell Virginia	NA		NA		NA	NA	Continuous [2]	Recorded [2]
Flow (cfs) of North Anna River at Route 30 gage near Doswell Virginia	NA		NA		NA	NA	Continuous [2]	Recorded [2]
Effluent Flow (MGD)	NL		NL		NA	NL	Continuous	TIRE [3]
pH (Standard Units)	NA		NA		6.0	9.0	1 / Day	Grab
$CBOD_5$	NL	NL	30 [4]	See A.4.c.	NA	2393 kg/d	1 / Day	24 HC
Total Suspended Solids	NL	NL	50 [4]	NL	NA	2393 kg/d	1 / Day	24 HC
Dissolved Oxygen (mg/L):								
Cascade Aeration	NA		NA		6.5	NL	1 / Day	Grab
Pure Oxygen Aeration	See Part I.A.4.f						Continuous	Measured
Total Kjeldahl Nitrogen	NL	NL	10.0	NL	NA	NA	1 / Day	24 HC
Temperature (^oF)	NA	NA	NA	NA	NA	90 [4]	1 / Day	Immersion Stabilization

[1] Outfall 001 is either the discharge via the cascade aeration structure or discharge through the submerged diffuser. Discharge from both points shall not simultaneously occur.

[2] Also see Special Condition I.B.4.

[3] Totalizing, Indicating, and Recording Equipment

[4] This limitation is expressed in two significant figures.

b. There shall be no discharge of floating solids or visible foam in other than trace amounts.

c. The average of daily $CBOD_5$ loadings over a calendar week shall not exceed L, as defined by the following equation:

(1)

$$L = \frac{\sum_{i=7}^{7} 18.97\, Q_{GAGE} + 204.77}{7}$$

Where L = effluent $CBOD_5$ in pounds per day [kg/d = pounds per day x 0.4536]
Q_{GAGE} = daily stream flow in cfs at the North Anna River gaging station above the Little River. Q_{GAGE} shall be the mean daily flow recorded at the gage for that day.

(2) The equation in c.(1) above establishes the effluent $CBOD_5$ loading limitation except when stream flow at the gage is less than 45 cfs. At 45 cfs and less, the effluent $CBOD_5$ limitation is the loading established by (1) above with Q_{GAGE} set equal to 45 cfs. The permittee shall continue to calculate L based on the actual stream flow at the gage and report those flows and values of L on Attachment A.

Additionally, when stream flow at the gaging station above the Little River is at 45 cfs and less, the total $CBOD_5$ loading shall not exceed 690 pounds per day (312 kg/d) and the total TKN loading shall not exceed 507 pounds per day (229 kg/d).

(3) Notwithstanding the above, the effluent $CBOD_5$ quantity shall not exceed 5,275 pounds per day (2,393 kg/d) at any time.

d. The effluent total suspended solids quantity shall not exceed 5,275 pounds per day (2,393 kg/d) at any time.

e. A calendar week average shall be calculated by determining each day's $CBOD_5$ and Total Suspended Solids and averaging the seven-individual values for each parameter (i.e., it is not correct to take an average stream flow and an average effluent flow over the 7-day period to determine average quantity). If any month ends in an incomplete calendar week, the report for that week shall be included in the following monthly reporting period.

f. The following conditions define the dissolved oxygen (D.O.) requirements for Outfall 001 in regard to use of the pure oxygen aeration system:

Season	Effluent D.O. (mg/L)	Minimum River Flow (cfs) at Gage to Switch to Cascade Aeration	
		Outfall 001 ≤ 6.34 MGD	Outfall 001 > 6.34 MGD
April through September	29	111	235
October through March	16	100	235

g. In addition to any Total Nitrogen or Total Phosphorus concentration limits (or monitoring requirements without associated limits) listed above, the Doswell Wastewater Treatment Facility and the Bear Island Wastewater Treatment Facility have Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration numbers VAN030051 and VAN030133, respectively, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia. All total phosphorus, total nitrogen, nitrate/nitrite as N, and orthophosphate data collected pursuant to that general permit will be reported in accordance with the requirements of the general permit and do not have to be reported under this individual permit.

h. In the event that stream flow is determined using the Route 30 gaging station, the following control equation shall be used:

The average of daily $CBOD_5$ loadings over a calendar week shall not exceed L, as defined by the following equation:

(1)

$$L = \frac{\sum_{i=1}^{7} 18.97\,(Q_S - Q_{BIPCO} - 2.6) + 204.77}{7}$$

Where L = effluent $CBOD_5$ in pounds per day [kg/d = pounds per day x 0.4536]
Q_S = mean daily stream flow (cfs) at the Route 30 gaging station (see Special Condition I.B.4)
Q_{BIPCO} = daily rate (cfs) of withdrawal by Bear Island

(2) The equation in h.(1) above establishes the effluent $CBOD_5$ loading limitation except when stream flow at the gage is less than 39 cfs. At 39 cfs and less, the effluent $CBOD_5$ limitation is the loading established by (1) above with Q_s set equal to 39 cfs. The permittee shall continue to calculate L based on the actual stream flow at the gage and report those flows and values of L on Attachment A.

Additionally, when stream flow at the gaging station above the Little River is at 39 cfs and less, the total $CBOD_5$ loading shall not exceed 690 pounds per day (312 kg/d) and the total TKN loading shall not exceed 507 pounds per day (229 kg/d).

i. The effluent shall not cause an increase in temperature of the receiving stream of more than 3^oC above the natural water temperature. Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

B. Other Requirements or Special Conditions

1. Whole Effluent Toxicity (WET) Monitoring Program

a. Biological Monitoring:

(1) In accordance with the schedule in Part I.B.1.b below, the permittee shall annually conduct acute and chronic toxicity tests for the duration of the permit. The permittee shall collect 24-hour flow-proportioned composite samples of final effluent from Outfall 001.

The acute tests to use are:

48 Hour Static Acute test using *Ceriodaphnia dubia*
48 Hour Static Acute test using *Pimephales promelas*

These acute tests shall be conducted using 5 geometric dilutions of effluent with a minimum of 4 replicates, with 5 organisms in each. The No Observed Adverse Effect Concentration (NOAEC), as determined by hypothesis testing, shall be reported. The LC_{50} shall also be determined and noted on the report. Tests in which control survival is less than 90% are not acceptable.

The chronic tests to use are:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia*
Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be determined (i.e., a “less than” NOEC value) are not acceptable, and a retest shall be performed. The LC_{50} at 48 hours and the IC_{25} shall also be included with the NOECs in the test report.

(2) The test dilutions should be able to determine compliance with the following endpoints:

(a) Acute tests **NOAEC = 100**%.

(b) Chronic **NOEC $\geq$ 14%**, equivalent to a **$TU_c \leq 7.14$,** prior to the mill expansion at Bear Island; and chronic **NOEC $\geq$ 15%**, equivalent to a **$TU_c \leq 6.66$,** after the mill expansion.

The test data will be evaluated for reasonable potential at the conclusion of the permit term, or sooner if toxicity has been noted. Should evaluation of the data indicate that a limitation is needed, a WET limitation and compliance schedule will be required and the toxicity tests in Part I.B.1.a may be discontinued.

The permittee may provide additional samples to address data variability; these data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

b. Reporting Schedule:

The permittee shall report the results and supply 2 copies of the toxicity test reports specified in this WET Monitoring Program in accordance with the following schedule:

Monitoring Period	Report Due Date
February 8, 2013 to December 31, 2013	January 10, 2014
January 1, 2014 to December 31, 2014	January 10, 2015
January 1, 2015 to December 31, 2015	January 10, 2016
January 1, 2016 to December 31, 2016	January 10, 2017
January 1, 2017 to December 31, 2017	January 10, 2018

2. The permittee shall notify the Department as soon as they know or have reason to believe:

   a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:

      (1) One hundred micrograms per liter (100 µg/L);
      (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.
      (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
      (4) The level established by the Board

   b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:

      (1) Five hundred micrograms per liter (500 µg/L);
      (2) One milligram per liter (1 mg/L) for antimony;
      (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
      (4) The level established by the Board.

3. Hanover County shall not permit Bear Island to discharge wastewater through its outfall pursuant to Part I, Paragraphs A.1., A.3., and A.4. of this permit unless Hanover County and Bear Island continue to have in effect a binding contract, approved by the DEQ staff, providing for the enforcement by Hanover County against Bear Island of all requirements contained in the permit for its duration, and any reissuance thereof, including any testing or monitoring requirements made necessary by this permit, and including termination of all or part of the Bear Island discharge at any time Hanover County determines that the Bear Island discharge is causing or threatening to cause any violation of the permit.

4. The Virginia Department of Environmental Quality maintains two river gaging stations on the North Anna River near Doswell, Virginia – one is located above the Little River (USGS gage number 01671025) and one is located at the Route 30 bridge (USGS gage number 01671020). River flow as determined at those gaging stations shall be used to determine effluent limitations in accordance with equations I.A.1.c.(1), I.A.1.f.(1), I.A.4.c.(1), and I.A.4.h.(1) in this permit. The gaging station at Route 30 shall only be used if the gaging station above the Little River is not functional and only until the gaging station above the Little River is returned to service. Monitoring and reporting of the flow at the Route 30 gage is required only when flow at the Route 30 gage is used to determine effluent limitations.

   If stream flows are not being continuously recorded by the USGS, stream flow shall be determined by the permittee in accordance with the following schedule:

Stream Flow Range	Number of Measurements
Above 300 cfs	1 per day
130 to 300 cfs	1 per twelve hours
Below 130 cfs	1 per four hours

   When more than one flow measurement is made per day, the value for that day for use in equations I.A.1.c.(1), I.A.1.f.(1), I.A.4.c.(1), and I.A.4.h.(1) in this permit shall be the mean daily flow.

   When stream flow exceeds the measurement capacity of the gaging station above the Little River (approximately 1850 cfs), calculations may be based on 1850 cfs or the measured flow at the Route 30 gaging station.

   Mean daily stream flows shall be reported on Attachment A.

5. The permittee shall monitor dissolved oxygen and temperature no less frequently than once per week at stations A through J as shown on the attached map. These stations are located on the North Anna River and

Pamunkey River between the Route 30 bridge and the Route 301 bridge. The values obtained shall be recorded on Attachment B, which shall be submitted monthly with Attachment A.

The monitoring run shall not be required if ice conditions on the river prevent making the run or if the flow of the river is equal to or greater than 750 cfs as measured at the gaging station above the Little River (USGS gage number 01671025) or at the Route 30 gaging station (01671020). Also, the monitoring run shall not be required if the flow at the gaging station above the Little River (USGS gage number 01671025) is less than 30 cfs.

Additionally, until the Bear Island wastewater treatment facility is expanded to a design average flow of 5.75 MGD, the monitoring run shall not be required when the river temperature is less than or equal to $10^{o}C$ and the ratio of effluent BOD_5 (pounds per day) divided by the sum of river flow (daily mean flow in cfs at the gaging station above the Little River or the Route 30 gaging station) is less than or equal to 2.0. After the Bear Island expansion, this waiver shall no longer be applicable unless the permittee demonstrates to the DEQ staff that this waiver is still valid.

This monitoring program may be revised by approval of the Piedmont Regional Office, DEQ. Such action must be initiated by request from the permittee to include documentation that the program will continue to provide adequate data with which to evaluate stream impacts if the requested revisions are approved.

The permit may be modified, or alternatively revoked and reissued, to address any dissolved oxygen problem attributable to the Doswell Wastewater Treatment Facility discharge that is identified by the dissolved oxygen monitoring in the receiving streams.

6. Pretreatment

a. Within 180 days of the effective date of this permit, the permittee shall submit to the DEQ Regional Office a survey of all Industrial Users discharging to the POTW. The information shall be submitted on the DEQ Discharger Survey Form, or an equivalent form that includes the quantity and quality of the wastewater. Survey results shall include the identification of significant industrial users of the POTW.

b. If Categorical Industrial User(s) are identified, or if the permittee or DEQ determines that the industrial user(s) have potential to adversely affect the operation of the POTW or cause violation(s) of federal, state or local standards or requirements, the permittee shall develop and submit to the DEQ Regional Office, within one year of written notification by DEQ, a pretreatment program for approval. The program shall enable the permittee to control by permit the Significant Industrial Users* discharging wastewater to the treatment works.

c. Should evaluation by the DEQ of results of the Industrial User survey conducted in accordance with (a) above indicate that the permittee is not required to implement a pretreatment program, the requirements for program development described in (d) below may be suspended by the DEQ.

d. The approvable pretreatment program submission shall at a minimum contain the following parts:

(1) Legal authority,
(2) Program procedures,
(3) Funding and resources,
(4) Local limits evaluation, and local limits if needed,
(5) Enforcement response plan, and
(6) List of Significant Industrial Users.

e. Where the permittee is required to develop a pretreatment program, they shall submit to the DEQ Regional Office an annual report that describes the permittee's program activities over the previous year. The annual report shall be submitted no later than January 31 of each year and shall include:

(1) An updated list of the Significant Industrial Users* showing the categorical standards and local limits applicable to each.
(2) A summary of the compliance status of each Significant Industrial User with pretreatment standards and permit requirements.
(3) A summary of the number and types of Significant Industrial User sampling and inspections

performed by the POTW.

(4) All information concerning any interference, upset, VPDES permit or Water Quality Standards violations directly attributable to Significant Industrial Users and enforcement actions taken to alleviate said events.

(5) A description of all enforcement actions taken against Significant Industrial Users over the previous 12 months.

(6) A summary of any changes to the submitted pretreatment program that have not been previously reported to the DEQ Regional Office.

(7) A summary of the permits issued to Significant Industrial Users since the last annual report.

(8) POTW and self-monitoring results for Significant Industrial Users determined to be in significant non-compliance during the reporting period.

(9) Results of the POTW's influent/effluent/sludge sampling, not previously submitted to DEQ.

(10) Copies of newspaper publications of all Significant Industrial Users in significant non-compliance during the reporting period.

(11) Signature of an authorized representative.

f. The DEQ may require the POTW to institute changes to the legal authority regarding Significant Industrial User* permit(s):

(1) If the legal authority does not meet the requirements of the Clean Water Act, Water Control Law or State regulations;

(2) If problems such as interferences, pass-through, violations of water quality standards or sludge contamination develop or continue; and

(3) If federal, state or local requirements change.

*A Significant Industrial User is one that:

1. Has a process wastewater** flow of 25,000 gallons or more per average workday;
2. Contributes a process wastestream which makes up 5-percent or more of the average dry weather hydraulic or organic capacity of the POTW;
3. Is subject to the categorical pretreatment standards; or
4. Has significant impact, either singularly or in combination with other Significant Dischargers, on the treatment works or the quality of its effluent.

**Excludes sanitary, non-contact cooling water and boiler blowdown.

7. The permit may be modified, or alternatively revoked and reissued, to address any change in design discharge volume.

8. Within 120 days of completion of the expanded wastewater treatment facilities at Bear Island, the permittee shall submit a study proposal for approval by the DEQ staff to characterize the degradability of the Total Kjeldahl Nitrogen (TKN) in the discharge. (A procedure for determining the degradability of the TKN was approved by the staff of the State Water Control Board by letter dated May 29, 1987.) The study proposal shall include a schedule of implementation. The approved study and schedule shall become an enforceable part of this permit.

   The permit may be modified, or alternatively revoked and reissued, to address any deviation between the results of this testing and data previously presented on TKN degradability.

9. Once per year following any major changes in the Bear Island mill, a quantitative macroinvertebrate survey (using artificial substrates) shall be conducted on the North Anna and Pamunkey Rivers during September or October. The purpose of these surveys shall be to evaluate the impact of the Doswell discharge on aquatic populations in the receiving streams and to specifically determine any impacts from the oxygenation of the wastewater. The survey shall include a minimum of six sampling stations: One control station upstream of the discharge, two stations between the discharge and the oxygen sag point, one station in the vicinity of the sag point, and two stations downstream of the oxygen sag point. Sampling locations and survey methods, to include data analysis, shall be approved by the staff of the Department of Environmental Quality prior to initiation of the study.

10. Dioxin and Dibenzofuran

    a. The Department of Environmental Quality may modify, or alternatively revoke and reissue, this permit to incorporate measures for the control of dioxin and dibenzofuran if deemed necessary.

    b. The Department of Environmental Quality reserves the right to require a monitoring program for dioxin and/or dibenzofuran. The permittee shall submit an approvable monitoring program within 60 days after being notified of the need for such a program for review and approval by the staff.

    c. The permittee shall notify the Department of Environmental Quality of any process change, prior to implementation, by Bear Island that would result in the use of more than 10% chlorine bleached Kraft pulp in their process.

11. Plans and specifications for the filter to treat the Doswell Wastewater Treatment Plant effluent prior to use by Bear Island shall be submitted to the Department of Environmental Quality for review and approval at least 120 days prior to beginning construction of the filter. Construction shall not begin until the plans and specifications have been approved.

12. Plans and specifications for the 60 million gallon effluent holding pond shall be submitted to the Department of Environmental Quality for review and approval at least 120 days prior to beginning construction. Construction shall not begin until the plans and specifications have been approved.

13. Within six months after initiation of wastewater discharge from the expanded Bear Island mill, the permittee shall complete and submit items V and VI of EPA Application Form 2C for Outfall 001. Based on that information, this permit may be modified, or alternatively revoked and reissued, in order to incorporate additional or different permit conditions.

14. The permittee and Bear Island shall each employ or contract at least one Class II licensed wastewater works operator for their respective treatment facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply, with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance. Following expansion, Bear Island shall employ or contract at least one Class I licensed wastewater works operator.

15. A written notice and plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the Piedmont Regional Office when the monthly average influent flow to the Doswell Wastewater Treatment Plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the Piedmont Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.

16. The Doswell Wastewater Treatment Plant shall meet Reliability Class I.

17. The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9 VAC 25-790), obtain a Certificate to Construct (CTC), and a Certificate to Operate (CTO) from the DEQ prior to constructing wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit. Upon issuance of a CTC, DEQ staff shall initiate modification, or alternatively, revocation and reissuance, of this permit, to include annual concentration limits based on the nutrient removal technology listed in the CTC. Upon issuance of a CTO, any nutrient removal facilities installed shall be operated to achieve design effluent Total Nitrogen and Total Phosphorus concentrations.

18. A Concept Engineering Report (CER) shall be submitted for DEQ approval prior to installation of any nutrient removal wastewater treatment technology at Bear Island. Upon approval of a CER for the installation of nutrient removal technology, DEQ staff shall initiate modification, or alternatively, revocation and reissuance, of this permit, to include annual concentration limits based on the nutrient removal technology proposed in the

CER. The permittee shall inform the DEQ regional office with 14 days of completion of construction of any project for which a CER has been approved. Upon completion of construction in accordance with a CER that has been approved by the DEQ regional office, any nutrient removal facilities installed shall be operated to achieve design effluent Total Nitrogen and Total Phosphorus concentrations.

19. The permittee shall conduct all sewage sludge use or disposal activities in accordance with the Sludge Management Plan (SMP) approved with the issuance of this permit. Any proposed changes in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ approval 90 days prior to the effective date of the changes. Upon approval, the revised SMP becomes an enforceable part of the permit. The permit may be modified, or alternatively revoked and reissued, to incorporate limitations or conditions necessitated by substantive changes in sewage sludge use of disposal practices.

20. The Board may promptly modify, or revoke and reissue, this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

21. Compliance Reporting

a. The quantification levels (QLs) shall be less than or equal to the following concentrations:

Effluent Parameter	Quantification Level
BOD_5	5 mg/L
$CBOD_5$	5 mg/L
TSS	1.0 mg/L
TKN	0.5 mg/L

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance / quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II.A of this permit.

b. Reporting

Monthly Average – Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in a. above shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities.

Weekly Average – Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in a. above shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week. If any month ends in an incomplete calendar week, the report for that week shall be included in the following monthly reporting period. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the weekly average shall be reported as "<QL". If reporting

for quantity is required on the DMR and the reported weekly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the maximum weekly average of the calculated daily quantities.

Daily Maximum – Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in a. above shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the maximum value of the daily averages shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported daily maximum concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported daily average concentrations (including the defined zeros) and corresponding daily flows to determine daily average quantities and report the maximum of the daily average quantities during the reporting month.

c. Any single datum required shall be reported as "<QL" if it is less than the QL used for the analysis (QL must be less than or equal to the QL listed in section a. above). Otherwise the numerical value shall be reported.

d. **Significant Digits --** The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

22. The permittee shall provide adequate notice to the Department of the following:

a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and

b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.

Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

23. The permit may be modified, or alternatively revoked and reissued, to revise the WET endpoints upon submittal of additional information and appropriate application.

24. If the facility as permitted herein is issued a Notice of Violation for any of the parameters listed below, then the following effluent monitoring frequencies shall become effective upon written notice from DEQ, and remain in effect until the permit's expiration date:

BOD_5:

Outfall 001	One per day
Outfall 101	One per day
Outfall 201	One per day

Total Suspended Solids

Outfall 001	One per day
Outfall 201	Three per week

Total Kjeldahl Nitrogen:

Outfall 001	One per day
Outfall 101	One per week
Outfall 201	One per week

No other effluent limitations or monitoring requirements are affected by this special condition.

25. The permittee shall review the existing Operations and Maintenance (O & M) Manuals for the Doswell WWTP and the Bear Island wastewater treatment plant and notify the DEQ Regional Office, in writing, within 90 days of the effective date of this permit whether the O&M Manuals are still accurate and complete. If the O & M Manuals are no longer accurate and complete, revised O & M Manuals shall be submitted for approval to the DEQ Regional Office within 90 days of the effective date of this permit. The permittee will maintain accurate, approved operation and maintenance manuals for the treatment works. The manuals shall detail the practices and procedures which will be followed to ensure compliance with the requirements of the permit. The permittee shall operate the treatment works in accordance with the approved O&M Manuals. The manuals shall include, but not necessarily be limited to, the following items, as appropriate:

    a. Techniques to be employed in the collection, preservation, and analysis of effluent samples;

    b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;

    c. Discussion of Best Management Practices, if applicable;

    d. Treatment works design, treatment works operation, routine preventive maintenance of units within the treatment works, critical spare parts inventory, and record keeping;

    e. Procedures for handling, storing, and disposing of all waste, fluids, and pollutants characterized in Part I.B.26 that will prevent these materials from reaching state waters;

    f. A plan for the management and/or disposal of waste solids and residues.

    Any changes in the practices and procedures followed by the permittee shall be documented and submitted for DEQ regional staff approval within 90 days of the effective date of the changes. Upon approval of the submitted manual changes, the revised manual becomes an enforceable part of the permit. Noncompliance with the O & M Manual shall be deemed a violation of the permit.

26. Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices, so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

27. This permit may be modified or, alternatively revoked and reissued:

    a. If any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements;`

    b. To incorporate technology-based effluent concentration limitations for nutrients in conjunction with the installation of nutrient control technology, whether by new construction, expansion or upgrade; or

    c. To incorporate alternative nutrient limitations and/or monitoring requirements, should:

        (1) the State Water Control Board adopt new nutrient standards for the water body receiving the discharge, including the Chesapeake Bay or its tributaries, or

        (2) a future water quality regulation or statute require new or alternative nutrient control.

28. This permit may be modified, or alternatively revoked and reissued, if any applicable standards or requirements for water reclamation and reuse promulgated under the Water Reclamation and Reuse Regulation (9VAC25-

740) are more stringent than or are in addition to any standards or requirements for water reclamation and reuse contained in this permit.

29. If Hanover County or Bear Island plans an expansion or upgrade to replace existing treatment works, or if facilities are permanently closed, the permittee shall submit to the DEQ Regional Office a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal, and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping, and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation.

30. The facility's water quality stream sanitation model is to be updated during the term of this permit. The updated model shall utilize either the most current DEQ Regional Water Quality Model for Free Flowing Streams, or a calibrated and verified water quality model approved for use in advance by DEQ. The model shall evaluate conventional pollutant effluent limitations necessary to maintain applicable ambient Virginia dissolved oxygen water quality criteria under permit design conditions and in accordance with current DEQ anti-degradation guidance. The selected model shall establish no more than two tiers of effluent limitations corresponding to: a) current annual 7Q10 low flows (required); and b) current seasonal low flows during the wet season (optional).

    The upstream and downstream study area boundaries shall be established to incorporate the receiving water segments to, and discharges of the Hanover Courthouse WWTP (VA0062154), Ashland WWTP (VA0024899), and all VPDES permitted facilities authorized to discharge conventional pollutants to the watershed whose dissolved oxygen affect profiles overlap into, or are affected by, the Doswell WWTP dissolved oxygen profile. Dissolved oxygen affect profiles shall be evaluated to the point of full recovery under permitted design conditions. Model results are to evaluate wastewaters generated by the Bear Island Paper Company and the Doswell WWTP as: a) two separate, independent wastewater discharges; and b) a single combined wastewater discharge.

    Unless a later submittal date is approved in advance by DEQ in writing, no later than two (2) years from the effective date of this permit, the permittee may submit to the DEQ Piedmont Regional Office an approvable final modeling report for DEQ consideration in drafting the next permit reissuance. A final report submittal shall include final model calibration and verification results substantiating the validity of the selected model.

C. Water Quality Criteria Monitoring (following Expansion of the Bear Island mill)

The permittee shall monitor the effluent at Outfall 001 for the following chemicals according to the indicated analysis number, quantification level, and sample type within six months after the effluent limitations in Part I.A.4 of this permit become effective. The results shall be submitted with the Discharge Monitoring Report for the month in which the samples were collected. Monitoring and analysis shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. The Department will use this data for making specific permit decisions in the future. This permit may be modified or revoked and reissued to incorporate limitations for any of the following chemicals.

CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL(1)	SAMPLE TYPE(2)
METALS			
Antimony, dissolved	(3)	27000	G or C
Arsenic, dissolved	(3)	320	G or C
Cadmium, dissolved	(3)	4.3	G or C
Chromium III, dissolved (8)	(3)	280	G or C
Chromium VI, dissolved (8)	(3)	15	G or C
Copper, dissolved	(3)	30	G or C
Lead, dissolved	(3)	55	G or C
Mercury, dissolved	(3)	1.0	G or C
Nickel, dissolved	(3)	77	G or C
Selenium, **total recoverable**	(3)	17	G or C
Silver, dissolved	(3)	16	G or C
Thallium, dissolved	(4)	(5)	G or C
Zinc, dissolved	(3)	240	G or C
PESTICIDES / PCBs			
Aldrin	608	0.05	G or C
Chlordane	608	0.2	G or C
Chlorpyrifos (Dursban)	622	(5)	G or C
DDD	608	0.1	G or C
DDE	608	0.1	G or C
DDT	608	0.1	G or C
Demeton	(4)	(5)	G or C
Diazinon	(5)	(5)	
Dieldrin	608	0.1	G or C
Alpha-Endosulfan	608	0.1	G or C
Beta-Endosulfan	608	0.1	G or C
Endosulfan Sulfate	608	0.1	G or C
Endrin	608	0.1	G or C
Endrin Aldehyde	(4)	(5)	G or C
Guthion	622	(5)	G or C
Heptachlor	608	0.05	G or C

CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL(1)	SAMPLE TYPE(2)
Heptachlor Epoxide	(4)	(5)	G or C
Hexachlorocyclohexane Alpha-BHC	608	(5)	G or C
Hexachlorocyclohexane Beta-BHC	608	(5)	G or C
Hexachlorocyclohexane Gamma-BHC (Lindane)	608	(5)	G or C
Kepone	(9)	(5)	G or C
Malathion	(4)	(5)	G or C
Methoxychlor	(4)	(5)	G or C
Mirex	(4)	(5)	G or C
Parathion	(4)	(5)	G or C
PCB Total	608	7.0	G or C
Toxaphene	608	5.0	G or C
BASE NEUTRALS			
Acenaphthene	625	10.0	G or C
Anthracene	625	10.0	G or C
Benzidine	(4)	(5)	G or C
Benzo (a) anthracene	625	10.0	G or C
Benzo (b) fluoranthene	625	10.0	G or C
Benzo (k) fluoranthene	625	10.0	G or C
Benzo (a) pyrene	625	10.0	G or C
Bis 2-Chloroethyl Ether	(4)	(5)	G or C
Bis 2-Chloroisopropyl Ether	(4)	(5)	G or C
Butyl benzyl phthalate	625	10.0	G or C
2-Chloronaphthalene	(4)	(5)	G or C
Chrysene	625	10.0	G or C
Dibenz (a,h) anthracene	625	20.0	G or C
Dibutyl phthalate (Di-n-Butyl Phthalate)	625	10.0	G or C
1,2-Dichlorobenzene	624	10.0	G or C
1,3-Dichlorobenzene	624	10.0	G or C
1,4-Dichlorobenzene	624	10.0	G or C
3,3-Dichlorobenzidine	(4)	(5)	G or C
Diethyl phthalate	625	10.0	G or C
Di-2-Ethylhexyl Phthalate	625	10.0	G or C
Dimethyl phthalate	(4)	(5)	G or C
2,4-Dinitrotoluene	625	10.0	G or C
1,2-Diphenylhydrazine	(4)	(5)	G or C
Fluoranthene	625	10.0	G or C
Fluorene	625	10.0	G or C
Hexachlorobenzene	(4)	(5)	G or C
Hexachlorobutadiene	(4)	(5)	G or C

CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	SAMPLE TYPE[2]
Hexachlorocyclopentadiene	(4)	(5)	G or C
Hexachloroethane	(4)	(5)	G or C
Indeno (1,2,3-cd) pyrene	625	20.0	G or C
Isophorone	625	10.0	G or C
Nitrobenzene	625	10.0	G or C
N-Nitrosodimethylamine	(4)	(5)	G or C
N-Nitrosodi-n-propylamine	(4)	(5)	G or C
N-Nitrosodiphenylamine	(4)	(5)	G or C
Pyrene	625	10.0	G or C
1,2,4-Trichlorobenzene	625	10.0	G or C
VOLATILES			
Acrolein	(4)	(5)	G
Acrylonitrile	(4)	(5)	G
Benzene	624	10.0	G
Bromoform	624	10.0	G
Carbon Tetrachloride	624	10.0	G
Chlorobenzene (monochlorobenzene)	624	50.0	G
Chlorodibromomethane	624	10.0	G
Chloroform	624	10.0	G
Dichloromethane (methylene chloride)	624	20.0	G
Dichlorobromomethane	624	10.0	G
1,2-Dichloroethane	624	10.0	G
1,1-Dichloroethylene	624	10.0	G
1,2-trans-dichloroethylene	(4)	(5)	G
1,2-Dichloropropane	(4)	(5)	G
1,3-Dichloropropene	(4)	(5)	G
Ethylbenzene	624	10.0	G
Methyl Bromide	(4)	(5)	G
1,1,2,2-Tetrachloroethane	(4)	(5)	G
Tetrachloroethylene	624	10.0	G
Toluene	624	10.0	G
1,1,2-Trichloroethane	(4)	(5)	G
Trichloroethylene	624	10.0	G
Vinyl Chloride (chloroethylene)	624	10.0	G
ACIDS [6]			
2-Chlorophenol	625	10.0	G or C
2,4 Dichlorophenol	625	10.0	G or C
2,4 Dimethylphenol	625	10.0	G or C

CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL(1)	SAMPLE TYPE(2)
2,4-Dinitrophenol	(4)	(5)	G or C
2-Methyl-4,6-Dinitrophenol	(4)	(5)	G or C
Nonylphenol	(5)	(5)	G or C
Pentachlorophenol	625	50.0	G or C
Phenol	625	10.0	G or C
2,4,6-Trichlorophenol	625	10.0	G or C
MISCELLANEOUS			
Ammonia as NH3-N	350.1	200	C
Chlorides	(4)	(5)	C
Chlorine, Total Residual	(4)	100	G
Cyanide, Free	(4)	10.0	G
Dioxin (2,3,7,8-tetrachlorobenzo-p-dioxin) (ppq)	1613	0.00001	G or C
E. coli (N/CML)	(4)	(5)	G
Hardness (mg/L as $CaCO_3$)	(4)	(5)	C
Hydrogen Sulfide	(4)	(5)	G or C
Tributyltin (7)	NBSR 85-3295	(5)	G or C

(1) Quantification level (QL) is defined as the lowest concentration used for the calibration of a measurement system when the calibration is in accordance with the procedures published for the required method.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information shall be submitted to document that the required quantification level has been attained.

(2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

C = Composite = A 24-hour composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period.

(3) A specific analytical method is not specified; however a target value for each metal has been established. An appropriate method to meet the target value shall be selected from the following list of EPA methods (or any approved method presented in 40 CFR Part 136). If the test result is less than the method QL, a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].

Metal	Analytical Method
Antimony	1638; 1639
Arsenic	1632
Chromium(9)	1639
Cadmium	1637; 1638; 1639; 1640
Chromium VI	1639
Copper	1638; 1640
Lead	1637; 1638; 1640
Mercury	1631
Nickel	1638; 1639; 1640
Selenium	1638; 1639
Silver	1638
Zinc	1638; 1639

(4) Any approved method presented in 40 CFR Part 136.

(5) The QL is at the discretion of the permittee. For any substances addressed in 40 CFR Part 136, the permittee shall use one of the approved methods in 40 CFR Part 136.

(6) Testing for phenols requires continuous extraction.

(7) Analytical Methods: NBSR 85-3295 or DEQ's approved analysis for Tributyltin may also be used [See “A Manual for the Analysis of Butyltins in Environmental Systems” by the Virginia Institute of Marine Science, dated November 1996].

(8) Both Chromium III and Chromium VI may be measured by the total chromium analysis. If the result of the total chromium analysis is less than or equal to the lesser of the Chromium III or Chromium VI method QL, the results for both Chromium III and Chromium VI can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

(9) The lab may use SW846 Method 8270D provided the lab has an Initial Demonstration of Capability, has passed a PT for Kepone, and meets the acceptance criteria for Kepone as given in Method 8270D

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NAME Hanover County Doswell WWTP
ADDRESS PO Box 470
Hanover VA 23069

FACILITY LOCATION

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

VA0029521	001
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD						
	YEAR	MO	DAY		YEAR	MO	DAY
FROM				TO			

Municipal Major 02/08/2013

DEPT. OF ENVIRONMENTAL QUALITY
(REGIONAL OFFICE)

Piedmont Regional Office
4949-A Cox Road

Glen Allen VA 23060

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
068 TKN (N-KJEL)	REPORTD				*********						
	REQRMNT	NL	NL	KG/D	*********	NL	13.0	MG/L		3D/W	24HC
078 TEMPERATURE, WATER (DEG. F)	REPORTD	*********	*********		*********						
	REQRMNT	*********	*********		*********	NL	NL	F		1/DAY	IS
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)

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.

OPERATOR IN RESPONSIBLE CHARGE			DATE		
TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE			
TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NAME Hanover County Doswell WWTP
ADDRESS PO Box 470
Hanover VA 23069

FACILITY LOCATION

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

VA0029521	101
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD						
	YEAR	MO	DAY		YEAR	MO	DAY
FROM				TO			

Municipal Major 02/08/2013

DEPT. OF ENVIRONMENTAL QUALITY
(REGIONAL OFFICE)

Piedmont Regional Office
4949-A Cox Road

Glen Allen VA 23060

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
003 BOD5	REPORTD				*********						
	REQRMNT	NL	NL	KG/D	*********	30.0	45.0	MG/L		1/W	24HC
004 TSS	REPORTD				*********						
	REQRMNT	NL	NL	KG/D	*********	30.0	45.0	MG/L		1/W	24HC
068 TKN (N-KJEL)	REPORTD				*********						
	REQRMNT	NL	NL	KG/D	*********	NL	NL	MG/L		1/M	24HC
120 E.COLI	REPORTD				*********		*********				
	REQRMNT	********	********		*********	126	*********	N/CML		3D/W	GRAB
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)

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OPERATOR IN RESPONSIBLE CHARGE			DATE		
TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE			
TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

Municipal Major 02/08/2013

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NAME Hanover County Doswell WWTP
ADDRESS PO Box 470
Hanover VA 23069

FACILITY LOCATION

VA0029521	201
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD						
	YEAR	MO	DAY		YEAR	MO	DAY
FROM				TO			

DEPT. OF ENVIRONMENTAL QUALITY
(REGIONAL OFFICE)

Piedmont Regional Office
4949-A Cox Road

Glen Allen VA 23060

NOTE: **READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.**

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
068 TKN (N-KJEL)	REPORTD				*********						
	REQRMNT	NL	NL	KG/D	*********	NL	NL	MG/L		2/M	24HC
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
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	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)

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OPERATOR IN RESPONSIBLE CHARGE			DATE		
TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE			
TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY

This report is required by your VPDES permit and by law. (See, e.g., the Code of Virginia of 1950 §62.1-44.5 and 9 VAC 25-31-50.) Failure to report or failure to report truthfully can result in civil penalties of $32,500 per violation, per day and felony prosecutions which can carry a 15 year term.

DISCHARGE MONITORING REPORT (DMR) - GENERAL INSTRUCTIONS

1. Complete this form in permanent ink or indelible pencil. The use of 'correction fluid/tape' is not allowed.
2. Be sure to enter the dates for the first and last day of the period covered by the report on the form in the space marked "Monitoring Period".
3. For those parameters where the "permit requirement" spaces have a requirement or limitation, provide data in the "reported" spaces in accordance with your permit.
4. Enter the average and maximum quantities and units in the "reported" spaces in the columns marked "Quantity or Loading".
   KG/DAY = Concentration (mg/L) x Flow (MGD) x 3.785 G/D (Grams/Day) = Concentration (mg/L) x Flow (MGD) x 3785
5. Enter maximum, minimum, and/or average concentrations and units in the "reported" spaces in the columns marked "Quality or Concentration".
6. For all parameters enter the number of samples which do not comply with the maximum and/or minimum permit requirements in the "reported" space in the column marked "No. Ex." (Number of Exceedances). If none, enter "0". Do NOT include monthly average violations in this field. Include any Maximum 7-Day Average and Maximum Weekly Average violations in this field. Permittees with continuous pH, or temperature monitoring requirements should consult the permit for what constitutes an exceedance and report accordingly.
7. You are required to sample (at a minimum) according to the Sample Frequencies and Sample Types specified in your permit.
8. Enter the actual frequency of analysis for each parameter (number of times per day, week, month, etc.) in the "reported" space in the column marked "Frequency of Analysis".
9. Enter the actual type of sample (Grab, 8HC, 24HC, etc) collected for each parameter in the "reported" space in the column marked "Sample Type".
10. Enter additional required data or comments in the space marked "additional permit requirements or comments". If additional required data or comments are appended to the DMR, reference appended correspondence in this field.
11. Record the number of bypasses during the month, the total flow in million gallons (MG) and BOD5 in kilograms (KG) in the proper columns in the section marked "Bypasses and Overflows".
12. The operator in responsible charge of the facility should review the form and sign in the space provided. If the plant is required to have a licensed operator or if the operator in responsible charge of the facility is a licensed operator, the operator's signature and certificate number must be reported in the spaces provided.
13. The principal executive officer then reviews the form and must sign in the space provided and provide a telephone number where he/she can be reached. Every page of the DMR must have an original signature.
14. Send the completed form(s) with original signatures to your Department of Environmental Quality Regional Office by the 10th of each month unless otherwise specified in the permit.
15. You are required to retain a copy of the report for your records.
16. Where violations of permit requirements are reported, attach a brief explanation in accordance with the permit requirements describing causes and corrective actions taken. Reference each separate violation by date.
17. If you have any questions, contact the Department of Environmental Quality Regional Office listed on the DMR.

ATTACHMENT A

Doswell Waste Water Treatment Plant PERMIT NO: VA0029521

Operator in responsible charge_____ LICENSE NUMBER :_____

DATE	101 MGD	201 MGD	001 MGD	001 CFS	Withdrawal BIPCO mgd	BIPCO cfs	PLAN mgd	PLAN cfs	STREAM cfs	CAL C permit	CAL LW	CAL C flow
AVERAGE												
AVERAGE												
AVERAGE												
AVERAGE												
AVERAGE												
HIGH												
LOW												
AVERAGE												
TOTALS												
NF: NO FLOW												

ATTACHMENT A

Doswell Waste Water Treatment Plant PERMIT NO: VA0029521

Operator in responsible charge_____ LICENSE NUMBER :_____

DATE	BOD 1O1	BOD 201	BOD 001	OO1 BOD LB/DAY	OO1 BOD KG/DAY	CAL TSS	TSS 101	TSS 201	TSS 001	OO1 TSS LB/DAY	OO1 TSS KG/DAY	001 PH	001 DO	OO1 TEMP °F	101 FECAL N/CML
AVERAGE															
AVERAGE															
AVERAGE															
AVERAGE															
AVERAGE															
HIGH															
LOW															
AVERAGE															
TOTALS														GEOMETRIC MEAN	
NF: NO FLOW				ND: NO DATA											

DOSWELL WASTEWATER TREATMENT PLANT

ATTACHMENT "B" (RIVER MONITORING)

PERMIT # VA0029521

WEEK		A		B		C		D		E		F		G		H		I		J	
DAY	DATE	D.O.	TEMP	D.O.	TEMP	D.O.	TEMP	D.O.	TEMP	D.O.	TEMP	D.O.	TEMP	D.O.	TEMP	D.O.	TEMP	D.O.	TEMP	D.O.	TEMP
SUN																					
MON																					
TUE																					
WED																					
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CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.

2. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.

3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.

B. Records

1. Records of monitoring information shall include:

   a. The date, exact place, and time of sampling or measurements;
   b. The individual(s) who performed the sampling or measurements;
   c. The date(s) and time(s) analyses were performed;
   d. The individual(s) who performed the analyses;
   e. The analytical techniques or methods used; and
   f. The results of such analyses.

2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

   Piedmont Regional Office
   4949-A Cox Road
   Glen Allen, Virginia 23060-6296

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved, or specified by the Department.

3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under Title 40 of the Code of Federal Regulations Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Department.

4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans,

specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or

2. Otherwise alter the physical, chemical, or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II.F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate, and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed.

The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:

   a. Any unanticipated bypass; and
   b. Any upset which causes a discharge to surface waters.

2. A written report shall be submitted within 5 days and shall contain:

   a. A description of the noncompliance and its cause;
   b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
   c. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

   The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II.I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II.I.1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II.I.2.

NOTE: The immediate (within 24 hours) reports required in Parts II.G, H, and I may be made to the Department's Regional Office at (804) 527-5020 (voice) or (804) 527-5106 (facsimile). For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

   a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

      (1) After promulgation of standards of performance under Section 306 of the Clean Water Act which are applicable to such source; or

      (2) After proposal of standards of performance in accordance with Section 306 of the Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or

   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

1. Applications. All permit applications shall be signed as follows:

a. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports, etc. All reports required by permits and other information requested by the Board shall be signed by a person described in Part II.K.1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part II.K.1;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

c. The written authorization is submitted to the Department.

3. Changes to authorization. If an authorization under Part II.K.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Parts II.K.1 or 2 shall make the following certification:

"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."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

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

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II.U), and "upset" (Part II.V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges, or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The

permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II.U.2 and U.3.

2. Notice

   a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.

   b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.I.

3. Prohibition of bypass

   a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:

      (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

      (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

      (3) The permittee submitted notices as required under Part II.U.2.

   b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II.U.3.a.

V. Upset

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II.V.2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and that the permittee can identify the cause(s) of the upset;
   b. The permitted facility was at the time being properly operated;
   c. The permittee submitted notice of the upset as required in Part II.I; and
   d. The permittee complied with any remedial measures required under Part II.S.

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise

authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II.Y.2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.

2. As an alternative to transfers under Part II.Y.1, this permit may be automatically transferred to a new permittee if:

   a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;

   b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

   c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II.Y.2.b.

Z. Severability

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