COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703) 583-3800 Fax (703) 583-3821
www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

December 27, 2012

Mr. Charles Boepple
Executive Director
Upper Occoquan Service Authority
14631 Compton Rd
Centreville, VA 20121-2506

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re: Reissuance of VPDES Permit No. VA0024988
Upper Occoquan Service Authority, Fairfax County

Dear Mr. Boepple:

The Department of Environmental Quality (DEQ) has approved the enclosed effluent limitations and monitoring requirements for the above-referenced permit. Copies of your permit and fact sheet are enclosed.

A Discharge Monitoring Report (DMR) form is no longer included in the reissuance package. DEQ has launched an electronic DMR (e-DMR) program that allows you to submit the effluent monitoring data electronically, and we expect every permittee to use e-DMR as permits are issued or reissued. The first electronic DMR submittal for the month of January 2013 is due by February 10, 2013. Please reference the effluent limits in your permit and report monitoring results in e-DMR to the same number of significant digits as are included in the permit limits for the parameter. Answers to frequently asked questions about the e-DMR system, including the e-DMR registration process, are available at the following website: http://www.deq.virginia.gov/Programs/Water/PermittingCompliance/ElectronicDMRsubmissions.aspx. The regional contact for e-DMR is Rebecca Vice; she can be reached at (703) 583-3922 or by e-mail at Rebecca.Vice@deq.virginia.gov.

Please note that compliance with the permit's requirements for use and disposal of sewage sludge do not relieve you of your responsibility to comply with federal requirements set forth in 40 CFR Part 503. Until DEQ seeks and is granted authority to administer the Part 503 regulations by EPA, treatment works treating domestic sewage should continue to work directly with EPA to comply with them.

Please note that if this permit is to be reissued in five years, there are specific testing requirements associated with the Form 2A reissuance application that are different from the testing requirements in your permit. In order to provide the necessary data for Form 2A you may need to begin additional sampling during the term of this permit prior to receiving a reissuance reminder letter from this agency. Please look at Form 2A Part D (Expanded Effluent Testing Data) and Part E (Toxicity Testing Data) for the sampling requirements. Please note that DEQ and EPA will no longer accept waiver requests from the sampling or testing requirements in the application forms.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty days from the date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director, Department of Environmental Quality. In the event that this decision is served on you by mail, three days are added to that period.

Alternately, any owner under §§ 62.1-44.16, 62.1-44.17, and 62.1-44.19 of the State Water Control Law aggrieved by any action of the State Water Control Board taken without a formal hearing, or by inaction of the Board, may demand in writing a formal hearing of such owner's grievance, provided a petition requesting such hearing is filed with the Board. Said petition must meet the requirements set forth in §1.23(b) of the Board's Procedural Rule No. 1. In cases involving actions of the Board, such petition must be filed within thirty days after notice of such action is mailed to such owner by certified mail.

A Reliability Class I is assigned to this facility and this facility has Class I licensed operator requirements.

If you have questions about the permit, please contact Alison Thompson at (703)583-3834, or by E-mail at Alison.Thompson@deq.virginia.gov.

Respectfully,

Bryant Thomas
Water Permit & Planning Manager

Enc.: Permit for VA0024988
Fact Sheet for VA0024988

cc: DEQ-Water, OWPP
EPA-Region III, 3WP12
Department of Health, Culpeper
Water Compliance, NRO

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. **VA0024988**
Effective Date: **December 21. 2012**
Expiration Date: **December 20, 2017**

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, Part I – Effluent Limitations and Monitoring Requirements, and Part II – Conditions Applicable To All VPDES Permits, as set forth herein.

Owner Name: Upper Occoquan Service Authority
Facility Name: Upper Occoquan Service Authority
County: Fairfax
Facility Location: 14631 Compton Rd, Centreville, VA 20121-2506

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

Stream Name: Bull Run, UT
River Basin: Potomac
River Subbasin: Potomac
Section: 7a
Class: III
Special Standards: g

Thomas A. Faha

Thomas A. Faha
Director, Northern Regional Office
Department of Environmental Quality

December 21, 2012
Date

A. Effluent Limitations and Monitoring Requirements

1. Outfall 001 – 54 MGD Facility

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

b. This facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN010019, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Dischargers and Nutrient Trading in the Chesapeake Watershed in Virginia.

c. During the period beginning with the permit's effective date and lasting until the expiration date or the issuance of the CTO for the 64 MGD facility, whichever occurs first, the permittee is authorized to discharge from Outfall Number 001. Such discharges shall be limited and monitored by the permittee as specified below.

Parameter	Discharge Limitations				Monitoring Requirement	
	Monthly Average[1]	Weekly Average[1]	Minimum	Maximum[1]	Frequency[5]	Sample Typ
Flow[2] (MGD)	NL	NA	NA	NL	Continuous	TIRE
pH	NA	NA	6.0 S.U.	9.0 S.U.	1/D	Grab
Chemical Oxygen Demand, COD	10 mg/L 2000 kg/day	25 mg/L 5100 kg/day	NA	NA	5D/W	24H-C
Total Suspended Solids, TSS	1.0 mg/L 200 kg/day	2.5 mg/L 510 kg/day	NA	NA	5D/W	24H-C
Total Kjeldahl Nitrogen, TKN	1.0 mg/L	2.5 mg/L	NA	NA	5D/W	24H-C
Methylene Blue Activated Substances, MBAS	0.10 mg/L	0.25 mg/L	NA	NA	1/M	24H-C
Dissolved Oxygen	NA	NA	5.0 mg/L	NA	1/D	Grab
Turbidity (immediately prior to Chlorination)	0.50 NTU	NA	NA	NA	1/D	3G/24H
Total Residual Chlorine (after dechlorination)	0.008 mg/L	0.010 mg/L	NA	NA	1/D	Grab
E. coli (Geometric Mean)[4]	<2 n/100 mLs	NA	NA	NA	1/D	Grab
Total Phosphorus	0.10 mg/L	0.25 mg/L	NA	NA	5D/W	24H-C
Chronic Toxicity – *C. dubia* (TU_c)[3]	NA	NA	NA	NL	1/YR	24H-C
Chronic Toxicity – *P. promelas* (TU_c)[3]	NA	NA	NA	NL	1/YR	24H-C

(1) See Part I.B.
(2) The design flow is 54 MGD.
(3) See Part 1.C. for toxicity monitoring requirements
(4) *E. coli* samples shall be collected just prior to dechlorination and after chlorine contact. The samples shall be collected in containers prepared with dechlorinating agent.
(5) See Part I.F.13 for the Effluent Monitoring Reduction special condition

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
TIRE = Totalizing, indicating and recording equipment.
NTU = Nephelometric Turbidity Units

1/D = Once every day.
3G/24H = Three grabs per 24 hr period.
5D/W = Five days every week.
1/M = Once every month.
1/YR = Once every year.

24H-C = A flow proportional composite sample collected manually or automatically, and discretely or continuously, for the entire discharge of the monitored 24-hour period. Where discrete sampling is employed, the permittee shall collect a minimum of twenty-four (24) aliquots for compositing. Discrete sampling may be flow proportioned either by varying the time interval between each aliquot or the volume of each aliquot. Time composite samples consisting of a minimum of twenty-four (24) grab sample obtained at hourly or smaller intervals may be collected where the permittee demonstrates that the discharge flow rate (gallons per minute) does not vary by 10% or more during the monitored discharge.

3G/24H = Twenty-four Hour Composite – Consisting of three (3) grab samples collected at 8-hour intervals.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

A. Effluent Limitations and Monitoring Requirements

2. Outfall 001 – 64 MGD Facility

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

b. In addition to any Total Nitrogen or Total Phosphorus concentration limits (or monitoring requirements without associated limits) listed below, this facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN010019, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Dischargers and Nutrient Trading in the Chesapeake Watershed in Virginia.

c. During the period beginning with the issuance of the CTO for the 64 MGD facility and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall Number 001. Such discharges shall be limited and monitored by the permittee as specified below.

Parameter	Discharge Limitations				Monitoring Requirement	
	Monthly Average[1]	Weekly Average[1]	Minimum	Maximum[1]	Frequency	Sample Typ
Flow[2] (MGD)	NL	NA	NA	NL	Continuous	TIRE
pH	NA	NA	6.0 S.U.	9.0 S.U.	1/D	Grab
Chemical Oxygen Demand, COD	10 mg/L 2400 kg/day	25 mg/L 6100 kg/day	NA	NA	1/D	24H-C
Total Suspended Solids, TSS	1.0 mg/L 240 kg/day	2.5 mg/L 610 kg/day	NA	NA	1/D	24H-C
Total Kjeldahl Nitrogen, TKN	1.0 mg/L	2.5 mg/L	NA	NA	1/D	24H-C
Methylene Blue Activated Substances, MBAS	0.10 mg/L	0.25 mg/L	NA	NA	1/M	24H-C
Dissolved Oxygen	NA	NA	5.0 mg/L	NA	1/D	Grab
Turbidity (immediately prior to Chlorination)	0.50 NTU	NA	NA	NA	1/D	3G/24H
Total Residual Chlorine (after dechlorination)	0.008 mg/L	0.010 mg/L	N/A	NA	1/D	Grab
E. coli (Geometric Mean)[6]	<2 n/100 mLs	NA	NA	NA	1/D	Grab
$NO_2 + NO_3$ as Nitrogen	NL (mg/L)	NA	NA	NA	3D/W	24H-C
Total Nitrogen[4]	NL (mg/L)	NA	NA	NA	3D/W	Calculated
Total Nitrogen – Year to Date[5]	NL (mg/L)	NA	NA	NA	1/M	Calculated
Total Nitrogen – Calendar Year [5]	NL (mg/L)*	NA	NA	NA	1/YR	Calculated
Total Phosphorus	0.10 mg/L	0.25 mg/L	NA	NA	1/D	24H-C
Chronic Toxicity – *C. dubia* (TU_c) [3]	NA	NA	NA	NL	1/Q	24H-C
Chronic Toxicity – *P. promelas* (TU_c) [3]	NA	NA	NA	NL	1/Q	24H-C

(1) See Part I.B.

(2) The design flow is 64 MGD.

(3) See Part 1.C. for toxicity monitoring requirements

(4) Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests.

(5) See Part I.B.4. for nutrient reporting calculations

(6) *E. coli* samples shall be collected just prior to dechlorination and after chlorine contact. The samples shall be collected in containers prepared with dechlorinating agent.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
TIRE = Totalizing, indicating and recording equipment.
NTU = Nephelometric Turbidity Units

1/D = Once every day.
3D/W = Three days a week.
3G/24H = Three grabs per 24 hr period.
1/M = Once every month.
1/Q = Once every quarter.
1/YR = Once every calendar year.

24H-C = A flow proportional composite sample collected manually or automatically, and discretely or continuously, for the entire discharge of the monitored 24-hour period. Where discrete sampling is employed, the permittee shall collect a minimum of twenty-four (24) aliquots for compositing. Discrete sampling may be flow proportioned either by varying the time interval between each aliquot or the volume of each aliquot. Time composite samples consisting of a minimum of twenty-four (24) grab samples obtained at hourly or smaller intervals may be collected where the permittee demonstrates that the discharge flow rate (gallons per minute) does not vary by 10% or more during the monitored discharge.

3G/24H = Twenty-four Hour Composite – Consisting of three (3) grab samples collected at 8-hour intervals.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

* See Part I.F.14 for additional Total Nitrogen language.

A. Effluent Limitations and Monitoring Requirements

3. Sewage Sludge

During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to manage sewage sludge according to the approved Sludge Management Plan. The pollutants in the sewage sludge shall be limited and monitored by the permittee as specified below. All samples shall be collected and analyzed in accordance with the current O&M Manual.

a. Sewage Sludge Annual Production Monitoring (SP1).

The permittee shall report the annual total amount of sludge produced (in dry metric tons) and annual amount of sludge (in dry metric tons) land applied. Data shall be reported on the Discharge Monitoring Report (DMR) for discharge number SP1.

b. Sewage Sludge Chemical Limitations and Monitoring Requirement (S01).

1. *Chemical Pollutant Characteristics*[1]

SLUDGE CHARACTERISTIC	LIMITATIONS		MONITORING REQUIREMENTS	
	Ceiling Concentration Maximum (mg/kg)	Monthly Average (mg/kg)	Frequency	Sample Type
Percent Solids (%)	NA	NL	1/2M	Composite
Arsenic, Sludge	75	41	1/2M	Composite
Cadmium, Sludge	85	39	1/2M	Composite
Copper, Sludge	4300	1500	1/2M	Composite
Lead, Sludge	840	300	1/2M	Composite
Mercury, Sludge	57	17	1/2M	Composite
Molybdenum, Sludge	75	NA	1/2M	Composite
Nickel, Sludge	420	420	1/2M	Composite
Selenium, Sludge	100	100	1/2M	Composite
Zinc, Sludge	7500	2800	1/2M	Composite

[1] All samples shall be collected and analyzed in accordance with approved EPA procedures.

1/2M = Once every two months.
NA = Not applicable.
NL = No limit; monitor and report.
mg/kg = Milligrams per kilogram, dry weight

The permittee shall achieve pathogen reduction in accordance with the approved Sludge Management Plan. The permittee shall verify in the annual report that the above pathogen reduction is achieved by means of appropriate documentation. The permittee shall perform monitoring and maintain bench sheets to insure that the vector attraction reduction requirements are obtained. Copies of the bench sheets shall be submitted with the annual reports for sludge. The requirements shall be met as specified below.

Class A Biosolids are produced by centrifuging blended sludge to a nominally 25 percent solids content. The wet cake then passes into a rotary drum dryer pelletizer to produce Class A Exceptional Quality biosolids. The pathogen reduction requirements met are found in 9VAC25-31-710.A.7, *Alternative 5 (fecal coliform density is less than 1000 MPN per gram of dry solids and Process to Further Reduce Pathogens Option 2, Heat Drying*) and the vector attraction reduction requirement met is found in 9VAC25-31-720.B.8 (*percent solids containing un-stabilized solids shall be equal to or greater than 90 percent*).

Class B Biosolids are produced by lime stabilizing centrifuged solids as prescribed in the Federal and State Biosolids regulations. The pathogen reduction requirements met are found in 9VAC25-31-710.B.3, Alternative 2 (*Process to Significantly Reduce Pathogens, Option 5, Lime Stabilization*) and the vector attraction reduction requirements are found in 9VAC25-31-720.B.6 (*the pH of the sludge shall be raised and retained at 12 for 2 hours and then to 11.5 or higher for an additional 22 hours*).

Class B Biosolids are produced by dewatering anaerobically digested solids utilizing recessed chamber filter presses. The pathogen reduction requirements met are found in 9VAC25-31-710.B.2, Alternative 1 (*fecal coliform geometric mean of seven samples is less than 2 million MPN per gram of dry solids*) and the vector attraction reduction requirement is found in 9VAC25-31-720.B.1 (*the mass of volatile solids shall be reduced to a minimum of 38%*).

B. Additional Monitoring Requirements, Quantification Levels and Compliance Reporting

1. Additional Total Residual Chlorine (TRC) Monitoring Requirements

   a. If chlorine disinfection is not used, *E. coli* shall be limited and monitored by the permittee as specified below:

	Discharge Limitations Monthly Average	Monitoring Frequency Requirements	Sample Type
E. coli	<2 n/100ml Geometric Mean	1/day	Grab

   This *E. coli* requirement, if applicable, shall substitute for the TRC requirements delineated elsewhere in Part I.

2. Quantification Levels

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

Characteristic	Quantification Level
TSS	1.0 mg/L
COD	10 mg/L
TRC	0.10 mg/L

   b. The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. The permittee shall use any method in accordance with Part II A of this permit.

   c. 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.

3. Compliance Reporting for parameters in Part I.A.

   a. Monthly Average –Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part I.B.2.a of this permit condition 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 Part I.B.2.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 Part I.B.2.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 Part I.B.2.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.

   b. Maximum Weekly Average –Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in Part I.B.2.a of this permit condition 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 Part I.B.2.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 Part I.B.2.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 and entirely contained within the reporting month. 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 Part I.B.2.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.

c. Single Datum - Any single datum required shall be reported as "<QL" if it is less than the QL used in the analysis (QL must be less than or equal to the QL listed in Part I.B.2.a above). Otherwise the numerical value shall be reported.

d. Significant Digits and Rounding - 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 (i.e., 5 always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

4. Nutrient Reporting Calculations for Part I.A.

a. For each calendar month, the DMR shall show the calendar year-to-date average concentration (mg/L) calculated in accordance with the following formulae:

$$MC_{avg}\text{-YTD} = (\Sigma_{(\text{Jan-current month})} MC_{avg}) \div (\text{\# of months})$$

where:
MC_{avg}-YTD = calendar year-to-date average concentration (mg/L)
MC_{avg} = monthly average concentration (mg/L) as reported on DMR

b. The total nitrogen and phosphorus average concentrations (mg/L) for each calendar year (AC) shall be shown on the December DMR due January 10th of the following year. These values shall be calculated in accordance with the following formulae:

$$AC_{avg} = (\Sigma_{(\text{Jan-Dec})} MC_{avg}) \div 12$$

where:
AC_{avg} = calendar year average concentration (mg/L)
MC_{avg} = monthly average concentration (mg/L) as reported on DMR

c. For Total Phosphorus and Total Kjeldahl Nitrogen (TKN), all daily concentration data below the quantification level (QL) for the analytical method used should be treated as half the QL. All daily concentration data equal to or above the QL for the analytical method used shall be treated as it is reported.

d. For Total Nitrogen (TN), if none of the daily concentration data for the respective species (i.e., TKN, Nitrates/Nitrites) are equal to or above the QL for the respective analytical methods used, the daily TN concentration value reported shall equal one half of the largest QL used for the respective species. If one of the data is equal to or above the QL, the daily TN concentration value shall be treated as that data point is reported. If more than one of the data is above the QL, the daily TN concentration value shall equal the sum of the data points as reported.

C. Whole Effluent Toxicity Program Requirements

1. Biological Monitoring for the 54 MGD Facility

a). In accordance with the schedule in Part I.C.2. below, the permittee shall conduct annual chronic toxicity tests during this permit term or until the issuance of the Certificate to Operate (CTO) for the 64 MGD facility, whichever occurs first. The permittee shall collect 24-hour flow-proportioned composite samples of final effluent from Outfall 001.

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) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be quantified (i.e., a "less than" NOEC value) are not acceptable and a retest will have to be performed. The NOEC as determined by hypothesis testing shall be converted to TU_c (Chronic Toxic Units) for DMR reporting where $TU_c = 100/NOEC$. Report the LC_{50} at 48 hours and the IC_{25} with the NOEC's in the test report.

b). The permittee may provide additional samples to address data variability. These data shall be reported. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

c). The test dilutions shall bracket and include the following endpoints:

A Chronic NOEC $\geq$ 69%; equivalent to a $TU_c \leq 1.44$

d). The test data will be evaluated statistically for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee or if toxicity has been noted. Should evaluation of the data indicate that a limit is warranted, a WET limit and compliance schedule will be required.

e). The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limitation shall control the toxicity of the effluent.

f). Should the results of any test exceed the endpoint cited above, the permittee shall conduct a retest of the effluent within 30 days.

g). Should the permittee conduct toxicity testing of the effluent prior to the compliance date listed in the schedule in Part I.C.2. below, the results of the test and the test report shall be reported with the DMR for the month following the receipt of the testing results. In no case shall this exceed 45 days from the completion of the test or the report submission date below, whichever may occur first.

2. Reporting Schedule

The permittee shall monitor during the specified period; shall report the results on the DMR; and shall supply one copy of the toxicity test report specified in this Toxics Management Program in accordance with the following schedule:

Period	Sampling Period	DMR/Report Submission Dates
Annual 1	January 1, 2013 – December 31, 2013	January 10, 2014
Annual 2	January 1, 2014 – December 31, 2014	January 10, 2015
Annual 3	January 1, 2015 – December 31, 2015	January 10, 2016
Annual 4	January 1, 2016 – December 31, 2016	January 10, 2017

3. Biological Monitoring for the 64 MGD Facility

a). Commencing within six (6) months of the effective date of the CTO issuance for the 64 MGD facility, the permittee shall conduct quarterly chronic toxicity tests using 24-hour flow-proportioned composite samples of final effluent from Outfall 001.

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) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be quantified (i.e., a "less than" NOEC value) are not acceptable and a retest will have to be performed. The NOEC as determined by hypothesis testing shall be converted to TU_c (Chronic Toxic Units) for DMR reporting where $TU_c = 100/NOEC$. Report the LC_{50} at 48 hours and the IC_{25} with the NOEC's in the test report.

b). The permittee may provide additional samples to address data variability. These data shall be reported. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

c). The test dilutions shall bracket and include the following endpoints:

A Chronic NOEC $\geq$ 69%; equivalent to a $TU_c \leq 1.44$

d). The test data will be evaluated statistically for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee or if toxicity has been noted. Should evaluation of the data indicate that a limit is warranted, a WET limit and compliance schedule will be required.

e). The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limitation shall control the toxicity of the effluent.

f). Should the results of any test exceed the endpoint cited above, the permittee shall conduct a retest of the effluent within 30 days.

g). The permittee may request that the monitoring frequency be reduced to once a year upon completion of eight (8) quarterly testing regimes which none of the results exceeded the above endpoints.

D. Pretreatment Requirements

1. The permittee's pretreatment program has been approved. The program is an enforceable part of this permit. The permittee shall:

   a. Within 180 days of the effective date of this permit, submit to the DEQ-Northern Regional Office (NRO) a survey of all Industrial Users (IUs) meeting the requirements of the VPDES Permit regulation, 9VAC25-31-10 et seq. and discharging to the POTW. The information shall be submitted to the POTW on the DEQ's 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 (SIUs) of the POTW.

      In lieu of the survey, the permittee may elect to develop and submit for approval a plan to continuously survey the industrial community in their jurisdiction. This plan must be implemented within 90 days of its approval by DEQ-NRO.

   b. Within one year of the effective date of this permit, the permittee shall develop or reevaluate the local limits using current influent, effluent and sludge monitoring data and submit the data and results of the evaluation to DEQ-NRO. All SIUs shall be sampled at the end of any categorical process and at the entrance to the treatment works.

   c. Submit to the DEQ-NRO 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 SIUs to include Categorical Industrial Users (CIUs), as defined in subdivision 3.c. of this section, noting all of the following:

         a) facility address and contact name, including email and phone number;
         b) contact information, SIU Codes, and NAICS Codes for each SIU/CIU;
         c) explanation of SIUs deleted from the previous year's list;
         d) identify which Industrial Users (IUs) are subject to Categorical Standards and note which Standard (ie. metal finishing);
         e) specify which 40 CFR part(s) is/are applicable;
         f) indicate which IUs are subject to local standards that are more stringent than Categorical Pretreatment Standards;
         g) indicate which IUs are subject only to local requirements;
         h) identify which IUs are subject to Categorical Pretreatment Standards that are subject to reduced reporting requirements under 9VAC25-31-840.E.3.; and
         i) identify which IUs are non-significant CIUs.

      2) A summary of the compliance status of each SIU with pretreatment standards and permit requirements.

      3) A summary of the number and types of SIU sampling and inspections performed by the POTW.

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

5) A description of all enforcement actions taken against SIUs over the previous 12 months.

6) A summary of any changes to the submitted pretreatment program that has not been previously reported to the DEQ-NRO.

7) A summary of the permits issued to SIUs since the last annual report.

8) POTW and self-monitoring results for SIUs 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 the DEQ-NRO.

10) Copies of newspaper publications of all SIUs in significant non-compliance during the reporting period. This is due no later than March 31 of each year.

11) Signature of an authorized representative.

d. Submit any changes to the approved pretreatment program to the DEQ-NRO and obtain approval before implementation of the changes.

e. Ensure all SIU permits are issued and reissued in a timely manner and that the SIU permits issued by the POTW are effective and enforceable.

f. Inspect and sample all SIUs at a minimum of once a year.

1) Sampling shall include all regulated parameters, and shall be representative of the wastewater discharged.

2) Inspection of the SIUs shall cover all areas that could result in wastewater discharge to the treatment works including manufacturing, chemical storage, pretreatment facilities, spill prevention and control procedures, hazardous waste generation and SIU self monitoring and records.

g. Implement the reporting requirements of Part VII of the VPDES Permit Regulation (9VAC25-31-730 through 9VAC25-31-900).

h. Review the Legal Authority and Enforcement Response Plan (ERP) to ensure they meet state and federal regulatory requirements. The approved Legal Authority and ERP are enforceable parts of this permit and shall be implemented.

i. Ensure that adequate resources are available to implement the approved program.

j. Meet all public participation requirements and annually public notice SIUs in significant non-compliance with pretreatment standards and requirements for the previous 12 months.

2. The DEQ may require the POTW to institute changes to its pretreatment program:

a. If the approved program is not implemented in a way satisfying the requirements of the Clean Water Act, Water Control Law or State regulations;

b. If problems such as pass-through, interference, water quality standards violations or sludge contamination develop or continue; and

c. If federal, state or local requirements change.

3. Program Streamlining:

   a. The Control Authority may determine that an Industrial User subject to categorical Pretreatment Standards under 9VAC25-31-780 and 40 CFR chapter I, subchapter N is a Non-Significant CIU rather than a SIU on a finding that the IU never discharges more than 100 gallons per day (gpd) of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the Pretreatment Standard) and the following conditions are met:

      1) The IU, prior to Control Authority's finding, has consistently complied with all applicable categorical Pretreatment Standards and Requirements;

      2) The IU annually submits the certification statement required in 9VAC25-31-840 together with any additional information necessary to support the certification statement; and

      3) The IU never discharges any untreated concentrated wastewater.

   b. Upon a finding that an industrial user, meeting the criteria in subdivision 3.c.2 and 3 below, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the control authority may at any time, on its own initiative or in response to a petition received from an IU or POTW and in accordance with Part VII (9VAC25-31-730 et seq.) of this chapter, determine that such IU is not a SIU.

   c. A SIU is an IU that:

      1) Is subject to Categorical Pretreatment Standards under 9VAC25-31-780 and incorporated by reference in 9VAC25-31-30;

      2) Discharges an average of 25,000 gallons per workday or more of process wastewater to the POTW (excluding sanitary, noncontact cooling water, and boiler blowdown wastewater);

      3) Contributes a process waste stream that makes up 5% or more of the average dry weather hydraulic or organic capacity of the POTW; or

      4) Has reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.

E. Sludge Management and Reporting Requirements

1. Sludge Reopener
   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.

2. Sludge Use and Disposal
   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-Northern Regional Office (DEQ-NRO) 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 or disposal practices.

3. Sludge Monitoring Frequency and Reporting Requirements

a. Monitoring Frequency.

After sewage sludge has been monitored for two years at the monitoring frequency specified in Part I.A.3, the required sewage sludge monitoring frequency shall be reduced to once a year provided the results of sludge monitoring for all limited pollutants is less than 75% of the monthly average concentration limitation listed in Part I.A.3 in each monitoring event. Should the pollutant concentration in a sludge monitoring event exceed 75% of the monthly average concentration limitation specified for any pollutant in Part I.A.3, the monitoring frequency of once per three months shall become effective and remain in effect until the permit's expiration date. No other effluent limitations or monitoring requirements are affected by this special condition.

b. Reporting Requirements.

1. Reporting Responsibilities:

The permittee shall provide the results of all monitoring performed in accordance with Part I.A.3., and information on management practices, land application sites, site restrictions (if applicable, and appropriate certifications not later than February 19 of each year to the DEQ-NRO. Each report is for the previous calendar year's activity. If no sewage sludge was applied to the land during the reporting period, "no sewage sludge applied" shall be reported.

2. Record Keeping:

The permittee is required to retain the following information for at least five years:

a) The concentrations of each pollutant in Part I.A.3.
b) A description of how the pathogen reduction requirements in Part I.A.3. are met;
c) A description of how the vector attraction reduction requirements in Part I.A.3. are met;
d) A description of how the management practices specified in the approved Sludge Management Plan and/or this permit are met;
e) A description of how the site restrictions specified in the approved Sludge Management Plan and/or this permit are met;
f) The following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with the pathogen requirements in 9VAC25-31-710 B, vector attraction reduction requirements in [**permittee shall insert one of the vector attraction reduction requirements in 9VAC25-31-720 B 1 through B 10**], the management practices in 9VAC25-31-550, and the site restrictions in 9VAC25-31-710 B 5 was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

F. Other Requirements and Special Conditions

1. 95% Capacity Reopener

A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the DEQ-Northern Regional Office (DEQ-NRO) when the monthly average flow influent to the sewage 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 DEQ-NRO 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.

2. Indirect Dischargers
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 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.

   c. 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.

3. Operation and Maintenance (O&M) Manual Requirement
The permittee shall maintain a current Operations and Maintenance (O&M) Manual for the treatment works that is in accordance with Virginia Pollutant Discharge Elimination System Regulations, 9VAC25-31 and the Sewage Collection and Treatment Regulations, 9VAC25-790.

The O&M Manual and subsequent revisions shall include the manual effective date and meet Part II.K.2 and Part II.K.4 Signatory Requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M manual available to Department personnel for review during facility inspections. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to the DEQ-NRO for review and approval.

The O&M manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:
   a. Permitted outfall locations and techniques to be employed in the collection, preservation, and analysis of effluent, storm water and sludge samples;
   b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;
   c. Discussion of Best Management Practices, if applicable;
   d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants that will prevent these materials from reaching state waters. List type and quantity of wastes, fluids, and pollutants (e.g. chemicals) stored at this facility;
   e. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory and record keeping;
   f. Plan for the management and/or disposal of waste solids and residues;
   g. Hours of operation and staffing requirements for the plant to ensure effective operation of the treatment works and maintain permit compliance;
   h. List of facility, local and state emergency contacts; and
   i. Procedures for reporting and responding to any spills/overflows/ treatment works upsets.

4. Licensed Operator Requirement
The permittee shall employ or contract at least one Class I licensed wastewater works operator for this 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.

5. Reliability Class

The permitted treatment works shall meet Reliability Class I.

6. CTC and CTO Requirement
In accordance with *Sewage Collection and Treatment* regulation (9VAC25-790), the permittee shall obtain a Certificate to Construct (CTC) and a Certificate to Operate (CTO) from the Department of Environmental Quality 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.

7. Water Quality Criteria Reopener
Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.

8. Total Maximum Daily Load (TMDL) Reopener
This permit shall be modified or alternatively revoked and reissued 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.

9. Nutrient Offsets
Any annual Total Nitrogen and/or Total Phosphorus loadings above and beyond those permitted prior to July 1, 2005 shall be offset subject to a DEQ-approved trading contract prepared in accordance with 62.1-44.19:12 - :19 of the Law and 9VAC25-820-10 et seq., and which includes, but not limited to, the following:

a. Discussion of the source of the acquired allocations,
b. Discussion of other permitted facilities involved in the trade, and
c. Discussion of any non-point source allocations acquired.

This proposal shall provide for the waste loads that are projected to be discharged on an annual basis for the term of this permit, and shall be approved prior to the commencement of discharge from the new or expanded facility. Once approved, the conditions of the proposal pertaining to verification of non-point allocations acquired, or self-offsetting practices implemented, become an enforceable part of this permit.

10. E3/E4
The annual average concentration limitations for Total Nitrogen and/or Total Phosphorus are suspended during any calendar year in which the facility is considered by DEQ to be a participant in the Virginia Environmental Excellence Program in good standing at either the Exemplary Environmental Enterprise (E3) level or the Extraordinary Environmental Enterprise (E4) level, provided that the following conditions have also been met:

a. The facility has applied for (or renewed) participation, been accepted, maintained a record of sustained compliance and submitted an annual report according to the program guidelines;
b. The facility has demonstrated that they have in place a fully implemented environmental management system (EMS) with an alternative compliance method that includes operation of installed nutrient removal technologies to achieve the annual average concentration limitations; and
c. The E3/E4 designation from DEQ and implementation of the EMS has been in effect for the full calendar year.

The annual average concentration limitations for Total Nitrogen and/or Total Phosphorus, as applicable, are not suspended in any calendar year following a year in which the facility failed to achieve the annual average concentration limitations as required by b. above.

11. Nutrient Reopener
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:
   i. the State Water Control Board adopt new nutrient standards for the water body receiving the discharge, including the Chesapeake Bay or its tributaries, or
   ii. a future water quality regulation or statute require new or alternative nutrient control.

12. PCB Monitoring
The permittee shall monitor the effluent at Outfall 001 for Polychlorinated Biphenyls (PCBs). DEQ will use these data for the development of the PCB TMDL for Bull Run and in the Potomac River Watershed. The permittee shall conduct the sampling and analysis in accordance with the requirements specified below. At a minimum:

a. Monitoring and analysis shall be conducted in accordance with the most current version of EPA Method 1668 or other equivalent methods capable of providing low-detection level, congener specific results. Any equivalent method shall be submitted to DEQ-NRO for review and approval prior to sampling and analysis. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. The sampling protocol shall be submitted to DEQ-NRO for review and approval prior to the first sample collection.

b. The permittee shall collect 2 wet weather samples and 2 dry weather samples during the term of the permit. Samples previously collected, analyzed and approved by DEQ utilizing a low-detection level, congener specific method, may be used in satisfying the total number of samples required even if the collection occurred prior to the current permit term.

   Wet weather samples shall be defined by the permittee based on the permittee's decision criteria for their facility. The wet weather decision criteria shall be submitted to DEQ-NRO prior to any PCB sampling and within 90 days of the permit reissuance for review and approval. The permittee shall maintain documentation to demonstrate that wet weather flows achieve these criteria. The documentation shall be available to DEQ-NRO upon request.

   Dry weather samples are defined as those taken at Outfall 001 following at least a 72 hour period with no measurable rainfall, and influent levels are at normal base flows.

   After the permittee has collected a wet weather sample and a dry weather sample, the permittee may request from DEQ a waiver for the second wet weather sample. Documentation shall be submitted with the request to demonstrate why another wet weather sample is not necessary for the TMDL development. DEQ shall review the documentation and notify the permittee in writing on the final waiver decision.

c. Each effluent sample shall consist of a minimum 2 liter volume and be collected using either 24 hour manual or automated compositing methods.

d. The data shall be submitted to DEQ-NRO by the 10th day of the month following receipt of the results. The permittee shall have the option of submitting the results electronically. The submittal

shall include the unadjusted and appropriately qualified individual PCB congener analytical results. Additionally, laboratory and field QA/QC documentation and results shall be reported. Total PCBs are to be computed as the summation of the reported, quantified congeners.

13. Effluent Monitoring Reductions for Parameters listed in Part I.A.1 (54 MGD Facility)
If the facility permitted herein is issued a Notice of Violation for any of the parameters listed below, then all of the following effluent monitoring frequencies shall become effective upon written notice from DEQ-NRO and remain in effect until permit expiration.

Chemical Oxygen Demand	1/Day
Total Suspended Solids	1/Day
Total Kjeldahl Nitrogen	1/Day
Total Phosphorus	1/Day

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

14. Annual Average Total Nitrogen Design at 64 MGD
The permittee shall design the 64 MGD facilities to meet a Total Nitrogen Annual Average of 6.75 mg/L.

15. Total Nitrogen Removal Facilities
Operation of the nitrogen removal facilities is required when the ambient nitrate (as N) concentration is 5.0 mg/L or greater in the Occoquan Reservoir in the vicinity of the Fairfax Water intake point. The owner of the regional sewage authority is responsible for knowing the ambient results of nitrate and when operation of nitrogen removal facilities is necessary.

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.
4. Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

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:

   Department of Environmental Quality - Northern Regional Office (DEQ-NRO)
   13901 Crown Court
   Woodbridge, VA 22193

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

2. 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.

3. 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 this 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 reoccurrence 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 I.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 Northern Regional Office at (703) 583-3800 (voice) or (703) 583-3821 (fax). 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 Clean Water Act which are applicable to such source; or
      2) After proposal of standards of performance in accordance with Section 306 of 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. 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:
      1) 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

      2) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if 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:

      1) The chief executive officer of the agency, or
      2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. 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 K.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.