# *COMMONWEALTH of VIRGINIA*

*DEPARTMENT OF ENVIRONMENTAL QUALITY*
NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703) 583-3800 Fax (703) 583-3801
www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

November 8, 2010

Ms. Cheryl St. Amant
Director of Operations
Fauquier County Water and Sanitation Authority
7172 Kennedy Road
Warrenton, VA 20187

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re: Modification of VPDES Permit No. VA0076805
Remington WWTP, Fauquier County

Dear Ms. St. Amant:

Please find enclosed the modified permit for the Remington WWTP reflecting the termination of the Fauquier County Water and Sanitation Authority's pretreatment program. Termination of the pretreatment program does not affect effluent limitations and monitoring requirements previously established for the above-referenced permit. A copy of your modified permit is included for your reference.

If you have questions about the permit, please contact Susan Mackert at (703) 583-3853, or by E-mail at susan.mackert@deq.virginia.gov.

Sincerely,

Bryant Thomas
Water Permits Manager

Enc.: Permit No. VA0076805

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

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

NAME Vint Hill Farms Station WWTP

ADDRESS Fauquier County Water and Sanitation Authority
Warrenton VA 20187

FACILITY LOCATION Vint Hill Farms Station Bldg 398

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

| VA0020460 | 001 |
|---|---|
| PERMIT NUMBER | DISCHARGE NUMBER |

| MONITORING PERIOD | | | | | | |
|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | | | | TO | | | |

Municipal Minor 07/14/2010

**DEPT. OF ENVIRONMENTAL QUALITY**
(REGIONAL OFFICE)

Northern Regional Office
13901 Crown Court

Woodbridge VA 22193

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 | | | |
| 001 FLOW | REPORTD | | | | ********* | ********* | ********* | | | | |
| | REQRMNT | 0.60 | NL | MGD | ********* | ********* | ********* | | | CONT | REC |
| 002 PH | REPORTD | ********* | ********* | | | ********* | | | | | |
| | REQRMNT | ********* | ********* | | 6.0 | ********* | 9.0 | SU | | 1/DAY | GRAB |
| 003 BOD5 | REPORTD | | | | ********* | | | | | | |
| | REQRMNT | 13 | 20 | KG/D | ********* | 6 | 9 | MG/L | | 3D/W | 8HC |
| 004 TSS | REPORTD | | | | ********* | | | | | | |
| | REQRMNT | 19 | 28 | KG/D | ********* | 8.4 | 12 | MG/L | | 3D/W | 8HC |
| 007 DO | REPORTD | ********* | ********* | | | ********* | ********* | | | | |
| | REQRMNT | ********* | ********* | | 6.0 | ********* | ********* | MG/L | | 1/DAY | GRAB |
| 012 PHOSPHORUS, TOTAL (AS P) | REPORTD | | | | ********* | | | | | | |
| | REQRMNT | 5.1 | 7.8 | LBS/D | ********* | 1.0 | 1.5 | MG/L | | 3D/W | 8HC |
| 013 NITROGEN, TOTAL (AS N) | REPORTD | ********* | ********* | | ********* | | ********* | | | | |
| | REQRMNT | ********* | ********* | | ********* | NL | ********* | MG/L | | 2/M | CALC |
| 068 TKN (N-KJEL) | REPORTD | ********* | ********* | | ********* | | ********* | | | | |
| | REQRMNT | ********* | ********* | | ********* | NL | ********* | MG/L | | 2/M | 8HC |

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 Vint Hill Farms Station WWTP

ADDRESS Fauquier County Water and Sanitation Authority
Warrenton VA 20187

FACILITY LOCATION Vint Hill Farms Station Bldg 398

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

| VA0020460 | 001 |
|---|---|
| PERMIT NUMBER | DISCHARGE NUMBER |

| MONITORING PERIOD | | | | | | |
|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | | | | TO | | | |

Municipal Minor 07/14/2010

**DEPT. OF ENVIRONMENTAL QUALITY**
(REGIONAL OFFICE)

Northern Regional Office
13901 Crown Court

Woodbridge VA 22193

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 | | | |
| 120 E.COLI | REPORTD | ********* | ********* | | ********* | | ********* | | | | |
| | REQRMNT | ********* | ********* | | ********* | 126 | ********* | N/CML | | 3D/W | GRAB |
| 358 AMMONIA, AS N DEC-APR | REPORTD | ********* | ********* | | ********* | | | | | | |
| | REQRMNT | ********* | ********* | | ********* | 4.6 | 6.2 | MG/L | | 3D/W | 8HC |
| 383 AMMONIA, AS N MAY-NOV | REPORTD | ********* | ********* | | ********* | | | | | | |
| | REQRMNT | ********* | ********* | | ********* | 2.4 | 3.2 | MG/L | | 3D/W | 8HC |
| 389 NITRITE+NITRATE-N,TOTAL | REPORTD | ********* | ********* | | ********* | | ********* | | | | |
| | REQRMNT | ********* | ********* | | ********* | NL | ********* | MG/L | | 2/M | 8HC |
| 792 NITROGEN, TOTAL (AS N) (CALENDAR YEAR) | REPORTD | ********* | ********* | | ********* | | ********* | | | | |
| | REQRMNT | ********* | ********* | | ********* | 3.0 | ********* | MG/L | | 1/YR | CALC |
| 794 PHOSPHORUS, TOTAL (AS P) (CALENDAR YEAR) | REPORTD | ********* | ********* | | ********* | | ********* | | | | |
| | REQRMNT | ********* | ********* | | ********* | 0.30 | ********* | MG/L | | 1/YR | CALC |
| 805 NITROGEN, TOTAL (AS N) (YEAR-TO-DATE) | REPORTD | ********* | ********* | | ********* | | ********* | | | | |
| | REQRMNT | ********* | ********* | | ********* | NL | ********* | MG/L | | 1/M | CALC |
| 806 PHOSPHORUS, TOTAL (AS P) (YEAR-TO-DATE) | REPORTD | ********* | ********* | | ********* | | ********* | | | | |
| | REQRMNT | ********* | ********* | | ********* | NL | ********* | MG/L | | 1/M | CALC |

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 |

**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 decribing causes and corrective actions taken. Reference each seperate violation by date.
17. If you have any questions, contact the Department of Environmental Quality Regional Office listed on the DMR.

# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

| | |
|---|---|
| Permit No. | **VA0020460** |
| Effective Date: | **April 23, 2009** |
| Modification Date: | **November 8, 2010** |
| Expiration Date: | **April 22, 2014** |

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: | Fauquier County Water and Sanitation Authority |
| Facility Name: | Vint Hill WWTP |
| County: | Fauquier |
| Facility Location: | 4266 Backe Drive, Warrenton, VA 20187 |

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

| | |
|---|---|
| Stream Name: | Kettle Run |
| River Basin: | Potomac River |
| River Subbasin: | Lower Potomac River |
| Section: | 7a |
| Class: | III |
| Special Standards: | g |

Thomas A. Faha

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

11- 8 - 10

Date

## A. Effluent Limitations and Monitoring Requirements

### 1. Outfall 001 – 0.60 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 VAN020053, 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 0.95 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 Requirements | |
|---|---|---|---|---|---|---|
| | Monthly Average[1] | Weekly Average[1] | Minimum | Maximum[1] | Frequency | Sample Type |
| Flow[2] (MGD) | NL | N/A | N/A | NL | Continuous | TIRE |
| pH | N/A | N/A | 6.0 S.U. | 9.0 S.U. | 1/D | Grab |
| $BOD_5$ | 6 mg/L 13 kg/day | 9 mg/L 20 kg/day | N/A | N/A | 3D/W | 8H-C |
| Total Suspended Solids, TSS | 8.4 mg/L 19 kg/day | 12 mg/L 28 kg/day | N/A | N/A | 3D/W | 8H-C |
| Dissolved Oxygen, DO | N/A | N/A | 6.0 mg/L | N/A | 1/D | Grab |
| *E. coli* (Geometric Mean) | 126 n/100 mLs | N/A | N/A | N/A | 3D/W[6] | Grab |
| Ammonia, as N (May – November) | 2.4 mg/L | 3.2 mg/L | N/A | N/A | 3D/W | 8H-C |
| Ammonia, as N (December - April) | 4.6 mg/L | 6.2 mg/L | N/A | N/A | 3D/W | 8H-C |
| Total Kjeldahl Nitrogen | NL (mg/L) | N/A | N/A | N/A | 2/M | 8H-C |
| Nitrate+Nitrite, as N | NL (mg/L) | N/A | N/A | N/A | 2/M | 8H-C |
| Total Nitrogen[3] | NL (mg/L) | N/A | N/A | N/A | 2/M | Calculated |
| Total Nitrogen – Year to Date[4] | NL (mg/L) | N/A | N/A | N/A | 1/M | Calculated |
| Total Nitrogen – Calendar Year[5] | 3.0 mg/L | N/A | N/A | N/A | 1/YR | Calculated |
| Total Phosphorus[4] | 1.0 mg/L 5.1 lb/day | 1.5 mg/L 7.8 lb/day | N/A | N/A | 3D/W | 8H-C |
| Total Phosphorus – Year to Date[4] | NL (mg/L) | N/A | N/A | N/A | 1/M | Calculated |
| Total Phosphorus – Calendar Year[4] | 0.30 mg/L | N/A | N/A | N/A | 1/YR | Calculated |

(1) See Part I.B.
(2) The design flow is 0.60 MGD.
(3) Total Nitrogen = Sum of TKN plus Nitrate+Nitrite
(4) See Part I.B.3 for nutrient reporting calculations.
(5) The TN concentration limit for the 0.60 MGD flow shall be 4.0 mg/L upon State Water Control Board approval of a regulatory amendment to 9 VAC 25-720-50.C amending the TN waste load allocation for Vint Hill WWTP based on a 4.0 mg/L TN concentration. Should the proposed amendment not be approved, the TN concentration shall remain unchanged at 3.0 mg/L.
(6) *E. coli* sampling shall be conducted three days per week between the hours of 10am and 4pm.

MGD = Million gallons per day.
N/A = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
TIRE = Totalizing, indicating and recording equipment.

1/D = Once per day.
3D/W = Three days per week.
1/M = Once per month.
2/M = Twice per month, >7 days apart.
1/YR = Once every twelve months.

8H-C = A flow proportional composite sample collected manually or automatically, and discretely or continuously, for the entire discharge of the monitored 8-hour period. Where discrete sampling is employed, the permittee shall collect a minimum of eight (8) 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 eight (8) 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.

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

## A. Effluent Limitations and Monitoring Requirements

### 2. Outfall 001 – 0.95 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 VAN020053, 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 0.95 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 Requirements | |
|---|---|---|---|---|---|---|
| | Monthly Average[1] | Weekly Average[1] | Minimum | Maximum[1] | Frequency | Sample Type |
| Flow[2] (MGD) | NL | N/A | N/A | NL | Continuous | TIRE |
| pH | N/A | N/A | 6.0 S.U. | 9.0 S.U. | 1/D | Grab |
| $BOD_5$ | 4 mg/L 13 kg/day | 6 mg/L 20 kg/day | N/A | N/A | 3D/W | 8H-C |
| Total Suspended Solids, TSS | 5.3 mg/L 19 kg/day | 7.8 mg/L 28 kg/day | N/A | N/A | 3D/W | 8H-C |
| Dissolved Oxygen, DO | N/A | N/A | 6.0 mg/L | N/A | 1/D | Grab |
| *E. coli* (Geometric Mean) | 126 n/100 mLs | N/A | N/A | N/A | 3D/W[6] | Grab |
| Ammonia, as N (May – November) | 2.4 mg/L | 3.2 mg/L | N/A | N/A | 3D/W | 8H-C |
| Ammonia, as N (December - April) | 4.6 mg/L | 6.2 mg/L | N/A | N/A | 3D/W | 8H-C |
| Total Kjeldahl Nitrogen | NL (mg/L) | N/A | N/A | N/A | 2/M | 8H-C |
| Nitrate+Nitrite, as N | NL (mg/L) | N/A | N/A | N/A | 2/M | 8H-C |
| Total Nitrogen[3] | NL (mg/L) | N/A | N/A | N/A | 2/M | Calculated |
| Total Nitrogen – Year to Date[4] | NL (mg/L) | N/A | N/A | N/A | 1/M | Calculated |
| Total Nitrogen – Calendar Year[4, 5] | 3.0 mg/L | N/A | N/A | N/A | 1/YR | Calculated |
| Total Phosphorus[4] | 0.60 mg/L 5.1 lb/day | 1.0 mg/L 7.8 lb/day | N/A | N/A | 3D/W | 8H-C |
| Total Phosphorus – Year to Date[4] | NL (mg/L) | N/A | N/A | N/A | 1/M | Calculated |
| Total Phosphorus – Calendar Year[4] | 0.30 mg/L | N/A | N/A | N/A | 1/YR | Calculated |

(1) See Part I.B.
(2) The design flow is 0.95 MGD.
(3) Total Nitrogen = Sum of TKN plus Nitrate+Nitrite
(4) See Part I.B.3 for nutrient reporting calculations.
(5) The TN concentration limit for the 0.95 MGD flow shall be 4.0 mg/L upon State Water Control Board approval of a regulatory amendment to 9 VAC 25-720-50.C amending the TN waste load allocation for Vint Hill WWTP based on a 4.0 mg/L TN concentration. Should the proposed amendment not be approved, the TN concentration shall remain unchanged at 3.0 mg/L.
(6) *E. coli* sampling shall be conducted three days per week between the hours of 10am and 4pm.

MGD = Million gallons per day.
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2/M = Twice per month, >7 days apart.
1/YR = Once every twelve months.

8H-C = A flow proportional composite sample collected manually or automatically, and discretely or continuously, for the entire discharge of the monitored 8-hour period. Where discrete sampling is employed, the permittee shall collect a minimum of eight (8) 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 eight (8) 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.

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

**B. Additional Monitoring Requirements, Quantification Levels and Compliance Reporting**

1. Quantification Levels

a. Maximum quantification levels (QLs) shall be as follows:

| Characteristic | Quantification Level |
|---|---|
| TSS | 1.0 mg/L |
| $BOD_5$ | 5 mg/L |
| Ammonia | 0.20 mg/L |

b. The permittee may use any approved method, which has a QL equal to or lower than the QL listed in B.1.a. above. The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method.

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.

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

a. Monthly Average – Compliance with the monthly average limitations and/or reporting requirements for the parameters, except for nitrogen and phosphorus parameters, listed in Part I. A shall be determined as follows: All concentration data below the QL listed above shall be treated as zero. All concentration data equal to or above the QL listed in a. above shall be treated as it is reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, for the month. This arithmetic average shall be reported on the DMR as calculated. If all data are below the QL then the average shall be reported as <QL. If reporting for quantity is required on the DMR and the calculated concentration is <QL then report <QL for the quantity, otherwise use the calculated concentration to determine the monthly average quantity.

b. Maximum Weekly Average – Compliance with the weekly average limitations and/or reporting requirements for the parameters, except for nitrogen and phosphorus parameters, listed in Part I. A. shall be determined as follows: All concentration data below the QL listed above shall be treated as zero. All concentration data equal to or above the QL 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 entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data reported is less than the QL then <QL shall be reported on the DMR. If reporting for quantity is required on the DMR and the calculated concentration is <QL then report <QL for the quantity, otherwise use the calculated concentration to determine the weekly average quantity.

c. Any single datum required shall be reported as <QL if it is less than the QL in a. above. Otherwise the numerical value shall be reported.

d. 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.

3. 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:

$MC_{avg}$-YTD = ( $\sum_{(Jan\text{-}current\ month)} MC_{avg}$ ) ÷ ( # 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:

$AC_{avg}$ = ( $\sum_{(Jan\text{-}Dec)} MC_{avg}$ ) ÷ 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, 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. 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 Northern Regional Office 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 Northern 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.

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 review the existing Operations and Maintenance (O&M) Manual and notify the DEQ Northern Regional Office, in writing, whether it is still accurate and complete. If the O&M Manual is no longer accurate and complete, a revised O&M Manual shall be submitted for approval to the DEQ Northern Regional Office no later than July 23, 2009. The permittee will maintain an accurate, approved O&M Manual for the treatment works. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

a. Treatment system design, treatment system operation, routine preventative maintenance of units within the treatment system, critical spare parts inventory and record keeping;
b. Techniques to be employed in the collection, preservation and analysis of effluent samples (and sludge samples if sludge analyses are required);
c. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants that will prevent these materials from reaching state waters;
d. A plan for the management and/or disposal of waste solids, residues, /Residue/Sludge Management and Disposal Plan; and
e. Discussion of Best Management Practices, if applicable.

Any changes in the practices and procedures followed by the permittee shall be documented and submitted for 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.

4. Licensed Operator Requirement
The permittee shall employ or contract at least one Class II 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
The permittee shall, in accordance with *Sewage Collection and Treatment* regulation (9 VAC 25-790) 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. Water Quality Criteria Monitoring
The permittee shall monitor the effluent at Outfall 001 for the substances noted in Attachment A, “Water Quality Criteria Monitoring” according to the indicated analysis number, quantification level, sample type and frequency. Monitoring shall be conducted once during the fourth year of the permit. Using Attachment A as the reporting form, the data shall be submitted with the next application for reissuance, which is due at least

180 days prior to the expiration date of this permit. 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 DEQ will use these data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of the substances listed in Attachment A.

9. 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.

10. 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 and Department of Health 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.

11. Instream Monitoring
The permittee shall conduct instream monitoring of Kettle Run at the 0.60 MGD and 0.95 MGD flows. Sampling shall be conducted in the receiving stream downstream of Outfall 001, at a point where the stream and effluent are completely mixed. The following parameters shall be sampled at a minimum of once per month: pH, dissolved oxygen, temperature and hardness. The results and date(s) of sampling shall be submitted with the DMR for the month in which sampling was conducted.

12. 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 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.

13. 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.

14. 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.

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:

   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) 583-3841 (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.

# ATTACHMENT A
# DEPARTMENT OF ENVIRONMENTAL QUALITY
# WATER QUALITY CRITERIA MONITORING

| CASRN# | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL [1] | REPORTING RESULTS | SAMPLE TYPE[2] | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|
| **METALS** | | | | | | |
| 7440-36-0 | Antimony, dissolved | (3) | 4300 | | G or C | 1/5 YR |
| 7440-38-2 | Arsenic, dissolved | (3) | 90 | | G or C | 1/5 YR |
| 7440-43-9 | Cadmium, dissolved | (3) | 1.1 | | G or C | 1/5 YR |
| 16065-83-1 | Chromium III, dissolved [8] | (3) | 70 | | G or C | 1/5 YR |
| 18540-29-9 | Chromium VI, dissolved [8] | (3) | 6.4 | | G or C | 1/5 YR |
| 7440-50-8 | Copper, dissolved | (3) | 8.7 | | G or C | 1/5 YR |
| 7439-92-1 | Lead, dissolved | (3) | 17 | | G or C | 1/5 YR |
| 7439-97-6 | Mercury, dissolved | (3) | 0.051 | | G or C | 1/5 YR |
| 7440-02-0 | Nickel, dissolved | (3) | 20 | | G or C | 1/5 YR |
| 7782-49-2 | Selenium, dissolved | (3) | 3.0 | | G or C | 1/5 YR |
| 7440-22-4 | Silver, dissolved | (3) | 3.6 | | G or C | 1/5 YR |
| 7440-28-0 | Thallium, dissolved | (4) | (5) | | G or C | 1/5 YR |
| 7440-66-6 | Zinc, dissolved | (3) | 75 | | G or C | 1/5 YR |
| **PESTICIDES/PCB'S** | | | | | | |
| 309-00-2 | Aldrin | 608 | 0.05 | | G or SC | 1/5 YR |
| 57-74-9 | Chlordane | 608 | 0.2 | | G or SC | 1/5 YR |
| 2921-88-2 | Chlorpyrifos (synonym = Dursban) | 622 | (5) | | G or SC | 1/5 YR |
| 72-54-8 | DDD | 608 | 0.1 | | G or SC | 1/5 YR |
| 72-55-9 | DDE | 608 | 0.1 | | G or SC | 1/5 YR |
| 50-29-3 | DDT | 608 | 0.1 | | G or SC | 1/5 YR |
| 8065-48-3 | Demeton | (4) | (5) | | G or SC | 1/5 YR |
| 60-57-1 | Dieldrin | 608 | 0.1 | | G or SC | 1/5 YR |
| 959-98-8 | Alpha-Endosulfan | 608 | 0.1 | | G or SC | 1/5 YR |
| 33213-65-9 | Beta-Endosulfan | 608 | 0.1 | | G or SC | 1/5 YR |
| 1031-07-8 | Endosulfan Sulfate | 608 | 0.1 | | G or SC | 1/5 YR |
| 72-20-8 | Endrin | 608 | 0.1 | | G or SC | 1/5 YR |

| CASRN# | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL (1) | REPORTING RESULTS | SAMPLE TYPE(2) | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|
| 7421-93-4 | Endrin Aldehyde | (4) | (5) | | G or SC | 1/5 YR |
| 86-50-0 | Guthion | 622 | (5) | | G or SC | 1/5 YR |
| 76-44-8 | Heptachlor | 608 | 0.05 | | G or SC | 1/5 YR |
| 1024-57-3 | Heptachlor Epoxide | (4) | (5) | | G or SC | 1/5 YR |
| 319-84-6 | Hexachlorocyclohexane Alpha-BHC | 608 | (5) | | G or SC | 1/5 YR |
| 319-85-7 | Hexachlorocyclohexane Beta-BHC | 608 | (5) | | G or SC | 1/5 YR |
| 58-89-9 | Hexachlorocyclohexane Gamma-BHC or Lindane | 608 | (5) | | G or SC | 1/5 YR |
| 143-50-0 | Kepone | (9) | (5) | | G or SC | 1/5 YR |
| 121-75-5 | Malathion | (4) | (5) | | G or SC | 1/5 YR |
| 72-43-5 | Methoxychlor | (4) | (5) | | G or SC | 1/5 YR |
| 2385-85-5 | Mirex | (4) | (5) | | G or SC | 1/5 YR |
| 56-38-2 | Parathion | (4) | (5) | | G or SC | 1/5 YR |
| 11096-82-5 | PCB 1260 | 608 | 1.0 | | G or SC | 1/5 YR |
| 11097-69-1 | PCB 1254 | 608 | 1.0 | | G or SC | 1/5 YR |
| 12672-29-6 | PCB 1248 | 608 | 1.0 | | G or SC | 1/5 YR |
| 53469-21-9 | PCB 1242 | 608 | 1.0 | | G or SC | 1/5 YR |
| 11141-16-5 | PCB 1232 | 608 | 1.0 | | G or SC | 1/5 YR |
| 11104-28-2 | PCB 1221 | 608 | 1.0 | | G or SC | 1/5 YR |
| 12674-11-2 | PCB 1016 | 608 | 1.0 | | G or SC | 1/5 YR |
| 1336-36-3 | PCB Total | 608 | 7.0 | | G or SC | 1/5 YR |
| 8001-35-2 | Toxaphene | 608 | 5.0 | | G or SC | 1/5 YR |
| BASE NEUTRAL EXTRACTABLES | | | | | | |
| 83-32-9 | Acenaphthene | 625 | 10.0 | | G or SC | 1/5 YR |
| 120-12-7 | Anthracene | 625 | 10.0 | | G or SC | 1/5 YR |
| 92-87-5 | Benzidine | (4) | (5) | | G or SC | 1/5 YR |
| 56-55-3 | Benzo (a) anthracene | 625 | 10.0 | | G or SC | 1/5 YR |
| 205-99-2 | Benzo (b) fluoranthene | 625 | 10.0 | | G or SC | 1/5 YR |
| 207-08-9 | Benzo (k) fluoranthene | 625 | 10.0 | | G or SC | 1/5 YR |
| 50-32-8 | Benzo (a) pyrene | 625 | 10.0 | | G or SC | 1/5 YR |

| CASRN# | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL (1) | REPORTING RESULTS | SAMPLE TYPE(2) | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|
| 111-44-4 | Bis 2-Chloroethyl Ether | (4) | (5) | | G or SC | 1/5 YR |
| 39638-32-9 | Bis 2-Chloroisopropyl Ether | (4) | (5) | | G or SC | 1/5 YR |
| 85-68-7 | Butyl benzyl phthalate | 625 | 10.0 | | G or SC | 1/5 YR |
| 91-58-7 | 2-Chloronaphthalene | (4) | (5) | | G or SC | 1/5 YR |
| 218-01-9 | Chrysene | 625 | 10.0 | | G or SC | 1/5 YR |
| 53-70-3 | Dibenz(a,h)anthracene | 625 | 20.0 | | G or SC | 1/5 YR |
| 84-74-2 | Dibutyl phthalate (synonym = Di-n-Butyl Phthalate) | 625 | 10.0 | | G or SC | 1/5 YR |
| 95-50-1 | 1,2-Dichlorobenzene | 624 | 10.0 | | G or SC | 1/5 YR |
| 541-73-1 | 1,3-Dichlorobenzene | 624 | 10.0 | | G or SC | 1/5 YR |
| 106-46-7 | 1,4-Dichlorobenzene | 624 | 10.0 | | G or SC | 1/5 YR |
| 91-94-1 | 3,3-Dichlorobenzidine | (4) | (5) | | G or SC | 1/5 YR |
| 84-66-2 | Diethyl phthalate | 625 | 10.0 | | G or SC | 1/5 YR |
| 117-81-7 | Di-2-Ethylhexyl Phthalate | 625 | 10.0 | | G or SC | 1/5 YR |
| 131-11-3 | Dimethyl phthalate | (4) | (5) | | G or SC | 1/5 YR |
| 121-14-2 | 2,4-Dinitrotoluene | 625 | 10.0 | | G or SC | 1/5 YR |
| 122-66-7 | 1,2-Diphenylhydrazine | (4) | (5) | | G or SC | 1/5 YR |
| 206-44-0 | Fluoranthene | 625 | 10.0 | | G or SC | 1/5 YR |
| 86-73-7 | Fluorene | 625 | 10.0 | | G or SC | 1/5 YR |
| 118-74-1 | Hexachlorobenzene | (4) | (5) | | G or SC | 1/5 YR |
| 87-68-3 | Hexachlorobutadiene | (4) | (5) | | G or SC | 1/5 YR |
| 77-47-4 | Hexachlorocyclopentadiene | (4) | (5) | | G or SC | 1/5 YR |
| 67-72-1 | Hexachloroethane | (4) | (5) | | G or SC | 1/5 YR |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 625 | 20.0 | | G or SC | 1/5 YR |
| 78-59-1 | Isophorone | 625 | 10.0 | | G or SC | 1/5 YR |
| 98-95-3 | Nitrobenzene | 625 | 10.0 | | G or SC | 1/5 YR |
| 62-75-9 | N-Nitrosodimethylamine | (4) | (5) | | G or SC | 1/5 YR |
| 621-64-7 | N-Nitrosodi-n-propylamine | (4) | (5) | | G or SC | 1/5 YR |
| 86-30-6 | N-Nitrosodiphenylamine | (4) | (5) | | G or SC | 1/5 YR |
| 129-00-0 | Pyrene | 625 | 10.0 | | G or SC | 1/5 YR |
| 120-82-1 | 1,2,4-Trichlorobenzene | 625 | 10.0 | | G or SC | 1/5 YR |

| CASRN# | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL (1) | REPORTING RESULTS | SAMPLE TYPE(2) | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|
| VOLATILES | | | | | | |
| 107-02-8 | Acrolein | (4) | (5) | | G | 1/5 YR |
| 107-13-1 | Acrylonitrile | (4) | (5) | | G | 1/5 YR |
| 71-43-2 | Benzene | 624 | 10.0 | | G | 1/5 YR |
| 75-25-2 | Bromoform | 624 | 10.0 | | G | 1/5 YR |
| 56-23-5 | Carbon Tetrachloride | 624 | 10.0 | | G | 1/5 YR |
| 108-90-7 | Chlorobenzene (synonym = monochlorobenzene) | 624 | 50.0 | | G | 1/5 YR |
| 124-48-1 | Chlorodibromomethane | 624 | 10.0 | | G | 1/5 YR |
| 67-66-3 | Chloroform | 624 | 10.0 | | G | 1/5 YR |
| 75-09-2 | Dichloromethane (synonym = methylene chloride) | 624 | 20.0 | | G | 1/5 YR |
| 75-27-4 | Dichlorobromomethane | 624 | 10.0 | | G | 1/5 YR |
| 107-06-2 | 1,2-Dichloroethane | 624 | 10.0 | | G | 1/5 YR |
| 75-35-4 | 1,1-Dichloroethylene | 624 | 10.0 | | G | 1/5 YR |
| 156-60-5 | 1,2-trans-dichloroethylene | (4) | (5) | | G | 1/5 YR |
| 78-87-5 | 1,2-Dichloropropane | (4) | (5) | | G | 1/5 YR |
| 542-75-6 | 1,3-Dichloropropene | (4) | (5) | | G | 1/5 YR |
| 100-41-4 | Ethylbenzene | 624 | 10.0 | | G | 1/5 YR |
| 74-83-9 | Methyl Bromide | (4) | (5) | | G | 1/5 YR |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | (4) | (5) | | G | 1/5 YR |
| 127-18-4 | Tetrachloroethylene | 624 | 10.0 | | G | 1/5 YR |
| 10-88-3 | Toluene | 624 | 10.0 | | G | 1/5 YR |
| 79-00-5 | 1,1,2-Trichloroethane | (4) | (5) | | G | 1/5 YR |
| 79-01-6 | Trichloroethylene | 624 | 10.0 | | G | 1/5 YR |
| 75-01-4 | Vinyl Chloride | 624 | 10.0 | | G | 1/5 YR |
| ACID EXTRACTABLES (6) | | | | | | |
| 95-57-8 | 2-Chlorophenol | 625 | 10.0 | | G or SC | 1/5 YR |
| 120-83-2 | 2,4 Dichlorophenol | 625 | 10.0 | | G or SC | 1/5 YR |
| 105-67-9 | 2,4 Dimethylphenol | 625 | 10.0 | | G or SC | 1/5 YR |
| 51-28-5 | 2,4-Dinitrophenol | (4) | (5) | | G or SC | 1/5 YR |

| CASRN# | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL (1) | REPORTING RESULTS | SAMPLE TYPE(2) | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|
| 534-52-1 | 2-Methyl-4,6-Dinitrophenol | (4) | (5) | | G or SC | 1/5 YR |
| 87-86-5 | Pentachlorophenol | 625 | 50.0 | | G or SC | 1/5 YR |
| 108-95-2 | Phenol | 625 | 10.0 | | G or SC | 1/5 YR |
| 88-06-2 | 2,4,6-Trichlorophenol | 625 | 10.0 | | G or SC | 1/5 YR |
| MISCELLANEOUS | | | | | | |
| 7782-50-5 | Chlorine, Total Residual | (4) | 100 | | G | 1/5 YR |
| 57-12-5 | Cyanide, Total | (4) | 10.0 | | G | 1/5 YR |
| 7783-06-4 | Hydrogen Sulfide | (4) | (5) | | G or SC | 1/5 YR |

Name of Principal Exec. Officer or Authorized Agent/Title

Signature of Principal Officer or Authorized Agent/Date

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. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)

FOOTNOTES:

(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 = An 8-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 an 8-hour period.

SC = Special Composite = samples for base/neutral/acid compounds, PCBs, and pesticides must be collected as 4 individual grab samples taken proportional to flow at 6-hour intervals over the course of one day. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period. Grab samples must be analyzed separately and the concentrations averaged. Alternately, grab samples may be collected in the field and composited in the laboratory if the compositing procedure produces results equivalent to results produced by arithmetic averaging of the results of analysis of individual grab samples.

(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 | 206.5; 1632 |
| Chromium [(9)] | 1639 |
| Cadmium | 1637; 1638; 1639; 1640 |
| Chromium VI | 218.6; 1639 |
| Copper | 1638; 1640 |
| Lead | 1637; 1638; 1640 |
| Mercury | 245.7; 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 phenol 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