COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. **VA0025143**
Effective Date: **December 1, 2019**
Expiration Date: **November 30, 2024**

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, Part II – Conditions Applicable To All VPDES Permits, and Part III – Biosolids, as set forth herein.

Owner Name: Arlington County Board
Facility Name: Arlington County Water Pollution Control Plant (WPCP)
County: Arlington
Facility Location: 3402 South Glebe Road, Arlington, VA 22202

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

Stream Name: Four Mile Run
River Basin: Potomac River
River Subbasin: Potomac River
Section: 6
Class: II
Special Standards: b, y

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

November 25, 2019
Date

A. Effluent Limitations and Monitoring Requirements

1. Outfall 001 – 40 MGD Facility

a. During the period beginning with the permit's effective date and lasting until the 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.

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 VAN010021, 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. There shall be no discharge of floating solids or visible foam in other than trace amounts.

Parameter	Discharge Limitations						Monitoring Requirements	
	Monthly Average[1]		Weekly Average[1]		Minimum	Maximum[1]	Frequency	Sample Type
Flow[2] (MGD)	NL		NA		NA	NL	Continuous	TIRE
pH	NA		NA		6.0 S.U.	8.5 S.U.	1/D	Grab
$cBOD_5$	5 mg/L	800 kg/day	8 mg/L	1000 kg/day	NA	NA	1/D	24H-C
Total Suspended Solids, TSS	6.0 mg/L	910 kg/day	9.0 mg/L	1400 kg/day	NA	NA	1/D	24H-C
Dissolved Oxygen	NA		NA		6.0 mg/L	NA	1/D	Grab
Total Kjeldahl Nitrogen, TKN	NL mg/L		NL mg/L		NA	NA	1/W	24H-C
Ammonia, as N (April – October)	1.0 mg/L	150 kg/day	2.7 mg/L	410 kg/day	NA	NA	1/D	24H-C
Ammonia, as N (November – March)	3.5 mg/L		4.2 mg/L		NA	NA	1/W	24H-C
Total Residual Chlorine (after contact tank)	NA		NA		0.5 mg/L	NA	1 / 2 hours	Grab
Total Residual Chlorine (after dechlorination)	0.007 mg/L		0.007 mg/L		NA	NA	1 / 2 hours	Grab
E. coli (Geometric Mean) [3]	126 n/100 mL		NA		NA	NA	5D/W	Grab
Nitrate+Nitrite, as N	NL mg/L		NA		NA	NA	1/W	24H-C
Total Nitrogen [4]	NL mg/L		NA		NA	NA	1/W	Calculated
Total Nitrogen – Year to Date [5]	NL mg/L		NA		NA	NA	1/M	Calculated
Total Nitrogen – Calendar Year [5]	3.0 mg/L		NA		NA	NA	1/YR	Calculated
Total Phosphorus	0.18 mg/L	60 lb/day	0.27 mg/L	90 lb/day	NA	NA	1/D	24H-C
Total Recoverable Copper	NA		NA		NA	NL µg/L	1/YR [6]	Grab
Chronic Toxicity – *C. dubia* (TU_c) [7]	NA		NA		NA	NL	1/YR	24H-C
Chronic Toxicity – *P. promelas* (TU_c) [7]	NA		NA		NA	NL	1/YR	24H-C

(1) See Part I.B.
(2) The design flow is 40 MGD.
(3) Samples shall be collected between 10:00 a.m. and 4:00 p.m.
(4) Total Nitrogen = Sum of TKN plus Nitrate+Nitrite.
(5) See Part I.B.4 for nutrient reporting calculations.
(6) Annual sample shall be collected in the month of February or March.
(7) See Part I.D. for toxicity monitoring requirements.

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

1/D = Once every day.
1/W = Once every week.
5D/W = Five days a week.
1 / 2 hrs = Once every two hours.
1/M = Once every month.
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.

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. Additional Total Residual Chlorine (TRC) Limitations and Monitoring Requirements

   a. The permitee shall monitor the TRC at the outlet of the chlorine contact tank once every two hours by grab sample.

   b. No more than 36 of all TRC samples taken at the outlet of the chlorine contact tank shall be less than 0.5 mg/L for any one calendar month.

   c. No TRC sample collected at the outlet of the chlorine contact tank shall be less than 0.2 mg/L.

   d. If dechlorination facilities exist, the samples above shall be collected prior to dechlorination.

   e. If the permittee violates the monthly geometric mean for *E. coli* (as shown in Part 1.A of this permit) during the permit cycle, the following limits shall apply and supersede the limits in Part I.A of this permit until it can be demonstrated through a revised Chlorine Reduction Study that adequate disinfection will occur using a lower level of chlorine disinfection. The Chlorine Reduction Study shall be reviewed and approved by the Department of Environmental Quality (DEQ).

      1) No more than 36 of all samples for TRC taken after the chlorine contact tank and prior to dechlorination shall be less than 1.0 mg/L TRC for any calendar month.

      2) No TRC sample collected prior to dechlorination shall be less than 0.6 mg/L (instantaneous TRC technological minimum limit).

   f. If disinfection is by a method other than chlorination, *E. coli* shall be limited and monitored by the permittee as specified below and this requirement, if applicable, shall substitute for the TRC and *E. coli* requirements delineated elsewhere in Part I of this permit.

	Discharge Limitations Monthly Average	Monitoring Frequency Requirements	Sample Type
E. coli	126 n/100mL Geometric Mean	1/D	Grab Between 10 AM & 4 PM

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
$cBOD_5$	2 mg/L
Ammonia-N	0.20 mg/L
TRC	0.10 mg/L
Total Recoverable Copper	7.2 µg/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. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures

have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II A of this permit.

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 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, 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. 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 a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis 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, 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 - The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

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:

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

   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:

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

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

c. For Total Phosphorus, 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. Pretreatment Requirements

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

   a. Continue implementing a pretreatment program that complies with the Clean Water Act, Water Control Law, State regulations, approved program and subsequent approved program elements.

   b. Within one year of the effective date of this permit, the permittee shall reevaluate the local limits using current influent, effluent and sludge monitoring data and submit the data and results of the evaluation to the DEQ Regional Office. 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 31st of each year and shall include:

      1) An updated list of the SIUs, as defined in 9VAC25-31-10, noting all of the following:

         a) Facility contact information (contact name, mailing address, email address, telephone number);

         b) The Standard Industrial Classification (SIC) and North American Industry Classification System (NAIC) codes for all SIUs and categorical industrial users (CIUs);

         c) Identification and explanation of any SIUs deleted from the previous year's list;

         d) Identification of SIUs subject to Categorical Standards and the applicable standard(s);

         e) Applicable sections of Title 40 of the Code of Federal Regulations (CFR);

         f) SIUs subject to local limits that are more stringent than Categorical Pretreatment Standards;

         g) SIUs subject only to local limits;

         h) CIUs that are subject to reduced reporting requirements under 9VAC25-31-840.E.3.; and

         i) SIUs that are nonsignificant 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/IUs and enforcement actions taken to alleviate said events.

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

6) A summary of any changes to the submitted pretreatment program previously not reported to 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 noncompliance during the reporting period.

9) Results of the POTW's influent, effluent and sludge sampling not previously submitted to DEQ-NRO.

10) Copies of newspaper publications of all SIUs in significant noncompliance during the reporting period.

11) Signature of an authorized representative.

d. Submit any changes to the approved pretreatment program to 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 or reissued by the POTW are effective and enforceable.

f. Ensure all SIUs are inspected at least annually.

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. At a minimum, this would include: manufacturing areas; chemical storage areas; pretreatment facilities; spill prevention and control procedures; hazardous waste generation; and the SIU's self-monitoring procedure and records.

g. Implement the reporting requirements of Part VII of the VPDES Permit Regulation at 9VAC25-31-840.

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. Ensure that all public participation requirements are met. SIUs in significant noncompliance with pretreatment standards and/or requirements for the previous twelve (12) months shall be placed in public notice annually.

2. DEQ may require the POTW to institute changes to the legal authority regarding SIU permits:

   a. If the legal authority does not meet the requirements of the Clean Water Act, State Water Control Law or VPDES Regulations;

   b. If problems such as interferences, pass-through, violations of Water Quality Standards or sludge contamination develop or continue; and/or

   c. If federal, state or local requirements change.

3. Program Streamlining:

   a. The Control Authority may determine that an IU 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 finding that an IU, as discussed in 3.a. above, 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 industrial user or POTW, and in accordance with Part VII (9VAC25-31-730 et seq.) of this chapter, determine that such IU is not a SIU, as defined in 9VAC25-31-10.

D. Whole Effluent Toxicity Program Requirements

1. Biological Monitoring

   a. In accordance with the schedule in Part I.D.2. below, the permittee shall conduct annual chronic toxicity tests until the permit term expiration. 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 endpoint:

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

d. The test data will be evaluated statistically by DEQ staff to assess the reasonable potential for toxicity of the discharge to surface waters 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 DEQ determine that a limit is warranted; this permit may be modified, or alternatively revoked and reissued, to incorporate a WET limit and compliance schedule.

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. The results of the test and the test report shall be reported with the DMR for the month following receipt of the testing results. In no case shall this exceed forty-five (45) days from the receipt of the test results.

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 Whole Effluent Toxicity Program in accordance with the following schedule:

Period	Sampling Period
Annual 1	April 1, 2020 – June 30, 2020
Annual 2	January 1, 2021 – March 31, 2021
Annual 3	October 1, 2022 – December 31, 2022
Annual 4	July 1, 2023 – September 30, 2023

E. 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% 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% 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.

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. CTC and CTO Requirement
The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9VAC25-790), obtain a Certificate to Construct (CTC), and a Certificate to Operate (CTO) from the Department. The request for a CTC or CTO shall be submitted by the design engineer and owner to the DEQ Regional Office prior to constructing the wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.

5. 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 Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals Regulations. 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.

6. Reliability Class
The permitted treatment works shall meet Reliability Class I.

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. 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.

9. 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.

10. 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.

11. PCB Pollutant Minimization Plan

   The permittee has completed low-detection level, congener specific monitoring of the effluent for PCBs.

   a. Pollutant Minimization Plan (PMP)

The permittee shall submit to DEQ-NRO for review and approval a Pollutant Minimization Plan (PMP) designed to investigate the location and potential reduction of sources of PCBs in the collection system. The PMP shall be submitted within one (1) year of the effective date of the permit.

The PMP shall detail the practices and procedures which will be followed to investigate the location and potential reduction of sources of PCBs. This PMP shall include, but not necessarily be limited to, the following items, as appropriate:

i. Provide a facility contact for the contents of the PMP and any activities associated with the PMP;

ii. Provide a proposed implementation schedule for minimization activities and prospective milestones;

iii. Propose actions for known or probable sources;

iv. Propose actions to find and control unknown sources;

v. Summarize any previous minimization activities;

vi. Present methods for measuring, demonstrating, and reporting progress;

a) May include an evaluation of the total PCBs and/or PCB congener distribution in the initial source intake water to determine the net contributions of PCBs introduced to the treatment works.

b) May include raw influent testing using either grab or composite samples as well as sampling upstream in the collection system. Screening methods may be utilized to target specific areas of interest.

c) Alternative PCB test methods are acceptable provided analytical sensitivity is sufficient for detection and quantification.

d) May perform further monitoring of the final effluent to determine effectiveness of the reduction efforts and to reestablish a new baseline for PCBs in the final effluent.

vii. Estimate the PCB load reduction provided by treatment; and

viii. Provide information on continuing assessment of progress, which may include establishment of criteria to evaluate whether the location and potential reduction of PCB sources has been addressed, and whether a more routine follow-up awareness, education, and inspection approach is appropriate.

b. Pollutant Minimization Plan (PMP) Annual Report

An Annual Report shall be submitted to DEQ-NRO for review and approval by February 10th for the previous year's PMP activities.

- First Annual Report is due February 10, 2021;
- Second Annual Report is due February 10, 2022;
- Third Annual Report is due February 10, 2023;
- Fourth Annual Report is due February 10, 2024.

The Annual Report shall:

i. Summarize PMP Achievement for investigating the location and potential reduction of sources of PCBs in the collection system during the past calendar year;

ii. Address any revisions needed for the PMP for the coming year;

iii. Address material and process modifications, if applicable;

iv. Summarize measures taken to address known, probable and potential sources; and

v. Discuss incremental and cumulative changes from the baseline loading.

12. Bypass Point Sources

The permittee is not authorized to discharge from any location except Outfall 001 except as provided for in Part II.U of this permit and in accordance with the State Water Control Board's VPDES Permit Regulation.

In addition to the reporting requirements in Part II.I and Part II.U, for each external bypass occurrence, the permittee is required to report the date, the duration of bypass occurrence, and an estimation of the volume of wastewater discharged during the occurrence. Additionally, the permittee shall measure pH and the concentration of BOD, TSS, and TRC discharged from the bypass point. BOD and TSS shall be measured using flow-proportioned composite sampling; grab samples shall be used to measure pH and TRC. The standard operating procedures to be conducted by facility staff during an external bypass event shall be incorporated into the O&M Manual and shall become an enforceable part of the permit.

The permittee shall notify Alexandria Health Department, Arlington Health Department and DEQ of each external bypass event as soon as possible but in no case more than 24 hours after the initial discharge enters Four Mile Run. Written record of notification shall be submitted to DEQ-NRO within five days of each event.

13. Final Effluent Monitoring Alternative

The permittee may develop an effluent specific correlation between $cBOD_5$ and TOC/COD for final effluent compliance monitoring as specified below:

a. The permittee must submit to DEQ for review and approval a plan of study prior to the start of the study. At minimum, the study shall include the following information:
   1. The method of analysis for COD or TOC;
   2. QA/QC procedures for the method;
   3. Time frame for the study;
   4. The number of samples to be analyzed to establish the correlation;
   5. The statistical methods for determining the correlation; and
   6. The method of validating the established correlation.

b. Once the study is completed and a correlation is established, the data, QA/QC information, and correlation calculations are to be submitted to DEQ for review and approval. Upon DEQ's approval of the results, monitoring for COD or TOC will be once per day and sampling will be 24-hour composites. Monitoring for $cBOD_5$ shall be reduced to once per week for the remainder of the permit term. COD or TOC results shall be reported in accordance with Part II.C.

c. The permittee shall validate the established correlation monthly, as outlined in the plan of study, and submit the validation with the monthly DMR. A summary of the validation data shall also be submitted with the permit application at least 180 days prior to the expiration of the current permit. The method of validation in the plan of study shall be an enforceable part of the permit.

d. DEQ may require resumption of $cBOD_5$ daily monitoring should it determine that the correlation is no longer valid. The permittee may discontinue TOC/COD final effluent monitoring and return to $cBOD_5$ monitoring upon notifying DEQ in writing. TOC/COD daily monitoring will cease the first day of the month following the notification.

Part II. Conditions Applicable To All VPDES Permits

A. Monitoring

1. Samples and measurements required by this permit shall be taken at the permit designated or approved location and be representative of the monitored activity.
   a. 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.
   b. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.
   c. Samples taken shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

2. Any pollutant specifically addressed by this permit that is sampled or measured at the permit designated or approved location more frequently than required by this permit shall meet the requirements in A.1.a through c above and the results of this monitoring shall be included in the calculations and reporting required by this permit.

3. Operational or process control samples or measurements shall not be taken at the designated permit sampling or measurement locations. Operational or process control samples or measurements do not need to follow procedures approved under Title 40 Code of Federal Regulations Part 136 or 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

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or 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) or online at **http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx** . 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. Applications. All permit applications shall be signed as follows:

   a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
      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, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

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

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes:

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

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

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

c. The written authorization is submitted to the Department.

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

4. Certification. Any person signing a document under Parts II, K.1. or 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.

Part III. Biosolids

A. Biosolids Limitations and Monitoring Requirements

During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to manage Class B biosolids in accordance with 9VAC25-31-420 through 720 and 9VAC25-32-303 through 358, the limitations, conditions and requirements set forth in this permit and the approved Biosolids Management Plan.

All biosolids samples shall be collected and analyzed in accordance with Title 40 of the Code of Federal Regulations, Part 503 and 136, and the approved Biosolids Management Plan. Analyses shall be conducted by a VELAP accredited environmental laboratory. The permittee shall ensure that all biosolids generated under authority of this permit and provided to other persons, for the purpose of land application, blending or further treatment, are monitored in accordance with the monitoring requirements as specified below in Part III.A.1.

1. Class B Biosolids

The permittee shall ensure that all Class B Biosolids provided to a person for the purpose of land application or blending are monitored in accordance with the requirements as specified below.

a. Biosolids Annual Production Monitoring (SP1)

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

b. Biosolids Chemical Limitations and Monitoring Requirements (S01)

Pollutants in Class B biosolids that are generated and provided to a land applier under the authority of this permit shall be monitored and limited as specified below. Biosolids shall not be provided for land application if the concentration of any pollutant in the biosolids exceeds the ceiling limitation of that pollutant.

PARAMETERS	PC / CPLR LIMITATIONS	CEILING LIMITATIONS	MONITORING REQUIREMENTS	
	Monthly Average (mg/kg) (1)(2)	Concentration Maximum (mg/kg) (1)(2)	Frequency	Sample Type
Percent Solids (%)	NL	NA	1/2M	Composite
Arsenic, Sludge	41	75	1/2M	Composite
Cadmium, Sludge	39	85	1/2M	Composite
Copper, Sludge	1,500	4,300	1/2M	Composite
Lead, Sludge	300	840	1/2M	Composite
Mercury, Sludge	17	57	1/2M	Composite
Molybdenum, Sludge	NL	75	1/2M	Composite
Nickel, Sludge	420	420	1/2M	Composite
Selenium, Sludge	100	100	1/2M	Composite
Zinc, Sludge	2,800	7,500	1/2M	Composite

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

(1) All parameters are subject to pollutant concentrations (PC), cumulative pollutant loading rates (CPLR), and ceiling limits. PC biosolids contain the constituents identified above at concentrations below the monthly average specified herein. CPLR biosolids contain the constituents identified above at concentrations above the monthly average and each sample must be below the maximum concentration specified.

(2) All limits and criteria are expressed on a dry weight basis

c. Pathogen Reduction and Vector Attraction Reduction (VAR) Requirements

Class B - Biosolids generated and provided to a land applier under this permit shall be treated to meet no less than Class B Pathogen Reduction Alternative and one VAR Option 1 - 8 prior to delivery to a land application site. The biosolids shall be monitored and limited in accordance with the treatment options selected as identified in the table below.

TREATMENT OPTION		CLASS B PATHOGEN REDUCTION & VAR TREATMENT & STANDARDS	MONITORING REQUIREMENTS
PATHOGEN REDUCTION ALTERNATIVE	PROCESS TO SIGNIFICANTLY REDUCE PATHOGENS (PSRP) OPTION		
2	5	PSRP: Sufficient lime is added to the sewage sludge to raise the pH of the sewage sludge to 12 S.U. after two hours of contact (9VAC25-31-710.D.5).	(1)
VAR OPTION	VECTOR ATTRACTION REDUCTION TREATMENT STANDARD		MONITORING REQUIREMENTS
6	Sufficient alkali is added to the sewage sludge to raise the pH of the sewage sludge to 12 or higher, and without the addition of more alkali, maintain the pH at 12 S.U. for two hours and then at 11.5 S.U. or higher for an additional 22 hours. (9VAC25-31-720.B.6.))		(1)(2)

NA = Not applicable

(1) Process monitoring must be sufficient to demonstrate compliance with PSRP and VAR treatment requirements.

(2) If the selected VAR option 1- 8 is not met, the permittee shall provide notification to the land applier at the time the biosolids are delivered that the biosolids did not meet VAR at the WPCP and that the biosolids must be injected below the surface of the land (9VAC25-31-720.B.9) or incorporated into the soil within 6 hours after application (9VAC25-31-720.B.10). The Permittee shall obtain verification from the land applier that injection or incorporation occurred.

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B. Biosolids Management and Reporting Requirements

1. Only biosolids from a source that has been approved by the DEQ, as identified on the DEQ's *Sources of Biosolids, Industrial Sludges, WTP Residuals* list, and treated to meet metals limits in Parts III.A.1.b, pathogen reduction and VAR standards in Parts III.A.1.c, shall be given to any person for the purpose of land application.

2. Biosolids Monitoring Frequency and Reporting Requirements

   a. Monitoring Frequency
   The monitoring frequency is once every two months (1 / 2 Months). The monitoring frequency may be increased during this permit term if DEQ deems it necessary.

   After sewage sludge has been monitored for two years at the monitoring frequency specified in Part III.A.1, the required biosolids 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 III.A.1 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 III.A.1, the monitoring frequency of once every two months (1 / 2 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. Annual Report
   The permittee shall submit an Annual Report not later than February 19th of each year to the DEQ-Northern Regional Office. Each report is for the previous calendar year's activity. If no biosolids were generated and provided to a land applier under this permit during the reporting year, a report shall be submitted stating that no biosolids were generated or delivered during the year. The report shall include at minimum:
   1) Part III.A.1.a Sewage Sludge Annual Production Monitoring;
   2) Biosolids Monitoring Data:
      a) Part III.A.1.b Biosolids – Metals Limitations;
      b) Part III.A.1.c Biosolids - Pathogen Reduction and Vector Attraction Reduction (VAR) Requirements;
      c) Supporting documentation, including laboratory chain of custody forms and certificates of analyses, shall be submitted with the report;
      d) Monthly average shall be reported as the average of the results of all samples collected within a calendar month and analyzed using an approved method, in accordance with Part II.A.1-2. of this permit. For monitoring periods which include multiple months, if one sample is collected during the monitoring period, that result shall be reported as the monthly average. If samples are collected in multiple months during the monitoring period, a monthly average shall be calculated for each month in which samples were collected during the monitoring period and the highest monthly average reported. Individual results and calculations shall be submitted with the report; and
      e) The maximum concentration shall be reported as the highest single result from all samples collected and analyzed during a monitoring period.
   3) A summary of biosolids disposal contracts, if any, currently held with other generators, as well as any other biosolids or sludges currently being handled through subcontracts or other agreements. Include biosolids or sludges given to other generators, contractors or land filled, and biosolids or sludges accepted from other generators for treatment or land application;
   4) Identify other methods used to dispose of or use biosolids or sludge produced during the previous calendar year. Report the annual total amount of biosolids or sludge (in dry metric tons) disposed of or used by each method identified; and
   5) The annual report shall be certified and signed in accordance with Part II.K.

3. Record Keeping

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

a. The concentrations of each pollutant in Parts III.A.1.b;
b. A description of how the pathogen reduction requirements in Parts III.A.1.c are met;
c. A description of how the vector attraction reduction requirements in Part III.A.1.c are met;
d. A description of how the management practices specified in the approved Biosolids Management Plan and this permit are met;
e. The reports required in Part II.B.2.;
f. The NANI's required in Part III.B.4; and
g. The following certification statement(s) as applicable:

"I certify, under penalty of law, that the information that will be used to determine compliance with the Class A pathogen requirements in 9VAC25-31-710 A, the Class B pathogen requirements in (insert, B 2, B 3, or B 4 when one of those requirements is met) and the vector attraction reduction requirements in (insert one of the vector attraction reduction requirements in 9VAC25-31-720 B 1 through B 8 when one of those requirements is met) 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."

4. Notice and Necessary Information (NANI)

A NANI shall be provided to any person to whom biosolids are provided for the purpose of further treatment, blending or land application. The NANI shall be provided at the time the biosolids are provided if available, but no later than 45 days after the last day of the month in which biosolids were provided. The NANI shall represent the most recent monitoring period.
The NANI shall include at minimum:

a. A statement that Class B pathogen requirements in 9VAC25-31-710.A - B were met and the alternative used;
b. A statement that one of the VAR requirements in 9VAC25-31-720.B.1 through B.8 was met and the alternative used; or
c. A statement that one of the VAR requirements in 9VAC25-31-720.B.1 through B.8 was not met and incorporation or injection was required;
d. The notice(s) provided to the land applier when biosolids provided did not meet VAR and required incorporation or injection;
e. The concentration of total nitrogen (as N on a dry weight basis) of the biosolids; and
f. The following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with the Class B pathogen requirements in 9VAC25-31-710.B or Class A pathogen requirements in 9VAC25-31-710.A and the VAR requirement in (insert one of the VAR requirements in 9VAC25-31-720.B.1 through B.8, if one of those requirements is met) 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".

5. Biosolids Management Plan (BSMP)

a. The permittee shall conduct all biosolids/sewage sludge use or disposal activities in accordance with the Biosolids Management Plan approved with the reissuance of this permit. The permittee shall maintain the BSMP which consists of the following components:

(1) The materials developed and submitted at the time of permit application or permit modification in accordance with 9VAC25-31-100.Q;
(2) The Operations and Maintenance (O&M) Manual (Sections regarding solids handling and biosolids production and management, etc); and
(3) The Odor Control Plan.

b. Odor Control Plan (OCP) Requirement – If an OCP is not on file at DEQ, an OCP shall be submitted to DEQ within 90 days of the effective date of this permit. The OCP shall include at a minimum:
   (1) Methods used to minimize odor in producing biosolids;
   (2) Methods used to identify malodorous biosolids before delivery to the land applier (at the generating facility);
   (3) Methods used to identify and abate malodorous biosolids if delivered to the field, prior to land application; and
   (4) Methods used to abate malodor from biosolids if land applied.

c. The BSMP and all of its components are an enforceable part of the permit.

d. Any proposed changes in the biosolids/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 Biosolids Management Plan 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 biosolids/sewage sludge use or disposal practices.

6. Biosolids/Sewage Sludge Reopener

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

7. Biosolids Use and Disposal

The permittee shall conduct all biosolids use or disposal activities in accordance with the Biosolids Management Plan approved with the issuance of this permit. Any proposed changes in the biosolids 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 Biosolids Management Plan 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 biosolids use or disposal practices.