



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court, Woodbridge, Virginia 22193

(703) 583-3800

www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

January 9, 2020

By E-mail: wdownes@loudounwater.org

Receipt Confirmation Requested

Kinsey Downes
Loudoun County Sanitation Authority
44865 Loudoun Water Way
Ashburn, VA 20146

Re: Reissuance of VPDES Permit No. VA0060500, Waterford Sewage Treatment Plant

Mr. Downes:

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

A Discharge Monitoring Report (DMR) form is no longer included in the reissuance package since you are already enrolled in DEQ's electronic DMR (e-DMR) program. The first electronic DMR submittal for February 2020 is due by March 10, 2020. Please reference the effluent limits in your permit and report monitoring results in e-DMR to the same number of significant digits as are included in the permit limits for the parameter. The regional contact for e-DMR is Rebecca Vice; she can be reached at (703) 583-3922 or rebecca.vice@deq.virginia.gov.

Please note that compliance with the permit's requirements for use and disposal of sewage sludge does not relieve you of your responsibility to comply with federal requirements set forth in 40 CFR Part 503. Until DEQ seeks and is granted authority to administer the Part 503 regulations by EPA, treatment works treating domestic sewage should continue to work directly with EPA to comply with them. For more information, you can call the EPA Region III office in Philadelphia at (215) 814-5735.

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

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

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

If you have any questions or concerns about the permit, please contact Caitlin Shipman at (703) 583-3859 or caitlin.shipman@deq.virginia.gov.

Respectfully,

A handwritten signature in blue ink, appearing to read "Bryant Thomas", is positioned above the printed name.

Bryant Thomas
Water Permit & Planning Manager

Enc.: Permit for VA0060500
Fact Sheet for VA0060500

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



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. **VA0060500**
Effective Date: **February 1, 2020**
Expiration Date: **January 31, 2025**

**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: Loudoun County Sanitation Authority d.b.a. Loudoun Water
Facility Name: Waterford Wastewater Treatment Plant
County: Loudoun
Facility Location: 40024 Old Wheatland Rd., Waterford, VA 20197

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

Stream Name: South Fork Catoctin Creek
River Basin: Potomac
River Subbasin: Potomac
Section: 10b
Class: III
Special Standards: None

A handwritten signature in blue ink, reading "Thomas A. Faha".

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

January 9, 2020
Date

A. Effluent Limitations and Monitoring Requirements**1. Outfall 001 – 0.058 MGD Facility**

- a. During the period beginning with the permit's effective date and lasting until the expiration, the permittee is authorized to discharge from Outfall Number 001. Such discharges shall be limited and monitored by the permittee as specified below.
- b. There shall be no discharge of floating solids or visible foam in other than trace amounts.

	Discharge Limitations				Monitoring Requirements	
	Monthly Average ⁽¹⁾		Weekly Average ⁽¹⁾		Frequency	Sample Type
Flow ⁽²⁾ (MGD)	NL		NA		Continuous	TIRE
pH	NA		NA		1/D	Grab
BOD ₅ ⁽³⁾	24 mg/L	5.3 kg/day	36 mg/L	7.9 kg/day	1/W	4H-C
Total Suspended Solids, TSS ⁽³⁾⁽⁴⁾	30 mg/L	6.6 kg/day	45 mg/L	9.9 kg/day	1/W	4H-C
Dissolved Oxygen	NA		NA		1/D	Grab
Ammonia, as N (June – November)	12 mg/L		18 mg/L		1/W	4H-C
Ammonia, as N (December – May)	NL mg/L		NA		1/Q	4H-C
<i>E. coli</i> (Geometric Mean)	126 n/100 mL		NA		1/Q ⁽⁵⁾⁽⁶⁾	Grab
Total Residual Chlorine (after contact tank)	NA		NA		3/D	Grab
Total Residual Chlorine (after dechlorination)	0.017 mg/L		0.019 mg/L		3/D	Grab
Nitrate+Nitrite	NL mg/L		NA		1/Q	4H-C
Total Kjeldahl Nitrogen, TKN	NL mg/L		NA		1/Q	4H-C
Total Nitrogen	NL mg/L		NA		1/Q	Calculated
Total Phosphorus	NL mg/L		NA		1/Q	4H-C

(1) See Part I.B.

MGD = Million gallons per day.

1/D = Once every day.

(2) The design flow is 0.058 MGD.

NA = Not applicable.

3/D = Three times every day, at four hour intervals.

(3) At least 85% removal for BOD₅ and TSS shall be attained for this effluent.

NL = No limit; monitor and report.

1/W = Once every week.

SU = Standard units.

(4) TSS shall be expressed as two significant figures.

TIRE = Totalizing, indicating and recording equipment.

1/Q = Once every calendar quarter.

(5) Sample shall be taken between 10 AM and 4 PM.

(6) The permittee shall collect four (4) samples during one month within each quarterly monitoring period as defined below. The results shall be reported as the geometric mean.

The quarterly monitoring periods shall be January through March, April through June, July through September and October through December. The DMR shall be submitted no later than the 10th day of the month following the monitoring period.

Should any of the quarterly monitoring results for *E. coli* exceed 126 n/100 mL, reported as the geometric mean, the monitoring frequency shall revert to once per week for the remainder of the permit term.

4H-C = A flow proportional composite sample collected manually or automatically, and discretely or continuously, for the entire discharge of the monitored 4-hour period. Where discrete sampling is employed, the permittee shall collect a minimum of four (4) 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 four (4) 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.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

B. Additional Monitoring Requirements, Quantification Levels and Compliance Reporting

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

- The permittee shall monitor the TRC at the outlet of the chlorine contact tank three times per day by grab sample.
- No more than 9 samples taken at the outlet of the chlorine contact tank shall be less than 1.0 mg/L for any one calendar month.
- No TRC sample collected at the outlet of the chlorine contact tank shall be less than 0.6 mg/L.
- If dechlorination facilities exist the samples above shall be collected prior to dechlorination.
- 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
<i>E. coli</i>	126 n/100 mL Geometric Mean	Two Days per Week	Grab Between 10 AM & 4 PM

2. Quantification Levels

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

Characteristic	Quantification Level
TSS	1.0 mg/L
BOD ₅	2 mg/L
Ammonia, as N	0.20 mg/L
TRC	0.10 mg/L
TKN	0.50 mg/L

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

3. Compliance Reporting for Parameters in Part I.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.
- 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 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.
- b. 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 Program

- 1. The permittee's pretreatment program has been approved. The program is an enforceable part of this permit. The permittee shall:
 - a. Within 180 days of the effective date of this permit, the permittee shall submit to DEQ Northern Regional Office (DEQ-NRO) a survey of all Industrial Users (IUs) discharging to the publically owned treatment works (POTW). The information shall be submitted on the DEQ Discharger Survey Form; or an equivalent form that includes the quantity and quality of the IU wastewater. Survey results shall include the identification of Significant Industrial Users (SIUs) of the POTW. In conjunction with the survey, the permittee may elect to develop, submit for DEQ-NRO approval and implement a plan to survey, on pre-established intervals during the term of this permit, the industrial community within their jurisdiction. If an alternative plan is developed, the permittee shall submit the plan to DEQ-NRO for approval within 90 days of the permit effective date.
 - b. If SIUs are identified during the survey, the permittee shall develop or reevaluate the local limits using current influent, effluent and sludge monitoring data and submit the data and results of the evaluation to the DEQ-NRO. All SIUs shall be sampled at the end of any categorical process and at the entrance to the treatment works.
 - c. Permittee shall 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 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. Categorical Industrial Users (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 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 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 Categorical Industrial User rather than a Significant Industrial User on a finding that the Industrial User 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. Groundwater Monitoring

1. Groundwater Quality Monitoring Plan

No later than 180 days following the effective date of this permit, the permittee shall submit to the DEQ Northern Regional Office a revised Groundwater Quality Monitoring (GQM) Plan for DEQ's review and approval. Once approved, the plan shall be incorporated by reference as an enforceable part of this permit. Any changes to the approved plan shall be submitted for review and approval to the Regional Office prior to implementation. The GQM plan shall be amended or updated if requested by the DEQ or in cases where new information or data warrants changes to the plan.

The revised GQM Plan shall, at a minimum, include:

- a. Geologic information;
- b. Site aquifer characterization, including a potentiometric map indicating the direction of groundwater flow and methods for calculating flow rate;
- c. Network description including the location, identification of the upgradient and downgradient well(s), proposed additional wells, and the location of all monitored units on the site;
- d. Upon installation of the proposed wells, the installation and construction (completion logs) of those wells.
- e. An updated constituent list including the following pollutants:
 - i. Total Arsenic
 - ii. Total Cadmium
 - iii. Total Chloride
 - iv. Total Copper
 - v. Total Lead
 - vi. Total Molybdenum
 - vii. Total Nickel
 - viii. Total Selenium
 - ix. Total Sulfate
 - x. Total Zinc
 - xi. pH
 - xii. *E. coli*
 - xiii. Ammonia
 - xiv. Nitrate
 - xv. Nitrite
- f. The plan shall identify applicable Virginia groundwater quality standards and federal maximum contaminant levels (MCLs) for all monitored constituents. In addition, background concentrations shall be calculated for each constituent based on the sampling results from the upgradient well(s) utilizing the initial four quarterly sampling events completed following plan approval. The methodology for determining site background shall meet the technical criteria defined in EPA's March 2009 ***Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance*** (EPA 530/R-09-007) and the August 2010 ***Errata Sheet*** (EPA 530/R-09-007a). The permittee shall update the plan with the site's natural background concentrations with the first annual report submittal following completion of the first four sampling events. The background concentrations shall be updated annually following initial calculation, and this updated information shall be incorporated in the plan and included in the annual report.

- g. Monitoring frequency and sampling methodology, which shall include:
- i. Monitoring of all wells shall be conducted on a calendar quarter basis, beginning with the first complete monitoring period following well installation. Monitoring results shall be reported to DEQ by the tenth of the month following the completion of the semiannual monitoring period.
 - ii. Prior to sampling, groundwater elevation measurements to the nearest 0.01 feet shall be obtained in order to calculate groundwater flow direction and rate for each groundwater sampling event, and the wells shall be properly purged to ensure collection of representative groundwater samples.
 - iii. Any time it is recognized that a monitoring well on site does not contain a sufficient volume of groundwater for sampling purposes, the Regional Office shall be notified no later than 30 days following the sampling event with a description of the problem. The DEQ may require a proposal and schedule to replace or relocate the well.
 - iv. Groundwater samples analyzed for metal constituents shall be taken without field filtering. All final metals analytical data shall be reported as total recoverable (not dissolved fraction) and determined by using an approved EPA SW-846 analytical method. The lab method utilized shall be listed in the Annual Report.
- h. Discussion of any surface water quality sampling points that are used in conjunction with the groundwater monitoring well network (to include the identification of the upgradient and downgradient sampling points and a site map showing the location of these points).
- i. A data evaluation method to be performed by the permittee, including a method to determine site background that meets the technical criteria defined in EPA's March 2009 ***Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance*** (EPA 530/R-09-007) and the August 2010 ***Errata Sheet*** (EPA 530/R-09-007a).
- j. Closure procedures for any wells proposed to be abandoned or replaced.

2. Reporting

The results of the annual groundwater sampling actions in accordance with the approved GQM Plan shall be submitted to the DEQ Northern Regional Office once per year in an Annual Report due 90 days following the end of the 4th quarterly monitoring period.

The permittee shall submit the site's natural background concentrations with the first Annual Report, following completion of the first four sampling events. The background concentrations shall be updated annually following initial calculation and included in the Annual Report.

The Annual Report shall include, at a minimum:

- a. A site map, a site location map, and a potentiometric map,
- b. Lab methods utilized for data evaluation,
- c. A copy of the analytical data from each sampling event,
- d. A summary of the concentrations of all detected constituents in each monitoring well per sampling event during the year,
- e. A discussion of the groundwater flow rate and direction as determined during the calendar year,
- f. A demonstration, including the evaluation required in Part I..1.e of whether the sampling results exceed background concentration.

3. Future Actions

In the event groundwater sampling results demonstrate exceedance of one or more background concentrations, the permittee shall, prior to the next regularly scheduled groundwater sampling event request a meeting with the Regional Office to discuss the appropriate response action(s) to maintain protection of human health and the environment. The Board may require corrective action, modifications to the plan, or alternatively modify or revoke and reissue the permit.

4. Source Removal

In lieu of submitting a GQM Plan, the permittee may submit a plan and schedule to remove the lagoon system which may be impacting groundwater. Removal of the potential source of groundwater contamination obviates the need for groundwater monitoring to evaluate the integrity of the lagoon system. The plan and schedule shall be submitted to

DEQ-NRO within 180 days of the permit effective date. Upon review and approval of this plan and schedule, the DEQ-NRO will waive the groundwater monitoring requirements of Part I.D for this permit term.

Any changes to the approved plan and schedule shall be submitted to DEQ-NRO in advance of implementing changes for review and approval. The approved plan shall be incorporated into the permit by reference and shall be enforceable under the permit. If the approved plan and schedule is not adhered to, DEQ-NRO may require the groundwater monitoring requirements as stipulated in Part I.D be implemented. DEQ-NRO will inform the permittee in writing should this circumstance occur.

The plan and schedule shall ensure the lagoons are removed from service as soon as practicable, but no later than December 31, 2025, and shall include, at a minimum, a timeline for the following:

- a. Completion of a preliminary engineering report,
- b. Submittal for a Certificate-to-Construct,
- c. Submittal for a Certificate-to-Operate.

Upon approval, the permittee shall submit an Annual Report, due annually on February 1st. The Annual Report shall include, at a minimum, the following:

- a. Review of the proposed timeline,
- b. Summary of actions taken in the previous year,
- c. Planned actions for the upcoming year,
- d. Summary of all fiscal planning for the treatment works upgrade.

E. Special Conditions

2. 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.

3. 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.

4. 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 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.

5. CTC and CTO Requirement

In accordance with Sewage Collection and Treatment regulation (9VAC25-790), the permittee shall obtain a Certificate to Construct (CTC) and a Certificate to Operate (CTO) from the Department of Environmental Quality prior to constructing wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.

6. Licensed Operator Requirement

The permittee shall employ or contract at least one Class III 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 Licensing Regulations at 18VAC160-30 et seq. 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.

7. Reliability Class

The permitted treatment works shall meet Reliability Class II.

8. 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.

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-NRO approval 90 days prior to the effective date of the changes. Upon approval, the revised SMP becomes an enforceable part of the permit.

The permit may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by substantive changes in sewage sludge use or disposal practices.

11. Treatment Works Closure Plan

If the permittee plans an expansion or upgrade to replace the existing treatment works, or if facilities are permanently closed, the permittee shall submit to the DEQ-NRO a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation. Once approved, the plan shall become an enforceable part of this permit and closure shall be implemented in accordance with the approved plan. No later than 14 calendar days following closure completion, the permittee shall submit to the DEQ-NRO written notification of the closure completion date and a certification of closure in accordance with the approved plan.

12. 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.

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 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.