

Permit No.: VA0091316
Effective Date:
Expiration Date:

AUTHORIZATION TO DISCHARGE UNDER THE
VIRGINIA POLLUTION 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, Parts I and II of this permit, as set forth herein.

Owner: Middlesex County
Facility Name: Middlesex Courthouse WWTP
City: Saluda
County: Middlesex
Facility Location: Northern side of Rt. 33, ¼ mile east of Courthouse Dr.

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

Stream: Unnamed Tributary to Urbanna Creek
River Basin: Rappahannock River
River Subbasin: N/A
Section: 2
Class: III
Special Standards: None

Water Permit Manager, Piedmont Regional Office

Date

A. Limitations and Monitoring Requirements

During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall 001.

1. This discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS			
	MONTHLY AVERAGE		WEEKLY AVERAGE		MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MGD) ^(a)	NL		NA		NA	NL	1/Day	Estimate
pH (standard units)	NA		NA		6.0	9.0	1/Day	Grab
cBOD ₅ ^(b)	10 mg/L	1500 g/d	15 mg/L	2300 g/d	NA	NA	1/Month	Grab
Total Suspended Solids (TSS) ^(b)	10 mg/L	1500 g/d	15 mg/L	2300 g/d	NA	NA	1/Month	Grab
Dissolved Oxygen (DO)	NA		NA		5.0 mg/L	NA	1/Day	Grab
Total Kjeldahl Nitrogen (TKN) ^(b)	3.0 mg/L	450 g/d	4.5 mg/L	680 g/d	NA	NA	1/Month	Grab
Fecal Coliform	200 N / 100 mL		NA		NA	NL	2/Month (between 10 am and 4 pm)	Grab
E.Coli	126 N / 100 mL (Geometric Mean)		NA		NA	NL	1/Week (between 10am and 4pm)	Grab

"NL" means no limitation is established. Monitoring and reporting however, are required.

"NA" means not applicable.

(a) The design flow of this treatment facility is 0.0399 MGD (39,900 gpd). See Part I.B.1 for additional flow requirements.

(b) These limitations are expressed in two significant digits.

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

3. Effluent samples shall be taken at Outfall 001.

4. At least 85% removal for TSS and cBOD₅ must be attained for this effluent.

5. Monitoring and reporting are not required until commencement of this discharge. See Part I.B.13 for notification requirement.

B. Other Requirements or 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, Piedmont Regional Office when the monthly average flow influent to the sewage treatment works reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the Piedmont Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of the permit.
2. **Operations and Maintenance Manual Requirement:** The permittee shall develop an Operations and Maintenance (O & M) Manual for the treatment works. This manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. The manual shall be submitted to the DEQ Regional Office for approval within 90 days of completion of construction. The permittee shall operate the treatment works in accordance with the approved O & M Manual. This manual shall include, but not necessarily be limited to, the following items, as appropriate:
 - a. Techniques to be employed in the collection, preservation, and analysis of effluent samples;
 - b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;
 - c. Discussion of Best Management Practices, if applicable;
 - d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants characterized in Part I.C.8 that will prevent these materials from reaching state waters;
 - e. Treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory and record keeping; and
 - f. A sludge/ solids disposal plan.

Any changes in the practices and procedures followed by the permittee shall be documented and submitted for staff approval within 90 days of the effective date of the changes. Upon approval of the submitted manual changes, the revised manual becomes an enforceable part of the permit. Noncompliance with the O & M Manual shall be deemed a violation of the permit.
3. **Licensed Operator Requirement:** The permittee shall employ or contract at least one Class IV licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.
4. **Reliability Class:** The permitted treatment works shall meet Reliability Class I.
5. **Sludge Use and Disposal:** The permittee shall, within 120 days of the completion of construction of this facility submit for DEQ approval a Sludge Management Plan (SMP). The SMP shall include information on sewage sludge and biosolids sampling and testing, operational testing and control and recordkeeping necessary to document the quality and proper use and disposal of sewage sludge and biosolids. The permittee shall conduct all biosolids use and disposal activities in accordance with the approved SMP, which becomes an enforceable part of the permit upon approval.

6. **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.

7. **Compliance Reporting:**

- a. Maximum quantification levels (QL's) shall be as follows:

<u>Effluent Characteristic</u>	<u>Quantification Level</u>
cBOD ₅	5 mg/L
TSS	1.0 mg/L
Total Residual Chlorine	0.10 mg/L
Total Kjeldahl Nitrogen	0.50 mg/L

- b. Reporting

Monthly Average -- Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in a. above shall be determined as follows: All concentration data below the QL listed in a. above shall be treated as zero. All concentration data equal to or above the QL listed in a. above shall be treated as it is reported. An arithmetic average shall be calculated using all reported data 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, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is "<QL", then report "<QL" for the quantity. Otherwise use the concentration data and flow data for each sample day to determine the daily quantity and report the average of the calculated daily quantities.

Weekly Average -- Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in a. above shall be determined as follows: All concentration data below the QL listed in a. above shall be treated as zero. All concentration data equal to or above the QL listed in a. above shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week 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, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is "<QL", then report "<QL" for the quantity. Otherwise use the concentration data and flow data for each sample day to determine the daily quantity and report the average of the calculated daily quantities.

- c. Any single datum required shall be reported as "<QL" if it is less than the QL in section a. above. Otherwise the numerical value shall be reported.
- d. The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used (i.e. 5 always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently and shall ensure that consulting laboratories employed by the permittee use the same convention.
8. **Materials Storage and Handling:** Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

9. **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.
10. **Indirect Dischargers:** The permittee shall provide adequate notice to the Department of the following:
- Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
 - 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.
11. **CTC, CTO Requirement:** The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9VAC 25-790), obtain a Certificate to Construct (CTC), and a Certificate to Operate (CTO) from the DEQ prior to constructing wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.
12. **Nutrient Reopener:** This permit may be modified or, alternatively, revoked and reissued to incorporate alternative nutrient limitations and/or monitoring requirements, should:
- the State Water Control Board adopt new nutrient standards for the water body receiving the discharge, including the Chesapeake Bay or its tributaries, or
 - a future water quality regulation or statute require new or alternative nutrient control.
13. **Notification of Commencement of Discharge**
No later than ten days prior to commencement of the discharge from the facility, the permittee shall submit written notification to the Piedmont Regional Office which provides the first day of discharge.