

9 VAC 25-401 - SEWAGE TREATMENT IN THE DULLES AREA WATERSHED

CHAPTER 401.SEWAGE TREATMENT IN THE DULLES AREA WATERSHED.**9 VAC 25-401-10. Purpose and authority.**

This chapter is established by the State Water Control Board to regulate the discharge of sewage treatment effluent to surface waters in the Dulles Area Watershed, which is located upstream of several major public water supply intakes serving the Washington, D.C., metropolitan area. The Dulles Area Watershed is composed of the southeastern portion of Loudoun County, the northwestern portion of Fairfax County, and a small northwestern portion of Arlington County. This regulation does not restrict or affect sewage treatment plants within the Dulles Area Watershed that do not discharge to surface waters within the watershed.

This chapter is adopted pursuant to authority vested in the State Water Control Board by §§ 62.1-44.15 (3a) and 62.1-44.15 (13) of the State Water Control Law.

9 VAC 25-401-20. Affected waters.

This regulation applies to all tributaries and their headwaters of the Potomac River from, and including, Goose Creek in Loudoun County to, and including, Pimmit Run in Arlington County. The mainstem of Goose Creek west of State Route 15 and tributaries to that portion of Goose Creek, and the mainstem of Little River west of State Route 15 and the tributaries to that portion of Little River, are not subject to this regulation.

9 VAC 25-401-30. Sewage treatment plant restrictions and requirements.

A. The number of sewage treatment plants discharging effluent to surface waters identified in 9 VAC 25-401-20 shall be no more than two, one to be under the authority of the Town of Leesburg and one under the authority of Loudoun County. The discharge from the treatment plants shall be in the Broad Run and Goose Creek Watersheds a minimum of 10 stream miles upstream from the Fairfax County Water Authority water supply intake on the Potomac River.

B. The following maximum effluent limitations shall apply for the sewage treatment plants prescribed in subsection A of this section:

<u>Parameter</u>	<u>Monthly Average</u>
<u>COD</u>	<u>10.0 mg/l</u>
<u>TSS</u>	<u>1.0 mg/l</u>
<u>TKN</u>	<u>1.0 mg/l</u>
<u>Total Phosphorus</u>	<u>0.1 mg/l</u>
<u>Turbidity</u>	<u>0.5 NTU</u>
<u>E. coli</u>	<u>less than 2 per 100 ml</u>

The above parameters and all other pollutants shall also be monitored and limited as necessary in accordance with the VPDES Permit Regulation.

The owners of the sewage treatment plants are responsible for knowing nitrate concentrations in the vicinity of Fairfax County Water Authority's intake on the Potomac River. Should nitrate concentrations at the intake reach 5 mg/l, the owners shall evaluate measures they can take to minimize impacts their discharge has on the nitrate concentrations and implement those measures deemed feasible and effective.

C. Requirements for sewage treatment plants in subsection A of this section.

1. The design shall be such that expansions and maintenance of any unit can be accomplished without bypassing wastes to the receiving waters and without degrading treatment.
2. The mechanical and fluid system design shall be such that a single failure of a component or unit shall not interrupt plant operations that are required to meet the final effluent requirements in subsection B of this section.
3. There shall be one independent source of outside power supply and one on-site power supply. Both the off-site and on-site electrical distributions shall be such that the failure of any one given component (mechanical or electrical) in the distribution system shall not cause an interruption of electrical service to parts of the plant that are essential to meet the effluent requirements.
4. The treatment plants shall be staffed 24 hours a day, seven days a week.

D. Design requirements for pumping stations for sewage treatment plants in subsection A of this section.

Pumping stations on all sewage collection systems that are connected to the plants identified in subsection A of this section shall meet the Reliability Classification 1 requirements as described in the Virginia Sewage Collection and Treatment Regulations (9 VAC 25-790), and shall have retention basins with a minimum of one-day capacity. A waiver from the retention basin requirement may be obtained from the Department of

Environmental Quality if the owner of the pump station can demonstrate that a sewer system tributary to the pump station meets the infiltration/inflow criteria established by the Virginia Sewage Collection and Treatment Regulations, and any other such information that the department may require.

9 VAC 25-401-40. Exceptions.

The following exceptions to 9 VAC 25-401-30 A may be allowed on a case-by-case basis after review and approval by the Department of Environmental Quality:

1. Existing sewage treatment plants. Existing sewage treatment plants located in the affected waters and not authorized by 9 VAC 25-400-30 A may continue to discharge to surface waters provided they were constructed prior to January 1975. Such discharges may continue only as long as the Department of Environmental Quality determines that it is not feasible for them to connect to a publicly owned sewage treatment plant. Expansions of these treatment works may be allowed as long as pollutant quantities or loadings are not increased.

2. Failing septic systems. Existing residential homes, industrial and commercial operations, public facilities, and any other operation where a septic drain field system has failed may discharge treated sewage effluent provided that the applicant demonstrates that it is not feasible to connect to a publicly owned sewage treatment plant and that there is no feasible alternative except to discharge. Discharge permits shall be issued in conformance with the State Water Control Law, the Virginia VPDES Permit Regulation (9 VAC 25-31), and the Water Quality Standards (9 VAC 25-260).

9 VAC 25-400-50. Stream monitoring.

The owners of the sewage treatment plants identified in 9 VAC 25-401-30 A shall develop and implement an instream monitoring program. The purpose of the monitoring program shall be to assess any impacts the discharge may have on down stream water quality and the water quality at the Fairfax County Water Authority's intake in the Potomac River. The owners of the sewage treatment plants shall consult with the Fairfax County Water Authority in developing the monitoring program.

Certified True and Accurate: _____

Robert G. Burnley

Director, DEQ

Date: _____