VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

Office of Drinking Water
Safe Drinking Water for a Healthy Virginia

Virginia Optimization Program (VOP) Goals

Effective January 1, 2020

VOP Clarification and Filtration Goals[1, 3]
Clarification[2] (Individual unit preferred, or other combinations as currently monitored){monthly evaluation period} • **Effluent turbidity ≤ 1.0 NTU 95% of time when average raw water turbidity for month ≤ 10.0 NTU** • **Effluent turbidity ≤ 2.0 NTU 95% of time when average raw water turbidity for month > 10.0 NTU**
Filtration (Individual Filters)){monthly evaluation period} • **Filtered water turbidity ≤ 0.1 NTU 95 % of time** • **Filtered water turbidity ≤ 0.3 NTU 100 % of time**
Filter Backwash (sum of all backwashes for all filters) {annual evaluation period} • **Filtered water turbidity ≤ 0.10 NTU 95 % of time a filter is placed into service following a backwash**

[1] ***With the decommissioning of the last Surface Water Treatment Plant (SWTP) without filter-to-waste capability, ODW revised the goals, effective January 1, 2020.***

[2] ***Clarification includes sedimentation basins, upflow clarifiers, absorption clarifiers, dissolved air flotation units.***

[3] ***Those SWTPs that do not continuously monitor individual filters or that record data on charts may use a 2-hour interval.***

The weighted ranking criteria for surface water treatment plants (SWTPs) with gravity flow, granular media filters are shown in the following table and are effective January 1, 2020. This table shows how the performance scoring is achieved for each participating SWTP:

Measure	Multiplier		
Fraction of filter-months in which VOP filter effluent goal of ≤ 0.10 NTU ≥ 95 % of readings was met	**7**		
Fraction of filter-months in which VOP filter effluent goal of ≤ 0.30 NTU, 100 % of readings, was met	**5**		
Fraction of backwashes for the year in which the filters were returned to service with filter effluent turbidity ≤ 0.10 NTU	**4**		
Fraction of clarifier-months in which VOP clarifier effluent goal was met	**4**		

Notes:

1. ***Perfect Score = 20***
2. ***Clarifier-months = sum clarifiers in service for each month of calendar year***
3. ***Filter-months = sum of filters in service for each month of calendar year – may be odd number as a filter may be out of service for an entire month.***

If you have any questions or concerns about the VOP goals or criteria, please contact your District Engineer.