

Arlington County
Department of Environmental Services
Water Pollution Control Bureau
Plant Data



Flows

Time Period	Parameter	Value	Units	Notes
2018	Average Daily Effluent Flow	24.7	MGD	
2019	Average Daily Effluent Flow	23.0	MGD	
2020	Average Daily Effluent Flow	22.0	MGD	
2021	Average Daily Effluent Flow	20.6	MGD	
2022	Average Daily Effluent Flow	22.1	MGD	
2018-2022	Maximum Daily Influent Flow	57.0	MGD	5/19/2018
2018-2022	Peak Instantaneous Influent Flow	126.0	MGD	7/18/2019
2022	Average Daily Peak Instantaneous Influent Flow	41.0	MGD	
2022	Average Daily Minimum Instantaneous Influent Flow	11.0	MGD	
2022	Average Plant Effluent Water Use	5.2	MGD	

Effluent

Time Period	Parameter	Value	Units	Notes / Permit Limits
2022	Average Daily Effluent Flow	22.1	MGD	Daily = 40 MGD
2022	Average Daily Effluent BOD	1.8	mg/L	Monthly = 5 mg/L; Weekly = 8 mg/L
2022	Average Daily Effluent TSS	0.5	mg/L	Monthly = 6 mg/L; Weekly = 9 mg/L
2022	Average Daily Effluent E. Coli	2.0	n/100mL	Monthly = 126 n/100mL
2022	Average Daily Effluent Ammonia	<0.2	mg/L	Monthly = 1(W) or 3.5(S) Weekly = 2.7(W) or 4.2(S)
2022	Average Daily Effluent TKN	1.3	mg/L	No Limit
2022	Average Daily Effluent Nitrate	2.0	mg/L	No Limit
2022	Average Daily Effluent TN	2.8	mg/L	Annual = 3 mg/L
2022	Average Daily Effluent TP	0.1	mg/L	Monthly = 0.18 mg/L; Weekly = 0.27 mg/L

Chemical Usage

Time Period	Parameter	Value	Units	Notes
2022	Average Daily Effluent Flow	22.1	MGD	
2022	Average Daily Ferric Chloride Usage	2,200	gpd	
2022	Average Daily Methanol Usage	700	gpd	
2022	Average Lime Usage	15000	lbs/d	When Dewatering
2022	Average Sodium Hypochlorite Usage	2000	gpd	
2022	Average Sodium Bisulfite Usage	400	gpd	

Biological Nutrient Removal

Time Period	Parameter	Value	Units	Notes
2022	Average Daily Effluent Flow	22.1	MGD	
2022	Average Solids Retention Time	25.4	days	
2022	Average Sludge Volume Index	74	mL/g	
2022	Average Aeration Effluent MLSS	4,676	mg/L	
2022	Average RAS MLSS	12,000	mg/L	
2022	Average Daily Aeration Air Flow	21,500	kcf/day	

Solids Handling

Time Period	Parameter	Value	Units	Notes
2022	Total Wet Biosolids Produced	240,000	lbs/d	
2022	Total Dry Biosolids Produced	38	tons/d	When Dewatering
2022	Average Daily Dewatered Cake %TS	31	%TS	
2022	Average WAS %TS	1.0	%TS	Estimated Value
2022	Average Daily DAFT (Thickened WAS) %TS	3.5	%TS	
2022	Average Daily Primary Sludge %TS	0.4	%TS	Estimated Value
2022	Average Daily GT (Thickened Primary Sludge) %TS	4.1	%TS	
2022	Average Lime Usage	15,000	lbs/d	When dewatering