



King County

Department of Natural Resources and Parks
Wastewater Treatment Division

West Point Treatment Plant, WTP-NR-0100
1400 Discovery Park Blvd
Seattle, WA 98199-1044

May 8, 2020

TO: Robert Waddle, WTD Operations Manager

FROM: Process Control Staff

SUBJECT: West Point Treatment Plant Performance Report – April 2020

All discharge requirements were met for Outfall 001 in April at the West Point Wastewater Treatment Plant. Effluent cBOD averaged < 25 mg/L and TSS averaged < 30 mg/L. Effluent pH was maintained between 6.0 and 9.0.

Total Plant flow at West Point averaged 74.64 MGD, 20.11 MGD below the average April flow for the previous five years (94.75 MGD). North end flows were sent to South Plant and Brightwater via Woodinville and North Creek.

Seattle had below average precipitation in April. West Point recorded a total of 1.48 inches of precipitation for the month. There was measurable precipitation on 9 days of the month, with most of the rainfall occurring during the last week and a half of the month (1.40 inches total). Seattle-Tacoma Airport (Sea-Tac) recorded 1.70 inches of precipitation, 1.01 inches below the normal April rainfall of 2.71 inches. The National Weather Service Office at Sand Point recorded 1.73 inches of precipitation, 1.04 below above the normal 2.77 inches.

Primary Treatment

Primary treatment operated the month with all 12 tanks in service.

Secondary Treatment

The secondary process operated with all 6 aeration trains in service until April 28 when train 5 was taken out of service due to lower plant flows. All trains operated in plug flow throughout the month. Twelve secondary clarifiers were in service during the month until April 9 when clarifier 6 was removed from service. Secondary operated with 11 clarifiers in service for the remainder of the month.

Key Measures

Volume Treated	2239	million gallons
Permit Compliance	0	exceptions
Biosolids	3944	wet tons hauled
	1060	dry tons hauled
	26.86%	cake total solids

Permit Compliance Summary – April 2020

Flow (mgd)	cBOD (mg/l)	TSS (mg/l)	cBOD (% Removal)	TSS (% Removal)	Fecal Coliforms (counts/100 ml)	Chlorine Residual (µg/l)
	Plant/Permit	Plant/Permit	Plant/Permit	Plant/Permit	Plant/Permit	Plant/Permit
74.64	4/25	4/30	98/80	98/80	1/200	90/139

West Point's NPDES Permit requires 80% removal of cBOD and TSS during the wet season months of November through April. The Permit also sets effluent concentration limits of 25 mg/l for cBOD and 30 mg/l for TSS, or 20% of influent values during the wet season months, whichever is more stringent. For April 2020, the effluent concentration limits were 25 mg/l for cBOD and 30 mg/l for TSS.

Process Control

Total plant flow for the month was 2239.24 million gallons. For the month, influent and effluent cBOD concentrations averaged 171 mg/l and 4 mg/l, respectively (98% removal); influent and effluent TSS averaged 215 mg/l and 4 mg/l, respectively (98% removal).

There were no diversions around secondary treatment.