



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

August 7, 2020

TO: Robert Waddle, WTD Operations Manager

FM: Process Control Staff

RE: West Point Treatment Plant Performance Report – July 2020

All discharge requirements were met for Outfall 001 in July 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 61.98 MGD, 3.25 MGD below the average July flow for the previous five years (65.23 MGD). North end flows were sent to South Plant and Brightwater via Woodinville and North Creek.

Seattle had below average precipitation in July. West Point recorded a total of 0.09 inches of precipitation for the month. There was measurable precipitation on 3 days of the month, with a high of 0.05 inches on July 1. Seattle-Tacoma Airport (Sea-Tac) recorded 0.17 inches of precipitation, 0.53 inches below the normal July rainfall of 0.70 inches. The National Weather Service Office at Sand Point recorded 0.16 inches of precipitation, 0.63 inches below the normal 0.79 inches.

Primary Treatment

Primary treatment began the month with 9 tanks in service until July 4, when tanks 1W and 2W were returned to service. On July 10, tank 2E was taken out of service due to a broken chain. On July 27, tank 6W was taken out of service for sludge hopper lining installation. Tank 2E was returned to service on July 31, and the month ended with 10 tanks in service.

Secondary Treatment

The secondary process operated with four aeration trains in service. All trains operated in plug flow throughout the month. Secondary operated with 9 clarifiers in service throughout the month. The primary effluent (PE) flow meter malfunctioned on July 3 and remained out of service until July 7. Final effluent flow data was substituted for the missing PE flow data. The PE flow meter was also out of service for a time over July 12 and 13. Final effluent flow was substituted for PE on those days.

Key Measures

Volume Treated	1921	million gallons
Permit Compliance	0	exceptions
Biosolids	3449	wet tons hauled
	947	dry tons hauled
	27.45%	cake total solids

Permit Compliance Summary – July 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
61.98	6/25	7/30	97/85	97/85	12/200	91/139

West Point's NPDES Permit requires 85% removal of cBOD and TSS during the dry season months of May through October. The Permit also sets effluent concentration limits of 25 mg/l for cBOD and 30 mg/l for TSS, or 15% of influent values during the dry season months, whichever is more stringent. For July 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 1921.25 million gallons. For the month, influent and effluent cBOD concentrations averaged 196 mg/l and 6 mg/l, respectively (97% removal); influent and effluent TSS averaged 257 mg/l and 7 mg/l, respectively (97% removal).