



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

December 12, 2019

TO: Robert Waddle, WTD Operations Manager

FROM: Process Control Staff

SUBJECT: West Point Treatment Plant Performance Report – November 2019

All discharge requirements were met for Outfall 001 in November 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 69.84 MGD, 46.74 MGD below the average November flow for the previous five years (116.58 MGD). North end flows were sent to South Plant and Brightwater via Woodinville and North Creek.

Seattle had lower than average precipitation in November. West Point recorded a total of 1.56 inches of precipitation for the month. There was measureable precipitation on eleven days during the month, with most of the rainfall occurring on November 18 (0.44 inches total). Seattle-Tacoma Airport (Sea-Tac) recorded 1.71 inches of precipitation, 4.86 inches below the normal November rainfall of 6.57 inches. The National Weather Service Office at Sand Point recorded 1.77 inches of precipitation, 4.07 inches below the normal 5.84 inches.

Primary Treatment

Primary treatment operated with all 12 tanks in service to start the month. On November 9, 1 West was gated out while awaiting parts to repair the primary sludge pump. On November 20, 1 East was taken out of service for repair of a separated wear strip. It was returned to service on November 25. Tank 1 West remained out of service throughout the rest of the month.

Secondary Treatment

The secondary process operated with all 6 aeration trains in service throughout the month. All 13 secondary clarifiers were in service during the Month.

Key Measures

Volume Treated	2095	million gallons
Permit Compliance	0	exceptions
Biosolids	3950	wet tons hauled
	1074	dry tons hauled
	27.17%	cake total solids

Permit Compliance Summary – November 2019

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
69.84	8/25	11/30	97/80	97/80	3/200	94/139

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 November 2019, 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 2095.12 million gallons. For the month, influent and effluent cBOD concentrations averaged 244 mg/l and 7 mg/l, respectively (97% removal); influent and effluent TSS averaged 261 mg/l and 8 mg/l, respectively (97% removal).

There was one diversion around secondary treatment due to a power disturbance. The disturbance caused an estimated total of less than 50,000 gallons of primary-treated flow to divert around the plant's secondary process. This diversion was reported to the Department of Ecology and assigned incident number 694408.

Date	Secondary Diversion Volume (MG)	Reason for Diversion
11/15/19	0.04	Power disturbance