



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

November 6, 2023

TO: Rebecca Singer, WTD Operations Manager

FROM: Process Control Staff

SUBJECT: West Point Treatment Plant Performance Report – October 2023

The West Point Treatment Plant (West Point) Outfall 001 met all effluent discharge requirements in October 2023. Effluent cBOD averaged < 25 mg/L and TSS averaged < 30 mg/L. Effluent pH was maintained between 6.0 and 9.0.

West Point's total flow averaged 78.10 million gallons per day (MGD), slightly above the average October flow for the previous five years (76.15 MGD).

For October, Seattle-Tacoma International Airport (SeaTac) reporting 2.89 inches of rainfall, much lower than the historical average of 3.91 inches for October rainfall at SeaTac.

Primary Treatment

Primary sedimentation operated with eleven sedimentation tanks until October 11 when another tank was placed in service, the area operated with twelve sedimentation tanks for the remainder of the month. The primary solids removal for the month was calculated to be 68.91%. The recycle streams have been temporarily routed to the headworks.

Secondary Treatment

The secondary process operated with six aeration trains and eleven clarifiers for the entire month. The secondary sludge age averaged 2.21 days for the month. Final effluent quality was good in October with a monthly average of 11 mg/L of TSS and 5 MPN/100 mL fecal coliform geomean for the month. There were no secondary diversion events at West Point during October.

Key Measures

Volume Treated	2421 Million Gallons
Permit Compliance	0 Exceptions
Biosolids	2890 Wet Tons Hauled
	863 Dry Tons Hauled
	29.85% Cake Total Solids

Permit Compliance Summary – October 2023

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
78.10	9/25	11/30	96/85	96/85	5/200	77/139

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 October 2023, 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 2420.97 million gallons. Influent and effluent cBOD concentrations averaged 201 mg/l and 9 mg/l, respectively (96% removal); influent and effluent TSS averaged 261 mg/l and 11 mg/l, respectively (96% removal).

There were no Secondary Diversions in October.