



## **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

September 11, 2024

TO: Rebecca Singer, WTD Operations Manager

FROM: Process Control Staff

SUBJECT: West Point Treatment Plant Performance Report – August 2024

The West Point Treatment Plant (West Point) Outfall 001 met all effluent discharge requirements in August 2024. 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 68.31 million gallons per day (MGD), the average August flow for the previous five years is 63.80 MGD.

Seattle-Tacoma International Airport (SeaTac) reported 1.66 inches of rainfall, significantly higher than the historical average rainfall for August of 0.97 inches.

### **Primary Treatment**

Primary sedimentation operated with nine tanks in service for the entire month. There were days tanks were rotating in and out of service for maintenance. Primary solids removal for the month was calculated to be 70.33%. The recycle streams continued to be temporarily routed to the headworks. The leaky gates were sealed off on August 27, 2024, but more maintenance needs to be done in the scum vault prior to secondary scum can be valved to the Raw Sludge Blend Tank and the recycle stream valved to the Secondary process.

### **Secondary Treatment**

The secondary process operated with five aeration trains for the entire month. There were nine clarifiers at the beginning of the month until two clarifiers were placed in service due to the rain on August 17, 2024, and the area operated with eleven clarifiers for the remainder of the month. The secondary sludge age averaged 2.71 days for the month. Final effluent quality was good in August with a monthly average of 7 mg/L of TSS and <23 MPN/100 mL fecal coliform geomean for the month. There were two Secondary Diversions in August.

Key Measures

Volume Treated 2117 Million Gallons  
 Permit Compliance 0 Exceptions  
 Biosolids 3533 Wet Tons Hauled  
 736 Dry Tons Hauled  
 27.27% Cake Total Solids

Permit Compliance Summary – August 2024

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
68.31	6/25	7/30	97/80	98/80	<23/200	83/139

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 August 2024, 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 2117.63 million gallons. Influent and effluent cBOD concentrations averaged 190 mg/l and 6 mg/l, respectively (97% removal); influent and effluent TSS averaged 269 mg/l and 7 mg/l, respectively (98% removal).

There were two Secondary Diversions in August, details are provided in the table below.

Date	Secondary Diversion Volume (MG)	Duration (hr)	Reason for Diversion
8/17/2024	1.38	1.30	Flows > 300 MGD
8/18/2024	1.68	3.48	Flows > 300 MGD