



## **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 9, 2024

TO: Rebecca Singer, WTD Operations Manager

FROM: Process Control Staff

SUBJECT: West Point Treatment Plant Performance Report – April 2024

The West Point Treatment Plant (West Point) Outfall 001 met all effluent discharge requirements in April 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 78.28 million gallons per day (MGD), lower than the average April flow for the previous five years (94.68 MGD).

Seattle-Tacoma International Airport (SeaTac) reported 0.89 inches of rainfall, well below the historical average of 3.18 inches for April rainfall at SeaTac.

### **Primary Treatment**

Primary sedimentation operated with eleven sedimentation tanks in service until another tank was taken out of service on April 17<sup>th</sup>, the area operated with 10 tanks in service for the remainder of the month. Primary solids removal for the month was calculated to be 65.48%. The recycle streams continued to be temporarily routed to the headworks.

### **Secondary Treatment**

The secondary process operated with six aeration trains and thirteen clarifiers for the entire month. The secondary sludge age averaged 2.66 days for the month. Final effluent quality was good in April with a monthly average of 6 mg/L of TSS and 4 MPN/100 mL fecal coliform geomean for the month. There were no secondary diversion events in April.

Key Measures

Volume Treated	2348 Million Gallons
Permit Compliance	0 Exceptions
Biosolids	3706 Wet Tons Hauled 974 Dry Tons Hauled 26.28% Cake Total Solids

Permit Compliance Summary – April 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
78.28	5/25	6/30	97/80	98/80	4/200	84/139

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 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 2348.25 million gallons. Influent and effluent cBOD concentrations averaged 178 mg/l and 5 mg/l, respectively (97% removal); influent and effluent TSS averaged 246 mg/l and 6 mg/l, respectively (98% removal).

A leak in the Emergency Bypass channel was discovered during the month. The Raw Sewage wet well was lowered on several occasions to accommodate the investigation and repair of the leak. On April 22<sup>nd</sup>, the wet well was kept at a low level for a long period of time to temporarily patch the leak. The lower levels prevented the primary Influent sampler from collecting representative samples hence the back-up Influent sample was tested. The repair was complete in early May and the leak was contained on site.

There were no Secondary Diversions in April.