



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

March 11, 2024

TO: Rebecca Singer, WTD Operations Manager

FROM: Process Control Staff

SUBJECT: West Point Treatment Plant Performance Report – February 2024

The West Point Treatment Plant (West Point) Outfall 001 met all effluent discharge requirements in February 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 113.75 million gallons per day (MGD), slightly higher than the average February flow for the previous five years (111.84 MGD).

Seattle-Tacoma International Airport (SeaTac) reported 3.84 inches of rainfall, in line with the historical average of 3.76 inches for February rainfall at SeaTac.

Primary Treatment

Primary sedimentation operated with twelve sedimentation tanks in service until the last day of the month when one tank was taken out of service for corrective maintenance. Primary solids removal for the month was calculated to be 65.12%. The recycle streams continued to be temporarily routed to the headworks.

Secondary Treatment

The secondary process operated with six aeration trains and twelve clarifiers for the entire month. The secondary sludge age averaged 3.63 days for the month. Final effluent quality was good in February with a monthly average of 7 mg/L of TSS and 3 MPN/100 mL fecal coliform geomean for the month. There were two secondary diversion event days at West Point during February.

Key Measures

Volume Treated 3299 Million Gallons
 Permit Compliance 0 Exceptions
 Biosolids 3520 Wet Tons Hauled
 1012 Dry Tons Hauled
 28.74% Cake Total Solids

Permit Compliance Summary – February 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
113.75	5/25	7/30	96/80	96/80	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 February 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 3298.76 million gallons. Influent and effluent cBOD concentrations averaged 135 mg/l and 5 mg/l, respectively (96% removal); influent and effluent TSS averaged 200 mg/l and 7 mg/l, respectively (96% removal).

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

Date	Secondary Diversion Volume (MG)	Duration (hr)	Reason for Diversion
2/28/2024	12.59	6.88	Flows > 300 MGD
2/29/2024	4.40	3.00	Flows > 300 MGD