



King County

Department of Natural Resources and Parks
Wastewater Treatment Division
West Point Treatment Plant
1400 Discovery Park Blvd.
Seattle, WA 98199

November 14, 2024

Tara Martich
NPDES Compliance Unit
U.S. Environmental Protection Agency, Region 10
Office of Compliance and Enforcement
Alaska Operations Office
222 West 7th Avenue #19
Anchorage, AK 99513

Sean Wilson, P.E.
Washington Department of Ecology
Northwest Regional Office
PO Box 330316
Shoreline, WA 98133-9716

Re: Total Residual Chlorine and pH Limits, Elliott West, November 10-11, 2024

Dear Ms. Martich and Mr. Wilson:

King County is providing this report, as required by its Consent Decree (Civil Action No. 2:13-cv-677) and to fulfill the five-day reporting obligation of National Pollution Discharge Elimination System (NPDES) permit No. WA0029181.

On November 10-11, 2024, a total of 1.06 inches of rain fell at the Seattle-Tacoma International Airport according to the National Weather Service. The rain resulted in flow into, and a discharge from, the Elliott West Combined Sewer Overflow (EWCSO) facility.

During the event, EWCSO exceeded its Total Residual Chlorine (TRC) limit of 109 µg/L and the pH limit of ≥ 6 S.U. The daily sampling period for these discharges is from 7:00 a.m. to 6:59 a.m. The violation was reported to the Department of Ecology and was assigned ERTS number 734960.

EWCSO, located at 545 Elliott Avenue West in Seattle, Washington, intermittently discharged from 5:01 a.m. to 9:12 a.m. on November 11, 2024. The estimated total discharge volume was 1.8 million gallons (MG) over 3.2 hours. While short in duration, this is considered a two-day event. The 5:01 a.m. to 6:59 a.m. period is considered part of November 10, 2024 (day 1) with a total discharge volume of 0.9 MG. The discharge on November 11, 2024 (day 2) was 0.88 MG.

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During this storm event, EWCSO exceeded its daily permit limit of 109 µg/L for TRC, averaging 210.2 µg/L g/L on day 2 (TRC averaged 2.6 µg/L on day 1). The total duration and volume of discharge exceeding 109 µg/L was 0.07 hours and 0.08 MG.

The exceedance is believed to be due to the reaction time of the dechlorination system, as the four minutes of high readings that caused the high average on day 2 were when discharge from EWCSO resumed at 7:41 a.m.

The minimum pH limit for the discharge is 6.0. During the event, the discharge reached a minimum pH of 5.9 on day 1 (the measured minimum pH was 5.946 which rounds to 5.9). The total estimated time and discharged flow below the pH limit were 0.07 hours and 0.08 MG, respectively.

Events with intermittent discharges pose a challenge for the chemical systems as they must adjust and stabilize to accommodate the incoming flows, both in terms of volume and intensity.

Improvements that will allow the EWCSO facility to better meet its permit limits are underway with several ongoing improvement projects.

1. Hypochlorite System Improvement Project - Design is finished and contract has been awarded. This work is expected to take place during the wet season and is projected to be completed in 2025.
2. Dechlorination System Improvement Project Part 1 - This includes re-doing sampling lines and strainers to improve measurement of TRC and sample flow. The project is currently undergoing 100% design review and is scheduled for completion during the next dry season.
3. Dechlorination System Improvement Project Part 2 - This includes dechlor pump replacement and is scheduled for completion during the next dry season.

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If you have additional questions concerning this event, please contact me at 206-477-3347.

Sincerely,

Signed by:

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Chapin Brackett
O&M Process and Environmental Compliance Manager

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision, in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

cc:

Kamuron Gurol, Director, Wastewater Treatment Division (WTD), Department of
Natural Resources and Parks (DNRP)
Bruce Kessler, Deputy Director, WTD, DNRP
Rebecca Singer, Operations Manager, WTD, DNRP
Jeff Lafer, Project/Program Manager IV, WTD, DNRP
Faon O'Connor, CSO Program Manager, WTD, DNRP
Verna Overturf, Offsite Supervisor, West Section, WTD, DNRP
Tom Bauer, West Point Treatment Plant Manager, WTD, DNRP