

TECHNICAL MEMORANDUM

To: Ian McAllister, Ashleigh Crompton, Mike Champion, and Ryan Schucroft (Woodfibre LNG) **Date:** 3 September 2026

From: Holly Pelletier and Cheng Kuang (Lorax) **Project #:** A825-1

Subject: PE-111578 Weekly Discharge and Compliance Report #129 for August 23 – 29

Waste Discharge Authorization (WDA) Effluent Permit PE-111578 was issued by the British Columbia Energy Regulator (BCER) to Woodfibre LNG on February 9, 2024. The associated WDA discharge and compliance monitoring program is conducted by on-site Environmental Monitors (Roe Environmental) that are sub-contracted to the civil works contractor (LB LNG). Analytical samples are submitted by Roe Environmental to ALS Environmental in Burnaby, BC, for testing. Lorax Environmental Services Ltd. (Lorax) provides water quality database management and WDA compliance reporting services to Woodfibre LNG.

This technical memorandum (Report #129) was prepared by Lorax and summarizes WDA monitoring conducted for the period of August 23 – 29. Monitoring data and pending results from prior monitoring periods available at the time of reporting are tabulated and included as appendices to this memorandum. Report #129 has been prepared to meet the requirements specified in Condition 4.2 of PE-111578:

“The Permittee shall summarize the results of the discharge and compliance monitoring program in a report that shall be submitted to the BCER weekly over the term of this permit. Reports must include suitable tabulated data. The table must include any applicable regulatory limits/guidelines e.g. permit limits, BC Water Quality Guidelines etc. Any exceedances of respective regulatory limits/guidelines must be clearly highlighted. Any missed sampling events/missing data must be identified with an explanation provided. Reporting frequency may be reduced upon a history of compliance and by written confirmation from the BCER. These reports shall be submitted to Waste.Management@bc-er.ca. A copy of the reports shall be provided to each First Nation consulted with regarding this subject permit, and also made publicly available on the Woodfibre LNG Environmental Reporting webpage.”

Site layout and water management figures and site images are included in Appendix A. Monitoring results are tabulated in Appendix B through Appendix E for contact water, treated water and receiving environment samples.

1. Current Conditions

1.1 Water Management Infrastructure

The Construction Phase of the Woodfibre LNG Export Facility commenced in October 2023. Shoring works along the foreshore areas were initiated in December 2023, and construction of water management infrastructure commenced in early 2024. Land-based construction occurs within two water management areas east and west of Mill Creek, referred to as the east and west catchments, respectively. Non-contact water is intercepted and diverted around the construction areas to Howe Sound and Mill Creek. Stormwater runoff collected within the east and west catchment areas (7.12 and 5.92 ha, respectively) is managed as site contact water and is conveyed to the East Wastewater Treatment Plant (WWTP) for treatment, or to the East and West Sedimentation Ponds for settling of suspended particulate prior to discharge. Intermittent discharge to Howe Sound from the East and West Sedimentation Ponds commenced April and October 2024, respectively.

Non-contact water from the slopes above and outside the Woodfibre LNG construction area is intercepted by diversion ditches and conveyed to Howe Sound or Mill Creek. Diversion ditches for the west catchment convey water to Mill Creek at station OUT-06, or to Howe Sound at station OUT-02 (Appendix A, Figure 1). During heavy precipitation, non-contact water is also conveyed to Howe Sound via station OUT-01. East of Mill Creek, non-contact water is intercepted and diverted around the east catchment along pre-existing road ditches that flow to East Creek or Mill Creek and through Outfall 13 (OUT-13). The diversion ditch connected to Outfall 11 (OUT-11) is not yet constructed; therefore, Outfall 11 is not in use. The lower reach of East Creek discharges to Howe Sound through Outfall 12 (OUT-12).

The contact water conveyance ditches described in PE- 111578 were designed to transport non-contaminated contact water (*i.e.*, stormwater) to the East and West Sedimentation Ponds and will be constructed following completion of site preparation activities (*e.g.*, site grading, bedrock excavation) along the ditch lines. Until the ditches are operational, contact waters within the catchments are managed to remain on site using a system of berms, sumps, temporary ditches and baker tanks for intermediate storage and are then directed to the East WWTP for treatment, or the East and West Sedimentation Ponds prior to re-use or discharge.

The East and West WWTPs were commissioned to treat contaminated contact water in April and August 2024, respectively. The installed treatment capacities are 1,080 m³/day (East WWTP) and 120 m³/day (West WWTP). Lower than expected volumes of contaminated contact water have been encountered during construction; therefore, operation of the West WWTP has been suspended since September 25, 2024, and all contaminated contact waters are directed to the East WWTP for treatment. Treated effluent is generally directed to the East Sedimentation Pond. Occasionally the East WWTP effluent is discharged to Howe Sound at authorized discharge location SP-E-OUT.

Discharge from the East and West Sedimentation Ponds is controlled using pumps. Sedimentation pond effluent is pumped to the 2700GPM TSS settling system to remove TSS prior to discharge. Each sedimentation pond has an associated authorized discharge location (stations SP-E-OUT and SP-W-OUT) with an initial dilution zone (IDZ) where discharged water mixes with Howe Sound surface waters. The IDZ is defined in PE-111578 and extends in a 150 m radius from each point of discharge into Howe Sound. Since June 2025, surplus contact water in the East Sedimentation Pond is directed to the West Sedimentation Pond for storage or discharge, and discharge of clarified non-contaminated contact water to Howe Sound generally only occurs from the West Sedimentation Pond.

The flocculant-based 2700GPM TSS settling system has an installed capacity to clarify 14,700 m³/day of contact water and consists of six parallel treatment trains (Trains 1 to 6), each with an installed capacity of 2,450 m³/day. A staged commissioning of the 2700GPM system began June 2025 and was completed November 2025. Only one train is operated when contact water flows are low. Additional trains are activated as needed to match the influent volumes. Some of the TSS-clarified water may be recirculated back to the ponds or re-used for construction purposes (*e.g.*, dust suppression).

The construction phase water management layout and monitoring stations are shown in Appendix A, Figure 1. Contact water collection and dewatering locations and photographs of the sedimentation ponds are shown in Appendix A, Figure 2 through Figure 5.

1.2 Weather and Water Management

Variable weather conditions were observed during the August 23 – 29 monitoring period, with precipitation recorded on August 23 (13.6 mm), August 27 (5.6 mm) and August 28 (4.4 mm). The daily weather conditions are summarized in Table 1.

Table 1:
Summary of Certified Project Area (CPA) Daily Weather Conditions.

Date	Precipitation (mm)	Max. Temp (°C)	Min. Temp (°C)	Weather Description
2026-08-23	13.6	19.7	15.8	Overcast & Rain
2026-08-24	0	23.3	15.2	Mostly Clear
2026-08-25	0	27.0	15.9	Sunny
2026-08-26	0	23.6	15.7	Cloudy
2026-08-27	5.6	19.2	14.9	Overcast & Rain
2026-08-28	4.4	19.4	13.8	Overcast & Rain
2026-08-29	0	21.1	11.3	Cloudy

Note: Data retrieved from the Woodfibre on-site weather station operated by Stantec.

From August 23 – 29, the East Sedimentation Pond received water from the MOF Sump, the 6403 Sump and recirculated effluent from the East WWTP (Appendix A, Figure 2). No water from the East Sedimentation Pond was transferred to the West Sedimentation Pond from August 23 – 29 (Appendix B, Table B-6).

Routine operation of the East WWTP continued during the monitoring period (August 23 – 29). Concrete contact water and water from the Hydrovac Pit and Wash Bay was periodically directed to the East WWTP for treatment, as well as water stored in the East Sedimentation Pond (Appendix A, Figure 2 and Figure 3). East WWTP treated effluent was discharged to the East Sedimentation Pond on August 23, 24, 28 and 29. Daily water volumes processed by the East WWTP are provided in Appendix B (Table B-6).

From August 23 – 29, the West Sedimentation Pond received water from the 4100 Sump and recirculated effluent from the 2700GPM TSS settling system (Appendix A, Figure 3). West Sedimentation Pond effluent was clarified through the 2700GPM system on August 23, 25 and 28 and recirculated back to the pond. West Sedimentation Pond effluent was not discharged to Howe Sound and clarified effluent was not reclaimed for construction use during the monitoring period (August 23 – 29). Daily clarified effluent volumes from the 2700GPM TSS settling system recirculated to the West Sedimentation Pond are provided in Appendix C (Table C-6).

2. Monitoring Summary

The locations of PE-111578 monitoring stations are shown on Figure 1. Monitoring is conducted by the on-site Environmental Monitors (Roe Environmental). Analytical samples are submitted by Roe Environmental to ALS Environmental in Burnaby, BC for testing.

The following PE-111578 and supplementary monitoring stations are currently being monitored:

- Non-contact diversion ditch outlet monitoring stations (OUT-01, OUT-02 and OUT-06).
- Creek water monitoring stations for Woodfibre, Mill and East Creek (SW-01, SW-02, SW-03, SW-04, SW-07).
- Contact water monitoring locations (SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN, WWTP-E-OUT, SP-W-IN, 2700GPM-IN, and 2700GPM-OUT).
- Supplementary contact water stations at the outlet of each sampling train. These samples are identified as W2700T#-OUT (with # equal to the train number).
- Effluent compliance stations (SP-E-OUT and SP-W-OUT). As described in Section 1.1, when there is surplus water, West Sedimentation Pond clarified effluent from the individual 2700GPM trains is directed to SP-W-OUT for discharge. From late September to early December 2025, SP-W-OUT was sampled from the discharge manhole. From December 1 to 8, a pipe manifold was installed that combines effluent from the individual trains into a single discharge line and is configured with a sampling port. Since December 8, samples have been collected at the sampling port or at the outfall.
- Howe Sound reference and IDZ monitoring stations (WQR1, WQR2, IDZ-E1, IDZ-E2, IDZ-W1, and IDZ-W2).

The diversion ditch outlet at Outfall 11 (OUT-11) does not receive water and will not be monitored until it is operational.

The influent culverts for East and West Sedimentation Ponds are not operational and the associated influent stations defined in PE-111578 (SP-E-IN-1, SP-E-IN-2, SP-W-IN-1 and SP-W-IN-2) have been replaced with temporary influent monitoring stations SP-E-IN and SP-W-IN (East and West Sedimentation Pond, respectively) located in-pond, at the influent end of each pond.

A flocculant-based TSS settling system (2700GPM) is used at the West Sedimentation Pond as described in Section 1.1. Influent and effluent are monitored at stations 2700GPM-IN and 2700GPM-OUT, respectively. The 2700GPM-OUT station represents the combined discharge line from all six individual treatment trains when clarified effluent is directed to the West Sedimentation Pond and is equivalent to the SP-W-OUT station. At times when only one 2700GPM treatment train is operated, the 2700GPM-OUT sample may be collected at the outlet of that train. Monitoring of the individual 2700GPM settling system treatment trains is supplemental to the PE-111578 monitoring requirements and is conducted at the discretion of field staff.

Water quality was monitored at stations SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN, WWTP-E-OUT, SP-W-IN, 2700GPM-IN and W2700T2-OUT during the monitoring period (August 23 – 29). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (August 23 – 29) were met. The initial high frequency monitoring requirements outlined in effluent permit PE-111578 for the sedimentation ponds, WWTP and IDZ stations have been met. On June 25, 2025, BCER approved the implementation of low-frequency (*i.e.*, bi-monthly and monthly) monitoring requirements specified in PE-111578 for all parameters, except for metals, hexavalent chromium, and methylmercury, which continue to be monitored weekly at sedimentation pond and WWTP stations.

Daily field parameters and a weekly analytical sample were not collected at the east and west catchment effluent compliance stations (SP-E-OUT and SP-W-OUT, respectively) as there was no discharge to Howe Sound from the East and West Sedimentation Ponds during the monitoring period (August 23 – 29). Daily field parameters were not collected at the influent and effluent stations of the East WWTP (WWTP-E-IN and WWTP-E-OUT, respectively) on August 25 – 28 as it was not operational at the time of monitoring. Daily field parameters and a weekly analytical sample were not collected at the influent and effluent stations of the West WWTP (WWTP-W-IN and WWTP-W-OUT, respectively) as it was not operational during the monitoring period (August 23 – 29).

Table 2:
Summary of PE-111578 Monitoring Samples Collected August 23 – 29.

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
August 23, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M ₂ , W
	2700GPM-IN	2700GPM TSS settling system influent monitored at cell 4 of the pond	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	P
	W2700T2-OUT	2700GPM TSS settling system at the outlet of Train 2		
August 24, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M ₂ , W
	WWTP-E-IN	East WWTP at the influent meter box	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M ₂ , W
	WWTP-E-OUT	East WWTP at the effluent meter box		
	COMB-WWTP-E-IN	Combined East WWTP influent from the concrete contact water treatment stream and the East Sedimentation Pond, collected from the heated frac tank	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	P
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
August 25, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system influent monitored at cell 4 of the pond	Field Parameters.	P
	W2700T2-OUT	2700GPM TSS settling system at the outlet of Train 2	Field & Physical Parameters, Total and Dissolved Metals.	P
August 26, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
August 27, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
August 28, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system influent monitored at cell 4 of the pond	Field Parameters.	P
August 29, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D

Notes:
Monitoring frequency requirements under PE-111578 are indicated as follows:
D – daily monitoring of field parameters at WWTP and sedimentation pond influent and effluent stations.
M – monthly monitoring for all parameters at WWTP, sedimentation pond and receiving environment stations. Monthly monitoring for General parameters, except ammonia, nitrate and nitrite (*i.e.*, nitrogen species) are monitored weekly during blasting season.
M₂ – bi-monthly monitoring for physical parameters at WWTP and sedimentation pond stations.
W – weekly monitoring for metals, chromium speciation and methylmercury at WWTP and sedimentation pond influent and effluent stations, effective June 25, 2025.
P – periodic monitoring for targeted parameters that is supplementary to PE-111578 requirements.

3. Water Quality Results

3.1 Summary of Reported Results

Analytical results and associated field measurements included in this weekly report (Report #129) are listed below in Table 3, with additional field measurements presented in Table B-5 (Appendix B) and Table C-5 (Appendix C). Testing for methylmercury, dioxins, furans and toxicity may require four weeks or longer to complete. Analytical results not reported will be included in future weekly reports. Reporting of results is pending for the following samples and parameters:

- SP-W-IN, 2700GPM-IN and W2700T2-OUT collected August 13 (total mercury and methylmercury);
- SP-W-IN, 2700GPM-IN and W2700T4-OUT collected August 17 (total mercury and methylmercury);
- SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN and WWTP-E-OUT collected August 18 (all analytical parameters);
- IDZ-E1, IDZ-E2 and WQR1 collected August 20 (field measurements and all analytical parameters);
- IDZ-W1, IDZ-W2 and WQR2 collected August 22 (field measurements and all analytical parameters);
- SP-W-IN, 2700GPM-IN and W2700T2-OUT collected August 23 (total mercury and methylmercury);
- SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN and WWTP-E-OUT collected August 24 (total mercury and methylmercury).

Table 3:
Summary of Analytical Results and Associated Field Measurements Included in Weekly Discharge and Compliance Report #129.

Sample	Description	Sampling Date	Parameters Reported
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	August 3, 2026	Total Mercury, Methylmercury, Dioxins and Furans.
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
W2700T1-OUT	2700GPM TSS settling system at the outlet of Train 1		
SW-01	Lower Reach of Woodfibre Creek (near the mouth)		Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, VOCs, Total Mercury, Methylmercury, Dioxins and Furans.
SW-02	Lower Reach of Mill Creek (upstream of the third bridge)		
SW-03	Mill Creek Estuary		
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)		
SW-07	Upstream Mill Creek (at the diversion inlet)		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	August 6, 2026	Total Mercury, Methylmercury, Dioxins and Furans.
WWTP-E-IN	East WWTP at the influent meter box		Total Mercury and Methylmercury.
WWTP-E-OUT	East WWTP at the effluent meter box		
COMB-WWTP-E-IN	Combined East WWTP influent from the concrete contact water treatment stream and the East Sedimentation Pond, collected from the heated frac tank		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	August 14, 2026	Total Mercury and Methylmercury.
WWTP-E-IN	East WWTP at the influent meter box		
WWTP-E-OUT	East WWTP at the effluent meter box		
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	August 17, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, and Hexavalent Chromium.
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
W2700T4-OUT	2700GPM TSS settling system at the outlet of Train 4		
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	August 23, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, and Hexavalent Chromium.
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
W2700T2-OUT	2700GPM TSS settling system at the outlet of Train 2		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	August 24, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, and Hexavalent Chromium.
WWTP-E-IN	East WWTP at the influent meter box		
WWTP-E-OUT	East WWTP at the effluent meter box		
COMB-WWTP-E-IN	Combined East WWTP influent from the concrete contact water treatment stream and the East Sedimentation Pond, collected from the heated frac tank		
W2700T2-OUT	2700GPM TSS settling system at the outlet of Train 2	August 25, 2026	Field and Physical Parameters, Total and Dissolved Metals.

3.2 Screening and Reporting Overview

Water quality and flow monitoring results are screened against operational minimum discharge objectives (MDOs) for the East WWTP, and PE-111578 discharge limits for sedimentation pond and 2700GPM TSS settling system stations. The East WWTP MDOs were set equal to Canadian Council of Ministers of the Environment (CCME) water quality guidelines (WQGs) and the PE-111578 discharge limits. Contact and non-contact water monitoring results are also screened against Canadian (Canadian Council of Ministers of the Environment, CCME), Federal (Environment and Climate Change Canada, ECCC) and BC water quality guidelines (WQGs). All water quality data are recorded in the Woodfibre LNG environmental monitoring database. However, for brevity, a sub-set of the results are presented in the weekly report appendices. Results are reported for parameters with a freshwater, estuarine or marine water quality guideline for the protection of aquatic life, parameters with a discharge limit, parameters of potential concern (*i.e.*, dioxins and furans) as well as other parameters that are relevant for water quality interpretation.

It is expected that samples of contact water and samples collected within the IDZ (*i.e.*, mixing zone) defined in PE-111578 for the authorized discharge locations may have parameter concentrations above baseline or background (*i.e.*, reference station) concentrations due to project influence. As well, for receiving environment samples, parameter concentrations above a WQG value but within the range of values observed in the baseline monitoring program are considered to represent the background conditions of the water.

The values used for screening are listed in the water quality tables provided in the appendices. Results above a screening value are highlighted in the tables. Samples collected from sedimentation pond effluent that is discharged to Howe Sound (monitored at stations SP-E-OUT and SP-W-OUT) are evaluated for non-compliance to PE-111578 discharge limits. Exceedances in contact water that remains on-site and is not discharged (*e.g.*, WWTP influent and effluent, sedimentation pond influent, TSS settling system influent, and TSS settling system effluent that is recirculated) are screened for comparison purposes only, and exceedances in these samples do not represent non-compliance to the PE-111578 conditions.

Canadian, Federal and BC WQGs are not specified for dioxins and furans. The general term “dioxins and furans” refers to a total of 210 polychlorinated dibenzo-*p*-dioxin (PCDD) and polychlorinated dibenzofuran (PCDF) compounds. A sub-set of 17 of the most toxic PCDDs and PCDFs are typically evaluated for toxicity by converting the individual parameter concentrations to toxic equivalent (TEQ) values that are summed and evaluated as a single PCDD/F TEQ parameter. To address uncertainties for results reported as not detected, two PCDD/F TEQ values are reported. A “lower-bound PCDD/F TEQ” is calculated assuming a concentration of zero for results reported as not detected, therefore, if all 17 of the individual compounds in the sub-set are

not detected the lower-bound PCDD/F TEQ will equal zero. An “upper-bound PCDD/F TEQ” is calculated assuming a concentration equal to the detection limit for results reported as not detected. These two parameters span the range of possible TEQs if one or more of the PCDDs and PCDFs are reported as not detected.

The BC WQG for total mercury is a sample-specific calculated value that is based on the concentration of methylmercury in a sample. Although an approved BC WQG for the protection of aquatic life for methylmercury has not been explicitly established, the BC Ambient Water Quality Guidelines for Mercury Overview Report indicates the total mercury WQG is derived from a methylmercury concentration threshold of 0.0001 µg/L (0.1 ng/L) that is set at a concentration that protects fish from mercury bioaccumulation to levels that could harm wildlife that consumes fish. Therefore, if methylmercury results are reported, the 0.0001 µg/L value is presented as a WQG to support the interpretation of methylmercury results.

A summary of reported and pending results is provided in Section 3.1. Results for effluents from East WWTP, 2700GPM TSS settling system, and East and West Sedimentation Ponds are discussed in Section 3.3 and Section 3.4, respectively. The water quality monitored at non-contact water diversion ditch outlets and in the receiving environment is described in Section 3.5 to Section 3.7. Sediment samples are collected annually at stations IDZ-E-SED and IDZ-W-SED and are discussed in Section 3.7 when they are reported. Sediment samples were last collected in May 2026, and the analytical results were presented in Report #122.

3.3 East Catchment

The east catchment water quality and flow monitoring results for stations at the East WWTP, the East Sedimentation Pond, and the authorized discharge location (SP-E-OUT) are discussed in this section and are tabulated in Appendix B.

East WWTP effluent was directed to the East Sedimentation Pond and there was no discharge from the pond to Howe Sound from August 23 – 29 (Section 1.2; Table B-6 of Appendix B). Hence, water quality samples and field measurements were not collected at the SP-E-OUT discharge location during the monitoring period.

Results are presented for field measurements of influent quality for the East Sedimentation Pond and East WWTP influent and effluent quality collected August 23 – 29 (stations SP-E-IN, WWTP-E-IN and WWTP-E-OUT) as well as analytical results for samples collected August 6 (total mercury, methylmercury, dioxins and furans results for stations SP-E-IN, WWTP-E-IN and WWTP-E-OUT and total mercury and methylmercury results for station COMB-WWTP-E-IN; as discussed in Report #126), August 14 (total mercury and methylmercury results for stations SP-E-IN, WWTP-E-IN and WWTP-E-OUT; as discussed in Report #127) and August 24 (stations

SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN and WWTP-E-OUT) (Appendix B, Table B-1 through Table B-5).

Field measurements for the East WWTP effluent samples (WWTP-E-OUT) collected August 23, 24 and 29 met MDOs except for dissolved oxygen (Appendix B, Table B-5). The depletion of dissolved oxygen was also observed in contact water during dry conditions in 2024 and 2025 and is speculated to be induced by warm temperatures and limited freshwater inputs (*i.e.*, from rain) to the contact water management system during dry conditions. Total mercury and methylmercury concentrations were above the MDOs in the WWTP-E-OUT analytical samples collected August 6 and 14 (Table B-3). Total selenium was above the MDO in the WWTP-E-OUT analytical sample collected August 24 (Table B-1). Metal parameters above MDOs are tracked in Table 4.

3.4 West Catchment

The west catchment water quality monitoring results for stations at the West Sedimentation Pond, the 2700GPM TSS settling system, and the authorized discharge location (SP-W-OUT) are discussed in this section and are tabulated in Appendix C. Operation of the West WWTP is suspended (refer to Section 1.1) and monitoring results are therefore not available for the stations at this facility.

As discussed in Section 1.2, clarified sedimentation pond effluent from the 2700GPM TSS Settling System was recirculated to the West Sedimentation Pond and did not discharge to Howe Sound from SP-W-OUT during the monitoring period (August 23 – 29). Therefore, water quality samples and field measurements were not collected at the SP-W-OUT discharge location.

Results are presented for field measurements of influent quality for the West Sedimentation Pond and the 2700GPM TSS settling system collected August 23 – 29 (stations SP-W-IN and 2700GPM-IN) as well as analytical results for samples collected August 3 (total mercury, methylmercury, dioxins and furans results for stations SP-W-IN, 2700GPM-IN and W2700T1-OUT; as discussed in Report #126), August 17 (stations SP-W-IN, 2700GPM-IN and W2700T4-OUT; as discussed in Report #128), August 23 (stations SP-W-IN, 2700GPM-IN and W2700T2-OUT) and August 25 (station W2700T2-OUT) (Appendix C, Table C-1 through Table C-5).

3.5 Non-Contact Water Diversion Ditch Outlets

There are no outstanding analytical results for non-contact water diversion ditch outlets.

3.6 Freshwater and Estuarine Water Receiving Environment

Analytical results were available at the time of reporting for freshwater and estuarine water samples collected near the mouths of Woodfibre Creek and East Creek (stations SW-01 and

SW-04, respectively) and at the Mill Creek estuary, mid-stream and background stations (SW-03, SW-02 and SW-07, respectively) on August 3 (as discussed in Report #126). The analytical results, field parameters, and WQGs are summarized in Appendix D (freshwater) and Appendix E (estuarine water).

Parameter concentrations met WQGs except field pH, fluoride, total aluminum and dissolved copper (Appendix D, Table D-1). Field pH was below the lower limit of the WQG in the sample collected from Woodfibre Creek on August 3. Fluoride was above the long-term WQG in the sample collected from East Creek. Total aluminum was above the long-term WQG in samples collected from Woodfibre Creek, East Creek and the Mill Creek background station. Dissolved copper was above the long-term WQG in samples collected from Woodfibre Creek and the Mill Creek background station.

Field pH measured in Woodfibre Creek on August 3 (pH 6.2) was within the range observed in the pre-construction baseline monitoring program (pH 5.4 to 7.6) and within ranges observed at the background station for Woodfibre Creek (pH 5.2 to 6.5). The total aluminum concentrations measured in Woodfibre Creek and East Creek on August 3 (0.141 and 0.0745 mg/L, respectively) were within the range observed in the pre-construction baseline monitoring program (0.0379 to 0.294 mg/L for Woodfibre Creek and 0.0158 to 0.264 mg/L for East Creek) and within ranges observed at the background stations for Woodfibre and East Creek (0.0428 to 0.250 mg/L for Woodfibre Creek and 0.0299 to 0.411 mg/L for East Creek). The dissolved copper concentration measured in Woodfibre Creek on August 3 (0.00025 mg/L) was also within the range observed in the pre-construction baseline monitoring program (0.00017 to 0.00074 mg/L) and within the range observed at the background station for Woodfibre Creek (<0.00020 to 0.00051 mg/L).

The fluoride concentration measured in East Creek on August 3 (0.28 mg/L) was above the maximum value observed in the pre-construction baseline monitoring program (<0.1 mg/L) but within the range observed at the background station for East Creek (<0.020 to 0.028 mg/L). Potential sources of fluoride to East Creek have been previously determined to originate from upstream of the LNG facility construction area and not from the Woodfibre LNG facility construction project (as discussed in Report #115).

Total mercury, methylmercury, dioxins and furans analytical results were available at the time of reporting for the freshwater and estuarine water samples collected August 3. Methylmercury concentrations were <0.000020 µg/L in all samples and met the WQG. The corresponding total mercury results met the WQG. The lower bound PCDD/F TEQ concentrations ranged from 0 to 0.0164 pg/L and the upper bound PCDD/F TEQ concentrations ranged from 1.48 to 3.70 pg/L in all samples. The lower and upper bound PCDD/F TEQ concentrations measured in Woodfibre Creek (SW-01), East Creek (SW-04), and downstream stations on Mill Creek (SW-02 and SW-03) were within the concentration ranges observed in the pre-construction baseline monitoring

program (0 to 0.08 pg/L and 0 to 5.30 pg/L for lower and upper bound PCDD/F TEQ, respectively) or within ranges observed at background stations (0 to 0.699 pg/L and 0.431 to 5.20 pg/L for lower and upper bound PCDD/F TEQ, respectively). Results are tabulated in Appendix D, Table D-2 and D-3 (freshwater) and Appendix E, Table E-2 and E-3 (estuarine water).

3.7 Marine Water Receiving Environment

Analytical results were not available at the time of reporting for the marine water receiving environment.

3.8 Quality Control

This section presents the results of the quality control (QC) evaluation for the PE-111578 weekly report (Table 4). The evaluation includes a review of field and lab QC, completeness of the weekly report (*e.g.*, pending data), completeness of the monitoring program, confirmation of record keeping, evaluation of compliance and review of water management activities. Items flagged for follow-up in Section 3 are also tracked in Table 4. Any items flagged for follow-up are carried forward to future reports until they are closed.

Table 4:
Weekly Report QC Evaluations and Ongoing Items

QC Procedure	Observation	Investigation/Resolution
Reporting Period (August 23 – 29, Report #129)		
Authorized Works and Monitoring Program Evaluation	The authorized works and monitoring stations have not been established as described in PE-111578.	The PE-111578 authorized works for water management have been constructed, except for some of the conveyance ditches, which require completion of site grading prior to installation. Sumps, pumps and hoses are used for temporary conveyance until the ditches are completed. Outfall 11 (OUT-11) has been constructed but is currently not in use. This item remains open.
Report #129: Pending Data	Analytical results not reported.	Total mercury and methylmercury results for contact and treated water samples collected August 23 and 24 are pending and will be included in future weekly reports when available. This item remains open.
Ongoing Items from Previous Weekly Reports		
Report #112: WWTP Performance Evaluation	Total mercury and methylmercury above the MDO.	This item was first noted in Report #112. The total mercury and methylmercury concentrations in the samples collected at WWTP-E-OUT from April 15 through June 8 and on July 10, 26, August 6 and 14 were above the MDOs. Total mercury was above the MDO on July 20. Increased incidence of total mercury and methylmercury concentrations above the MDOs in site contact waters occurred in late April 2025 through September 2025, coinciding with warmer and drier weather relative to winter months. In 2025, possible project related sources had been evaluated, and upstream contact water monitoring data indicate methylmercury was elevated in the Hydrovac sump. Excess water from this sump is directed to the East WWTP. This production of methylmercury is attributed to microbially mediated methylation of total mercury in the bottom sediments of water management sumps, and transfer from the sump sediments to the water column. Enhanced monitoring for methylmercury was implemented in May 2026. Results indicate elevated methylmercury concentrations are observed in the Hydrovac bins, comparable to levels observed in 2025 at the Hydrovac sump. Excess water from the Hydrovac bins is directed to the East WWTP. The enhanced monitoring for methylmercury is ongoing. This item remains open.
Report #116: WWTP Performance Evaluation	Hexavalent chromium above the MDO.	This item was first noted in Report #116. Hexavalent chromium concentrations in all samples collected at WWTP-E-OUT in July and on August 6 were above the MDO (0.0015 mg/L). The hexavalent chromium concentration in the WWTP-E-OUT sample collected August 14 and 24 met the MDO. The WWTP treatment performance for hexavalent chromium will continue to be evaluated through August 2026. This item remains open.
Report #126: Pending Data	Analytical results not reported.	Previously pending field measurements and analytical results for receiving environment samples collected August 3 as well as total mercury, methylmercury, dioxins and furans results for contact and treated water samples collected August 3 and 6 are included in Report #129. This item is closed.
Report #127: Pending Data	Analytical results not reported.	Previously pending total mercury and methylmercury results for contact and treated water samples collected August 14 are included in Report #129. Total mercury and methylmercury results for contact and treated water samples collected August 13 are pending and will be included in future weekly reports when available. This item remains open.
Report #127: WWTP Performance Evaluation	Total selenium above the MDO.	The total selenium concentrations in duplicate samples collected at WWTP-E-OUT on August 6 and in the WWTP-E-OUT sample collected on August 14 and 24 were above the MDO (0.002 mg/L). The WWTP treatment performance for total selenium will be evaluated through August 2026. This item remains open.
Report #128: Pending Data	Analytical results not reported.	Previously pending analytical results for contact and treated water samples collected August 17 are included in Report #129. Analytical results for contact and treated water samples collected August 18 as well as field measurements and all analytical parameters for receiving environment samples collected August 20 and 22 are pending and will be included in future weekly reports when available. This item remains open.

Notes:
Result QA/QC screening includes the evaluation of field and lab QC results, comparison of total and dissolved metal results and review for modified detection limits.
Pending data are outstanding results from monitoring samples reported in the current or previous weekly reports.
Authorized works and monitoring program evaluation is an assessment of the completeness of the authorized works and monitoring program compared to PE-111578 specified or implied requirements.
WWTP performance evaluation is an assessment of WWTP effluent quality compared to operational MDOs.
Data QC indicates an evaluation of data trends or inter-parameter relationships that suggest a test result may not be representative of water quality at the time of monitoring.
Non-compliant discharge indicates exceedance of a discharge limit or a discharge that bypasses the sedimentation pond discharge location.
Potential project influence is an assessment that water quality at creek and Howe Sound baseline stations are above the baseline concentration range and may indicate project influence at these stations.

4. Closure

This weekly report is a desktop review by Lorax of the PE-111578 discharge and compliance monitoring program records, reports and results provided by Woodfibre LNG and prime contractor McDermott International and their sub-contractors. The records reviewed and analyzed by Lorax include ALS Environmental laboratory test reports and site reports (from Roe Environmental, LB LNG, McDermott and Woodfibre LNG). Verbal or electronic communications between Lorax, and Roe Environmental, LB LNG, McDermott, and Woodfibre LNG staff are conducted as needed to confirm the information presented in this report.

Regards,

LORAX ENVIRONMENTAL SERVICES LTD.

A handwritten signature in black ink, appearing to read 'Cheng Kuang', is positioned above the printed name of the Environmental Scientist.

**Holly Pelletier, B.Sc., P.Geo.
Environmental Geoscientist**

**Cheng Kuang, M.Sc., RPBio.
Environmental Scientist**

Lorax Environmental Services Ltd. EGBC Permit to Practice Number: 1001840

Appendix A: Figures and Site Images



LEGEND

- Freshwater Monitoring Station
- Marine Water Monitoring Station
- Clean Water Diversion Discharge Station
- Sedimentation Pond Monitoring Stations (Water Quality)
- Wastewater Treatment Plant (WWTP)
- Certified Project Area
- Watercourse
- Non-Contact Ditch
- Culvert / Outfall / Pipeline
- Non-Contact Water Transfer Hose
- Bathymetry Contour (Major: 50m)
- Bathymetry Contour (Minor: 10m)

DATE SAVED: Sep 03, 2026
DRAWN BY: DM
REVIEWED: PM
VERSION: 1

Coordinate System: NAD 1983 UTM Zone 10N
Projection: Transverse Mercator
Datum: North American 1983
Units: Metre
1:6,000
0 100 200 Metres



PROJECT: Woodfibre LNG Project Construction Phase
TITLE: Site Layout and Water Quality Monitoring Stations for PE-111578 (August 29, 2026)
PROJECT #: A825-1
FIGURE: 1

Potential Influent Sources to EWWTP and East Sediment Pond: August 23 - August 29, 2026

Figure 2

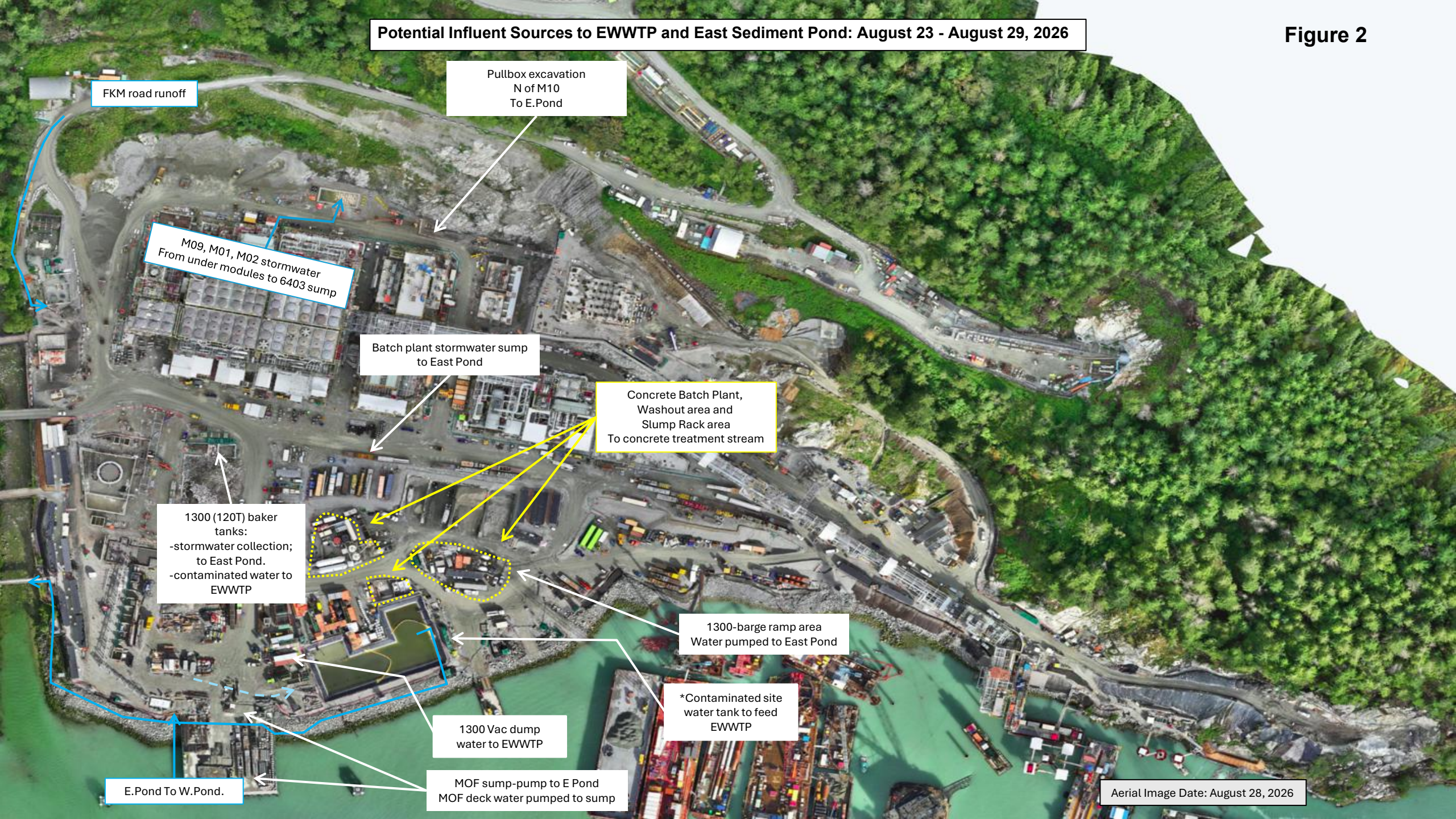


Figure 3

Potential Influent Sources to West Sedimentation Pond and 2700GPM system: August 23 - August 29, 2026

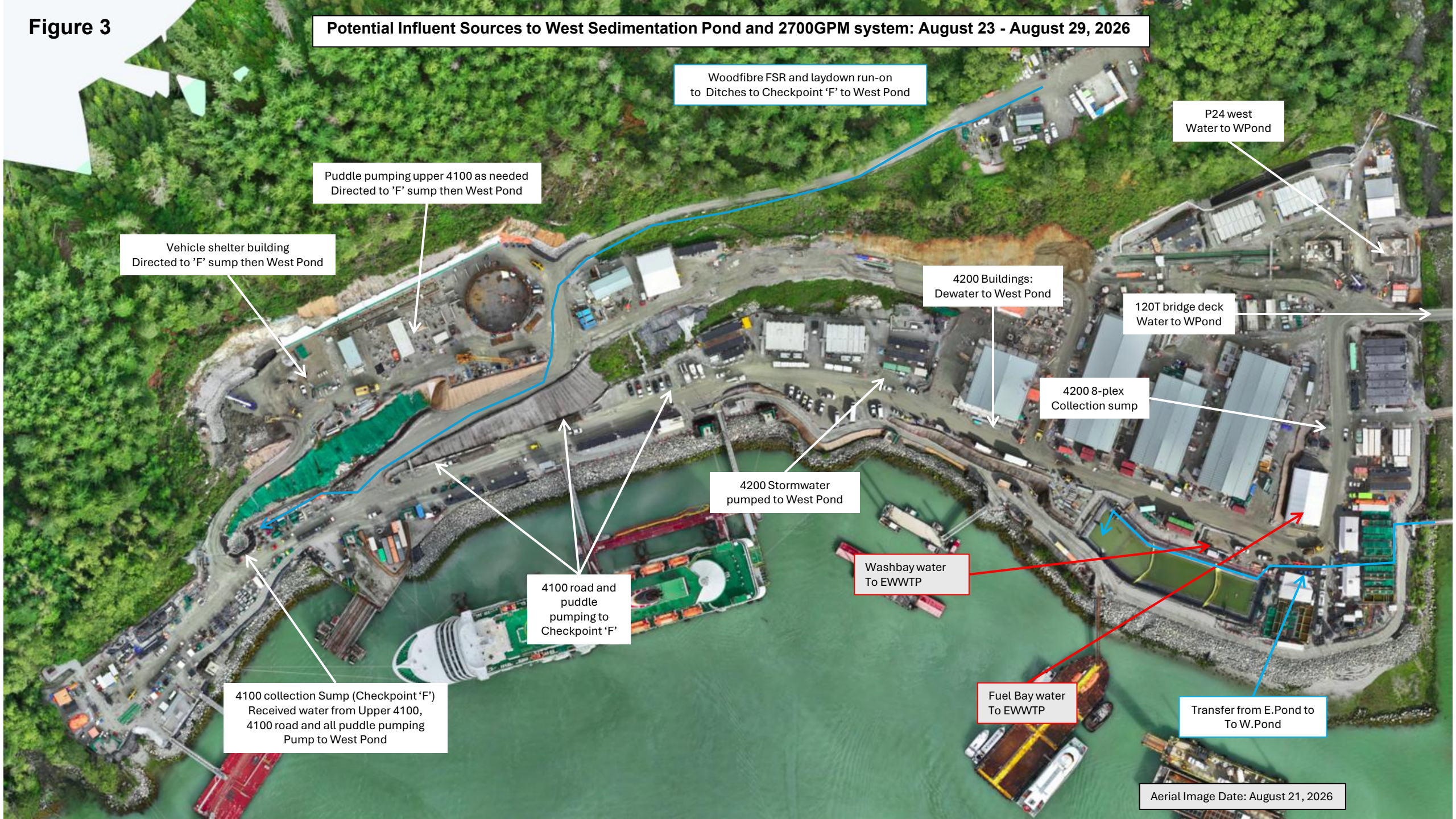




Figure 4: Aerial view of the East Sedimentation Pond (August 31, 2026). The East WWTP is located on the left side of the pond.



Figure 5: Aerial view of the West Sedimentation Pond (August 31, 2026).

Appendix B:
East Catchment Monitoring Results

Table B-1:
East WWTP Influent and Effluent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline ¹		PE-111578 Discharge Limit	Station	Station	Station
					WWTP-E-IN	COMB-WWTP-E-IN	WWTP-E-OUT
					Influent	Influent	Effluent
					WWTP-E-IN	COMB-WWTP-E-IN	WWTP-E-OUT
				VA26C3684-002	VA26C3684-005	VA26C3684-008	
				2026-08-24 10:15	2026-08-24 11:03	2026-08-24 13:56	
General Parameters							
pH - Field	pH units	- ²	-	5.5 - 9.0	8.4	8.5	6.7
Specific Conductivity - Field	µS/cm	-	-	-	3449	-	3389
Temperature - Field	°C	-	-	-	23.1	-	22.9
Salinity - Field	ppt	-	-	-	1.81	-	1.78
Turbidity - Field	NTU	-	-	-	9.02	66.3	3.74
TSS	mg/L	-	-	25 or 75 ⁵	4.9	41.9	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	8.87	-	7.02
Total Hardness	mg/L	-	-	-	110	185	39
Dissolved Hardness	mg/L	-	-	-	112	136	38.9
Anions and Nutrients							
Sulphate	mg/L	-	-	-	1260	1310	1230
Chloride	mg/L	-	-	-	20.2	19.8	19.4
Fluoride	mg/L	-	1.5	-	<0.400	<0.400	<0.400
Ammonia (N-NH ₃)	mg/L	0.41-9.4 ³	2.7-62 ³	-	0.0905	0.086	0.0765
Nitrite (N-NO ₂)	mg/L	-	-	-	<0.0200	0.0255	<0.0200
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.209	0.351	0.286
Total Organic Carbon (TOC)	mg/L	-	-	-	4.92	5.67	4.62
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	5.16	5.65	4.37
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	0.527	0.638	0.144
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00228	0.00225	0.00233
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00286	0.00283	0.00271
Barium, total (T-Ba)	mg/L	-	-	-	0.0322	0.0663	0.00601
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000040	<0.000040	<0.000040
Boron, total (T-B)	mg/L	1.2	-	-	0.23	0.244	0.219
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000850	<0.0000900	<0.0000950
Chromium, total (T-Cr)	mg/L	-	-	-	0.00245	0.0179	0.00258
Cobalt, total (T-Co)	mg/L	-	-	-	0.00022	0.00031	<0.00020
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00329	0.00493	0.00244
Iron, total (T-Fe)	mg/L	-	-	-	0.442	0.841	0.3
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.000223	0.000401	0.000228
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.0281	0.0331	0.0211
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.244	0.274	0.251
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00100	<0.00100	<0.00100
Selenium, total (T-Se)	mg/L	0.002	-	-	0.00234	0.00265	0.00218
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000020	<0.000020	<0.000020
Thallium, total (T-Tl)	mg/L	-	-	-	0.000067	0.000079	0.000073
Uranium, total (T-U)	mg/L	-	-	-	0.00974	0.00975	0.00843
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00413	0.00424	0.00455
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	<0.0060	0.0094	0.0078
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00177	0.00339	0.00128
Dissolved Metals							
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000475	<0.0000475	<0.0000450
Cobalt, dissolved (D-Co)	mg/L	-	-	-	<0.00020	<0.00020	<0.00020
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00253	0.0033	0.00179
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.022	0.061	0.026
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000100	<0.000100	<0.000100
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00672	0.0025	0.0116
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00100	<0.00100	<0.00100
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.859	1.03	0.481
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00336	0.0031	0.00393
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0020	<0.0020	0.0023
Polycyclic Aromatic Hydrocarbons (PAHs)							
Acenaphthene	mg/L	0.006	-	-	-	-	-
Acridine	mg/L	-	-	-	-	-	-
Anthracene	mg/L	-	-	-	-	-	-
Benz(a)anthracene	mg/L	-	-	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-	-
Chrysene	mg/L	0.0001	-	-	-	-	-
Fluoranthene	mg/L	-	-	-	-	-	-
Fluorene	mg/L	0.012	-	-	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	-	-	-
Naphthalene	mg/L	0.001	-	-	-	-	-
Phenanthrene	mg/L	-	-	-	-	-	-
Pyrene	mg/L	-	-	-	-	-	-
Quinoline	mg/L	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)							
Benzene	mg/L	0.59	6.0	-	-	-	-
Ethylbenzene	mg/L	0.07	1.0	-	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-	-
Styrene	mg/L	-	-	-	-	-	-
Toluene	mg/L	0.03	3.0	-	-	-	-
Total Xylenes	mg/L	0.07	1.0	-	-	-	-
Chlorobenzene	mg/L	0.025	-	-	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	-	-

Notes:
East catchment influents and East WWTP effluent were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.
Non-detect results are screened using the detection limit value.
Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in **orange text** exceed the PE-111578 East Sedimentation Pond Discharge Limit.
The East Catchment did not discharge during the monitoring period (August 23 – 29).

¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.
² The WQG was not evaluated for parameters with discharge limits.
³ The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27G and 27H in BC WQG guidance document.
⁴ The working BC WQG for trivalent antimony [Sb(III)] is 0.27 mg/L and is applied to total antimony results.
⁵ The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

Table B-2:
East Sedimentation Pond Influent and Effluent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline ¹		PE-111578 Discharge Limit	Station SP-E-IN
					Influent
					SP-E-IN
		Long Term	Short Term		VA26C3684-001 2026-08-24 10:03
General Parameters					
pH - Field	pH units	- ²	-	5.5 - 9.0	7.2
Specific Conductivity - Field	µS/cm	-	-	-	3422
Temperature - Field	°C	-	-	-	22.3
Salinity - Field	ppt	-	-	-	1.8
Turbidity - Field	NTU	-	-	-	21.36
TSS	mg/L	-	-	25 or 75 ⁵	17.5
Dissolved Oxygen - Field	mg/L	≥8	-	-	6.58
Total Hardness	mg/L	-	-	-	92.2
Dissolved Hardness	mg/L	-	-	-	90.1
Anions and Nutrients					
Sulphate	mg/L	-	-	-	1250
Chloride	mg/L	-	-	-	19.6
Fluoride	mg/L	-	1.5	-	<0.400
Ammonia (N-NH ₃)	mg/L	5.9 ³	40 ³	-	0.137
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0298
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.323
Total Organic Carbon (TOC)	mg/L	-	-	-	4.97
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	5.03
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	1.12
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00221
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00287
Barium, total (T-Ba)	mg/L	-	-	-	0.0297
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000040
Boron, total (T-B)	mg/L	1.2	-	-	0.193
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.000110
Chromium, total (T-Cr)	mg/L	-	-	-	0.00324
Cobalt, total (T-Co)	mg/L	-	-	-	0.00051
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00312
Iron, total (T-Fe)	mg/L	-	-	-	1.19
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.000435
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.068
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.256
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00100
Selenium, total (T-Se)	mg/L	0.002	-	-	0.00241
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000020
Thallium, total (T-Tl)	mg/L	-	-	-	0.000068
Uranium, total (T-U)	mg/L	-	-	-	0.00844
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00463
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0091
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00119
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000500
Cobalt, dissolved (D-Co)	mg/L	-	-	-	<0.00020
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00177
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.036
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000100
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0292
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00100
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.686
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00284
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0020
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.006	-	-	-
Acridine	mg/L	-	-	-	-
Anthracene	mg/L	-	-	-	-
Benz(a)anthracene	mg/L	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-
Chrysene	mg/L	0.0001	-	-	-
Fluoranthene	mg/L	-	-	-	-
Fluorene	mg/L	0.012	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	-
Naphthalene	mg/L	0.001	-	-	-
Phenanthrene	mg/L	-	-	-	-
Pyrene	mg/L	-	-	-	-
Quinoline	mg/L	-	-	-	-
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.59	6.0	-	-
Ethylbenzene	mg/L	0.07	1.0	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-
Styrene	mg/L	-	-	-	-
Toluene	mg/L	0.03	3.0	-	-
Total Xylenes	mg/L	0.07	1.0	-	-
Chlorobenzene	mg/L	0.025	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-

Notes:
East catchment influents and East WWTP effluent were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.
Non-detect results are screened using the detection limit value.
Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in **orange text** exceeded the PE-111578 East Sedimentation Pond Discharge Limit.
The East Catchment did not discharge during the monitoring period (August 23 – 29).
¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.
² The WQG was not evaluated for parameters with discharge limits.
³ The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27G and 27H in BC WQG guidance document.
⁴ The working BC WQG for trivalent antimony [Sb(III)] is 0.27 mg/L and is applied to total antimony results.
⁵ The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

Table B-3:
East Catchment Methylmercury and Corresponding Total Mercury Results Received at the Time of Reporting.

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline ¹					0.0001 ²	0.0055 - 0.016 ^{3,4}
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-E-IN	Influent	SP-E-IN	VA26C1393-001	2026-08-06	<u>0.000338</u>	<u>0.0525</u>
SP-E-IN	Influent	SP-E-IN	VA26C2414-001	2026-08-14	<u>0.000718</u>	<u>0.0392</u>
WWTP-E-IN	Influent	WWTP-E-IN	VA26C1393-002	2026-08-06	0.000095	0.0130
WWTP-E-IN	Influent	WWTP-E-IN	VA26C2414-002	2026-08-14	<u>0.000208</u>	<u>0.0183</u>
COMB-WWTP-E-IN	Influent	COMB-WWTP-E-IN	VA26C1393-005	2026-08-06	<u>0.000253</u>	<u>0.0803</u>
Effluent						
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA26C1393-006	2026-08-06	<u>0.000116</u>	<u>0.0358</u>
WWTP-E-OUT	Effluent	WWTP-E-OUT-DUP	VA26C1393-007	2026-08-06	<u>0.000135</u>	<u>0.0323</u>
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA26C2414-003	2026-08-14	<u>0.000252</u>	<u>0.0382</u>

Notes:
East catchment influents and effluents were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.
Non-detect results are screened using the detection limit value.
Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine aquatic life.
¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
² From BC Ambient Water Quality Guidelines for Mercury Overview Report. The methylmercury concentration threshold of 0.0001 µg/L (0.1 ng/L) is indicated as a WQG for the protection of wildlife and is set at a concentration that protects fish from mercury bioaccumulation to a level that may harm wildlife that consume fish.
³ CCME guideline for total mercury = 0.016 µg/L.
⁴ When MeHg ≤ 0.5% of total Hg, BC WQG = 0.02 µg/L. When MeHg > 0.5% of total Hg, BC WQG = 0.0001/(MeHg/Total Hg). Detection limit values are used to calculate the WQG for results reported as not detected.

Table B-4:
East Catchment Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.

Parameter					Lower Bound PCDD/F TEQ	Upper Bound PCDD/F TEQ
Unit					pg/L	pg/L
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-E-IN	Influent	SP-E-IN	VA26C1397-001	2026-08-06	0	1.03
WWTP-E-IN	Influent	WWTP-E-IN	VA26C1397-002	2026-08-06	0	1.00
Effluent						
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA26C1397-003	2026-08-06	0.000854	1.01
WWTP-E-OUT	Effluent	WWTP-E-OUT-DUP	VA26C1397-004	2026-08-06	0	1.06

Notes:
PCDD = polychlorinated dibenzodioxins (dioxins)
PCDF = polychlorinated dibenzofurans (furans)
TEQ = toxic equivalency
Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).
Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.

Table B-5:
East Catchment Field Measurements Collected During the Monitoring Period (August 23 – 29).

Parameter			Temperature	Dissolved Oxygen (DO)	Salinity	Turbidity	Estimated TSS ³	pH	Specific Conductivity	Visibility of Sheen
Unit			°C	mg/L	ppt	NTU	mg/L	s.u.	µS/cm	
PE-111578 Discharge Limit			-	-	-	-	25 or 75 ⁶	5.5 - 9.0	-	-
Lowest Applicable Guideline ¹			-	≥8	-	-	- ²	- ²	-	-
Station ID	Water Type	Date								
Influent ⁴										
SP-E-IN	Influent	2026-08-23 13:57	22.7	<u>7.40</u>	1.66	66.57	52.6	7.8	3183	No
SP-E-IN	Influent	2026-08-24 10:03	22.3	<u>6.58</u>	1.80	21.36	18.9	7.2	3422	No
SP-E-IN	Influent	2026-08-25 9:23	22.3	<u>6.53</u>	1.69	10.75	11.0	7.4	3226	No
SP-E-IN	Influent	2026-08-26 15:09	25.6	8.67	1.67	10.08	10.5	7.8	3206	No
SP-E-IN	Influent	2026-08-27 9:12	21.2	<u>7.25</u>	1.65	12.11	12.0	7.6	3160	No
SP-E-IN	Influent	2026-08-28 9:23	20.9	<u>6.90</u>	1.58	69.62	54.9	7.5	3033	No
SP-E-IN	Influent	2026-08-29 11:52	20.1	<u>7.44</u>	1.69	66.16	52.3	7.2	3220	No
WWTP-E-IN	Influent	2026-08-23 14:06	23.1	9.56	1.70	9.92	10.4	8.5	3254	No
WWTP-E-IN	Influent	2026-08-24 10:15	23.1	8.87	1.81	9.02	9.7	8.4	3449	No
WWTP-E-IN	Influent	2026-08-29 11:59	21.1	8.27	1.77	8.40	9.3	8.3	3361	No
Effluent ⁵										
WWTP-E-OUT	Effluent	2026-08-23 14:45	22.4	<u>6.18</u>	1.79	3.42	5.6	6.6	3401	No
WWTP-E-OUT	Effluent	2026-08-24 13:56	22.9	<u>7.02</u>	1.78	3.74	5.8	6.7	3389	No
WWTP-E-OUT	Effluent	2026-08-29 12:03	20.1	<u>7.64</u>	1.78	4.34	6.2	6.3	3375	No

Notes:
The east catchment did not discharge to Howe Sound during the monitoring period (August 23 – 29). Results above screening values are highlighted for comparative purposes. Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life. Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life. Results in orange text exceed the PE-111578 East Sedimentation Pond Discharge Limit.
¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
² The WQG was not evaluated for parameters with discharge limits.
³ TSS concentration is estimated from field turbidity measurements using a site-specific relationship TSS = 0.7458 * [turbidity as NTU] + 3.
⁴ Daily field measurements for station SP-E-IN were collected from cell 1 of the East Sedimentation Pond. Daily field measurements for station WWTP-E-IN were not collected on August 25 – 28 as the East WWTP was not operational at the time of monitoring.
⁵ There was no discharge at the authorized discharge location (SP-E-OUT) during the monitoring period (August 23 – 29), therefore daily field measurements for SP-E-OUT were not collected on those days. Daily field measurements for station WWTP-E-OUT were not collected on August 25 – 28 as the East WWTP was not operational at the time of monitoring.
⁶ The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

Table B-6:
East Catchment Daily Discharge Volumes for the Monitoring Period (August 23 – 29).

	East Sedimentation Pond Effluent	Transfer to West Sedimentation Pond	East WWTP Treated Effluent (Station WWTP-E-OUT) ²	Discharge to Howe Sound (Station SP-E-OUT)
Units	m ³	m ³	m ³	m ³
PE-111578 Discharge Limit	-	-	1,100	- ¹
Date				
2026-08-23	0	0	131	0
2026-08-24	0	0	228	0
2026-08-25	0	0	0	0
2026-08-26	0	0	0	0
2026-08-27	0	0	0	0
2026-08-28	0	0	57	0
2026-08-29	0	0	195	0

Notes:
Results in orange text exceed the PE-111578 East Sedimentation Pond Discharge Limit.
¹ As noted in PE-111578 Condition 2.1.4, the annual average authorized discharge rate from the East Sedimentation Pond to Howe Sound was set to 650 m³/day for the purpose of calculating discharge fees as required by the Permit and Approval Fees and Charges Regulation. Therefore, the annual average authorized discharge rate is not evaluated as a discharge limit.
² East WWTP treated effluent was recirculated to the East Sedimentation Pond.

Appendix C:
West Catchment Monitoring Results

Table C-1:
West 2700GPM TSS Settling System Influent and Effluent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline ¹		PE-111578 Discharge Limit	Station 2700GPM-IN	Station 2700GPM-IN	Station W2700T4-OUT	Station W2700T2-OUT	Station W2700T2-OUT
					Influent	Influent	Effluent	Effluent	Effluent
					2700GPM-IN	2700GPM-IN	W2700T4-OUT	W2700T2-OUT	W2700T2-OUT
					VA26C2716-002	VA26C3424-002	VA26C2716-003	VA26C3424-003	VA26C3730-001
		Long Term	Short Term		2026-08-17 10:52	2026-08-23 12:22	2026-08-17 10:14	2026-08-23 12:49	2026-08-25 14:13
General Parameters									
pH - Field	pH units	- ²	-	5.5 - 9.0	8.5	8.4	7.6	8.1	8.1
Specific Conductivity - Field	µS/cm	-	-	-	1663	1456	1601	1503	1445
Temperature - Field	°C	-	-	-	22.7	22.5	21.2	21.9	24
Salinity - Field	ppt	-	-	-	0.84	0.73	0.81	0.76	0.72
Turbidity - Field	NTU	-	-	-	2	16.08	9.46	3.58	4.49
TSS	mg/L	-	-	25 or 75 ⁵	<3.0	7.3	<3.0	<3.0	3.3
Dissolved Oxygen - Field	mg/L	≥8	-	-	9.09	8.5	9.12	8.23	8.09
Total Hardness	mg/L	-	-	-	75.5	76.2	75.3	70.2	-
Dissolved Hardness	mg/L	-	-	-	76.2	73.9	75.4	67.4	-
Anions and Nutrients									
Sulphate	mg/L	-	-	-	527	478	513	502	-
Chloride	mg/L	-	-	-	14.2	12.6	13.8	13.1	-
Fluoride	mg/L	-	1.5	-	0.197	0.174	0.212	0.197	-
Ammonia (N-NH ₃)	mg/L	0.41-2.4 ³	2.7-16 ³	-	0.055	0.0748	0.114	0.0747	-
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0123	<0.0050	0.0171	0.0084	-
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.183	0.0696	0.489	0.205	-
Total Organic Carbon (TOC)	mg/L	-	-	-	4.10	4.09	3.66	3.82	-
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	4.34	4.15	3.92	3.70	-
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	-	0.288	1.05	0.168	0.271	0.294
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00124	0.00102	0.00127	0.0012	0.00097
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00192	0.00179	0.00181	0.00187	0.00145
Barium, total (T-Ba)	mg/L	-	-	-	0.0116	0.0201	0.00312	0.00497	0.00528
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.041	0.039	0.03	0.036	0.034
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000350	<0.0000400	<0.0000300	<0.0000300	<0.0000200
Chromium, total (T-Cr)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.00011	0.00027	<0.00010	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.0019	0.00227	0.00315	0.00155	0.00565
Iron, total (T-Fe)	mg/L	-	-	-	0.132	0.653	0.069	0.138	0.12
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.00026	0.00043	0.000391	0.000175	0.000442
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.02	0.0384	0.0204	0.0121	0.00819
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.109	0.0957	0.108	0.0995	0.0843
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00053	<0.00050	<0.00050	<0.00050	0.0008
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000534	0.000453	0.000552	0.00041	0.000323
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000042	0.00004	0.000071	0.000043	0.000036
Uranium, total (T-U)	mg/L	-	-	-	0.00873	0.00844	0.00863	0.00844	0.00645
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00179	0.00205	0.00177	0.00159	0.00125
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0074	0.008	0.0134	0.0045	0.0066
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050	<0.00050	<0.00050	-
Dissolved Metals									
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000250	<0.0000350	<0.0000250	<0.0000250	<0.0000250
Cobalt, dissolved (D-Co)	mg/L	-	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00133	0.00158	0.00147	0.00136	0.00277
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.054	0.02	0.033	0.044	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000083	0.000072	0.000111	0.000132	0.000335
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0139	0.0094	0.0159	0.00599	0.00119
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050	0.00056	0.00188
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.208	0.216	0.188	0.208	0.203
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00158	0.00108	0.0016	0.00141	0.00108
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0022	0.0032	0.0035	0.0044	0.0117
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	mg/L	0.006	-	-	-	-	-	-	-
Acridine	mg/L	-	-	-	-	-	-	-	-
Anthracene	mg/L	-	-	-	-	-	-	-	-
Benz(a)anthracene	mg/L	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-	-	-	-
Chrysene	mg/L	0.0001	-	-	-	-	-	-	-
Fluoranthene	mg/L	-	-	-	-	-	-	-	-
Fluorene	mg/L	0.012	-	-	-	-	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	-	-	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	-	-	-	-	-
Naphthalene	mg/L	0.001	-	-	-	-	-	-	-
Phenanthrene	mg/L	-	-	-	-	-	-	-	-
Pyrene	mg/L	-	-	-	-	-	-	-	-
Quinoline	mg/L	-	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)									
Benzene	mg/L	0.59	6.0	-	-	-	-	-	-
Ethylbenzene	mg/L	0.07	1.0	-	-	-	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-	-	-	-
Styrene	mg/L	-	-	-	-	-	-	-	-
Toluene	mg/L	0.03	3.0	-	-	-	-	-	-
Total Xylenes	mg/L	0.07	1.0	-	-	-	-	-	-
Chlorobenzene	mg/L	0.025	-	-	-	-	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	-	-	-	-

Notes:
West catchment influents were not discharged to Howe Sound. Influent results above screening values are only highlighted for comparative purposes.
Non-detect results are screened using the detection limit value.
Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in **orange text** exceed the PE-111578 West Sedimentation Pond Discharge Limit.
The West Catchment did not discharge during the monitoring period (August 23 – 29).
¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.
² The WQG was not evaluated for parameters with discharge limits.
³ The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27G and 27H in BC WQG guidance document.
⁴ The working BC WQG for trivalent antimony [Sb(III)] is 0.27 mg/L and is applied to total antimony results.
⁵ The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

Table C-2:
West Sedimentation Pond Influent and Effluent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline ¹		PE-111578 Discharge Limit	Station	Station
					SP-W-IN	SP-W-IN
					Influent	Influent
		SP-W-IN	SP-W-IN			
				VA26C2716-001	VA26C3424-001	
		Long Term	Short Term	2026-08-17 10:21		2026-08-23 12:11
General Parameters						
pH - Field	pH units	- ²	-	5.5 - 9.0	8.3	7.8
Specific Conductivity - Field	µS/cm	-	-	-	1629	1338
Temperature - Field	°C	-	-	-	22.3	20.7
Salinity - Field	ppt	-	-	-	0.82	0.67
Turbidity - Field	NTU	-	-	-	7.3	66.43
TSS	mg/L	-	-	25 or 75 ⁵	132	47.7
Dissolved Oxygen - Field	mg/L	≥8	-	-	9.58	8.49
Total Hardness	mg/L	-	-	-	81.1	95
Dissolved Hardness	mg/L	-	-	-	80.3	82
Anions and Nutrients						
Sulphate	mg/L	-	-	-	515	443
Chloride	mg/L	-	-	-	13.9	11.8
Fluoride	mg/L	-	1.5	-	0.207	0.183
Ammonia (N-NH ₃)	mg/L	0.62-1.5 ³	4.2-10 ³	-	0.0851	0.0653
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0199	0.0134
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.445	0.281
Total Organic Carbon (TOC)	mg/L	-	-	-	3.88	4.04
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	4.20	4.21
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	0.432	3.98
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00127	0.0011
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.0019	0.00203
Barium, total (T-Ba)	mg/L	-	-	-	0.00547	0.0367
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020	0.000067
Boron, total (T-B)	mg/L	1.2	-	-	0.032	0.042
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000300	<0.0000650
Chromium, total (T-Cr)	mg/L	-	-	-	<0.00050	0.00106
Cobalt, total (T-Co)	mg/L	-	-	-	0.00016	0.00112
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00147	0.00403
Iron, total (T-Fe)	mg/L	-	-	-	0.313	3.02
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.000185	0.00134
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.0282	0.143
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.108	0.083
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050	0.00096
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000472	0.000416
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000063	0.000042
Uranium, total (T-U)	mg/L	-	-	-	0.00824	0.00746
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00217	0.00591
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	<0.0030	0.0209
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000250	<0.0000250
Cobalt, dissolved (D-Co)	mg/L	-	-	-	<0.00010	<0.00010
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00103	0.00103
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.035	0.029
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000051	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0141	0.0135
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.195	0.208
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00167	0.00138
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	-	-	-
Acridine	mg/L	-	-	-	-	-
Anthracene	mg/L	-	-	-	-	-
Benz(a)anthracene	mg/L	-	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-
Chrysene	mg/L	0.0001	-	-	-	-
Fluoranthene	mg/L	-	-	-	-	-
Fluorene	mg/L	0.012	-	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	-	-
Naphthalene	mg/L	0.001	-	-	-	-
Phenanthrene	mg/L	-	-	-	-	-
Pyrene	mg/L	-	-	-	-	-
Quinoline	mg/L	-	-	-	-	-
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.59	6.0	-	-	-
Ethylbenzene	mg/L	0.07	1.0	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-
Styrene	mg/L	-	-	-	-	-
Toluene	mg/L	0.03	3.0	-	-	-
Total Xylenes	mg/L	0.07	1.0	-	-	-
Chlorobenzene	mg/L	0.025	-	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	-

Notes:
West catchment influents were not discharged to Howe Sound. Influent results above screening values are only highlighted for comparative purposes.
Non-detect results are screened using the detection limit value.
Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in **orange text** exceed the PE-111578 West Sedimentation Pond Discharge Limit.
The West Catchment did not discharge during the monitoring period (August 23 – 29).
¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.
² The WQG was not evaluated for parameters with discharge limits.
³ The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27G and 27H in BC WQG guidance document.
⁴ The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
⁵ The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

Table C-3:
West Catchment Methylmercury and Corresponding Total Mercury Results Received at the Time of Reporting.

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline ¹					0.0001 ²	0.0026 - 0.0035 ^{3,4}
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-W-IN	Influent	SP-W-IN	VA26C0787-001	2026-08-03	<u>0.000153</u>	<u>0.00534</u>
2700GPM-IN	Influent	W2700-IN	VA26C0787-002	2026-08-03	<u>0.000127</u>	<u>0.00371</u>
Effluent						
W2700T1-OUT	Effluent	W2700T1-OUT	VA26C0787-003	2026-08-03	0.000098	0.00251

Notes:
West catchment influents and effluents presented in the table were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.
Non-detect results are screened using the detection limit value.
Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine aquatic life.
¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
² From BC Ambient Water Quality Guidelines for Mercury Overview Report. The methylmercury concentration threshold of 0.0001 µg/L (0.1 ng/L) is indicated as a WQG for the protection of wildlife and is set at a concentration that protects fish from mercury bioaccumulation to a level that may harm wildlife that consume fish.
³ CCME guideline for total mercury = 0.016 µg/L.
⁴ When MeHg ≤ 0.5% of total Hg, BC WQG = 0.02 µg/L. When MeHg > 0.5% of total Hg, BC WQG = 0.0001/(MeHg/Total Hg). Detection limit values are used to calculate the WQG for result.

Table C-4:
West Catchment Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.

Parameter					Lower Bound PCDD/F TEQ	Upper Bound PCDD/F TEQ
Unit					pg/L	pg/L
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-W-IN	Influent	SP-W-IN	VA26C0790-001	2026-08-03	0	0.960
2700GPM-IN	Influent	W2700-IN	VA26C0790-002	2026-08-03	0	0.987
Effluent						
W2700T1-OUT	Effluent	W2700T1-OUT	VA26C0790-003	2026-08-03	0.00518	1.01

Notes:
PCDD = polychlorinated dibenzodioxins (dioxins)
PCDF = polychlorinated dibenzofurans (furans)
TEQ = toxic equivalency
Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).
Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.

Table C-5:
West Catchment Field Measurements Collected During the Monitoring Period (August 23 – 29).

Parameter			Temperature	Dissolved Oxygen (DO)	Salinity	Turbidity	Estimated TSS ³	pH	Specific Conductivity	Visibility of Sheen
Unit			°C	mg/L	ppt	NTU	mg/L	s.u.	µS/cm	
PE-111578 Discharge Limit			-	-	-	-	25 or 75 ⁶	5.5 - 9.0	-	-
Lowest Applicable Guideline ¹			-	≥8	-	-	- ²	- ²	-	-
Station ID	Water Type	Date								
Influent ⁴										
SP-W-IN	Influent	2026-08-23 12:11	20.7	8.49	0.67	66.43	52.5	7.8	1338	No
SP-W-IN	Influent	2026-08-24 14:34	26.6	9.20	0.68	51.07	41.1	8.4	1373	No
SP-W-IN	Influent	2026-08-25 13:13	23.6	8.81	0.73	7.85	8.9	8.3	1452	No
SP-W-IN	Influent	2026-08-26 10:51	22.3	9.58	0.62	25.75	22.2	7.4	1248	No
SP-W-IN	Influent	2026-08-27 8:23	21.6	8.52	1.30	8.89	9.6	6.9	2524	No
SP-W-IN	Influent	2026-08-28 10:08	20.8	9.01	0.45	12.33	12.2	8.2	908	No
SP-W-IN	Influent	2026-08-29 9:40	18.7	9.15	0.93	83.31	65.1	8.3	1819	No
2700GPM-IN	Influent	2026-08-23 12:22	22.5	8.50	0.73	16.08	15.0	8.4	1456	No
2700GPM-IN	Influent	2026-08-25 13:17	24.0	8.57	0.72	11.56	11.6	8.3	1435	No
2700GPM-IN	Influent	2026-08-28 10:02	21.4	8.59	0.79	4.50	6.4	8.1	1558	No
Effluent ⁵										
-	-	-	-	-	-	-	-	-	-	-

Notes:
West catchment influents were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.
Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in orange text exceed the PE-111578 West Sedimentation Pond Discharge Limit.
¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
² The WQG was not evaluated for parameters with discharge limits.
³ TSS concentration is estimated from field turbidity measurements using a site-specific relationship TSS = 0.7458 * [turbidity as NTU] + 3.
⁴ Daily field measurements for station SP-W-IN were collected from cell 1 of the West Sedimentation Pond.
⁵ As described in Section 1.1, when there is surplus water, West Sedimentation Pond clarified effluent from the individual 2700GPM trains is directed to SP-W-OUT for discharge. 2700GPM clarified effluent was not discharged to Howe Sound at the authorized discharge location (SP-W-OUT) during the monitoring period (August 23 – 29); therefore, daily field parameters were not collected from station SP-W-OUT August 23 – 29.
⁶ The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

**Table C-6:
West Catchment Daily Discharge Volumes for the Monitoring Period (August 23 – 29).**

	West Sedimentation Pond Effluent	West TSS Settling System (2700GPM) Clarified Effluent (Station 2700GPM-OUT) ³	Water Reclaimed for Construction Purposes (Station 2700GPM-OUT)	West WWTP Treated Effluent ¹ (Station WWTP-W-OUT)	Discharge to Howe Sound (Station SP-W-OUT)
Unit	m ³	m ³	m ³	m ³	m ³
PE-111578 Discharge Limit	-	-	-	120	- ²
Date					
2026-08-23	0	187	0	0	0
2026-08-24	0	0	0	0	0
2026-08-25	0	400	0	0	0
2026-08-26	0	0	0	0	0
2026-08-27	0	0	0	0	0
2026-08-28	0	103	0	0	0
2026-08-29	0	0	0	0	0

Notes:

Results in orange text exceed the PE-111578 West Sedimentation Pond Discharge Limit.

¹ The West WWTP is not being operated therefore discharges are not expected from this facility.

² As noted in PE-111578 Condition 2.2.4, the annual average authorized discharge rate from the West Sedimentation Pond to Howe Sound was set to 310 m³/day for the purpose of calculating discharge fees as required by the Permit and Approval Fees and Charges Regulation. Therefore, the annual average authorized discharge rate is not evaluated as a discharge limit.

³ Clarified effluent from the 2700GPM TSS settling system is recirculated to the West Sedimentation Pond, discharged to Howe Sound or reclaimed for construction purposes based on operational considerations. Daily discharge volumes from station 2700GPM-OUT are a sum of all active treatment trains.

***Appendix D:
Freshwater Receiving Environment Monitoring
Results***

Table D-1:
Summary of Freshwater Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline ^{1, 2}		Station SW-01	Station SW-04	Station SW-02	Station SW-07
				Woodfibre Creek Lower Reach	East Creek Lower Reach	Mill Creek Lower Reach	Upstream Mill Creek
				SW-01	SW-04	SW-02	SW-07
		VA26C0938-001	VA26C0938-004	VA26C0938-002	VA26C0938-005		
		Long Term	Short Term	2026-08-03 8:30	2026-08-03 9:41	2026-08-03 12:17	2026-08-03 13:34
General Parameters							
pH - Field	pH units	6.5 - 9.0	-	<u>6.2</u>	6.8	7.3	6.9
Specific Conductivity - Field	µS/cm	-	-	9	187	14	14
Temperature - Field	°C	-	-	10.3	13.7	11.9	12.8
Salinity - Field	ppt	-	-	0	0.09	0.01	0.01
Turbidity - Field	NTU	-	-	1.22	1.92	0.4	0.6
TSS	mg/L	-	-	<3.0	<3.0	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	>=8	>=5	11.54	10.52	11.08	10.58
Total Hardness	mg/L	-	-	2.50	67.5	3.96	3.71
Dissolved Hardness	mg/L	-	-	2.52	69.9	4.02	3.75
Anions and Nutrients							
Sulphate ²	mg/L	128-218	-	0.33	14	1.7	1.73
Chloride	mg/L	120	600	<0.50	15.8	0.69	0.69
Fluoride ²	mg/L	0.12	0.400-1.18	<0.020	<u>0.28</u>	<0.020	<0.020
Ammonia (N-NH ₃) ²	mg/L	1.80-1.84	15.9-25.5	0.0056	0.0079	0.0077	<0.0050
Nitrite (N-NO ₂) ²	mg/L	0.0200-0.200	0.06-0.6	<0.0010	<0.0010	<0.0010	<0.0010
Nitrate (N-NO ₃)	mg/L	3	32.8	0.0372	<0.0050	0.0691	0.0572
Total Organic Carbon (TOC)	mg/L	-	-	3.18	1.17	1.62	1.50
Total Inorganic Carbon (DOC)	mg/L	-	-	2.87	0.98	1.88	1.51
Total Metals							
Aluminum, total (T-Al) ²	mg/L	0.0243-0.0809	-	<u>0.141</u>	<u>0.0745</u>	0.0687	<u>0.0619</u>
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010	0.00029	<0.00010	<0.00010
Arsenic, total (T-As)	mg/L	0.005	-	<0.00010	0.00104	<0.00010	<0.00010
Barium, total (T-Ba)	mg/L	1	-	0.00173	0.00638	0.00248	0.00231
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010	0.012	<0.010	0.01
Cadmium, total (T-Cd) ²	mg/L	0.0000364-0.000114	0.000106-0.00141	<0.0000050	<0.0000175	<0.0000050	0.0000054
Chromium, total (T-Cr)	mg/L	0.0025	-	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co) ²	mg/L	0.000778-0.000867	-	<0.00010	<0.00010	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Iron, total (T-Fe) ²	mg/L	0.0450-0.130	1	0.035	0.049	<0.010	<0.010
Lead, total (T-Pb)	mg/L	-	-	0.000061	<0.000050	<0.000050	<0.000050
Manganese, total (T-Mn)	mg/L	-	-	0.00105	0.0201	0.00035	0.00036
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.00027	0.0373	0.000507	0.000469
Nickel, total (T-Ni) ²	mg/L	0.0250-0.0550	-	<0.00050	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.001	-	<0.000050	<0.000050	<0.000050	<0.000050
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	<0.000010	<0.000010	<0.000010	0.000011
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000642	0.000322	0.00019	0.000167
Vanadium, total (T-V)	mg/L	0.12	-	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, total (T-Zn)	mg/L	-	-	<0.0030	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0025	-	<0.00050	<0.00050	<0.00050	<0.00050
Dissolved Metals							
Cadmium, dissolved (D-Cd) ²	mg/L	0.0000176-0.000158	0.0000380-0.000392	<0.0000050	<0.0000100	<0.0000050	<0.0000050
Cobalt, dissolved (D-Co) ²	mg/L	0.000389-0.000433	-	<0.00010	<0.00010	<0.00010	<0.00010
Copper, dissolved (D-Cu) ²	mg/L	0.000200-0.000351	0.000357-0.00208	<u>0.00025</u>	<0.00020	0.00028	<u>0.0003</u>
Iron, dissolved (D-Fe)	mg/L	-	-	0.021	<0.010	<0.010	<0.010
Lead, dissolved (D-Pb) ²	mg/L	0.00133-0.00188	-	<0.000050	<0.000050	<0.000050	<0.000050
Manganese, dissolved (D-Mn) ²	mg/L	0.145-0.245	0.985-4.71	0.00045	0.0172	0.00034	0.00041
Nickel, dissolved (D-Ni) ²	mg/L	0.000600-0.00120	0.00940-0.0123	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.003	0.0533	0.00576	0.00558
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, dissolved (D-Zn) ²	mg/L	0.00338-0.0107	0.00832-0.0281	<0.0010	0.0021	<0.0010	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)							
Acenaphthene	mg/L	0.0058	-	<0.000010	<0.000010	<0.000010	<0.000010
Acridine	mg/L	0.003	-	<0.000010	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	0.000012	-	<0.000010	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	0.000018	-	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	0.00004	-	<0.000010	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.003	-	<0.000010	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	0.001	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	0.0003	-	<0.000020	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	0.00002	-	<0.000010	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	0.0034	-	<0.000050	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)							
Benzene	mg/L	0.04	-	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.09	-	<0.00050	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	10	3.4	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	mg/L	0.072	-	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.0005	-	<0.00040	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	0.03	-	<0.00050	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.0013	-	<0.00050	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.0007	-	<0.00050	<0.00050	<0.00050	<0.00050

Notes:
Non-detect results are screened using the detection limit value. The lowest applicable guidelines are shown in the table; however, water quality data was screened to all applicable guidelines.
Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of freshwater aquatic life.
¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
² BC WQG or CWQG indicated to be variable are calculated from sample-specific measurements for temperature, field pH, total hardness and dissolved organic carbon (DOC) content.

Table D-2:
Freshwater Methylmercury and Corresponding Total Mercury Results Received at the Time of Reporting.

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline ¹					0.0001 ²	0.0025-0.0094 ^{3,4}
Station	Description	Sample ID	Lab ID	Sampling Date		
SW-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA26C0938-002	2026-08-03	<0.000020	0.00091
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA26C0938-005	2026-08-03	<0.000020	0.00083
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	SW-01	VA26C0938-001	2026-08-03	<0.000020	0.00187
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)	SW-04	VA26C0938-004	2026-08-03	<0.000020	<0.00050

Notes:
Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.
¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
² From BC Ambient Water Quality Guidelines for Mercury Overview Report. The methylmercury concentration threshold of 0.0001 µg/L (0.1 ng/L) is indicated as a WQG for the protection of wildlife and is set at a concentration that protects fish from mercury bioaccumulation to a level that may harm wildlife that consume fish.
³ CCME guideline for total mercury = 0.026 µg/L.
⁴ When MeHg ≤ 0.5% of total Hg, BC WQG = 0.02 µg/L. When MeHg > 0.5% of total Hg, BC WQG = 0.0001/(MeHg/Total Hg). Detection limit values are used to calculate the WQG for result reported as not detected.
Non-detect results are screened using the detection limit value.

Table D-3:
Freshwater Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.

Parameter					Lower Bound PCDD/F TEQ	Upper Bound PCDD/F TEQ
Unit					pg/L	pg/L
Station	Water Type	Sample ID	Lab ID	Sampling Date		
SW-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA26C0953-002	2026-08-03	0	1.77
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA26C0953-005	2026-08-03	0.0164	1.89
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	SW-01	VA26C0953-001	2026-08-03	0	1.48
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)	SW-04	VA26C0953-004	2026-08-03	0.000875	1.65

Notes:
PCDD = polychlorinated dibenzodioxins (dioxins)
PCDF = polychlorinated dibenzofurans (furans)
TEQ = toxic equivalency
Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).
Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.

***Appendix E:
Estuarine Water Receiving Environment Results***

Table E-1:
Summary of Mill Creek Estuary Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline ¹		Station SW-03
				Mill Creek Estuary
				SW-03
		VA26C0938-003		
Long Term	Short Term	2026-08-03 15:42		
General Parameters				
pH - Field	pH units	7.0 - 8.7	-	7.8
Specific Conductivity - Field	µS/cm	-	-	251
Temperature - Field	°C	-	-	18.5
Salinity - Field	ppt	-	-	0.1
Turbidity - Field	NTU	-	-	0.38
TSS	mg/L	-	-	<3.0
Dissolved Oxygen - Field	mg/L	>=8	-	10.79
Total Hardness	mg/L	-	-	21.70
Dissolved Hardness	mg/L	-	-	20.60
Anions and Nutrients				
Sulphate	mg/L	-	-	10.9
Chloride	mg/L	-	-	63.3
Fluoride	mg/L	-	1.5	<0.020
Ammonia (N-NH ₃)	mg/L	2.2 ²	15 ²	<0.0050
Nitrite (N-NO ₂)	mg/L	-	-	<0.0010
Nitrate (N-NO ₃)	mg/L	3.7	339	0.048
Total Organic Carbon (TOC)	mg/L	-	-	1.67
Total Inorganic Carbon (DOC)	mg/L	-	-	1.55
Total Metals				
Aluminum, total (T-Al)	mg/L	-	-	0.0718
Antimony, total (T-Sb)	mg/L	-	0.27	<0.00010
Arsenic, total (T-As)	mg/L	0.0125	-	<0.00010
Barium, total (T-Ba)	mg/L	-	-	0.00241
Beryllium, total (T-Be)	mg/L	0.1	-	<0.000020
Boron, total (T-B)	mg/L	1.2	-	0.026
Cadmium, total (T-Cd)	mg/L	0.00012	-	0.0000065
Chromium, total (T-Cr)	mg/L	-	-	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	<0.00010
Copper, total (T-Cu)	mg/L	0.002	0.003	<0.00050
Iron, total (T-Fe)	mg/L	-	-	0.017
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.000050
Manganese, total (T-Mn)	mg/L	0.1	-	0.00069
Molybdenum, total (T-Mo)	mg/L	-	-	0.000613
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	<0.000050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	<0.000010
Uranium, total (T-U)	mg/L	-	-	0.000181
Vanadium, total (T-V)	mg/L	0.005	-	<0.00050
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00050
Dissolved Metals				
Cadmium, dissolved (D-Cd)	mg/L	-	-	0.0000067
Cobalt, dissolved (D-Co)	mg/L	-	-	<0.00010
Copper, dissolved (D-Cu)	mg/L	-	-	0.00023
Iron, dissolved (D-Fe)	mg/L	-	-	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00028
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.0249
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050
Zinc, dissolved (D-Zn)	mg/L	-	-	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)				
Acenaphthene	mg/L	0.006	-	<0.000010
Acridine	mg/L	-	-	<0.000010
Anthracene	mg/L	-	-	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050
Chrysene	mg/L	0.0001	-	<0.000010
Fluoranthene	mg/L	-	-	<0.000010
Fluorene	mg/L	0.012	-	<0.000010
1-methylnaphthalene	mg/L	-	-	<0.000010
2-methylnaphthalene	mg/L	-	-	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050
Phenanthrene	mg/L	-	-	<0.000020
Pyrene	mg/L	-	-	<0.000010
Quinoline	mg/L	-	-	<0.000050
Volatile Organic Compounds (VOCs)				
Benzene	mg/L	0.59	-	<0.00050
Ethylbenzene	mg/L	0.07	-	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050
Styrene	mg/L	-	-	<0.00050
Toluene	mg/L	0.03	-	<0.00040
Total Xylenes	mg/L	0.07	-	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<0.00050

Notes:
Non-detect results are screened using the detection limit value.
Results in ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of estuarine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of estuarine and marine water aquatic life.
¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
² The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.

Table E-2:**Estuarine Water Methylmercury and Corresponding Total Mercury Results Received at the Time of Reporting.**

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline ¹					0.0001 ²	0.0040 ^{3,4}
Station	Description	Sample ID	Lab ID	Sampling Date		
SW-03	Mill Creek Estuary	SW-03	VA26C0938-003	2026-08-03	<0.000020	0.00080

Notes:

Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of estuarine aquatic life.

¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.

² From BC Ambient Water Quality Guidelines for Mercury Overview Report. The methylmercury concentration threshold of 0.0001 µg/L (0.1 ng/L) is indicated as a WQG for the protection of wildlife and is set at a concentration that protects fish from mercury bioaccumulation to a level that may harm wildlife that consume fish.

³ CCME guideline for total mercury = 0.026 µg/L.

⁴ When MeHg ≤ 0.5% of total Hg, BC WQG = 0.02 µg/L. When MeHg > 0.5% of total Hg, BC WQG = 0.0001/(MeHg/Total Hg). Detection limit values are used to calculate the WQG for result reported as not detected.

Non-detect results are screened using the detection limit value.

Table E-3:**Estuarine Water Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.**

Parameter					Lower Bound PCDD/F TEQ	Upper Bound PCDD/F TEQ
Unit					pg/L	pg/L
Station	Water Type	Sample ID	Lab ID	Sampling Date		
SW-03	Mill Creek Estuary	SW-03	VA26C0953-003	2026-08-03	0	3.70

Notes:

PCDD = polychlorinated dibenzodioxins (dioxins)

PCDF = polychlorinated dibenzofurans (furans)

TEQ = toxic equivalency

Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).

Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.