

TECHNICAL MEMORANDUM

To: Ian McAllister, Ashleigh Crompton, Mike Champion,
and Ryan Schucroft (Woodfibre LNG) **Date:** 7 August 2026

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

Subject: PE-111578 Weekly Discharge and Compliance Report #125 for July 26 –
August 1

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 #125) was prepared by Lorax and summarizes WDA monitoring conducted for the period of July 26 – August 1. 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 #125 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 July 26 – August 1 monitoring period, with precipitation recorded on July 26 (25.4 mm), July 27 (20.2 mm), July 28 (7.4 mm) and August 1 (11.6 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
2026-07-26	25.4	17.6	14.3	Rain
2026-07-27	20.2	18.1	13.9	Rain
2026-07-28	7.4	21.3	14.0	Rain
2026-07-29	0	22.9	11.9	Partly cloudy
2026-07-30	0	24.1	12.6	Sunny, Clear Skies
2026-07-31	0	25.4	13.2	Sunny, Clear Skies
2026-08-01	11.6	21.5	14.0	Rain

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

From July 26 – August 1, the East Sedimentation Pond received water from the MOF Sump and recirculated effluent from the East WWTP (Appendix A, Figure 2). A total of 347 m³ from the East Sedimentation Pond was transferred to the West Sedimentation Pond from July 26 – August 1 (Appendix B, Table B-5).

Routine operation of the East WWTP continued during the monitoring period (July 26 – August 1). Concrete contact water 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 each day during the monitoring period (July 26 – August 1) except on July 31 as the East WWTP was not operated. Daily water volumes processed by the East WWTP are provided in Appendix B (Table B-5).

From July 26 – August 1, 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 each day during the monitoring period (July 26 – August 1) and clarified effluent was either recirculated back to the pond or intermittently discharged to Howe Sound. A total of 645 m³ of clarified effluent was intermittently discharged to Howe Sound from station SP-W-OUT on July 27 and 28. A total of 459 m³ of clarified effluent was reclaimed for construction use during the monitoring period (July 26 – August 1). Daily clarified effluent volumes from the 2700GPM TSS settling system recirculated to the West Sedimentation Pond, discharged to Howe Sound and reclaimed for construction use 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 IDZ-W1, IDZ-W2, WQR2, SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN, WWTP-E-OUT, SP-W-IN, 2700GPM-IN, W2700T1-OUT and W2700T4-OUT during the monitoring period (July 26 – August 1). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (July 26 – August 1) 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.

Monthly PE-111578 monitoring requirements were met for the month of July. Monthly and bi-monthly analytical samples were not collected at the east catchment effluent compliance station (SP-E-OUT) as there was no discharge to Howe Sound from the East Sedimentation Pond in July. The influent and effluent stations of the West WWTP (WWTP-W-IN and WWTP-W-OUT, respectively) were not monitored as it was not operational in July. Monthly field measurements and analytical samples were not collected from non-contact water diversion ditch stations OUT-01, OUT-02 and OUT-06 as the ditches were dry at the time of monitoring throughout July.

Daily field parameters and a weekly analytical sample were not collected at the east catchment effluent compliance station (SP-E-OUT) as there was no discharge to Howe Sound from the East

Sedimentation Pond during the monitoring period (July 26 – August 1). Daily field parameters were not collected at the west catchment effluent compliance station (SP-W-OUT) on July 26 and July 29 – August 1 as there was no discharge to Howe Sound from the West Sedimentation Pond on those days. Daily field parameters were not collected at SP-W-OUT on July 27 as there was no discharge at the time of monitoring. 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 July 27, 29 and 31 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 (July 26 – August 1).

Table 2:
Summary of PE-111578 Monitoring Samples Collected July 26 – August 1.

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
July 26, 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
	2700GPM-IN	2700GPM TSS settling system influent monitored at cell 4 of the pond	Field Parameters.	P
July 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
	2700GPM-IN	2700GPM TSS settling system influent monitored at cell 4 of the pond	Field Parameters.	P
July 28, 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
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the SP-W-OUT outfall structure	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, M, 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
	W2700T1-OUT	2700GPM TSS settling system at the outlet of Train 1		
	W2700T4-OUT	2700GPM TSS settling system at the outlet of Train 4		
	IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	M
	IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
	IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
	IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
	IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
	IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		
	WQR2-0.5	Reference site 2; 0.5 m below surface		
	WQR2-2m	Reference site 2; 2 m below surface		
	WQR2-SF	Reference site 2; 2 m above the seafloor		
July 29, 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
July 30, 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
	2700GPM-IN	2700GPM TSS settling system influent monitored at cell 4 of the pond	Field Parameters.	P
July 31, 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 1, 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
	2700GPM-IN	2700GPM TSS settling system influent monitored at cell 4 of the pond	Field Parameters.	P

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 #125) are listed below in Table 3, with additional field measurements presented in Table B-4 (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:

- IDZ-E1, IDZ-E2 and WQR1 collected July 9 (total mercury, methylmercury, dioxins and furans);
- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected July 13 (total mercury and methylmercury);
- SP-W-IN, 2700GPM-IN and W2700T1-OUT collected July 15 (total mercury and methylmercury);
- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected July 20 (total mercury and methylmercury);
- SP-W-IN, 2700GPM-IN and W2700T4-OUT collected July 21 (total mercury and methylmercury);
- SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN and WWTP-E-OUT collected July 26 (total mercury and methylmercury);
- SP-W-IN, 2700GPM-IN, W2700T1-OUT and W2700T4-OUT collected July 28 (total mercury and methylmercury);
- SP-W-OUT collected July 28 (total mercury, methylmercury, dioxins and furans);
- IDZ-W1, IDZ-W2 and WQR2 collected July 28 (field measurements and all analytical parameters).

Table 3:
Summary of Analytical Results and Associated Field Measurements Included in Weekly Discharge and Compliance Report #125.

Sample	Description	Sampling Date	Parameters Reported
SW-03	Mill Creek Estuary	July 2, 2026	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-07	Upstream Mill Creek (at the diversion inlet)		
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	July 3, 2026	Total Mercury, Methylmercury, Dioxins and Furans.
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)		Total Mercury, Methylmercury, Dioxins and Furans.
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond		
2700GPM-IN	2700GPM TSS settling system at the influent meter box		Total Mercury and Methylmercury.
W2700T1-OUT	2700GPM TSS settling system at the outlet of Train 1		
W2700T3-OUT	2700GPM TSS settling system at the outlet of Train 3		
W2700T4-OUT	2700GPM TSS settling system at the outlet of Train 4		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	July 10, 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	July 11, 2026	Total Mercury and Methylmercury.
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
W2700T1-OUT	2700GPM TSS settling system at the outlet of Train 1		
W2700T4-OUT	2700GPM TSS settling system at the outlet of Train 4		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	July 26, 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		
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	July 28, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, and Hexavalent Chromium.
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
W2700T1-OUT	2700GPM TSS settling system at the outlet of Train 1		
W2700T4-OUT	2700GPM TSS settling system at the outlet of Train 4		
SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the SP-W-OUT outfall structure		Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, and VOCs.

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.

Results are presented for field measurements of influent quality for the East Sedimentation Pond and East WWTP influent and effluent quality collected July 26 – August 1 (stations SP-E-IN, WWTP-E-IN and WWTP-E-OUT) as well as analytical results for samples collected July 10 (total mercury and methylmercury for stations SP-E-IN, WWTP-E-IN, and WWTP-E-OUT; as discussed in Report #122) as well as July 26 (stations SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN, and WWTP-E-OUT) (Appendix B, Table B-1 through Table B-4).

Field measurements for the East WWTP effluent samples (WWTP-E-OUT) collected July 26 – August 1 met MDOs except for dissolved oxygen on July 26, 28, 30 and August 1 (Appendix B, Table B-4). 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.

Hexavalent chromium was above the MDO in the WWTP-E-OUT analytical sample collected July 26 (Appendix B, Table B-1). Metal parameters above MDOs are tracked in Table 4.

East WWTP effluent was directed to the East Sedimentation Pond and there was no discharge from the pond to Howe Sound from July 26 – August 1 (Section 1.2; Table B-5 of Appendix B). Hence, water quality samples and field measurements were not collected at the SP-E-OUT discharge location during the monitoring period.

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, a total of 645 m³ of clarified sedimentation pond effluent from the 2700GPM TSS Settling System was intermittently discharged to Howe Sound from SP-W-OUT on July 27 and 28.

Results are presented for field measurements of influent and effluent quality for the West Sedimentation Pond and the 2700GPM TSS settling system collected July 26 – August 1 as well as analytical results for samples collected July 28 (stations SP-W-IN, 2700GPM-IN, SP-W-OUT, W2700T1-OUT and W2700T4-OUT) (Appendix C, Table C-1 through Table C-5).

Field measurements and the analytical sample collected at SP-W-OUT on July 28 met PE-111578 discharge limits and WQGs (Appendix C, Table C-2 and Table C-5).

Dioxins and furans results were available at the time of reporting for West Sedimentation Pond influent as well as 2700GPM TSS settling system influent and effluent collected on July 3 (as discussed in Report #121). Results are presented in Appendix C, Table C-4.

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 at the Mill Creek estuary, mid-stream and background stations (SW-03, SW-02 and SW-07, respectively) on July 2 (as discussed in Report #121). The analytical results, field parameters, and WQGs are summarized in Appendix D (freshwater) and Appendix E (estuarine water).

Parameter concentrations met WQGs in the freshwater and estuarine samples collected July 2 (Appendix D, Table D-1 and Appendix E, Table E-1).

Total mercury and methylmercury analytical results were available at the time of reporting for freshwater and estuarine water samples collected at the Mill Creek estuary, mid-stream and background stations (SW-03, SW-02 and SW-07, respectively) on July 2 as well as near the mouth of Woodfibre Creek and East Creek (stations SW-01 and SW-04, respectively) on July 3 (as discussed in Report #121). Methylmercury concentrations ranged from <0.000020 to 0.000058 µg/L in all samples and met the WQG. The corresponding total mercury results met the WQG. Results are tabulated in Appendix D, Table D-2 (freshwater) and Appendix E, Table E-2 (estuarine water).

Dioxin and furans results were available at the time of reporting for freshwater and estuarine samples collected July 2 and 3 (as discussed in Report #121). The lower bound PCDD/F TEQ concentrations in these samples ranged from 0 to 0.0124 pg/L and the upper bound PCDD/F TEQ concentrations ranged from 1.01 to 1.27 pg/L. 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 and within ranges observed at background stations. Results are tabulated in Appendix D, Table D-3 (freshwater) and Appendix E, Table 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 (July 26 – August 1, Report #125)		
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 #125: Pending Data	Analytical results not reported.	Field measurements and analytical results for receiving environment samples collected July 28 as well as total mercury, methylmercury, dioxins and furans results for contact and treated water samples collected July 26 and 28 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 were above the MDOs. Total mercury and methylmercury concentrations collected at WWTP-E-OUT on June 16, 25 and July 2 met the MDO. 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. 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 the samples collected at WWTP-E-OUT on May 21, June 16, 25, July 2, 10, 13, 20 and 26 were above the MDO (0.0015 mg/L). Hexavalent chromium concentrations met the MDO in the WWTP-E-OUT samples collected May 25, June 3, and June 8. The WWTP treatment performance for hexavalent chromium will continue to be evaluated through August 2026 to determine if this is an isolated event or a recurring issue that requires additional investigation. This item remains open.
Report #118: WWTP Performance Evaluation	Nitrate above the MDO.	This item was first noted in Report #118. Nitrate was above the MDO in the WWTP-E-OUT samples collected June 3, 8, 16, 25, July 2, 10 and 13. East Sedimentation Pond and East WWTP influent samples collected at SP-E-IN and WWTP-E-IN, respectively, on these days also had elevated concentrations of nitrate. As of mid July, an ongoing source of nitrate has not been identified. Concrete accelerants contain nitrate, and it is possible the nitrate originated from the use of accelerant during placement of concrete. The concentration of nitrate in the East and West Sedimentation Ponds is trending lower and was below the MDO in the WWTP-E-OUT sample collected July 20 and 26. Therefore, it is speculated the input of nitrate to the East Sedimentation Pond detected early June is a singular event that is not on-going. This item is closed.
Report #121: Pending Data	Analytical results not reported.	Previously pending field parameters and analytical results for receiving environment samples collected July 2 as well as total mercury, methylmercury, dioxins and furans results for contact, treated water and receiving environment samples collected July 2 and 3 are included in Report #125. This item is closed.
Report #122: Pending Data	Analytical results not reported.	Previously pending total mercury and methylmercury results for contact and treated water samples collected July 10 and 11 are included in Report #125. Total mercury, methylmercury, dioxins and furans results for receiving environment samples collected July 9 are pending and will be included in future weekly reports when available. This item remains open.
Report #123: WWTP Performance Evaluation	Total copper, selenium and zinc above MDOs.	The total selenium concentration in the sample collected at WWTP-E-OUT on July 10 was above the MDO (0.0020 mg/L). Total copper and total zinc concentrations were also above the MDOs (0.0043 and 0.0133 mg/L, respectively) in the WWTP-E-OUT sample collected July 13, and total zinc was above the MDO on July 20. Total selenium, total copper and total zinc concentrations met MDOs in the WWTP-E-OUT sample collected July 26. This item is closed.
Report #123: Pending Data	Analytical results not reported.	Total mercury and methylmercury results for contact and treated water samples collected July 13 and 15 are pending and will be included in future weekly reports when available. This item remains open.
Report #124: Pending Data	Analytical results not reported.	Total mercury and methylmercury results for contact and treated water samples collected July 20 and 21 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.



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



World Imagery: District of Squamish. Additional imagery provided by McDermott International captured July 1st, 2026.

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: Aug 07, 2026		Coordinate System: NAD 1983 UTM Zone 10N Projection: Transverse Mercator Datum: North American 1983 Units: Metre Scale: 1:6,000	CLIENT: 	PROJECT: Woodfibre LNG Project Construction Phase	
		DRAWN BY: DM				TITLE: Site Layout and Water Quality Monitoring Stations for PE-111578 (August 1, 2026)	
		REVIEWED: PM				PROJECT #: A825-1	
		VERSION: 1				FIGURE: 1	



Figure 2: East Catchment contact water management facilities (July 26 – August 1).

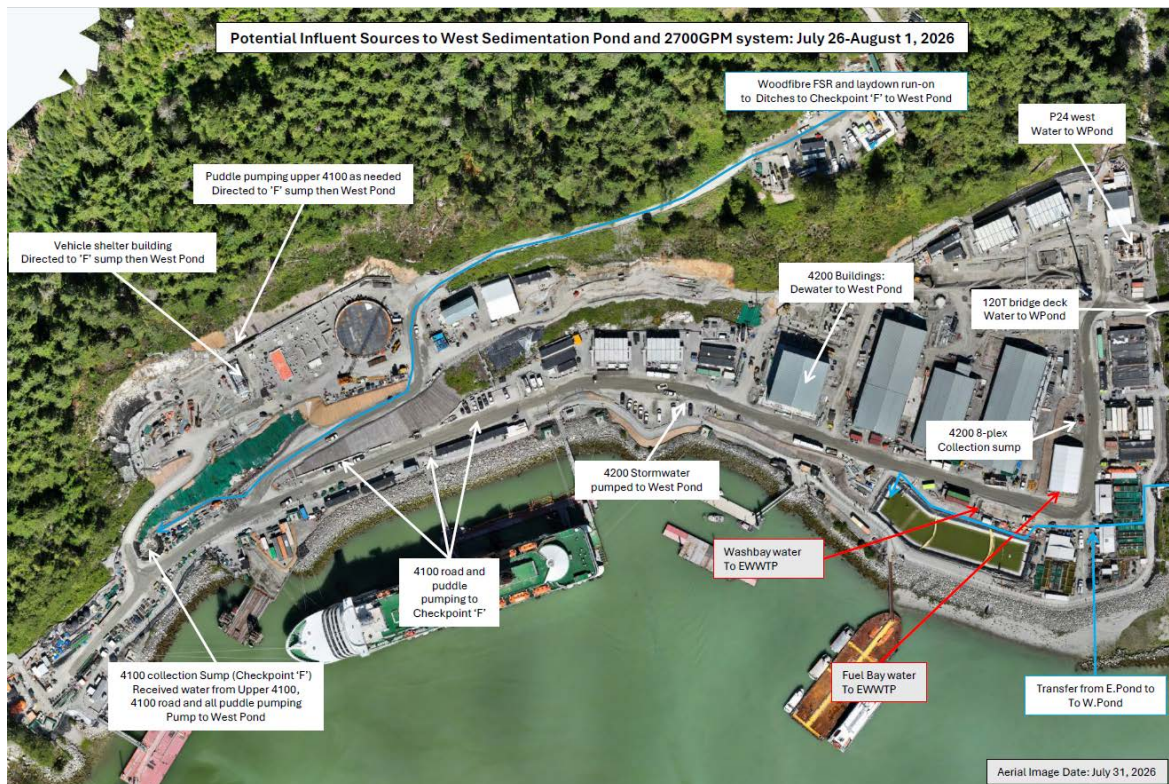


Figure 3: West Catchment contact water management facilities (July 26 – August 1).



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

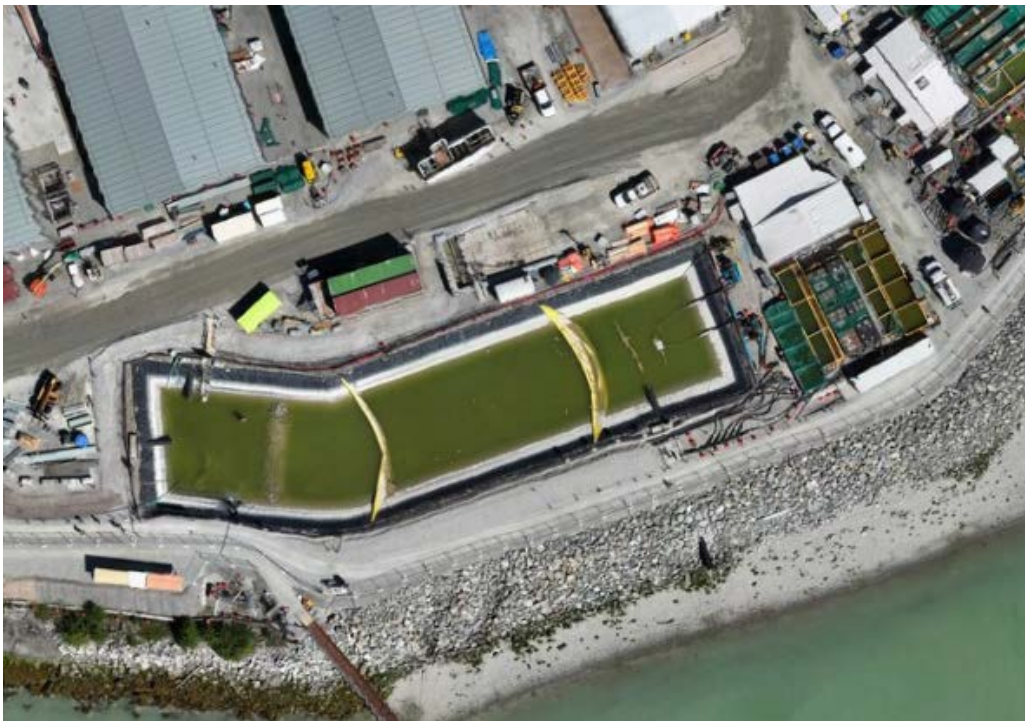


Figure 5: Aerial view of the West Sedimentation Pond (July 31, 2026).

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 WWTP-E-IN	Station COMB-WWTP-E-IN	Station WWTP-E-OUT
					Influent	Influent	Effluent
					WWTP-E-IN	COMB-WWTP-E-IN	WWTP-E-OUT
					VA26B9856-003	VA26B9856-004	VA26B9856-007
		Long Term	Short Term		2026-07-26 15:10	2026-07-26 15:45	2026-07-26 17:19
General Parameters							
pH - Field	pH units	- ²	-	5.5 - 9.0	7.8	8.5	6.7
Specific Conductivity - Field	µS/cm	-	-	-	2938	-	3163
Temperature - Field	°C	-	-	-	21.9	-	22
Salinity - Field	ppt	-	-	-	1.53	-	1.65
Turbidity - Field	NTU	-	-	-	152	90.3	13.32
TSS	mg/L	-	-	25 or 75 ⁵	79.1	123	8.9
Dissolved Oxygen - Field	mg/L	≥8	-	-	8.35	-	7.94
Total Hardness	mg/L	-	-	-	116	98.2	45.8
Dissolved Hardness	mg/L	-	-	-	89.3	58.9	40
Anions and Nutrients							
Sulphate	mg/L	-	-	-	1140	1290	1170
Chloride	mg/L	-	-	-	27.9	27.6	26.8
Fluoride	mg/L	-	1.5	-	0.459	0.43	0.403
Ammonia (N-NH ₃)	mg/L	0.41-9.4 ³	2.7-62 ³	-	0.0329	0.0462	0.174
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0738	0.0814	<0.0200
Nitrate (N-NO ₃)	mg/L	3.7	339	-	2.4	2.46	2.63
Total Organic Carbon (TOC)	mg/L	-	-	-	5.3	4.63	7.77
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	4.43	3.9	7.17
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	8.49	4.85	0.863
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00253	0.00272	0.00261
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00289	0.00267	0.00238
Barium, total (T-Ba)	mg/L	-	-	-	0.0759	0.0639	0.0124
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000123	<0.000100	<0.000100
Boron, total (T-B)	mg/L	1.2	-	-	0.258	0.26	0.27
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.000110	<0.000100	<0.0000650
Chromium, total (T-Cr)	mg/L	-	-	-	0.00426	0.00413	0.00253
Cobalt, total (T-Co)	mg/L	-	-	-	0.00255	0.00162	<0.00050
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00804	0.00615	0.00319
Iron, total (T-Fe)	mg/L	-	-	-	6.72	4.37	0.5
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.0026	0.00183	0.000458
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.29	0.17	0.0504
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.217	0.22	0.231
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.0025	<0.00250	<0.00250
Selenium, total (T-Se)	mg/L	0.002	-	-	0.0014	0.00137	0.00124
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000020	<0.000050	<0.000050
Thallium, total (T-Tl)	mg/L	-	-	-	0.000041	<0.000050	0.000124
Uranium, total (T-U)	mg/L	-	-	-	0.0414	0.0436	0.0259
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.0147	0.0101	0.00645
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0543	0.0383	<0.0150
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00173	0.00133	0.00173
Dissolved Metals							
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000600	<0.0000400	<0.0000600
Cobalt, dissolved (D-Co)	mg/L	-	-	-	<0.00020	<0.00020	<0.00050
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00133	0.00159	0.00132
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.085	0.044	<0.050
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000100	<0.000100	<0.000250
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0357	0.00869	0.032
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00100	<0.00100	<0.00250
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.627	0.549	0.174
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00324	0.00334	0.00498
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0027	<0.0020	<0.0050
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 (July 26 – August 1).
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		VA26B9856-001 2026-07-26 13:29
General Parameters					
pH - Field	pH units	- ²	-	5.5 - 9.0	7.4
Specific Conductivity - Field	µS/cm	-	-	-	2761
Temperature - Field	°C	-	-	-	21.2
Salinity - Field	ppt	-	-	-	1.43
Turbidity - Field	NTU	-	-	-	236.7
TSS	mg/L	-	-	25 or 75 ⁵	177
Dissolved Oxygen - Field	mg/L	≥8	-	-	8.19
Total Hardness	mg/L	-	-	-	142
Dissolved Hardness	mg/L	-	-	-	90.2
Anions and Nutrients					
Sulphate	mg/L	-	-	-	1060
Chloride	mg/L	-	-	-	27.9
Fluoride	mg/L	-	1.5	-	0.449
Ammonia (N-NH ₃)	mg/L	3.7 ³	25 ³	-	0.0657
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0752
Nitrate (N-NO ₃)	mg/L	3.7	339	-	2.26
Total Organic Carbon (TOC)	mg/L	-	-	-	7.67
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	7.05
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	14.9
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00264
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00503
Barium, total (T-Ba)	mg/L	-	-	-	0.113
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000193
Boron, total (T-B)	mg/L	1.2	-	-	0.263
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.000170
Chromium, total (T-Cr)	mg/L	-	-	-	0.00608
Cobalt, total (T-Co)	mg/L	-	-	-	0.00464
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.0116
Iron, total (T-Fe)	mg/L	-	-	-	12.3
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.00428
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.528
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.201
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00303
Selenium, total (T-Se)	mg/L	0.002	-	-	0.00138
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	-	-	-	0.0312
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.0256
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0869
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.0021
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000700
Cobalt, dissolved (D-Co)	mg/L	-	-	-	<0.00020
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00144
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.119
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000100
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0531
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00100
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.469
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00441
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0032
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 (July 26 – August 1).
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	0.0035 - 0.015 ^{3,4}
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-E-IN	Influent	SP-E-IN	VA26B8267-001	2026-07-10	<u>0.000194</u>	<u>0.0128</u>
WWTP-E-IN	Influent	WWTP-E-IN	VA26B8267-002	2026-07-10	0.000083	0.0124
Effluent						
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA26B8267-003	2026-07-10	<u>0.000187</u>	<u>0.00662</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 result.

Table B-4:
East Catchment Field Measurements Collected During the Monitoring Period (July 26 – August 1).

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	2026-07-26 13:29	21.2	8.19	1.43	236.70	179.5	7.4	2761	No
SP-E-IN	Influent	2026-07-27 11:48	19.6	<u>7.49</u>	1.08	353.5	266.6	7.8	2101	No
SP-E-IN	Influent	2026-07-28 9:20	18.8	<u>6.84</u>	0.89	209.23	159.0	7.5	1745	No
SP-E-IN	Influent	2026-07-29 9:26	20.5	<u>7.10</u>	1.25	14.78	14.0	7.3	2417	No
SP-E-IN	Influent	2026-07-30 12:10	21.7	<u>7.77</u>	1.28	10.36	10.7	7.1	2471	No
SP-E-IN	Influent	2026-07-31 13:58	25.5	10.48	1.36	12.23	12.1	7.5	2634	No
SP-E-IN	Influent	2026-08-01 12:16	22.5	10.31	1.32	35.86	29.7	6.8	2548	No
WWTP-E-IN	Influent	2026-07-26 15:10	21.9	8.35	1.53	152	116.4	7.8	2938	No
WWTP-E-IN	Influent	2026-07-28 9:12	19.8	<u>6.64</u>	1.37	111.08	85.8	7.8	2642	No
WWTP-E-IN	Influent	2026-07-30 12:01	21.2	<u>7.38</u>	1.32	23.6	20.6	7.8	2559	No
WWTP-E-IN	Influent	2026-08-01 12:25	22.5	9.93	1.29	16.33	15.2	7.5	2509	No
Effluent ⁵										
WWTP-E-OUT	Effluent	2026-07-26 17:19	22.0	<u>7.94</u>	1.65	13.32	12.9	6.7	3163	No
WWTP-E-OUT	Effluent	2026-07-28 9:36	20.3	<u>7.61</u>	1.61	13.96	13.4	6.8	3072	No
WWTP-E-OUT	Effluent	2026-07-30 12:05	20.6	<u>5.89</u>	1.35	3.07	5.3	6.5	2613	No
WWTP-E-OUT	Effluent	2026-08-01 12:20	21.4	<u>7.50</u>	1.42	2.92	5.2	6.0	2739	No
WWTP-E-OUT	Effluent	2026-08-01 12:22	21.4	<u>7.48</u>	1.42	1.26	3.9	6.0	2738	No

Notes:
The east catchment did not discharge to Howe Sound during the monitoring period (July 26 – August 1). 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 July 27, 29 and 31 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 (July 26 – August 1), 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 July 27, 29 and 31 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-5:
East Catchment Daily Discharge Volumes for the Monitoring Period (July 26 – August 1).

	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				
2026-07-26	0	0	584	0
2026-07-27	0	347	335	0
2026-07-28	0	0	483	0
2026-07-29	0	0	140	0
2026-07-30	0	0	295	0
2026-07-31	0	0	0	0
2026-08-01	0	0	491	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 W2700T1-OUT	Station W2700T4-OUT
					Influent	Effluent	Effluent
					2700GPM-IN	W2700T1-OUT	W2700T4-OUT
					VA26C0082-002	VA26C0082-003	VA26C0082-004
		Long Term	Short Term		2026-07-28 12:04	2026-07-28 9:39	2026-07-28 10:04
General Parameters							
pH - Field	pH units	- ²	-	5.5 - 9.0	8.2	7.7	8.2
Specific Conductivity - Field	µS/cm	-	-	-	933	913	944
Temperature - Field	°C	-	-	-	19.4	19.4	19.5
Salinity - Field	ppt	-	-	-	0.46	0.45	0.47
Turbidity - Field	NTU	-	-	-	41.43	0.87	0.99
TSS	mg/L	-	-	25 or 75 ⁵	46.0	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	9.19	8.83	10.22
Total Hardness	mg/L	-	-	-	71.1	63.8	64.9
Dissolved Hardness	mg/L	-	-	-	66.2	65.4	64.1
Anions and Nutrients							
Sulphate	mg/L	-	-	-	289	282	293
Chloride	mg/L	-	-	-	10.3	10.3	10.5
Fluoride	mg/L	-	1.5	-	0.168	0.175	0.179
Ammonia (N-NH ₃)	mg/L	0.87-3.4 ³	5.8-23 ³	-	0.0454	0.0322	0.0584
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0331	0.0137	0.0305
Nitrate (N-NO ₃)	mg/L	3.7	339	-	1.17	1.18	1.14
Total Organic Carbon (TOC)	mg/L	-	-	-	2.79	2.74	2.89
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	2.64	2.84	2.7
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	1.89	0.16	0.197
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00118	0.0013	0.0012
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00131	0.00113	0.00114
Barium, total (T-Ba)	mg/L	-	-	-	0.0182	0.00531	0.00338
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.00003	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.037	0.035	0.034
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000500	<0.0000200	<0.0000200
Chromium, total (T-Cr)	mg/L	-	-	-	0.00079	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.00055	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00283	0.00122	0.0016
Iron, total (T-Fe)	mg/L	-	-	-	1.43	0.043	0.083
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.00095	0.000072	0.000115
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.0643	0.00181	0.00954
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0628	0.0623	0.0649
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000316	0.000341	0.000361
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000034	0.000025	0.000038
Uranium, total (T-U)	mg/L	-	-	-	0.0106	0.0101	0.0102
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00371	0.00146	0.00154
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0179	<0.0030	0.003
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050	<0.00050
Dissolved Metals							
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000200	<0.0000200	<0.0000200
Cobalt, dissolved (D-Co)	mg/L	-	-	-	<0.00010	<0.00010	<0.00010
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00116	0.00107	0.00131
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	<0.000050	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00598	0.00023	0.00627
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.16	0.156	0.153
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00129	0.00123	0.00122
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0021	0.0013	0.002
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 intermittently discharged during the monitoring period (July 26 – August 1) on July 27 and 28.
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 SP-W-IN	Station SP-W-OUT
					Influent	Effluent
					SP-W-IN	SP-W-OUT
		VA26C0082-001	VA26C0082-005			
		Long Term	Short Term		2026-07-28 11:41	2026-07-28 10:48
General Parameters						
pH - Field	pH units	- ²	-	5.5 - 9.0	8.2	8.2
Specific Conductivity - Field	µS/cm	-	-	-	899	941
Temperature - Field	°C	-	-	-	19.4	19.4
Salinity - Field	ppt	-	-	-	0.44	0.47
Turbidity - Field	NTU	-	-	-	155.1	0.43
TSS	mg/L	-	-	25 or 75 ⁵	219	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	9.24	9.23
Total Hardness	mg/L	-	-	-	96.4	62.8
Dissolved Hardness	mg/L	-	-	-	70.3	62.6
Anions and Nutrients						
Sulphate	mg/L	-	-	-	276	293
Chloride	mg/L	-	-	-	10.1	10.5
Fluoride	mg/L	-	1.5	-	0.171	0.178
Ammonia (N-NH ₃)	mg/L	0.87 ³	5.8 ³	-	0.0373	0.0424
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0278	0.026
Nitrate (N-NO ₃)	mg/L	3.7	339	-	1.19	1.19
Total Organic Carbon (TOC)	mg/L	-	-	-	4.01	2.92
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	2.99	2.78
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	8.36	0.182
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00123	0.00122
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00182	0.00118
Barium, total (T-Ba)	mg/L	-	-	-	0.0632	0.00417
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000128	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.037	0.033
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.000092	<0.0000250
Chromium, total (T-Cr)	mg/L	-	-	-	0.00207	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.00252	<0.00010
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.0127	0.001
Iron, total (T-Fe)	mg/L	-	-	-	7.13	0.058
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.00312	0.000056
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.286	0.00843
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0605	0.0635
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00113	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000268	0.000273
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.000011	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000044	0.00003
Uranium, total (T-U)	mg/L	-	-	-	0.0107	0.0101
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.0129	0.00147
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0399	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000150	<0.0000150
Cobalt, dissolved (D-Co)	mg/L	-	-	-	<0.00010	<0.00010
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00094	0.00078
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0073	0.00544
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.153	0.154
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00124	0.0012
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010	<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	0.001	-	-	-	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	-	<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	6.0	-	-	<0.00050
Ethylbenzene	mg/L	0.07	1.0	-	-	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	<0.00050
Styrene	mg/L	-	-	-	-	<0.00050
Toluene	mg/L	0.03	3.0	-	-	<0.00040
Total Xylenes	mg/L	0.07	1.0	-	-	<0.00050
Chlorobenzene	mg/L	0.025	-	-	-	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	<0.00050

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 intermittently discharged during the monitoring period (July 26 – August 1) on July 27 and 28.
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	0.0017 - 0.0042 ^{3,4}
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-W-IN	Influent	SP-W-IN	VA26B7464-001	2026-07-03	0.000081	0.00339
SP-W-IN	Influent	SP-W-IN	VA26B8315-001	2026-07-11	<u>0.00222</u>	<u>0.00221</u>
2700GPM-IN	Influent	W2700-IN	VA26B7464-002	2026-07-03	<u>0.000117</u>	<u>0.00253</u>
2700GPM-IN	Influent	W2700-IN	VA26B8315-002	2026-07-11	<u>0.000189</u>	<u>0.00436</u>
Effluent						
W2700T1-OUT	Effluent	W2700T1-OUT	VA26B7464-003	2026-07-03	<u>0.000120</u>	<u>0.00198</u>
W2700T1-OUT	Effluent	W2700T1-OUT-DUP	VA26B7464-006	2026-07-03	<u>0.000128</u>	<u>0.00213</u>
W2700T3-OUT	Effluent	W2700T3-OUT	VA26B7464-004	2026-07-03	0.000096	0.00158
W2700T4-OUT	Effluent	W2700T4-OUT	VA26B7464-005	2026-07-03	<u>0.000113</u>	<u>0.00185</u>
W2700T1-OUT	Effluent	W2700T1-OUT	VA26B8315-003	2026-07-11	0.000037	0.00172
W2700T4-OUT	Effluent	W2700T4-OUT	VA26B8315-004	2026-07-11	<u>0.000103</u>	<u>0.00159</u>

Notes:
West catchment influents and effluents presented in this 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	VA26B7475-001	2026-07-03	0.0751	1.15
2700GPM-IN	Influent	W2700-IN	VA26B7475-002	2026-07-03	0.00127	1.22
Effluent						
W2700T1-OUT	Effluent	W2700T1-OUT	VA26B7475-003	2026-07-03	0.0143	1.08
W2700T1-OUT	Effluent	W2700T1-OUT-DUP	VA26B7475-006	2026-07-03	0.0133	1.19

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 (July 26 – August 1).

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	2026-07-26 11:19	20.4	8.38	0.55	359.1	270.8	7.1	1105	No
SP-W-IN	Influent	2026-07-27 12:25	19.3	9.03	0.47	300.78	227.3	8.2	954	No
SP-W-IN	Influent	2026-07-28 11:41	19.4	9.24	0.44	155.10	118.7	8.2	899	No
SP-W-IN	Influent	2026-07-29 9:58	20.1	8.62	0.44	34.52	28.7	8.2	888	No
SP-W-IN	Influent	2026-07-30 9:42	20.7	8.92	0.44	12.16	12.1	8.4	890	No
SP-W-IN	Influent	2026-07-31 9:11	20.5	9.00	0.34	29.11	24.7	6.7	704	No
SP-W-IN	Influent	2026-08-01 11:25	22.0	8.81	0.39	13.64	13.2	8.2	799	No
2700GPM-IN	Influent	2026-07-26 11:24	19.6	8.88	0.3	160.02	122.3	7.7	615	No
2700GPM-IN	Influent	2026-07-27 12:28	19.6	9.09	0.5	161.87	123.7	8.2	1001	No
2700GPM-IN	Influent	2026-07-28 12:04	19.4	9.19	0.46	41.43	33.9	8.2	933	No
2700GPM-IN	Influent	2026-07-29 9:51	20	8.86	0.45	24.62	21.4	8.2	904	No
2700GPM-IN	Influent	2026-07-30 10:00	21.3	8.86	0.44	27.74	23.7	8.3	899	No
2700GPM-IN	Influent	2026-07-31 9:14	21.2	8.92	0.41	6.72	8.0	7.9	839	No
2700GPM-IN	Influent	2026-08-01 11:44	22.1	8.87	0.39	42.52	34.7	8.3	797	No
Effluent ⁵										
SP-W-OUT	Effluent	2026-07-28 10:48	19.4	9.23	0.47	0.43	3.3	8.2	941	No
SP-W-OUT	Effluent	2026-07-28 10:49	19.4	9.21	0.47	0.36	3.3	8.2	943	No
W2700T1-OUT ⁵	Effluent	2026-07-27 ⁵	- ⁵	- ⁵	- ⁵	4.90	6.7	7.9	- ⁵	- ⁵

Notes:
West catchment influents for July 26 – August 1 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 from Trains 1 and 4 was intermittently discharged to Howe Sound at the authorized discharge location (SP-W-OUT) during the monitoring period (July 26 – August 1) on July 27 and 28, respectively. Daily field parameters were not collected from station SP-W-OUT on July 26 as there was no discharge to Howe Sound at the time of monitoring. In-line field pH and turbidity measurements recorded at the end of the discharge period on July 27 at the outlet of Train 1 are shown in lieu of daily field measurements. Daily field parameters were not collected from station SP-W-OUT on July 26 and July 29 – August 1 as there was no discharge to Howe Sound on those days.
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 (July 26 – August 1).

	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					
2026-07-26	0	1,408	0	0	0
2026-07-27	0	2,776	0	0	334
2026-07-28	0	2,318	12	0	311
2026-07-29	0	1,347	41	0	0
2026-07-30	0	2,036	224	0	0
2026-07-31	0	1,846	131	0	0
2026-08-01	0	2,078	51	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-02	Station SW-07
				Mill Creek Lower Reach	Upstream Mill Creek
				SW-02	SW-07
		VA26B7342-002	VA26B7342-003		
		Long Term	Short Term	2026-07-02 14:50	2026-07-02 12:08
General Parameters					
pH - Field	pH units	6.5 - 9.0	-	7.9	8.0
Specific Conductivity - Field	µS/cm	-	-	17	16
Temperature - Field	°C	-	-	11.5	10.8
Salinity - Field	ppt	-	-	0.01	0.01
Turbidity - Field	NTU	-	-	1.52	1.19
TSS	mg/L	-	-	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	>=8	>=5	11.24	11.1
Total Hardness	mg/L	-	-	4.28	3.91
Dissolved Hardness	mg/L	-	-	4.28	3.84
Anions and Nutrients					
Sulphate ²	mg/L	128	-	2.01	1.97
Chloride	mg/L	120	600	1.13	1.11
Fluoride ²	mg/L	0.12	0.400	<0.020	<0.020
Ammonia (N-NH ₃) ²	mg/L	0.343-1.04	5.86-6.92	<0.0050	<0.0050
Nitrite (N-NO ₂) ²	mg/L	0.0200	0.1	<0.0010	<0.0010
Nitrate (N-NO ₃)	mg/L	3	32.8	0.0421	0.0439
Total Organic Carbon (TOC)	mg/L	-	-	0.79	0.66
Total Inorganic Carbon (DOC)	mg/L	-	-	0.67	0.64
Total Metals					
Aluminum, total (T-Al) ²	mg/L	0.0929-0.103	-	0.0449	0.0352
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010	<0.00010
Arsenic, total (T-As)	mg/L	0.005	-	<0.00010	<0.00010
Barium, total (T-Ba)	mg/L	1	-	0.00279	0.00218
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	29	0.017	0.016
Cadmium, total (T-Cd) ²	mg/L	0.0000364	0.000106	0.0000076	0.0000052
Chromium, total (T-Cr)	mg/L	0.0025	-	<0.00050	<0.00050
Cobalt, total (T-Co) ²	mg/L	0.000778	-	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	-	-	<0.00050	<0.00050
Iron, total (T-Fe)	mg/L	0.0600	1	0.015	<0.010
Lead, total (T-Pb)	mg/L	-	-	<0.000050	<0.000050
Manganese, total (T-Mn)	mg/L	-	-	0.00074	0.00056
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.000594	0.000473
Nickel, total (T-Ni) ²	mg/L	0.0250	-	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.001	-	<0.000050	<0.000050
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000109	0.00009
Vanadium, total (T-V)	mg/L	0.12	-	<0.00050	<0.00050
Zinc, total (T-Zn)	mg/L	-	-	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0025	-	<0.00050	<0.00050
Dissolved Metals					
Cadmium, dissolved (D-Cd) ²	mg/L	0.0000195-0.0000208	0.0000380	<0.0000050	0.0000073
Cobalt, dissolved (D-Co) ²	mg/L	0.000389	-	<0.00010	<0.00010
Copper, dissolved (D-Cu) ²	mg/L	0.000323-0.000341	0.00185-0.00197	<0.00020	<0.00020
Iron, dissolved (D-Fe)	mg/L	-	-	<0.010	<0.010
Lead, dissolved (D-Pb) ²	mg/L	0.000856-0.000876	-	<0.000050	<0.000050
Manganese, dissolved (D-Mn) ²	mg/L	0.135-0.160	0.985-1.97	0.00027	0.00031
Nickel, dissolved (D-Ni) ²	mg/L	0.000600	0.00840-0.00860	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00694	0.00661
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050
Zinc, dissolved (D-Zn) ²	mg/L	0.00125-0.00138	0.00677-0.00684	<0.0010	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.0058	-	<0.000010	<0.000010
Acridine	mg/L	0.003	-	<0.000010	<0.000010
Anthracene	mg/L	0.000012	-	<0.000010	<0.000010
Benz(a)anthracene	mg/L	0.000018	-	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050
Chrysene	mg/L	-	-	<0.000010	<0.000010
Fluoranthene	mg/L	0.00004	-	<0.000010	<0.000010
Fluorene	mg/L	0.003	-	<0.000010	<0.000010
1-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010
2-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010
Naphthalene	mg/L	0.001	0.001	<0.000050	<0.000050
Phenanthrene	mg/L	0.0003	-	<0.000020	<0.000020
Pyrene	mg/L	0.00002	-	<0.000010	<0.000010
Quinoline	mg/L	0.0034	-	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.04	-	<0.00050	<0.00050
Ethylbenzene	mg/L	0.09	-	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	10	3.4	<0.00050	<0.00050
Styrene	mg/L	0.072	-	<0.00050	<0.00050
Toluene	mg/L	0.0005	-	<0.00040	<0.00040
Total Xylenes	mg/L	0.03	-	<0.00050	<0.00050
Chlorobenzene	mg/L	0.0013	-	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.0007	-	<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	0.00086-0.0099 ^{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	VA26B7342-002	2026-07-02	<0.000020	0.00086
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA26B7342-003	2026-07-02	<0.000020	0.00104
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	SW-01	VA26B7467-001	2026-07-03	<0.000020	0.00198
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)	SW-04	VA26B7467-002	2026-07-03	0.000058	<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	VA26B7343-002	2026-07-02	0	1.27
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA26B7343-003	2026-07-02	0	1.01
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	SW-01	VA26B7471-001	2026-07-03	0.0124	1.02
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)	SW-04	VA26B7471-002	2026-07-03	0	1.07

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
		VA26B7342-001		
		Long Term	Short Term	2026-07-02 14:08
General Parameters				
pH - Field	pH units	7.0 - 8.7	-	8.0
Specific Conductivity - Field	µS/cm	-	-	258
Temperature - Field	°C	-	-	11.7
Salinity - Field	ppt	-	-	0.1
Turbidity - Field	NTU	-	-	1.58
TSS	mg/L	-	-	<3.0
Dissolved Oxygen - Field	mg/L	>=8	-	11.12
Total Hardness	mg/L	-	-	28.60
Dissolved Hardness	mg/L	-	-	18.50
Anions and Nutrients				
Sulphate	mg/L	-	-	13.5
Chloride	mg/L	-	-	79.8
Fluoride	mg/L	-	1.5	0.021
Ammonia (N-NH ₃)	mg/L	29 ²	191 ²	<0.0050
Nitrite (N-NO ₂)	mg/L	-	-	<0.0010
Nitrate (N-NO ₃)	mg/L	3.7	339	0.0344
Total Organic Carbon (TOC)	mg/L	-	-	0.76
Total Inorganic Carbon (DOC)	mg/L	-	-	0.6
Total Metals				
Aluminum, total (T-Al)	mg/L	-	-	0.0554
Antimony, total (T-Sb)	mg/L	-	0.27	0.00015
Arsenic, total (T-As)	mg/L	0.0125	-	<0.00010
Barium, total (T-Ba)	mg/L	-	-	0.00278
Beryllium, total (T-Be)	mg/L	0.1	-	<0.000020
Boron, total (T-B)	mg/L	1.2	-	0.043
Cadmium, total (T-Cd)	mg/L	0.00012	-	0.0000063
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	-	-	0.025
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.000050
Manganese, total (T-Mn)	mg/L	0.1	-	0.00099
Molybdenum, total (T-Mo)	mg/L	-	-	0.000928
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	-	-	0.000123
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	-	-	<0.0000050
Cobalt, dissolved (D-C0)	mg/L	-	-	<0.00010
Copper, dissolved (D-Cu)	mg/L	-	-	<0.00020
Iron, dissolved (D-Fe)	mg/L	-	-	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00025
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.0233
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	0.0037 ^{3,4}
Station	Description	Sample ID	Lab ID	Sampling Date		
SW-03	Mill Creek Estuary	SW-03	VA26B7342-001	2026-07-02	<0.000020	0.00073

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	VA26B7343-001	2026-07-02	0.0	1.13

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.