

TECHNICAL MEMORANDUM

To: Ian McAllister, Ashleigh Crompton, Mike Champion, and Ryan Schucroft (Woodfibre LNG) **Date:** 03 July 2026

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

Subject: PE-111578 Weekly Discharge and Compliance Report #120 for June 21 – 27

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 #120) was prepared by Lorax and summarizes WDA monitoring conducted for the period of June 21 – 27. 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 #120 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 G 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

Generally sunny weather conditions were observed during the June 21 – 27 monitoring period, with precipitation recorded on June 26. The total precipitation amount during the monitoring period was 12.4 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
2026-06-21	0	23.6	12.1	Sunny
2026-06-22	0	29.7	14	Sunny
2026-06-23	0	29.8	15.8	Sunny
2026-06-24	0	27.6	15.7	Sunny
2026-06-25	0	21.2	15	Sunny
2026-06-26	12.4	16.3	13	Rain
2026-06-27	0	21.2	11.3	Sunny

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

From June 21 – 27, the East Sedimentation Pond received water from the MOF 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 June 21 – 27 (Appendix B, Table B-4).

Routine operation of the East WWTP continued during the monitoring period (June 21 – 27). 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 (June 21 – 27). Daily water volumes processed by the East WWTP are provided in Appendix B (Table B-4).

From June 21 – 27, 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 (June 21 – 27) except on June 25 and 26 and recirculated back to the pond. West Sedimentation Pond effluent was not discharged to Howe Sound during the monitoring period (June 21 – 27). A total of 80 m³ of clarified effluent was reclaimed for construction use during the monitoring period (June 21 – 27). Daily clarified effluent volumes from the 2700GPM TSS settling system recirculated to the West Sedimentation Pond or reclaimed for construction use are provided in Appendix C (Table C-4).

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-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1, WQR2, SP-E-IN, SP-E-NE, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, 2700GPM-IN, and W2700T1-OUT during the monitoring period (June 21 – 27). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (June 21 – 27) 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 (June 21 – 27). 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 (June 21 – 27).

Table 2:
Summary of PE-111578 Monitoring Samples Collected June 21 – 27.

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
June 21, 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
June 22, 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
	W2700T1-OUT	2700GPM TSS settling system at the outlet of Train 1	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	P
June 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 Parameters.	D
	2700GPM-IN	2700GPM TSS settling system influent monitored at cell 4 of the pond	Field Parameters.	P
June 24, 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
June 25, 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		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
June 26, 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
June 27, 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.
M₅ – spring high-frequency (5-in-30) sampling for receiving environment 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 #120) are listed below in Table 3, with additional field measurements presented in Table B-3 (Appendix B) and Table C-3 (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-E-SED collected May 17 (all analytical parameters);
- IDZ-W-SED collected May 18 (all analytical parameters);
- WWTP-E-OUT collected May 25 (acute toxicity);
- W2700T2-OUT collected May 25 (acute toxicity);
- IDZ-E1, IDZ-E2 and WQR1 collected May 26 (chronic toxicity);
- IDZ-W1, IDZ-W2 and WQR2 collected May 26 (chronic toxicity);
- SP-E-IN collected June 3 (total mercury and methylmercury, dioxins and furans);
- WWTP-E-IN and WWTP-E-OUT collected June 3 (dioxins and furans);
- SP-W-IN, 2700GPM-IN, and W2700T1-OUT collected June 10 (total mercury and methylmercury);
- SP-W-IN, 2700GPM-IN, and W2700T1-OUT collected June 14 (total mercury, methylmercury, dioxins and furans);
- IDZ-E1, IDZ-E2 and WQR1 collected June 14 (total mercury, methylmercury, dioxins and furans);
- IDZ-W1, IDZ-W2 and WQR2 collected June 15 (total mercury, methylmercury, dioxins and furans);
- IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1, and WQR2 collected June 15 (chronic toxicity);
- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected June 16 (total mercury and methylmercury);
- SP-W-IN, 2700GPM-IN, and W2700T1-OUT collected June 22 (all analytical parameters);
- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected June 25 (all analytical parameters).

Table 3:
Summary of Analytical Results and Associated Field Measurements Included in Weekly Discharge and Compliance Report #120.

Sample	Description	Sampling Date	Parameters Reported
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	June 4, 2026	Total Mercury and Methylmercury; Dioxins and Furans
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)		
SW-02	Lower Reach of Mill Creek (upstream of the third bridge)	June 5, 2026	Total Mercury and Methylmercury; Dioxins and Furans
SW-07	Upstream Mill Creek (at the diversion inlet)		
SW-03	Mill Creek Estuary	June 5, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, VOCs, Total Mercury and Methylmercury; Dioxins and Furans
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	June 10, 2026	Dioxins and Furans.
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
W2700T2-OUT	2700GPM TSS settling system at the outlet of Train 2		
OUT-02	Non-contact water diversion ditch outlet	June 11, 2026	Total Mercury and Methylmercury
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	June 14, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, and PAHs.
IDZ-E1-2m	Howe Sound IDZ station E1; 2 m below surface		
IDZ-E1-SF	Howe Sound IDZ station E1; 2 m above the seafloor		
IDZ-E2-0.5	Howe Sound IDZ station E2; 0.5 m below surface		
IDZ-E2-2m	Howe Sound IDZ station E2; 2 m below surface		
IDZ-E2-SF	Howe Sound IDZ station E2; 2 m above the seafloor		
WQR1-0.5	Reference site 1; 0.5 m below surface		
WQR1-2m	Reference site 1; 2 m below surface		
WQR1-SF	Reference site 1; 2 m above the seafloor		
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface	June 15, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, and PAHs.
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		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	June 16, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium.
WWTP-E-IN	East WWTP at the influent meter box		
WWTP-E-OUT	East WWTP at the effluent meter box		
W2700T1-OUT	2700GPM TSS settling system at the outlet of Train 1	June 22, 2026	Field, Physical Parameters, Total and Dissolved Metals, Hexavalent Chromium.

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 July 2025 and the analytical results were presented in Report #82.

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 June 21 – 27 (stations SP-E-IN, WWTP-E-IN and WWTP-E-OUT), as well as analytical results for samples collected June 16 (stations SP-E-IN, WWTP-E-IN, and WWTP-OUT; as discussed in Report # 119).

Field measurements for the East WWTP effluent samples (WWTP-E-OUT) collected June 21 – 27 met MDOs except for dissolved oxygen from June 21 – 26 (Appendix B, Table B-3). Nitrate and hexavalent chromium were above MDOs in the WWTP-E-OUT sample collected June 16. 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. Nitrate and metal parameters above MDOs are tracked in Table 5.

East WWTP effluent was directed to the East Sedimentation Pond and there was no discharge from the pond to Howe Sound from June 21 – 27 (Section 1.2; Table B-4 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, 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 (June 21 – 27). 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 and effluent quality for the West Sedimentation Pond and the 2700GPM TSS settling system collected June 21 – 27, as well as an analytical sample collected June 22 (station W2700T1-OUT; Appendix C, Table C-1).

Dioxins and furans results were available at the time of reporting for influent and effluent samples of the West Sedimentation Pond and the 2700GPM TSS settling system (stations SP-W-IN, 2700GPM-IN and W2700T1-OUT) collected June 10 (as discussed in Report #118). Results are presented in Appendix C, Table C-2.

3.5 Non-Contact Water Diversion Ditch Outlets

Total mercury and methylmercury analytical results were available at the time of reporting for the non-contact water diversion ditch outlet sample collected at station OUT-02 on June 11 (as discussed in Reports #118). The methylmercury concentration was 0.000024 µg/L in the sample collected at OUT-02 and met the WQG. The corresponding total mercury results met the WQG. Results are tabulated in Appendix D, Table D-1.

3.6 Freshwater and Estuarine Water Receiving Environment

Analytical results were available at the time of reporting for an estuarine sample collected at the Mill Creek estuary (station SW-03) on June 5 (as discussed in Report #117). Parameter concentrations met WQGs except pH (Appendix F, Table F-1). Field pH measured at SW-03 on June 5 (pH 6.74) was within the range observed in the pre-construction baseline monitoring program (5.7 – 8.6).

Total mercury and methylmercury analytical results were available at the time of reporting for freshwater and estuarine water samples collected near the mouth of Woodfibre Creek and East Creek (stations SW-01 and SW-04, respectively) on June 4, as well as at the Mill Creek estuary, mid-stream and background stations (SW-03, SW-02 and SW-07, respectively) on June 5 (as discussed in Report #117). Methylmercury concentrations ranged from <0.000020 to 0.000023 µg/L in all samples and met the WQG. The corresponding total mercury results met the WQG. Results are tabulated in Appendix E, Table E- 1 (freshwater) and Appendix F, Table F-1 (estuarine water).

Dioxin and furans results were available at the time of reporting for freshwater and estuarine samples collected on June 4 and June 5 (as discussed in Report #117). The lower bound PCDD/F TEQ concentrations in these samples ranged from 0 to 0.184 pg/L and the upper bound PCDD/F TEQ concentrations ranged from 1.31 to 2.74 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 or within ranges observed at background stations. Results are tabulated in Appendix E, Table E- 2 (freshwater) and Appendix F, Table F-2 (estuarine water).

3.7 Marine Water Receiving Environment

Analytical results and field measurements were available at the time of reporting for marine water samples collected at 0.5 and 2 m below the water surface and 2 m above the seafloor on June 14 (stations IDZ-E1, IDZ-E2 and WQR1) and June 15 (stations IDZ-W1, IDZ-W2 and WQR2), as

discussed in Reports #119. The analytical results, field parameters, and WQGs are summarized in Appendix G.

Parameter concentrations met WQGs except dissolved oxygen and total boron in some samples (Appendix G; Table G-1 through Table G-3). Dissolved oxygen ranged from 5.80 to 6.41 mg/L and was below the lower limit of the WQG (8 mg/L) in all samples collected at 2 m above the seafloor. Total boron was above the WQG (1.2 mg/L) and ranged from 1.21 to 3.97 mg/L in all marine water samples collected at IDZ-E1; 2 m above the seafloor at IDZ-E2; 2 m below the surface and 2 m above the seafloor at IDZ-W1, IDZ-W2, and WQR1; and at 2 m above the seafloor at WQR2.

Low concentrations of dissolved oxygen and elevated concentrations of total boron are indicative of influence from the deeper saline waters in the northern basin of Howe Sound and are a natural condition of marine water at the WDA monitoring stations. The dissolved oxygen and total boron concentrations observed at the IDZ monitoring stations are within concentration ranges that have been observed in the pre-construction baseline monitoring program (2.44 to 13.8 mg/L for dissolved oxygen and 0.0893 to 8.38 mg/L for total boron) or within ranges observed at marine reference stations for dissolved oxygen (2.44 to 12.11 mg/L) and total boron (0.114 to 8.38 mg/L).

3.8 Quality Control

This section presents the results of the quality control (QC) evaluation for the PE-111578 weekly report (Table 5). 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 5. 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 (June 21 – 27, Report #120)		
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 not in use. This item remains open.
Report #120: Pending Data	Analytical results not reported.	Analytical results for contact and treated water samples collected June 22 and 25 are pending, and results 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 on April 15, 22, 27, May 7, 13, 21 and 25, June 3 and 8 were above the MDOs. 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 has been implemented in May 2026. This item remains open.
Report #115: Pending Data	Analytical results not reported.	Marine sediment samples collected May 17 and 18 as well as are pending and will be included in future weekly reports when available. This item remains open.
Report #116: Pending Data	Analytical results not reported.	Acute toxicity and chronic toxicity results for samples collected May 25 and 26, respectively are pending and will be included in future weekly reports when available. This item remains open.
Report #116: WWTP Performance Evaluation	Hexavalent chromium above the MDO.	Hexavalent chromium concentration was 0.00190 mg/L in the sample collected at WWTP-E-OUT on May 21 and was above the MDO (0.0015 mg/L). Hexavalent chromium concentration met MDO in the WWTP-E-OUT sample collected May 25, June 3, June 8, but was above the MDO on June 16. The WWTP treatment performance for hexavalent chromium will be evaluated through the end of June 2026 to determine if this is an isolated event or a recurring issue that requires additional investigation. This item remains open.
Report #117: Pending Data	Analytical results not reported.	Previously pending total mercury, methylmercury, dioxins and furans results for freshwater receiving environment samples collected June 4 and 5 are included in Report #120. Field and all analytical results for the estuarine sample collected June 5 are included in Report #120. The June 3 dioxins and furans results for contact and treated water samples and total mercury and methylmercury results for SP-E-IN are pending. Results will be included in future weekly reports when available. This item remains open.
Report #118: Pending Data	Analytical results not reported.	Previously pending dioxins and furans results for contact and treated water samples collected June 10, and total mercury and methylmercury results for non-contact water diversion ditch sample collected June 11 are included in Report #120. Total mercury and methylmercury results for contact and treated water samples collected June 10 are pending and will be included in future weekly reports when available. 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, and 16. Influent samples collected at WWTP-E-IN on these days also had elevated concentrations of nitrate. Potential sources of nitrate to the East WWTP are being reviewed. This item remains open.
Report #118: WWTP Performance Evaluation	Total zinc above the MDO.	Total zinc was above the MDO in duplicate WWTP-E-OUT samples collected on June 3 but met the MDO in subsequent samples collected June 8, 13 and 16. The WWTP treatment performance for total zinc will be evaluated through the end of June 2026 to determine if this is an isolated event or a recurring issue that requires additional investigation. This item remains open.
Report #119: Pending Data	Analytical results not reported.	Previously pending analytical results for marine receiving environment samples collected June 14 and 15 (except total mercury and methylmercury, dioxins and furans, chronic toxicity), and contact and treated water samples collected June 16 (except total mercury and methylmercury) are included in Report #120. Pending results will be included in future weekly reports when available. This item remains open.

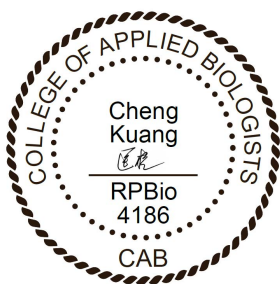
Notes:
Result QA/QC screening includes the evaluation of field and lab QC results, comparison of total and dissolved metal results and review for modified detection limits.
Pending data are outstanding results from monitoring samples reported in the current or previous weekly reports.
Authorized works 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

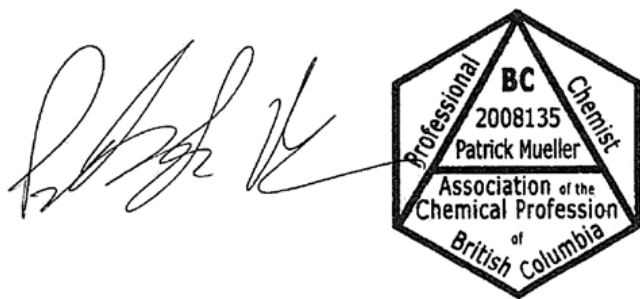
This weekly report is a desktop review by Lorax of the PE-111578 discharge and compliance monitoring program records, reports and results provided by Woodfibre LNG and prime contractor McDermott International and their sub-contractors. The records reviewed and analyzed by Lorax include ALS Environmental 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.



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



Patrick Mueller, B.Sc., P.Chem.
Environmental Chemist

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: Jul 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 (June 27, 2026)
PROJECT #: A825-1
FIGURE: 1

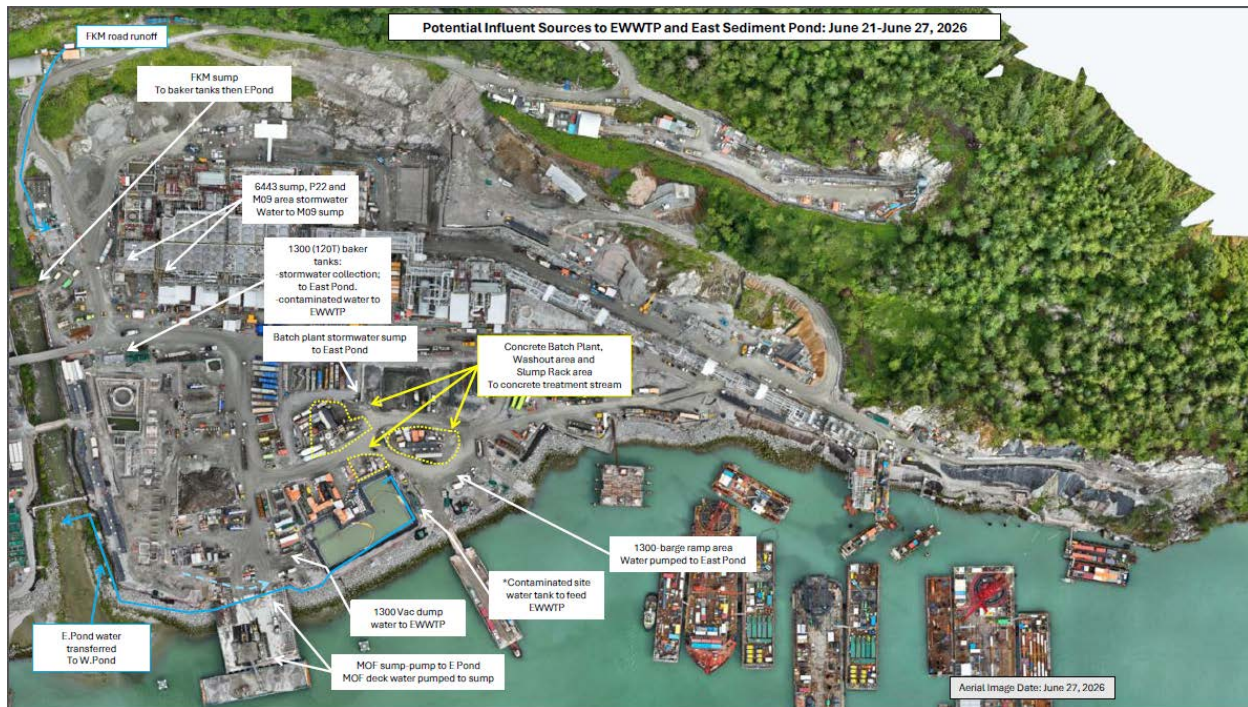


Figure 2: East Catchment contact water management facilities (June 21 – 27).

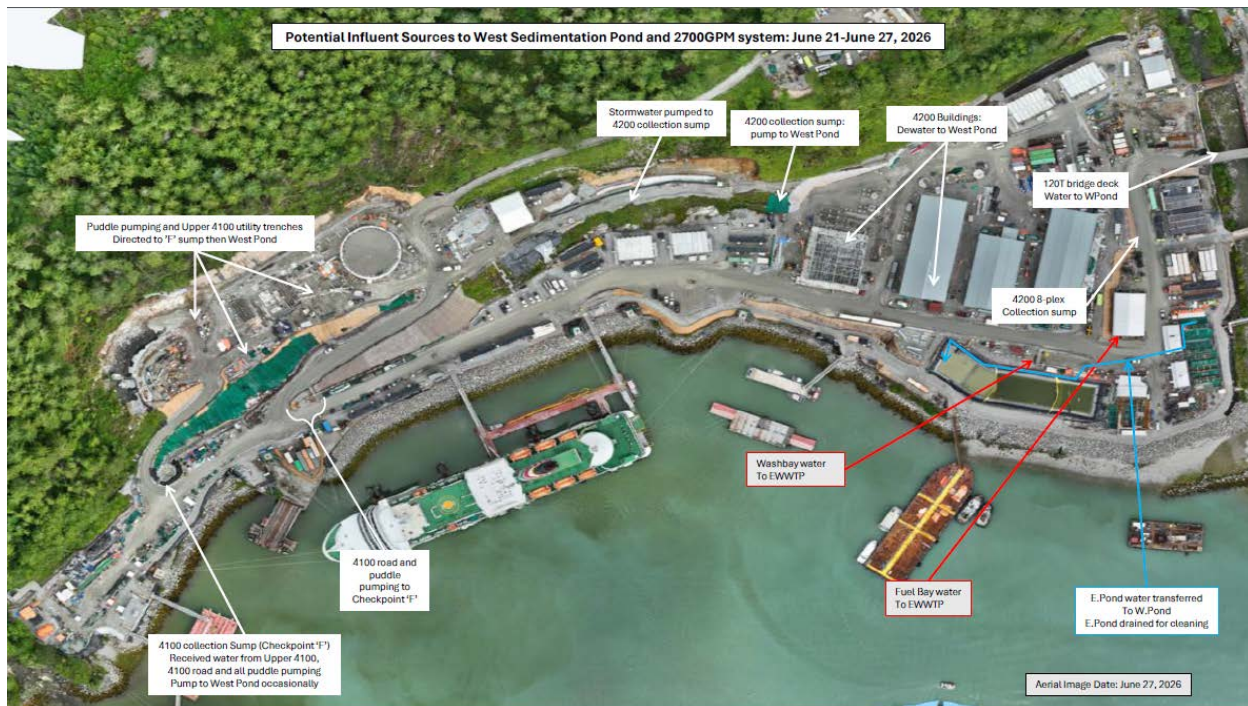


Figure 3: West Catchment contact water management facilities (June 21 – 27).



Figure 4: Aerial view of the East Sedimentation Pond (June 24, 2026). The East WWTP is located on the left side of the pond.

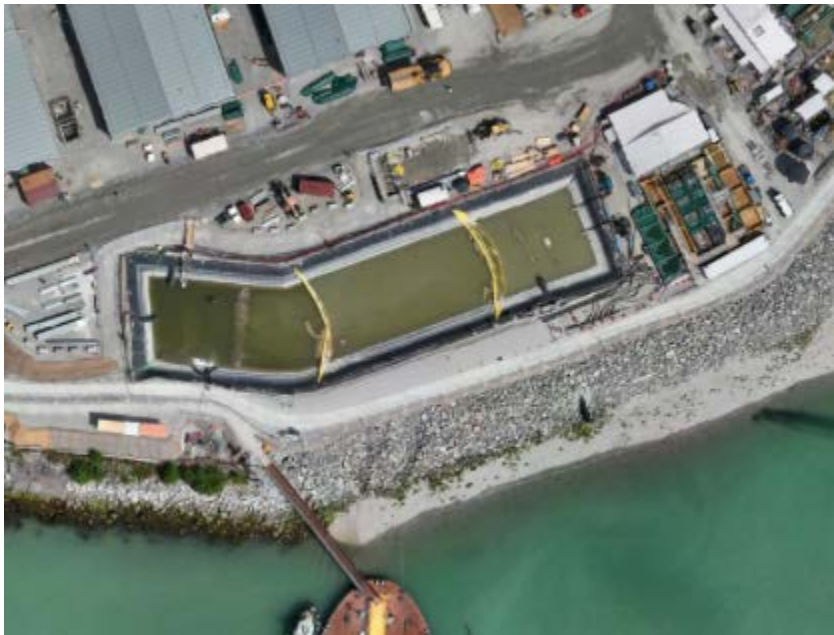


Figure 5: Aerial view of the West Sedimentation Pond (June 24, 2026).

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
					WWTP-E-IN	WWTP-E-OUT
					Influent	Effluent
		WWTP-E-IN	WWTP-E-OUT			
VA26B5611-002	VA26B5611-008					
2026-06-16 08:35	2026-06-16 13:30					
General Parameters						
pH - Field	pH units	- ²	-	5.5 - 9.0	7.15	6.62
Specific Conductivity - Field	µS/cm	-	-	-	1197	1134
Temperature - Field	°C	-	-	-	23.3	22
Salinity - Field	ppt	-	-	-	0.6	0.56
Turbidity - Field	NTU	-	-	-	9.81	1.44
TSS	mg/L	-	-	25 or 75 ⁵	4.2	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	8.99	8.19
Total Hardness	mg/L	-	-	-	32.3	14.3
Dissolved Hardness	mg/L	-	-	-	32.3	14.4
Anions and Nutrients						
Sulphate	mg/L	-	-	-	249	261
Chloride	mg/L	-	-	-	20.1	15.3
Fluoride	mg/L	-	1.5	-	0.351	0.294
Ammonia (N-NH ₃)	mg/L	9.4 ³	62 ³	-	0.14	0.104
Nitrite (N-NO ₂)	mg/L	-	-	-	0.462	0.341
Nitrate (N-NO ₃)	mg/L	3.7	339	-	<u>14.7</u>	<u>10.8</u>
Total Organic Carbon (TOC)	mg/L	-	-	-	2.59	2.2
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	2.52	2.01
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	0.504	0.0684
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00147	0.00122
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00146	0.00177
Barium, total (T-Ba)	mg/L	-	-	-	0.0117	0.00174
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.187	0.156
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000450	<0.0000350
Chromium, total (T-Cr)	mg/L	-	-	-	0.00107	0.0056
Cobalt, total (T-Co)	mg/L	-	-	-	0.00033	0.00013
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00209	0.00114
Iron, total (T-Fe)	mg/L	-	-	-	0.351	<0.010
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.000312	0.000063
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.1	0.00273
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.151	0.146
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000324	0.00041
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000016	0.000011
Uranium, total (T-U)	mg/L	-	-	-	0.0383	0.0247
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00288	0.00312
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0058	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00097	<u>0.0054</u>
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000450	<0.0000350
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00128	0.00105
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.01	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000055	0.000055
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.087	0.00202
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.111	0.0771
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00228	0.003
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0039	0.0022
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 (June 21 – 27).

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 27E and 27F 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
		VA26B5611-001			
					2026-06-16 08:15
General Parameters					
pH - Field	pH units	- ²	-	5.5 - 9.0	6.82
Specific Conductivity - Field	µS/cm	-	-	-	1312
Temperature - Field	°C	-	-	-	21.7
Salinity - Field	ppt	-	-	-	0.66
Turbidity - Field	NTU	-	-	-	8.44
TSS	mg/L	-	-	25 or 75 ⁵	13
Dissolved Oxygen - Field	mg/L	≥8	-	-	8.54
Total Hardness	mg/L	-	-	-	31.4
Dissolved Hardness	mg/L	-	-	-	29.5
Anions and Nutrients					
Sulphate	mg/L	-	-	-	343
Chloride	mg/L	-	-	-	16.3
Fluoride	mg/L	-	1.5	-	0.334
Ammonia (N-NH ₃)	mg/L	9.4 ³	62 ³	-	0.128
Nitrite (N-NO ₂)	mg/L	-	-	-	0.461
Nitrate (N-NO ₃)	mg/L	3.7	339	-	<u>13</u>
Total Organic Carbon (TOC)	mg/L	-	-	-	2.87
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	2.52
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	0.487
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00123
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00161
Barium, total (T-Ba)	mg/L	-	-	-	0.0138
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.156
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000600
Chromium, total (T-Cr)	mg/L	-	-	-	0.0136
Cobalt, total (T-Co)	mg/L	-	-	-	0.00034
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00195
Iron, total (T-Fe)	mg/L	-	-	-	0.323
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.000246
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.0997
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.233
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000713
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000015
Uranium, total (T-U)	mg/L	-	-	-	0.0276
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00335
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0045
Hexavalent Chromium, total	mg/L	0.0015	-	-	<u>0.0116</u>
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000550
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00104
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0588
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.158
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00238
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0017
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 (June 21 – 27).
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 27E and 27F 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.
⁵The 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 Field Measurements Collected During the Monitoring Period (June 21 – 27).

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	2026-06-21 10:05	22.8	9.69	0.65	4.06	6.0	6.8	1293	No
SP-E-IN	Influent	2026-06-22 15:46	25.4	9.03	0.64	19.40	17.5	7.7	1295	No
SP-E-IN	Influent	2026-06-23 15:24	27.2	9.61	0.74	15.67	14.7	7.7	1486	No
SP-E-IN	Influent	2026-06-24 16:06	25.5	9.67	0.71	16.52	15.3	7.2	1426	No
SP-E-IN	Influent	2026-06-25 09:16	22.8	8.07	0.77	9.12	9.8	7.4	1530	No
SP-E-IN	Influent	2026-06-26 14:37	21	8.4	0.69	122.26	94.2	7.1	1371	No
SP-E-IN	Influent	2026-06-27 12:16	21.1	8.49	0.75	24.16	21.0	7.5	1497	No
WWTP-E-IN	Influent	2026-06-21 10:14	23	9.02	0.61	13.11	12.8	7.2	1222	No
WWTP-E-IN	Influent	2026-06-22 15:24	26	10.06	0.62	8.78	9.5	7.5	1252	No
WWTP-E-IN	Influent	2026-06-23 15:27	26.2	9.29	0.59	37.39	30.9	7.6	1195	No
WWTP-E-IN	Influent	2026-06-24 15:57	25.4	9.04	0.64	27.28	23.3	7.7	1279	No
WWTP-E-IN	Influent	2026-06-25 09:37	23.8	8.65	0.75	10.12	10.5	7.5	1487	No
WWTP-E-IN	Influent	2026-06-26 14:27	21.7	8.9	0.74	14.82	14.1	7.6	1463	No
WWTP-E-IN	Influent	2026-06-27 12:10	21.3	8.73	0.75	23.83	20.8	7.7	1490	No
Effluent ⁵										
WWTP-E-OUT	Effluent	2026-06-21 10:11	23	7.58	0.64	0.98	3.7	6.8	1275	No
WWTP-E-OUT	Effluent	2026-06-22 15:39	24.6	7.59	0.63	3.56	5.7	7.3	1259	No
WWTP-E-OUT	Effluent	2026-06-23 15:34	25.7	6.61	0.77	4.24	6.2	7.1	1542	No
WWTP-E-OUT	Effluent	2026-06-24 16:00	25	6.57	0.67	1.69	4.3	7.2	1350	No
WWTP-E-OUT	Effluent	2026-06-25 14:31	23.1	7.43	0.8	2.42	4.8	6.9	1579	No
WWTP-E-OUT	Effluent	2026-06-26 14:31	20.5	7.55	0.73	0.53	3.4	6.8	1460	No
WWTP-E-OUT	Effluent	2026-06-27 12:25	20.2	8.55	0.79	2.84	5.1	7.3	1557	No

Notes:

The east catchment did not discharge to Howe Sound during the monitoring period (June 21 – 27). 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.

⁵ There was no discharge at the authorized discharge location (SP-E-OUT) during the monitoring period (June 21 – 27), therefore daily field measurements for SP-E-OUT were not collected 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 B-4:
East Catchment Daily Discharge Volumes for the Monitoring Period (June 21 – 27).

	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				
2026-06-21	0	0	476	0
2026-06-22	0	0	590	0
2026-06-23	0	0	514	0
2026-06-24	0	0	455	0
2026-06-25	0	0	528	0
2026-06-26	0	0	394	0
2026-06-27	0	0	327	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
					W2700T1-OUT
					Effluent
		W2700T1-OUT			
					VA26B6217-003
					2026-06-22 10:09
General Parameters					
pH - Field	pH units	- ²	-	5.5 - 9.0	7.9
Specific Conductivity - Field	µS/cm	-	-	-	959
Temperature - Field	°C	-	-	-	22.9
Salinity - Field	ppt	-	-	-	0.47
Turbidity - Field	NTU	-	-	-	2.69
TSS	mg/L	-	-	25 or 75 ⁵	-
Dissolved Oxygen - Field	mg/L	≥8	-	-	8.04
Total Hardness	mg/L	-	-	-	53.6
Dissolved Hardness	mg/L	-	-	-	57.7
Anions and Nutrients					
Sulphate	mg/L	-	-	-	-
Chloride	mg/L	-	-	-	-
Fluoride	mg/L	-	1.5	-	-
Ammonia (N-NH ₃)	mg/L	1.5 ³	10 ³	-	-
Nitrite (N-NO ₂)	mg/L	-	-	-	-
Nitrate (N-NO ₃)	mg/L	3.7	339	-	-
Total Organic Carbon (TOC)	mg/L	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	-
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	0.222
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00127
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00194
Barium, total (T-Ba)	mg/L	-	-	-	0.00401
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.05
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000350
Chromium, total (T-Cr)	mg/L	-	-	-	0.00108
Cobalt, total (T-Co)	mg/L	-	-	-	0.00011
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00151
Iron, total (T-Fe)	mg/L	-	-	-	0.075
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.000203
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.00497
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.113
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000265
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000032
Uranium, total (T-U)	mg/L	-	-	-	0.0194
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00225
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00106
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000300
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00136
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.013
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000091
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00126
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.122
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00213
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0015
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 (June 21 – 27).

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 27E and 27F 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 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	VA26B4981-001	2026-06-10	0.00423	1.35
2700GPM-IN	Influent	2700GPM-IN	VA26B4981-002	2026-06-10	0.92	2.51
Effluent						
W2700T1-OUT	Effluent	W2700T1-OUT	VA26B4981-003	2026-06-10	0.00124	1.45

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-3:
West Catchment Field Measurements Collected During the Monitoring Period (June 21 – 27).

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	2026-06-21 13:02	25.7	9.98	0.48	52.86	42.4	8.3	985	No
SP-W-IN	Influent	2026-06-22 11:00	24.7	6.68	0.48	5.1	6.8	8.2	976	No
SP-W-IN	Influent	2026-06-23 09:21	22.0	8.46	0.48	12.02	12.0	7.8	969	No
SP-W-IN	Influent	2026-06-24 13:40	23.3	8.27	0.37	12.78	12.5	8.2	759	No
SP-W-IN	Influent	2026-06-25 13:31	22.1	9.53	0.38	7.24	8.4	8.5	767	No
SP-W-IN	Influent	2026-06-26 15:14	21	11	0.35	29.47	25.0	8.7	717	No
SP-W-IN	Influent	2026-06-27 11:34	20.8	9.85	0.36	44.37	36.1	8.3	737	No
2700GPM-IN	Influent	2026-06-22 10:41	23.8	8.69	0.48	5.01	6.7	8.3	967	No
2700GPM-IN	Influent	2026-06-23 09:42	23.6	8.14	0.45	4.76	6.6	8.3	919	No
2700GPM-IN	Influent	2026-06-24 13:34	23.8	8.44	0.4	15.78	14.8	8.2	823	No
Effluent ⁵										
-	-	-	-	-	-	-	-	-	-	-

Notes:
West catchment influents for June 21 – 27 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 (June 21 – 27); therefore, daily field parameters were not collected from station SP-W-OUT on June 21 – 27.
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-4:
West Catchment Daily Discharge Volumes for the Monitoring Period (June 21 – 27).

	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					
2026-06-21	0	376	80	0	0
2026-06-22	0	735	0	0	0
2026-06-23	0	196	0	0	0
2026-06-24	0	1245	0	0	0
2026-06-25	0	0	0	0	0
2026-06-26	0	0	0	0	0
2026-06-27	0	233	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

***Appendix D:
Non-Contact Water Diversion Ditch Outlets
Monitoring Results***

Table D-1:
Non-Contact 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	0.009 ^{3,4}
Station	Description	Sample ID	Lab ID	Sampling Date		
OUT-02	Non-Contact Water Diversion Ditch Outlet	OUT-02	VA26B5335-001	2026-06-11	0.000024	0.00215

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.

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

Table E-1:
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	0.0045-0.008 ^{3,4}
Station	Description	Sample ID	Lab ID	Sampling Date		
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	SW-01	VA26B4599-001	2026-06-04	0.000023	0.00185
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)	SW-04	VA26B4599-002	2026-06-04	<0.000020	0.0009
SW-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA26B4601-002	2026-06-05	<0.000020	0.00126
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA26B4601-003	2026-06-05	<0.000020	0.00103

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 E-2:
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-01	Lower Reach of Woodfibre Creek (near the mouth)	SW-01	VA26B4600-001	04/06/2026 08:26	0.0	1.58
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)	SW-04	VA26B4600-002	04/06/2026 09:37	0.0	1.31
SW-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA26B4602-002	05/06/2026 09:20	0.184	2.74
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA26B4602-005	05/06/2026 12:00	0.0	1.88

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 F:
Estuarine Water Receiving Environment Results

Table F-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
		Long Term	Short Term	VA26B4601-001 2026-06-05 08:51
General Parameters				
pH - Field	pH units	7.0 - 8.7	-	<u>6.74</u>
Specific Conductivity - Field	µS/cm	-	-	240
Temperature - Field	°C	-	-	9.6
Salinity - Field	ppt	-	-	0.1
Turbidity - Field	NTU	-	-	2.73
TSS	mg/L	-	-	<3.0
Dissolved Oxygen - Field	mg/L	>=8	-	11.56
Total Hardness	mg/L	-	-	22.50
Dissolved Hardness	mg/L	-	-	27.20
Anions and Nutrients				
Sulphate	mg/L	-	-	9.43
Chloride	mg/L	-	-	61
Fluoride	mg/L	-	1.5	<0.020
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	0.0213
Total Organic Carbon (TOC)	mg/L	-	-	0.88
Total Inorganic Carbon (DOC)	mg/L	-	-	0.78
Total Metals				
Aluminum, total (T-Al)	mg/L	-	-	0.0623
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	-	-	0.00163
Beryllium, total (T-Be)	mg/L	0.1	-	<0.000020
Boron, total (T-B)	mg/L	1.2	-	0.021
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.0000050
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	-	-	0.024
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.000050
Manganese, total (T-Mn)	mg/L	0.1	-	0.00077
Molybdenum, total (T-Mo)	mg/L	-	-	0.000416
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	-	-	0.00013
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
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	-	-	0.0003
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.035
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 F-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	0.003 ^{3,4}
Station	Description	Sample ID	Lab ID	Sampling Date		
SW-03	Mill Creek Estuary	SW-03	VA26B4601-001	2026-06-05	<0.000020	0.00060

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 F-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	VA26B4602-004	05/06/2026 08:51	0	2.20

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 G:
Marine Water Receiving Environment Monitoring
Results***

Table G-1:
Summary of Marine Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline ¹		Station IDZ-E1	Station IDZ-E1	Station IDZ-E1	Station IDZ-E2	Station IDZ-E2	Station IDZ-E2
				0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor	0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				IDZ-E1-0.5	IDZ-E1-2m	IDZ-E1-SF	IDZ-E2-0.5	IDZ-E2-2m	IDZ-E2-SF
				VA26B5446-004	VA26B5446-005	VA26B5446-006	VA26B5446-007	VA26B5446-008	VA26B5446-009
		Long Term	Short Term	2026-06-14 13:33	2026-06-14 13:32	2026-06-14 13:30	2026-06-14 10:06	2026-06-14 10:05	2026-06-14 09:58
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	8.19	8	7.45	8.08	8.17	7.48
Specific Conductivity - Field	µS/cm	-	-	14906	30479	46812	8229	14803	47441
Temperature - Field	°C	-	-	14.9	14.1	9.3	14.9	14.4	9.3
Salinity - Field	ppt	Narrative ²	-	8.71	18.95	30.2	4.6	8.64	30.64
Turbidity - Field	NTU	Narrative ²	Narrative ²	7.81	2.5	2.72	4.21	3.24	1.29
TSS	mg/L	Narrative ²	Narrative ²	4.3	4.2	<2.0	3.9	3.5	<2.0
Dissolved Oxygen - Field	mg/L	>=8	-	10.33	9.26	<u>5.8</u>	10.64	10.2	<u>6.38</u>
Total Hardness	mg/L	-	-	1460	3570	5870	812	1400	6440
Dissolved Hardness	mg/L	-	-	1260	2510	5120	986	1580	5360
Anions and Nutrients									
Sulphate	mg/L	-	-	580	1340	2090	325	556	2350
Chloride	mg/L	-	-	4360	9660	15300	2500	4120	16900
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia (N-NH ₃)	mg/L	2-13 ³	13-85 ³	<0.0050	0.0102	0.0199	<0.0050	<0.0050	<0.0050
Nitrite (N-NO ₂)	mg/L	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate (N-NO ₃)	mg/L	3.7	339	<0.50	<0.50	<0.50	<0.50	<0.50	0.96
Total Organic Carbon (TOC)	mg/L	-	-	1.08	1.38	1.1	0.92	1.05	1.02
Dissolved Organic Carbon (DOC)	mg/L	-	-	1.72	2.02	1.13	0.96	0.96	0.95
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.154	0.0618	0.0207	0.138	0.132	0.0147
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	0.0005	0.0009	0.00134	<0.00040	0.00045	0.00151
Barium, total (T-Ba)	mg/L	-	-	0.0095	0.01	0.0095	0.0086	0.0095	0.0096
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	<u>1.21</u>	<u>2.27</u>	<u>3.42</u>	0.74	1.08	<u>3.59</u>
Cadmium, total (T-Cd)	mg/L	0.00012	-	0.000024	0.000047	0.000059	<0.000020	<0.000020	0.000081
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00069
Cobalt, total (T-Co)	mg/L	-	-	0.0001	0.000077	0.000079	0.000082	0.000085	0.000072
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00085	0.00074	<0.00050	0.00067	0.00079	0.00058
Iron, total (T-Fe)	mg/L	-	-	0.155	0.049	0.021	0.119	0.11	0.022
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, total (T-Mn)	mg/L	0.1	-	0.0074	0.00395	0.00269	0.00644	0.00618	0.00243
Molybdenum, total (T-Mo)	mg/L	-	-	0.00325	0.00599	0.00865	0.00187	0.00273	0.00977
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.0005
Selenium, total (T-Se)	mg/L	0.002	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thallium, total (T-Tl)	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.000734	0.00145	0.0022	0.000412	0.000661	0.00247
Vanadium, total (T-V)	mg/L	0.005	-	0.00098	0.00109	0.00143	0.00082	0.0009	0.0017
Zinc, total (T-Zn)	mg/L	0.01	0.055	0.005	0.0053	<0.0030	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150
Dissolved Metals									
Cadmium, dissolved (D-Cd)	mg/L	-	-	0.000021	0.00003	0.000059	<0.000020	0.000027	0.000068
Copper, dissolved (D-Cu)	mg/L	-	-	0.0006	0.00056	<0.00050	0.00051	<0.00050	0.00056
Iron, dissolved (D-Fe)	mg/L	-	-	0.013	0.013	<0.010	<0.010	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00423	0.00329	0.00196	0.00324	0.00289	0.00162
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	1.6	3.11	6.19	1.19	1.97	6.48
Vanadium, dissolved (D-V)	mg/L	-	-	0.0006	0.00091	0.00129	<0.00050	0.00063	0.00147
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0041	0.0022	<0.0010	0.0012	0.0011	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Acridine	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)									
Benzene	mg/L	0.11	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Notes:
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.
¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
² Induced guidelines for change from background conditions arising from discharges to the aquatic environment. Salinity WQG was not evaluated. The water quality data presented in the table were collected when the site was discharging intermittently for <24 hours, therefore the turbidity and TSS short-term WQGs were evaluated. Background conditions at each depth (0.5 and 2 m below surface and 2 m above the seafloor) were established from reference station WQR1 collected March 27 (Table E-3).
³ The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F 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.

Table G-2:
Summary of Marine Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline ¹		Station IDZ-W1	Station IDZ-W1	Station IDZ-W1	Station IDZ-W1	Station IDZ-W2	Station IDZ-W2	Station IDZ-W2
				0.5 m Below Surface	0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor	2 m Below Surface	2 m Below Surface	2 m Above Seafloor
				IDZ-W1-0.5	IDZ-W1-0.5-DUP	IDZ-W1-2m	IDZ-W1-SF	IDZ-W2-0.5	IDZ-W2-2m	IDZ-W2-SF
				VA26B5471-001	VA26B5471-010	VA26B5471-002	VA26B5471-003	VA26B5471-004	VA26B5471-005	VA26B5471-006
		Long Term	Short Term	2026-06-15 11:42	2026-06-15 11:42	2026-06-15 11:43	2026-06-15 11:47	2026-06-15 10:52	2026-06-15 10:53	2026-06-15 10:55
General Parameters										
pH - Field	pH units	7.0 - 8.7	-	7.78	7.78	7.93	7.49	7.89	7.95	7.5
Specific Conductivity - Field	µS/cm	-	-	10746	10746	18234	32919	9362	15999	32857
Temperature - Field	°C	-	-	14.4	14.4	14.3	9.3	14.4	14.3	9.3
Salinity - Field	ppt	Narrative ²	-	7.8	7.8	13.9	30.33	6.74	12.03	30.25
Turbidity - Field	NTU	Narrative ²	Narrative ²	5.22	5.22	3.66	1.23	5.65	5.08	1.24
TSS	mg/L	Narrative ²	Narrative ²	5	4.6	4.4	6.3	<2.0	6.2	5.8
Dissolved Oxygen - Field	mg/L	>=8	-	10.49	10.49	10.16	<u>5.8</u>	10.31	10.28	<u>6.04</u>
Total Hardness	mg/L	-	-	1250	1180	3800	6860	1380	2060	6410
Dissolved Hardness	mg/L	-	-	1170	1130	3200	5560	836	1720	5560
Anions and Nutrients										
Sulphate	mg/L	-	-	471	434	929	2200	491	766	2240
Chloride	mg/L	-	-	3630	3400	6920	16300	3800	5780	16300
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia (N-NH ₃)	mg/L	5-13 ³	21-85 ³	<0.0050	<0.0050	0.0062	<0.0050	0.0057	0.0078	<0.0050
Nitrite (N-NO ₂)	mg/L	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate (N-NO ₃)	mg/L	3.7	339	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total Organic Carbon (TOC)	mg/L	-	-	0.94	0.99	1.03	0.92	0.9	1.06	1.11
Dissolved Organic Carbon (DOC)	mg/L	-	-	0.93	0.77	1.28	1.14	0.79	1.01	1
Total Metals										
Aluminum, total (T-Al)	mg/L	-	-	0.146	0.129	0.0653	0.0062	0.137	0.108	0.0054
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	<0.00040	<0.00040	0.00087	0.00154	<0.00040	0.0006	0.00152
Barium, total (T-Ba)	mg/L	-	-	0.0101	0.0103	0.0105	0.0099	0.0108	0.0108	0.01
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	1.02	0.93	<u>2.36</u>	<u>3.97</u>	1	<u>1.43</u>	<u>3.77</u>
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.000020	0.000024	0.000038	0.000081	<0.000020	<0.000020	0.000079
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000103	0.00012	0.000073	0.000062	0.000113	0.000103	0.000065
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00082	0.00085	0.0008	<0.00050	0.00088	0.00081	<0.00050
Iron, total (T-Fe)	mg/L	-	-	0.169	0.152	0.068	<0.010	0.159	0.135	<0.010
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, total (T-Mn)	mg/L	0.1	-	0.00799	0.00755	0.00479	0.00232	0.00819	0.00696	0.00227
Molybdenum, total (T-Mo)	mg/L	-	-	0.00236	0.00244	0.00595	0.0102	0.00273	0.00384	0.00992
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thallium, total (T-Tl)	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.00062	0.000623	0.00163	0.00254	0.000707	0.000956	0.00254
Vanadium, total (T-V)	mg/L	0.005	-	0.00102	0.00095	0.00122	0.0016	0.00107	0.00105	0.00162
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150
Dissolved Metals										
Cadmium, dissolved (D-Cd)	mg/L	-	-	<0.000020	<0.000020	0.000029	0.000071	<0.000020	<0.000020	0.00007
Copper, dissolved (D-Cu)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00051	<0.00050
Iron, dissolved (D-Fe)	mg/L	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00373	0.00376	0.00253	0.00139	0.00333	0.00299	0.00133
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	1.46	1.38	3.6	6.33	1.04	2.1	6.34
Vanadium, dissolved (D-V)	mg/L	-	-	0.00051	0.00051	0.00089	0.0014	<0.00050	0.0006	0.0014
Zinc, dissolved (D-Zn)	mg/L	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)										
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Acridine	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)										
Benzene	mg/L	0.11	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Notes:

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.

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

² Induced guidelines for change from background conditions arising from discharges to the aquatic environment. Salinity WQG was not evaluated. The water quality data presented in the table were collected when the site was discharging intermittently for <24 hours, therefore the turbidity and TSS short-term WQGs were evaluated. Background conditions at each depth (0.5 and 2 m below surface and 2 m above the seafloor) were established from reference station WQR2 collected March 28 (Table E-3).

³ The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F 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.

Table G-3:
Summary of Marine Water Quality Results Received at the Time of Reporting

Parameter	Unit	Lowest Applicable Guideline ¹		Reference Station WQR1	Reference Station WQR1	Reference Station WQR1	Reference Station WQR2	Reference Station WQR2	Reference Station WQR2
				0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor	0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				WQR1-0.5	WQR1-2m	WQR1-SF	WQR2-0.5	WQR2-2m	WQR2-SF
				VA26B5446-001	VA26B5446-002	VA26B5446-003	VA26B5471-007	VA26B5471-008	VA26B5471-009
		Long Term	Short Term	2026-06-14 08:49	2026-06-14 08:48	2026-06-14 08:43	2026-06-15 10:09	2026-06-15 10:08	2026-06-15 10:10
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	8.13	8.18	7.39	7.9	7.85	7.53
Specific Conductivity - Field	µS/cm	-	-	9566	16894	47376	8694	16475	46833
Temperature - Field	°C	-	-	14.7	14.4	9.2	13.8	14.4	9.4
Salinity - Field	ppt	Narrative ²	-	5.4	9.97	30.59	4.88	9.7	30.21
Turbidity - Field	NTU	Narrative ²	Narrative ²	4.96	3.8	1.72	7.29	5.61	1.38
TSS	mg/L	Narrative ²	Narrative ²	4	4.2	<2.0	4.5	7.2	6.8
Dissolved Oxygen - Field	mg/L	>=8	-	10.65	10.26	<u>5.86</u>	10.7	10.43	<u>6.41</u>
Total Hardness	mg/L	-	-	963	1550	6570	1010	1410	6190
Dissolved Hardness	mg/L	-	-	874	1430	5630	784	1060	5660
Anions and Nutrients									
Sulphate	mg/L	-	-	394	618	2320	376	555	2220
Chloride	mg/L	-	-	2960	4600	16700	2950	4270	16300
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia (N-NH ₃)	mg/L	2-20 ³	13-135 ³	<0.0050	<0.0050	<0.0050	<0.0050	0.0085	<0.0050
Nitrite (N-NO ₂)	mg/L	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate (N-NO ₃)	mg/L	3.7	339	<0.50	<0.50	<0.50	<0.50	<0.50	0.61
Total Organic Carbon (TOC)	mg/L	-	-	0.96	1.02	0.93	0.81	1.09	0.89
Dissolved Organic Carbon (DOC)	mg/L	-	-	0.9	1.18	1.15	0.72	0.91	1.05
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.155	0.137	0.0198	0.191	0.135	0.0055
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	<0.00040	0.0005	0.00148	<0.00040	<0.00040	0.0014
Barium, total (T-Ba)	mg/L	-	-	0.0093	0.0099	0.0093	0.0113	0.0106	0.0097
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	0.86	<u>1.22</u>	<u>3.73</u>	0.8	1.05	<u>3.67</u>
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.000020	0.000023	0.000069	<0.000020	<0.000020	0.000072
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000091	0.000091	0.000074	0.000145	0.000122	0.000066
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00073	0.00067	<0.00050	0.00096	0.00083	<0.00050
Iron, total (T-Fe)	mg/L	-	-	0.135	0.122	0.018	0.236	0.169	<0.010
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, total (T-Mn)	mg/L	0.1	-	0.00687	0.00575	0.00237	0.00971	0.00785	0.00212
Molybdenum, total (T-Mo)	mg/L	-	-	0.00199	0.00277	0.00932	0.00212	0.00277	0.00953
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thallium, total (T-Tl)	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.00046	0.000731	0.0024	0.000536	0.000728	0.00255
Vanadium, total (T-V)	mg/L	0.005	-	0.00085	0.00099	0.00159	0.00117	0.00101	0.00166
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150
Dissolved Metals									
Cadmium, dissolved (D-Cd)	mg/L	-	-	<0.000020	<0.000020	0.000073	<0.000020	<0.000020	0.000078
Copper, dissolved (D-Cu)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00058
Iron, dissolved (D-Fe)	mg/L	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	0.014
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00332	0.00251	0.00138	0.00326	0.00317	0.00146
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	1.1	1.83	6.59	0.955	1.29	6.36
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	0.00061	0.00144	<0.00050	<0.00050	0.00145
Zinc, dissolved (D-Zn)	mg/L	-	-	<0.0010	<0.0010	0.0018	0.002	<0.0010	0.0012
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Acridine	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)									
Benzene	mg/L	0.11	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Notes:
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.

¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
² Induced guidelines for change from background conditions arising from discharges to the aquatic environment. Salinity WQG was not evaluated. The water quality data presented in the table are marine reference stations and represent background conditions, therefore the turbidity and TSS WQGs were not evaluated.
³ The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F 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.