



TECHNICAL MEMORANDUM

To: Ian McAllister, Ashleigh Crompton, Mike Champion,
Mark Zan and Ryan Schucroft (Woodfibre LNG) **Date:** 20 Mar 2026

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

Subject: PE-111578 Weekly Discharge and Compliance Report #105 for March 8 – 14

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 #105) was prepared by Lorax and summarizes WDA monitoring conducted for the period of March 8 – 14. 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 #105 has been prepared to meet the requirements specified in Condition 4.2 of PE-111578:

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

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

1. Current Conditions

1.1 Water Management Infrastructure

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

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

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

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

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

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

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

1.2 Weather and Water Management

Variable weather conditions were observed during the March 8 – 14 monitoring period, with precipitation recorded each day except on March 14. The total precipitation amount during the monitoring period was 58.6 mm. The daily weather conditions are summarized in Table 1.

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

Date	Precipitation (mm)	Max. Temp (°C)	Min. Temp (°C)	Weather Description
2026-03-08	7.0	12.1	4.1	Rain
2026-03-09	3.4	6.3	0.8	Rain
2026-03-10	15.2	5.3	0.2	Rain
2026-03-11	21.8	8.0	1.9	Rain
2026-03-12	5.8	7.2	1.5	Rain
2026-03-13	5.4	6.9	0.4	Rain
2026-03-14	0	9.4	0.1	Mix of Sun and Cloud

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

From March 8 – 14, the East Sedimentation Pond received water from the 6403 Sump, the MOF Sump, the 120T Baker Tank 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 March 8 – 14 (Appendix B, Table B-5).

Routine operation of the East WWTP continued during the monitoring period (March 8 – 14). Concrete contact water and water from the Wash Bay was periodically directed to the East WWTP for treatment, as well as water stored in the East Sedimentation Pond (Appendix A, Figure 2 and Figure 3). East WWTP treated effluent was discharged to the East Sedimentation Pond each day during the monitoring period (March 8 – 14). Daily water volumes processed by the East WWTP are provided in Appendix B (Table B-5).

From March 8 – 14, the West Sedimentation Pond received water from the Area 4100 and Area 4200 Sumps as well as 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 (March 8 – 14) and either recirculated back to the pond or intermittently discharged to Howe Sound. A total of 22,245 m³ of clarified effluent was intermittently discharged to Howe Sound from station SP-W-OUT each day during the monitoring period (March 8 – 14). Clarified effluent was not reclaimed for construction use. Daily clarified effluent volumes from the 2700GPM TSS settling system recirculated to the West Sedimentation Pond or discharged to Howe Sound are provided in Appendix C (Table C-5).

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 OUT-01, SP-E-IN, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, SP-W-OUT, 2700GPM-IN and W2700T2-OUT during the monitoring period (March 8 – 14). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (March 8 – 14) 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 catchment effluent compliance station (SP-E-OUT) as there was no discharge to Howe Sound from the East Sedimentation Pond during the monitoring period (March 8 – 14). Daily field parameters were not collected at the influent and effluent stations of the East WWTP (WWTP-E-IN and WWTP-E-OUT, respectively) on March 9 and 13 as the East WWTP was not operational at the time of monitoring. Daily field parameters and a weekly analytical sample were not collected at the influent and effluent stations of the West WWTP (WWTP-W-IN and WWTP-W-OUT, respectively) as it was not operational during the monitoring period (March 8 – 14).

**Table 2:
Summary of PE-111578 Monitoring Samples Collected March 8 – 14.**

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
March 8, 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
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the SP-W-OUT outfall structure	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
	OUT-01	Non-contact water diversion ditch outlet	Field, Physical & General Parameters, Total and Dissolved Metals, and Methylmercury.	M
March 9, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M ₂ , W
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the manifold that combines effluent from the individual 2700GPM trains into a single discharge line configured with a SP-W-OUT sampling port and at the SP-W-OUT outfall structure	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M ₂ , W
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	P
	W2700T2-OUT	2700GPM TSS settling system at the outlet of Train 2	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	P
March 10, 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
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the manifold that combines effluent from the individual 2700GPM trains into a single discharge line configured with a SP-W-OUT sampling port	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
March 11, 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
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the SP-W-OUT outfall structure	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
March 12, 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
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the SP-W-OUT outfall structure	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
March 13, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the SP-W-OUT outfall structure	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
March 14, 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
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the SP-W-OUT outfall structure	Field Parameters.	D
2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P	

Notes:

Monitoring frequency requirements under PE-111578 are indicated as follows:

D – daily monitoring of field parameters at WWTP and sedimentation pond influent and effluent stations.

M – monthly monitoring for all parameters at WWTP, sedimentation pond and receiving environment stations. Monthly monitoring for General parameters, except ammonia, nitrate and nitrite (*i.e.*, nitrogen species) are monitored weekly during blasting season.M₂ – bi-monthly monitoring for physical parameters at WWTP and sedimentation pond stations.

W – weekly monitoring for metals, chromium speciation and methylmercury at WWTP and sedimentation pond influent and effluent stations, effective June 25, 2025.

P – periodic monitoring for targeted parameters that is supplementary to PE-111578 requirements.

3. Water Quality Results

3.1 Summary of Reported Results

Analytical results and associated field measurements included in this weekly report (Report #105) are listed below in Table 3, with additional field measurements presented in Table B-4 (Appendix B) and Table C-4 (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:

- WWTP-E-OUT and SP-W-OUT collected February 9 (acute toxicity);
- IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1 and WQR2 collected February 9 (chronic toxicity);
- COMB-WWTP-E-IN collected February 26 (total mercury and methylmercury);
- SW-01 and SW-04 collected March 1 (field and all analytical parameters);
- SW-02, SW-03 and SW-07 collected March 2 (field and all analytical parameters);
- SP-W-IN, 2700GPM-IN and SP-W-OUT collected March 3 (dioxins and furans);
- IDZ-E1, IDZ-E2 and WQR1 collected March 4 (total mercury, methylmercury and dioxins and furans);
- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected March 5 (dioxins and furans);
- COMB-WWTP-E-IN collected March 5 (total mercury and methylmercury);
- OUT-02 and OUT-06 collected March 5 (total mercury and methylmercury);
- OUT-01 collected March 8 (field and all analytical parameters);
- SP-W-IN, 2700GPM-IN, SP-W-OUT and W2700T2-OUT collected March 9 (total mercury and methylmercury);
- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected March 10 (total mercury and methylmercury).

**Table 3:
Summary of Analytical Results and Associated Field Measurements Included in Weekly Discharge and Compliance Report #105.**

Sample	Description	Sampling Date	Parameters Reported
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	February 9, 2026	Dioxins and Furans.
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		
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface		
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		
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		
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-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	March 3, 2026	Total Mercury and Methylmercury.
SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the manifold that combines effluent from the individual 2700GPM trains into a single discharge line configured with a SP-W-OUT sampling port		
SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, at the SP-W-OUT outfall structure		
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
W2700T5-OUT	2700GPM TSS settling system at the outlet of Train 5		
W2700T6-OUT	2700GPM TSS settling system at the outlet of Train 6		
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	March 4, 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		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	March 5, 2026	Total Mercury and Methylmercury.
WWTP-E-IN	East WWTP at the influent meter box		
WWTP-E-OUT	East WWTP at the effluent meter box		
COMB-WWTP-E-IN	Combined East WWTP influent from the concrete contact water treatment stream and the East Sedimentation Pond, collected from the heated frac tank		Field and Physical Parameters, Total and Dissolved Metals and Hexavalent Chromium.
OUT-02	Non-contact water diversion ditch outlet		
OUT-06	Non-contact water diversion ditch outlet		
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	March 9, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, and Hexavalent Chromium.
SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, at the SP-W-OUT outfall structure		
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
W2700T2-OUT	2700GPM TSS settling system at the outlet of Train 2		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	March 10, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, and Hexavalent Chromium.
WWTP-E-IN	East WWTP at the influent meter box		
WWTP-E-OUT	East WWTP at the effluent meter box		

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. 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 March 8 – 14, as well as analytical results for samples collected March 5 (stations SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN and WWTP-E-OUT; as discussed in Report #104) and March 10 (stations SP-E-IN, WWTP-E-IN and WWTP-E-OUT). Field measurements for the East WWTP effluent samples (WWTP-E-OUT) collected March 8 – 14 and the analytical samples collected March 5 (total mercury and methylmercury) and March 10 met MDOs (Appendix B, Table B-1, Table B-3 and Table B-4).

East WWTP effluent was directed to the East Sedimentation Pond and there was no discharge from the pond to Howe Sound from March 8 – 14 (Section 1.2; Table B-5 of Appendix B). Therefore, water quality samples and field measurements were not collected at the SP-E-OUT discharge location.

3.4 West Catchment

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

As discussed in Section 1.2, a total of 22,245 m³ of clarified sedimentation pond effluent from the 2700GPM TSS Settling System was intermittently discharged to Howe Sound from SP-W-OUT each day during the monitoring period (March 8 – 14).

Results are presented for field measurements of influent and effluent quality for the West Sedimentation Pond and the 2700GPM TSS settling system collected March 8 – 14, as well as analytical samples collected March 3 (total mercury and methylmercury for stations SP-W-IN, SP-W-OUT, 2700GPM-IN, W2700T5-OUT and W2700T6-OUT; as discussed in Report #104) and March 9 (stations SP-W-IN, SP-W-OUT, 2700GPM-IN and W2700T2-OUT). Field measurements collected March 8 – 14 and the analytical samples collected at SP-W-OUT on March 3 (total mercury and methylmercury), and March 9 met PE-111578 discharge limits and WQGs (Appendix C, Table C-2, Table C-3 and Table C-4).

3.5 Non-Contact Water Diversion Ditch Outlets

Analytical results were available at the time of reporting for the non-contact water diversion ditch outlet samples collected at stations OUT-02 and OUT-06 on March 5 (as discussed in Report #104). The analytical results, field parameters, and WQGs are summarized in Appendix D.

Parameter concentrations met WQGs except total aluminum and dissolved copper in the sample collected at OUT-06 on March 5. Total aluminum (0.126 mg/L) and dissolved copper (0.00072 mg/L) were above the long-term WQGs. The total aluminum and dissolved copper concentrations measured at OUT-06 are within the range of values observed during the pre-construction baseline monitoring of diversion ditch water quality (0.118 to 0.433 mg/L for total aluminum and 0.00052 to 0.00095 mg/L for dissolved copper).

3.6 Freshwater and Estuarine Water Receiving Environment

Analytical results for freshwater and estuarine water receiving environment samples were not available at the time of reporting.

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 March 4 (stations IDZ-E1, IDZ-E2 and WQR1), as discussed in Report #104. The analytical results, field parameters, and WQGs are summarized in Appendix E.

Parameter concentrations met WQGs except dissolved oxygen and total boron in some samples (Appendix E; Tables E-1 and Table E-2). Dissolved oxygen concentrations were 7.77 and 7.13 mg/L and below the lower limit of the WQG (8 mg/L) in samples collected at 2 m above the seafloor at IDZ-E2 and reference station WQR1, respectively, on March 4. Total boron was above the WQG (1.2 mg/L) and ranged from 1.30 to 4.27 mg/L in all samples collected at stations IDZ-E1, IDZ-E2 and WQR1.

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 9.42 mg/L for dissolved oxygen and 1.47 to 8.38 mg/L for total boron) or within ranges observed at marine reference stations (3.94 to 13.80 mg/L for dissolved oxygen and 1.90 to 8.38 mg/L for total boron).

Dioxin and furans results were available at the time of reporting for marine samples collected at 0.5 and 2 m below the water surface and 2 m above the seafloor on February 9 (stations IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1 and WQR2), as discussed in Report #101. For all samples, the lower bound PCDD/F TEQ concentrations ranged from 0 to 0.0819 pg/L and the upper bound PCDD/F TEQ concentrations ranged from 1.27 to 3.02 pg/L. The lower and upper bound PCDD/F TEQ concentrations were within the concentration ranges observed in the pre-construction baseline monitoring program (0 to 2.64 pg/L and 0 to 7.06 pg/L, respectively) or within background ranges observed at marine reference stations (0 to 0.941 pg/L and 0.499 to 5.65 pg/L, respectively). Results are tabulated in Appendix E, Table E-3.

3.8 Quality Control

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

Table 4:
Weekly Report QC Evaluations and Ongoing Items

QC Procedure	Observation	Investigation/Resolution
Reporting Period (March 8 – 14, Report #105)		
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. The lower reach of East Creek was temporarily diverted through Outfall 11 from September 17, 2024 to November 18, 2025. As November 19, 2025, East Creek flows have been returned to the lower Channel that discharges to Howe Sound through the Outfall 12 culverts (OUT-12). The culvert at OUT-01 is being replaced and diversion water flows to OUT-01 have been redirected to OUT-02. Outfall 11 (OUT-11) has been constructed but is not in use. All monitoring stations have been established except at SP-E-IN-1, SP-E-IN-2, SP-W-IN-1 and SP- W- IN- 2 where substitute stations are established in lieu of those listed in PE-111578 (refer to Section 2). This item remains open.
Report #105: Pending Data	Analytical results not reported.	Field records and analytical results for the non-contact water diversion ditch sample collected March 8 as well as total mercury and methylmercury results for contact and treated water samples collected March 9 and 10 are pending and will be included in future weekly reports when available. This item remains open.
Ongoing Items from Previous Weekly Reports		
Report #98: WWTP Performance Evaluation	Hexavalent chromium above the MDO.	This item was first noted in Report #98. Hexavalent chromium concentrations ranged from 0.00081 to 0.00321 mg/L in the WWTP-E-OUT samples collected from January 20 through February 26, which were frequently above the MDO (0.0015 mg/L). Hexavalent chromium concentrations were 0.00096, 0.00076 and 0.00087 mg/L in the WWTP-E-OUT samples collected February 27, March 5 and March 10, respectively, and met the MDO. The WWTP treatment performance for hexavalent chromium will continue to be evaluated in March 2026. This item remains open.
Report #101: WWTP Performance Evaluation	Total copper above the MDO.	This item was first noted in Report #101. Total copper concentrations were 0.00443, 0.00493 and 0.00451 mg/L in the samples collected at WWTP-E-OUT on February 12, 14 and 27 and were above the MDO (0.0043 mg/L). Total copper met the MDO in the subsequent samples collected at WWTP-E-OUT on March 5 and 10 (0.00150 and 0.00137 mg/L, respectively). The WWTP treatment performance for total copper will continue to be evaluated in March 2026 to determine if this is an isolated event or a recurring issue that requires additional investigation. This item remains open.
Report #101: Pending Data	Analytical results not reported.	Previously pending dioxins and furans results for receiving environment samples collected February 9 are included in Report #105. Chronic toxicity results for receiving environment samples and acute toxicity results for treated water samples collected February 9 are pending and will be included in future weekly reports when available. This item remains open.
Report #102: WWTP Performance Evaluation	Total zinc above the MDO.	The total zinc concentration was 0.0185 mg/L in the sample collected at WWTP-E-OUT on February 14 and was above the MDO (0.0133 mg/L). Total zinc met the MDO in the subsequent samples collected at WWTP-E-OUT on February 17, 19, 26, 27, March 5 and 10 (0.0038, <0.0030, <0.0030, 0.0116, <0.0030 and <0.0030 mg/L, respectively). The total zinc concentration above the MDO on February 14 appears to be an isolated event. This item is closed.
Report #103: Pending Data	Analytical results not reported.	Total mercury and methylmercury results for the contact water sample collected February 26 are pending and will be included in future weekly reports when available. This item remains open.
Report #104: Pending Data	Analytical results not reported.	Previously pending field records and analytical results for receiving environment samples collected March 4 and for contact water and non-contact diversion ditch samples collected March 5 as well as total mercury and methylmercury results for contact and treated water samples collected March 3 and 5 are included in Report #105. Field records and analytical results for receiving environment samples collected March 1 and 2 as well as total mercury, methylmercury, dioxins and furans results for receiving environment, contact, treated and non-contact diversion ditch water samples collected March 3, 4 and 5 are pending and will be included in future weekly reports when available. This item remains open.

Notes:

Result QA/QC screening includes the evaluation of field and lab QC results, comparison of total and dissolved metal results and review for modified detection limits.

Pending data are outstanding results from monitoring samples reported in the current or previous weekly reports.

Authorized works and monitoring program evaluation is an assessment of the completeness of the authorized works and monitoring program compared to PE-111578 specified or implied requirements.

WWTP performance evaluation is an assessment of WWTP effluent quality compared to operational MDOs.

Data QC indicates an evaluation of data trends or inter-parameter relationships that suggest a test result may not be representative of water quality at the time of monitoring.

Non-compliant discharge indicates exceedance of a discharge limit or a discharge that bypasses the sedimentation pond discharge location.

Potential project influence is an assessment that water quality at creek and Howe Sound baseline stations are above the baseline concentration range and may indicate project influence at these stations.

4. Closure

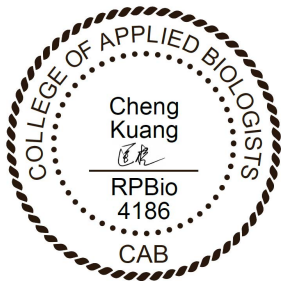
This weekly report is a desktop review by Lorax of the PE-111578 discharge and compliance monitoring program records, reports and results provided by Woodfibre LNG and prime contractor McDermott International and their sub-contractors. The records reviewed and analyzed by Lorax include ALS Environmental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

Regards,

LORAX ENVIRONMENTAL SERVICES LTD.



Holly Pelletier, B.Sc., GIT.
Environmental Geoscientist



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

***Appendix A:
Figures and Site Images***



World Imagery: District of Squamish. Additional imagery provided by McDermott International captured February 2nd, 2026.

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

DATE SAVED:	Mar 20, 2026
DRAWN BY:	DM
REVIEWED:	PM
VERSION:	1

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

CLIENT:

CLIENT:

PROJECT:
Woodfire LNG Project Construction Phase

TITLE: Site Layout and Water Quality Monitoring Stations for PE-111578 (March 14, 2026)

PROJECT #: A825-1 **FIGURE:** 1

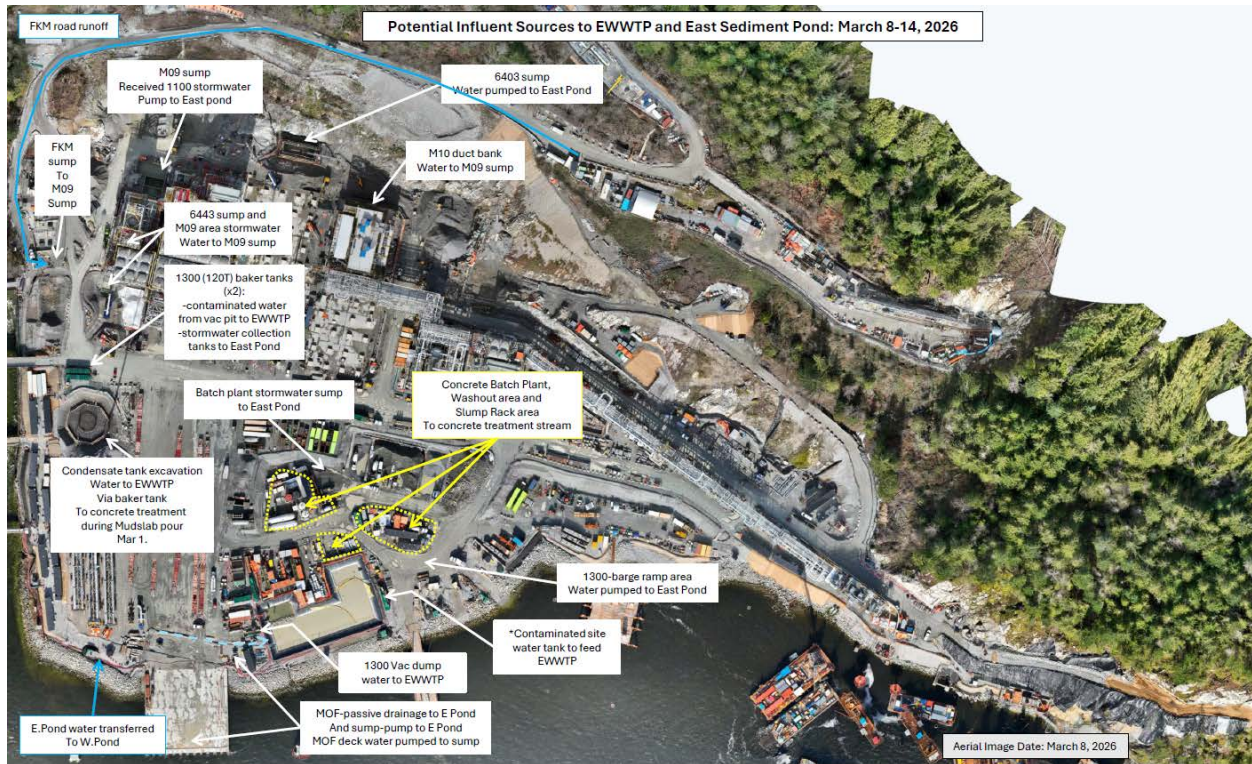


Figure 2: East Catchment contact water management facilities (March 8 – 14).



Figure 3: West Catchment contact water management facilities (March 8 – 14).

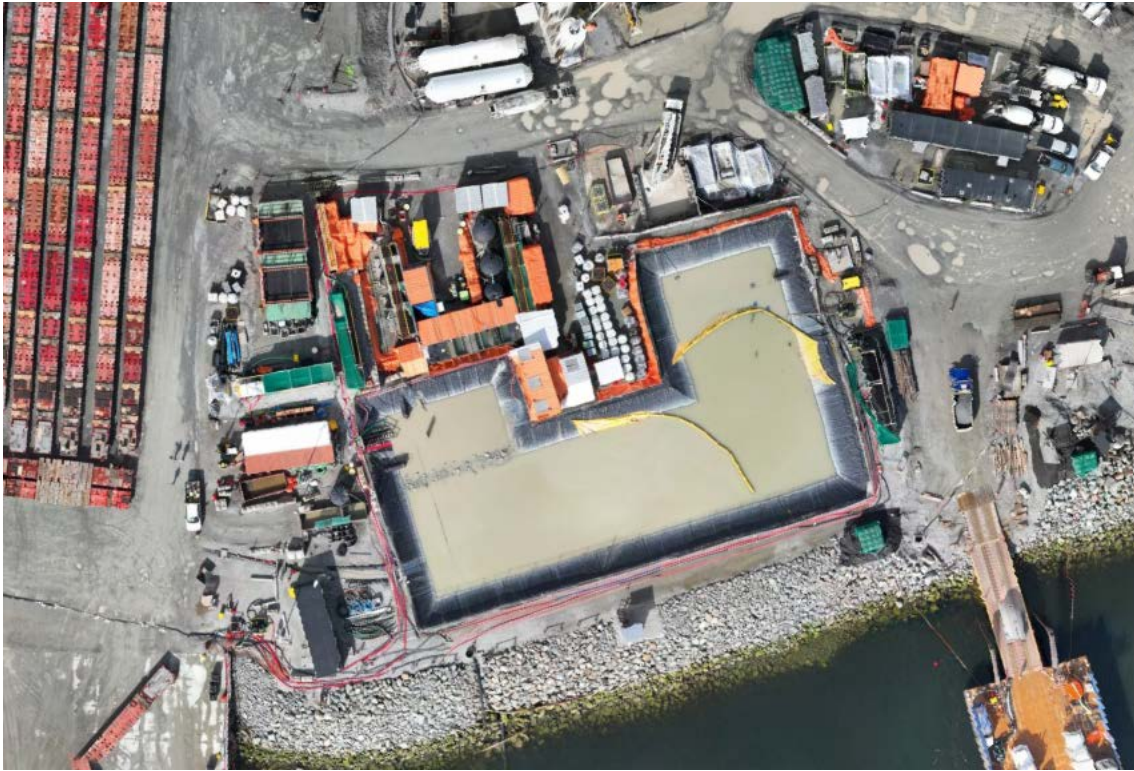


Figure 4: Aerial view of the East Sedimentation Pond (March 13, 2026). The East WWTP is located on the upper left side of the pond.

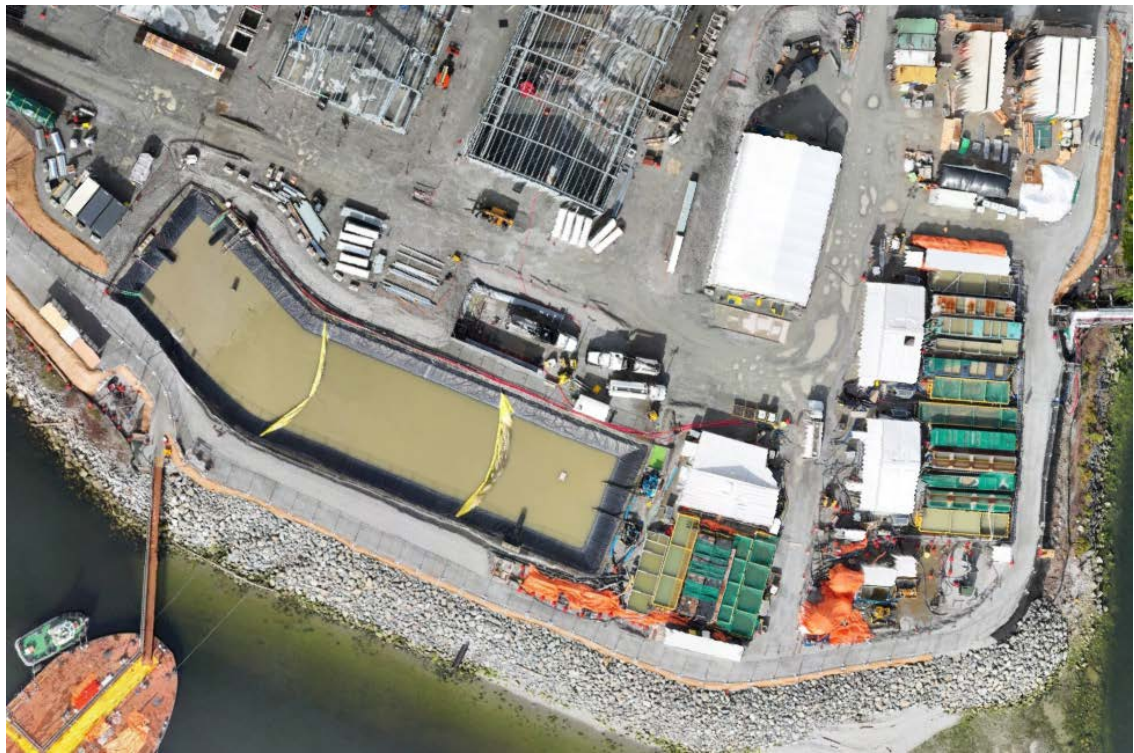


Figure 5: Aerial view of the West Sedimentation Pond (March 13, 2026).

***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 COMB-WWTP-E-IN	Station WWTP-E-IN	Station WWTP-E-OUT
					Influent	Influent	Effluent
					COMB-WWTP-E-IN	WWTP-E-IN	WWTP-E-OUT
					VA26A5305-005	VA26A5666-002	VA26A5666-003
		Long Term	Short Term		2026-03-05 10:52	2026-03-10 8:36	2026-03-10 14:28
General Parameters							
pH - Field	pH units	- ²	-	5.5 - 9.0	-	7.8	7.6
Specific Conductivity - Field	µS/cm	-	-	-	-	575	337
Temperature - Field	°C	-	-	-	-	6.6	7.3
Salinity - Field	ppt	-	-	-	-	0.28	0.41
Turbidity - Field	NTU	-	-	-	-	158.36	1.21
TSS	mg/L	-	-	25 or 75 ⁵	50.7	135	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	-	11.63	11.55
Total Hardness	mg/L	-	-	-	79.8	83.3	19.9
Dissolved Hardness	mg/L	-	-	-	79.6	57.3	19.5
Anions and Nutrients							
Sulphate	mg/L	-	-	-	-	153	268
Chloride	mg/L	-	-	-	-	6.43	6.63
Fluoride	mg/L	-	1.5	-	-	0.132	0.142
Ammonia (N-NH ₃)	mg/L	4.7-7.2 ³	31-48 ³	-	-	<0.0050	0.011
Nitrite (N-NO ₂)	mg/L	-	-	-	-	0.012	0.0121
Nitrate (N-NO ₃)	mg/L	3.7	339	-	-	0.438	0.428
Total Organic Carbon (TOC)	mg/L	-	-	-	-	5.07	2.41
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	-	2.29	2.24
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	1.54	10.4	0.0279
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00095	0.00103	0.00091
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00231	0.00351	0.00135
Barium, total (T-Ba)	mg/L	-	-	-	0.0357	0.0855	0.0017
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000026	0.000171	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.036	0.032	0.021
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000425	0.00014	<0.0000150
Chromium, total (T-Cr)	mg/L	-	-	-	0.00748	0.00458	0.00107
Cobalt, total (T-Co)	mg/L	-	-	-	0.00046	0.00326	<0.00010
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00357	0.0118	0.00137
Iron, total (T-Fe)	mg/L	-	-	-	1.64	8.47	0.034
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.00121	0.0113	0.000063
Manganese, total (T-Mn)	mg/L	-	-	-	0.0662	0.327	0.0103
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0528	0.0454	0.0517
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00115	0.0026	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000358	0.000289	0.000256
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	0.000027	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000013	0.000038	0.000025
Uranium, total (T-U)	mg/L	-	-	-	0.00663	0.00856	0.00893
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00522	0.0162	0.00201
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0336	0.0834	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00074	0.00112	0.00087
Dissolved Metals							
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000400	<0.0000200	<0.0000150
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00139	0.00175	0.00081
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.066	0.011	0.013
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	<0.000050	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0389	0.0258	0.0095
Nickel, dissolved (D-Ni)	mg/L	-	-	-	0.00068	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.226	0.124	0.0607
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00145	0.00216	0.00186
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0142	0.0023	0.0012
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	0.11	-	-	-	-	-
Ethylbenzene	mg/L	0.25	-	-	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-	-
Styrene	mg/L	-	-	-	-	-	-
Toluene	mg/L	0.215	-	-	-	-	-
Total Xylenes	mg/L	-	-	-	-	-	-
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 (March 8 – 14).

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
		Long Term	Short Term		Influent
					VA26A5666-001 2026-03-10 8:26
General Parameters					
pH - Field	pH units	- ²	-	5.5 - 9.0	7.4
Specific Conductivity - Field	µS/cm	-	-	-	980
Temperature - Field	°C	-	-	-	7.9
Salinity - Field	ppt	-	-	-	0.49
Turbidity - Field	NTU	-	-	-	66.96
TSS	mg/L	-	-	25 or 75 ⁵	61.8
Dissolved Oxygen - Field	mg/L	≥8	-	-	11.56
Total Hardness	mg/L	-	-	-	65.6
Dissolved Hardness	mg/L	-	-	-	54.8
Anions and Nutrients					
Sulphate	mg/L	-	-	-	348
Chloride	mg/L	-	-	-	6.63
Fluoride	mg/L	-	1.5	-	<0.100
Ammonia (N-NH ₃)	mg/L	12 ³	78 ³	-	0.0056
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0101
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.412
Total Organic Carbon (TOC)	mg/L	-	-	-	3.13
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	1.92
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	4.03
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00098
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00179
Barium, total (T-Ba)	mg/L	-	-	-	0.0381
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000074
Boron, total (T-B)	mg/L	1.2	-	-	0.022
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.0000543
Chromium, total (T-Cr)	mg/L	-	-	-	0.00232
Cobalt, total (T-Co)	mg/L	-	-	-	0.00131
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00481
Iron, total (T-Fe)	mg/L	-	-	-	3.42
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.00403
Manganese, total (T-Mn)	mg/L	-	-	-	0.142
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0451
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00121
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000288
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000037
Uranium, total (T-U)	mg/L	-	-	-	0.00492
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00706
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0287
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00064
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000250
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00114
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.011
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0326
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.151
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00131
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.004
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	0.11	-	-	-
Ethylbenzene	mg/L	0.25	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-
Styrene	mg/L	-	-	-	-
Toluene	mg/L	0.215	-	-	-
Total Xylenes	mg/L	-	-	-	-
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 (March 8 – 14).

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

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline ¹					0.0001 ²	0.0046-0.0095 ^{3,4}
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-E-IN	Influent	SP-E-IN	VA26A5305-001	2026-03-05	0.000038	0.00268
WWTP-E-IN	Influent	WWTP-E-IN	VA26A5305-002	2026-03-05	0.000080	0.00757
Effluent						
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA26A5305-008	2026-03-05	0.000034	0.00155

Notes:

East catchment influents and 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 aquatic life.

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

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

³ CCME guideline for total mercury = 0.016 µg/L.

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

**Table B-4:
East Catchment Field Measurements Collected During the Monitoring Period (March 8 – 14).**

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	2026-03-08 13:21	10.8	11.15	0.33	51.64	41.5	7.2	666	No
SP-E-IN	Influent	2026-03-09 16:44	8.5	12.53	0.26	299.61	226.4	7.7	536	No
SP-E-IN	Influent	2026-03-10 8:26	7.9	11.56	0.49	66.96	52.9	7.4	980	No
SP-E-IN	Influent	2026-03-11 13:01	6.3	12.31	0.34	260.91	197.6	7.8	697	No
SP-E-IN	Influent	2026-03-12 13:41	7.1	12.59	0.44	96.71	75.1	6.8	897	No
SP-E-IN	Influent	2026-03-13 17:27	8.2	12.06	0.24	130.23	100.1	7.7	496	No
SP-E-IN	Influent	2026-03-14 8:38	6.9	12.07	0.36	14.51	13.8	7.3	740	No
WWTP-E-IN	Influent	2026-03-08 13:05	10.5	10.98	0.16	615.02	461.7	8.0	339	No
WWTP-E-IN	Influent	2026-03-10 8:36	6.6	11.63	0.28	158.36	121.1	7.8	575	No
WWTP-E-IN	Influent	2026-03-11 13:09	6.1	11.91	0.30	194.21	147.8	7.7	607	No
WWTP-E-IN	Influent	2026-03-12 13:08	7.1	12.32	0.30	253.16	191.8	7.7	617	No
WWTP-E-IN	Influent	2026-03-14 8:45	5.8	12.11	0.25	91.26	71.1	7.5	526	No
Effluent ⁵										
WWTP-E-OUT	Effluent	2026-03-08 13:15	10.5	10.92	0.37	1.11	3.8	6.9	747	No
WWTP-E-OUT	Effluent	2026-03-10 14:28	7.3	11.55	0.41	1.21	3.9	7.6	337	No
WWTP-E-OUT	Effluent	2026-03-11 13:06	7.1	13.03	0.43	1.01	3.8	7.4	867	No
WWTP-E-OUT	Effluent	2026-03-12 13:33	6.9	11.48	0.50	3.93	5.9	6.7	1010	No
WWTP-E-OUT	Effluent	2026-03-14 8:49	6.8	12.15	0.44	1.99	4.5	7.1	898	No

Notes:

The east catchment did not discharge to Howe Sound during the monitoring period (March 8 – 14). 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 $TSS = 0.7458 * [turbidity \text{ as NTU}] + 3$.

⁴ Daily field measurements for station SP-E-IN were collected from cell 1 of the East Sedimentation Pond. Daily field parameters were not collected at the influent station of the East WWTP (WWTP-E-IN) on March 9 and 13 as the East WWTP was not operational at the time of monitoring.

⁵ There was no discharge at the authorized discharge location (SP-E-OUT) during the monitoring period (March 8 – 14), therefore daily field measurements for SP-E-OUT were not collected on those days. Daily field parameters were not collected at the effluent station of the East WWTP (WWTP-E-OUT) on March 9 and 13 as the East WWTP was not operational at the time of monitoring.

⁶ The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

**Table B-5:
East Catchment Daily Discharge Volumes for the Monitoring Period (March 8 – 14).**

	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				
2026-03-08	0	0	367	0
2026-03-09	0	0	644	0
2026-03-10	0	0	309	0
2026-03-11	0	0	454	0
2026-03-12	0	0	317	0
2026-03-13	0	0	421	0
2026-03-14	0	0	392	0

Notes:

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

¹ As noted in PE-111578 Condition 2.1.4, the annual average authorized discharge rate from the East Sedimentation Pond to Howe Sound was set to 650 m³/day for the purpose of calculating discharge fees as required by the Permit and Approval Fees and Charges Regulation. Therefore, the annual average authorized discharge rate is not evaluated as a discharge limit.

² East WWTP treated effluent was recirculated to the East Sedimentation Pond.

***Appendix C:
West Catchment Monitoring Results***

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

Parameter	Unit	Lowest Applicable Guideline ¹		PE-111578 Discharge Limit	Station 2700GPM-IN	Station W2700T2-OUT
					Influent	Effluent
		W2700-IN	W2700T2-OUT			
		VA26A5552-002 2026-03-09 10:20	VA26A5552-003 2026-03-09 12:16			
Long Term		Short Term				
General Parameters						
pH - Field	pH units	- ²	-	5.5 - 9.0	8.0	7.8
Specific Conductivity - Field	µS/cm	-	-	-	116	119
Temperature - Field	°C	-	-	-	7.2	7.5
Salinity - Field	ppt	-	-	-	0.05	0.06
Turbidity - Field	NTU	-	-	-	68.74	8.43
TSS	mg/L	-	-	25 or 75 ⁵	82	5
Dissolved Oxygen - Field	mg/L	≥8	-	-	12.05	11.76
Total Hardness	mg/L	-	-	-	33	24.9
Dissolved Hardness	mg/L	-	-	-	25.4	24.7
Anions and Nutrients						
Sulphate	mg/L	-	-	-	19.1	19.7
Chloride	mg/L	-	-	-	2.47	2.21
Fluoride	mg/L	-	1.5	-	0.035	0.035
Ammonia (N-NH ₃)	mg/L	2.9-4.7 ³	19-31 ³	-	<0.0050	<0.0050
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0027	0.003
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.154	0.136
Total Organic Carbon (TOC)	mg/L	-	-	-	6.14	3.86
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	4.31	4.21
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	5.44	0.501
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00037	0.00031
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00195	0.00067
Barium, total (T-Ba)	mg/L	-	-	-	0.0481	0.00487
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000141	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	<0.010	<0.010
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.0000786	0.0000078
Chromium, total (T-Cr)	mg/L	-	-	-	0.00191	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.0014	0.00012
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.0134	0.00293
Iron, total (T-Fe)	mg/L	-	-	-	4.04	0.262
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.00559	0.000538
Manganese, total (T-Mn)	mg/L	-	-	-	0.122	0.0106
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.00714	0.00591
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.0017	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000122	0.000052
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.000031	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000046	<0.000010
Uranium, total (T-U)	mg/L	-	-	-	0.00326	0.00157
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00777	0.00106
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0219	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	0.0000062	<0.0000100
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00143	0.00122
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.019	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000053	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00383	0.00417
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.0346	0.0305
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00059	0.00055
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0016	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	-	-	-
Acridine	mg/L	-	-	-	-	-
Anthracene	mg/L	-	-	-	-	-
Benz(a)anthracene	mg/L	-	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-
Chrysene	mg/L	0.0001	-	-	-	-
Fluoranthene	mg/L	-	-	-	-	-
Fluorene	mg/L	0.012	-	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	-	-
Naphthalene	mg/L	0.001	-	-	-	-
Phenanthrene	mg/L	-	-	-	-	-
Pyrene	mg/L	-	-	-	-	-
Quinoline	mg/L	-	-	-	-	-
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.11	-	-	-	-
Ethylbenzene	mg/L	0.25	-	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-
Styrene	mg/L	-	-	-	-	-
Toluene	mg/L	0.215	-	-	-	-
Total Xylenes	mg/L	-	-	-	-	-
Chlorobenzene	mg/L	0.025	-	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	-

Notes:

West catchment influents were not discharged to Howe Sound. Influent results above screening values are only highlighted for comparative purposes.

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

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

Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.

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

The West Catchment intermittently discharged each day during the monitoring period (March 8 – 14).

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 Sedimentation Pond Influent and Effluent Analytical Results Received at the Time of Reporting.**

Parameter	Unit	Lowest Applicable Guideline ¹		PE-111578 Discharge Limit	Station SP-W-IN	Station SP-W-OUT	Station SP-W-OUT
					Influent	Effluent	Effluent
		SP-W-IN	SP-W-OUT-Outfall		SP-W-OUT-Port		
		VA26A5552-001	VA26A5552-005		VA26A5552-004		
					2026-03-09 9:55	2026-03-09 11:25	2026-03-09 12:00
General Parameters							
pH - Field	pH units	- ²	-	5.5 - 9.0	8.1	8.0	8.0
Specific Conductivity - Field	µS/cm	-	-	-	109	122	123
Temperature - Field	°C	-	-	-	7.4	7.4	7.3
Salinity - Field	ppt	-	-	-	0.05	0.06	0.06
Turbidity - Field	NTU	-	-	-	98.36	8.6	10.02
TSS	mg/L	-	-	25 or 75 ⁵	290	6.2	5.2
Dissolved Oxygen - Field	mg/L	≥8	-	-	12.05	11.91	11.77
Total Hardness	mg/L	-	-	-	49.5	25	24
Dissolved Hardness	mg/L	-	-	-	23.9	26	25.1
Anions and Nutrients							
Sulphate	mg/L	-	-	-	15.7	20.5	20
Chloride	mg/L	-	-	-	2.05	2.25	2.22
Fluoride	mg/L	-	1.5	-	0.033	0.036	0.036
Ammonia (N-NH ₃)	mg/L	2.9 ³	19 ³	-	<0.0050	<0.0050	<0.0050
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0021	0.0031	0.003
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.13	0.141	0.137
Total Organic Carbon (TOC)	mg/L	-	-	-	13.8	4.11	4.2
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	3.83	3.4	4.01
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	14.1	0.531	0.539
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00047	0.00032	0.00032
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00345	0.00065	0.00064
Barium, total (T-Ba)	mg/L	-	-	-	0.0984	0.00543	0.0054
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000268	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	<0.010	<0.010	<0.010
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.000207	0.0000109	0.0000097
Chromium, total (T-Cr)	mg/L	-	-	-	0.0044	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.0038	0.00011	0.00011
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.0211	0.00172	0.00173
Iron, total (T-Fe)	mg/L	-	-	-	10.1	0.284	0.28
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.0149	0.00047	0.00047
Manganese, total (T-Mn)	mg/L	-	-	-	0.39	0.0116	0.0112
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.00725	0.00598	0.00608
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00367	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000125	0.000073	0.000096
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.000053	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000103	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	-	-	-	0.00548	0.00156	0.00158
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.0182	0.00108	0.00105
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0471	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050	<0.00050
Dissolved Metals							
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000100	<0.0000100	0.0000074
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00114	0.00104	0.00133
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.011	0.014	0.046
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	<0.000050	0.000113
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00368	0.00439	0.00524
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.0288	0.031	0.0302
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00056	0.00057	0.00063
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010	<0.0010	0.001
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	0.11	-	-	-	-	-
Ethylbenzene	mg/L	0.25	-	-	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-	-
Styrene	mg/L	-	-	-	-	-	-
Toluene	mg/L	0.215	-	-	-	-	-
Total Xylenes	mg/L	-	-	-	-	-	-
Chlorobenzene	mg/L	0.025	-	-	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	-	-

Notes:

West catchment influents were not discharged to Howe Sound. Influent results above screening values are only highlighted for comparative purposes.

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

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

Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.

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

The West Catchment intermittently discharged each day during the monitoring period (March 8 – 14).

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

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline ¹					0.0001 ²	0.0081-0.017 ^{3,4}
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-W-IN	Influent	SP-W-IN	VA26A5014-001	2026-03-03	0.000045	0.00549
2700GPM-IN	Influent	W2700-IN	VA26A5014-002	2026-03-03	<u>0.000108</u>	<u>0.0187</u>
Effluent						
SP-W-OUT	Effluent	SP-W-OUT-Port	VA26A5014-007	2026-03-03	0.000024	0.00221
SP-W-OUT	Effluent	SP-W-OUT-Outfall	VA26A5014-005	2026-03-03	0.000027	0.00233
SP-W-OUT	Effluent	SP-W-OUT-Outfall-DUP	VA26A5014-006	2026-03-03	0.000027	0.00218
W2700T5-OUT	Effluent	W2700T5-OUT	VA26A5014-003	2026-03-03	0.000029	0.00239
W2700T6-OUT	Effluent	W2700T6-OUT	VA26A5014-004	2026-03-03	0.000029	0.00237

Notes:

West catchment influents were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.

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

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

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

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

³ CCME guideline for total mercury = 0.016 µg/L.

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

**Table C-4:
West Catchment Field Measurements Collected During the Monitoring Period (March 8 – 14).**

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	2026-03-08 12:28	10.5	11.23	0.12	39.05	32.1	8.3	244	No
SP-W-IN	Influent	2026-03-09 9:55	7.4	12.05	0.05	98.36	76.4	8.1	109	No
SP-W-IN	Influent	2026-03-10 9:07	6.3	12.2	0.04	55.01	44.0	7.8	91	No
SP-W-IN	Influent	2026-03-11 12:14	6.8	13.07	0.04	63.36	50.3	7.9	77	No
SP-W-IN	Influent	2026-03-12 12:43	6.7	13.1	0.07	61.06	48.5	7.9	148	No
SP-W-IN	Influent	2026-03-13 13:54	7.5	13.01	0.04	58.2	46.4	8.2	94	No
SP-W-IN	Influent	2026-03-14 11:54	6.8	13.08	0.1	70.78	55.8	8.2	210	No
2700GPM-IN	Influent	2026-03-08 12:53	9.4	11.36	0.11	227.75	172.9	7.8	223	No
2700GPM-IN	Influent	2026-03-09 10:20	7.2	12.05	0.05	68.74	54.3	8.0	116	No
2700GPM-IN	Influent	2026-03-10 9:04	6.3	12.22	0.04	30.04	25.4	7.6	91	No
2700GPM-IN	Influent	2026-03-11 12:48	5.9	12.58	0.04	63.35	50.2	8.0	81	No
2700GPM-IN	Influent	2026-03-12 12:38	6.4	12.73	0.14	143.71	110.2	7.9	283	No
2700GPM-IN	Influent	2026-03-13 13:42	7.1	12.55	0.05	55.87	44.7	8.4	102	No
2700GPM-IN	Influent	2026-03-14 11:48	6.8	12.92	0.1	29.07	24.7	8.0	207	No
Effluent ⁵										
SP-W-OUT	Effluent	2026-03-08 12:34	9.0	11.74	0.16	8.16	9.1	7.9	329	No
SP-W-OUT	Effluent	2026-03-09 11:25	7.4	11.91	0.06	8.6	9.4	8.0	122	No
SP-W-OUT	Effluent	2026-03-10 13:49	6.2	12.26	0.04	9.41	10.0	8.0	92	No
SP-W-OUT	Effluent	2026-03-11 12:26	5.9	12.51	0.04	10.22	10.6	7.9	85	No
SP-W-OUT	Effluent	2026-03-11 12:28	5.9	12.52	0.04	10.55	10.9	7.9	85	No
SP-W-OUT	Effluent	2026-03-12 9:37	6.1	13.97	0.13	9.63	10.2	7.7	278	No
SP-W-OUT	Effluent	2026-03-12 12:17	6.5	12.62	0.14	4.73	6.5	7.4	285	No
SP-W-OUT	Effluent	2026-03-13 13:16	7.7	12.8	0.05	14.13	13.5	8.4	111	No
SP-W-OUT	Effluent	2026-03-13 13:19	7.1	12.77	0.05	14.06	13.5	8.5	110	No
SP-W-OUT	Effluent	2026-03-13 13:22	6.9	13.06	0.05	14.59	13.9	8.2	108	No
SP-W-OUT	Effluent	2026-03-13 16:27	7.3	12.58	0.10	10.41	10.8	7.9	215	No
SP-W-OUT	Effluent	2026-03-13 16:30	7.1	12.05	0.11	8.15	9.1	8.1	130	No
SP-W-OUT	Effluent	2026-03-14 9:06	6.2	12.48	0.07	13.6	13.1	7.7	157	No
SP-W-OUT	Effluent	2026-03-14 12:03	6.6	12.52	0.13	9.63	10.2	8.1	267	No

Notes:

West catchment influents for March 8 – 14 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 $TSS = 0.7458 * [\text{turbidity as NTU}] + 3$.

⁴ Daily field measurements for station SP-W-IN were collected from cell 1 of the West Sedimentation Pond.

⁵ As described in Section 1.1, when there is surplus water, West Sedimentation Pond clarified effluent from the individual 2700GPM trains is directed to SP-W-OUT for discharge. 2700GPM clarified effluent from trains 1, 2, 3 and 4 was intermittently discharged to Howe Sound at the authorized discharge location (SP-W-OUT) each day during the monitoring period (March 8 – 14).

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-5:
West Catchment Daily Discharge Volumes for the Monitoring Period (March 8 – 14).**

	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					
2026-03-08	0	5,229	0	0	2,576
2026-03-09	0	7,579	0	0	6,338
2026-03-10	0	7,535	0	0	810
2026-03-11	0	3,836	0	0	1,425
2026-03-12	0	4,701	0	0	2,862
2026-03-13	0	8,500	0	0	7,263
2026-03-14	0	8,847	0	0	973

Notes:

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

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

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

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

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

**Table D-1:
Summary of Non-Contact Water Diversion Ditch Outlet Quality Results Received at the Time of Reporting.**

Parameter	Unit	Lowest Applicable Guideline ^{1,2}		Station OUT-02	Station OUT-06
				Non-contact Water	Non-contact Water
				Diversion Ditch Outlet	Diversion Ditch Outlet
				OUT-02	OUT-06
		VA26A5324-001	VA26A5324-002	2026-03-05 14:15	2026-03-05 15:33
		Long Term	Short Term		
General Parameters					
pH - Field	pH units	6.5 - 9.0	-	7.4	6.6
Specific Conductivity - Field	µS/cm	-	-	11	72
Temperature - Field	°C	-	-	6.4	10.3
Salinity - Field	ppt	-	-	0	0.03
Turbidity - Field	NTU	-	-	2.02	0.15
TSS	mg/L	-	-	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	>=8	>=5	12.38	11.93
Total Hardness	mg/L	-	-	3.76	36.3
Dissolved Hardness	mg/L	-	-	3.81	36.2
Anions and Nutrients					
Sulphate ²	mg/L	128-218	-	1.43	3.66
Chloride	mg/L	120	600	<0.50	<0.50
Fluoride ²	mg/L	-	0.400-0.927	<0.020	<0.020
Ammonia (N-NH ₃) ²	mg/L	1.84-10.3	15.0-24.7	<0.0050	<0.0050
Nitrite (N-NO ₂) ²	mg/L	0.200	0.600	<0.0010	<0.0010
Nitrate (N-NO ₃)	mg/L	3	32.8	0.067	0.109
Total Organic Carbon (TOC)	mg/L	-	-	3.23	3.8
Total Inorganic Carbon (DOC)	mg/L	-	-	3.52	4.15
Total Metals					
Aluminum, total (T-Al) ²	mg/L	0.0861-0.416	-	0.128	<u>0.126</u>
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010	0.00023
Arsenic, total (T-As)	mg/L	0.005	-	<0.00010	0.00017
Barium, total (T-Ba)	mg/L	1	-	0.00273	0.00876
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010	0.012
Cadmium, total (T-Cd) ²	mg/L	0.000036-0.000068	0.00011-0.00075	<0.000050	0.000072
Chromium, total (T-Cr) ³	mg/L	0.001	-	<0.00050	<0.00050
Cobalt, total (T-Co) ²	mg/L	0.000389-0.000778	-	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	-	-	<0.00050	0.0008
Iron, total (T-Fe)	mg/L	0.3	1	0.017	0.029
Lead, total (T-Pb)	mg/L	-	-	<0.000050	0.000104
Manganese, total (T-Mn) ²	mg/L	0.768	0.816-0.940	0.00068	0.00152
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.000375	0.00134
Nickel, total (T-Ni) ²	mg/L	0.0250	-	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.001	-	<0.000050	0.000056
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000056	0.000198
Vanadium, total (T-V)	mg/L	0.12	-	<0.00050	<0.00050
Zinc, total (T-Zn)	mg/L	-	-	<0.0030	0.0063
Hexavalent Chromium, total	mg/L	0.001	-	-	-
Dissolved Metals					
Cadmium, dissolved (D-Cd) ²	mg/L	0.000019-0.00010	0.000038-0.00021	<0.000050	0.000056
Copper, dissolved (D-Cu) ²	mg/L	0.000246-0.00256	0.00165-0.00417	0.00046	<u>0.00072</u>
Iron, dissolved (D-Fe)	mg/L	-	0.35	0.013	<0.010
Lead, dissolved (D-Pb) ²	mg/L	0.00206-0.00679	-	<0.000050	<0.000050
Manganese, dissolved (D-Mn) ²	mg/L	0.330-0.380	1.97-2.73	0.00032	0.00071
Nickel, dissolved (D-Ni) ²	mg/L	0.00100-0.00110	0.0127-0.0158	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00544	0.0431
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050
Zinc, dissolved (D-Zn) ²	mg/L	0.00400-0.0249	0.0102-0.0474	0.0026	0.006
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.0058	-	-	-
Acridine	mg/L	0.003	-	-	-
Anthracene	mg/L	0.000012	-	-	-
Benz(a)anthracene	mg/L	0.000018	-	-	-
Benzo(a)pyrene	mg/L	0.000001	-	-	-
Chrysene	mg/L	-	-	-	-
Fluoranthene	mg/L	0.000004	-	-	-
Fluorene	mg/L	0.003	-	-	-
1-methylnaphthalene	mg/L	-	-	-	-
2-methylnaphthalene	mg/L	-	-	-	-
Naphthalene	mg/L	0.001	0.001	-	-
Phenanthrene	mg/L	0.0003	-	-	-
Pyrene	mg/L	0.000002	-	-	-
Quinoline	mg/L	0.0034	-	-	-
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.04	-	-	-
Ethylbenzene	mg/L	0.09	-	-	-
Methyl-tert-butyl-ether	mg/L	10	3.4	-	-
Styrene	mg/L	0.072	-	-	-
Toluene	mg/L	0.0005	-	-	-
Total Xylenes	mg/L	0.03	-	-	-
Chlorobenzene	mg/L	-	-	-	-
1,2-Dichlorobenzene	mg/L	-	-	-	-

Notes:

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 freshwater aquatic life.

Shaded results exceed the applicable short-term water quality guideline for the protection of freshwater aquatic life.

¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.² BC WQG or CWQG indicated to be variable are calculated from sample-specific measurements for temperature, field pH, total hardness and dissolved organic carbon (DOC) content.³ The approved BC WQG for hexavalent chromium [Cr(VI)] is 0.001 mg/L and 0.0089 mg/L for trivalent chromium [Cr(III)]. The more conservative criteria for Cr(VI) is applied to total chromium results. The lowest applicable guidelines are shown in the table; however, water quality data was screened to all applicable guidelines.

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

**Table E-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
				VA26A5157-001	VA26A5157-002	VA26A5157-003	VA26A5157-004	VA26A5157-005	VA26A5157-006
		Long Term	Short Term	2026-03-04 13:50	2026-03-04 13:40	2026-03-04 13:30	2026-03-04 13:15	2026-03-04 13:05	2026-03-04 12:50
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.68	7.53	7.59	7.83	7.65	7.54
Specific Conductivity - Field	µS/cm	-	-	20352	41373	41490	18637	35138	44198
Temperature - Field	°C	-	-	6.8	7.2	8.2	6.7	8.1	8.8
Salinity - Field	ppt	Narrative ²	-	12.08	26.21	26.36	10.98	21.96	28.3
Turbidity - Field	NTU	Narrative ²	Narrative ²	1.63	1.54	1.32	1.74	1.52	1.29
TSS	mg/L	Narrative ²	Narrative ²	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dissolved Oxygen - Field	mg/L	>=8	-	11.85	10.41	9.58	10.77	9.09	<u>7.77</u>
Total Hardness	mg/L	-	-	2090	4500	5100	1910	3150	5660
Dissolved Hardness	mg/L	-	-	2140	2970	4910	1870	2140	5740
Anions and Nutrients									
Sulphate	mg/L	-	-	949	1210	2000	783	871	2240
Chloride	mg/L	-	-	7050	8990	14600	5910	6510	16400
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia (N-NH ₃)	mg/L	4.7-12 ³	31-78 ³	0.0081	0.011	0.0052	0.0098	0.0101	0.0073
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	<0.50
Total Organic Carbon (TOC)	mg/L	-	-	1.59	1.58	1.27	1.68	1.68	1.01
Dissolved Organic Carbon (DOC)	mg/L	-	-	1.35	1.51	1.16	1.47	1.57	1.19
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.0389	0.0192	0.0096	0.0535	0.0485	0.0117
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	0.00065	0.00134	0.00138	0.0006	0.00091	0.00151
Barium, total (T-Ba)	mg/L	-	-	0.0088	0.0096	0.009	0.008	0.0085	0.0089
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>1.66</u>	<u>3.14</u>	<u>3.41</u>	<u>1.30</u>	<u>2.09</u>	<u>3.89</u>
Cadmium, total (T-Cd)	mg/L	0.00012	-	0.000038	0.00007	0.000066	0.000033	0.000035	0.00008
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000076	0.000059	0.000053	0.000072	0.000075	0.000057
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00052	<0.00050	<0.00050	0.00058	0.00058	<0.00050
Iron, total (T-Fe)	mg/L	-	-	0.102	0.044	<0.010	0.096	0.081	0.025
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	-	-	0.008	0.0044	0.00259	0.00779	0.00625	0.00263
Molybdenum, total (T-Mo)	mg/L	-	-	0.00477	0.00855	0.00938	0.00388	0.00613	0.00986
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	-	-	0.00114	0.00218	0.00238	0.00102	0.00161	0.00263
Vanadium, total (T-V)	mg/L	0.005	-	0.00099	0.00143	0.00133	0.00087	0.00117	0.00161
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	-	-	0.000038	0.00005	0.000072	0.000026	0.000026	0.000081
Copper, dissolved (D-Cu)	mg/L	-	-	0.00053	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Iron, dissolved (D-Fe)	mg/L	-	-	0.015	0.013	<0.010	0.019	0.016	<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	-	-	0.00695	0.00525	0.00337	0.00732	0.00731	0.00141
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	0.00066	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	2.72	3.79	5.95	2.38	2.69	6.62
Vanadium, dissolved (D-V)	mg/L	-	-	0.00076	0.00095	0.00139	0.00075	0.00079	0.00146
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0014	0.0016	0.001	0.0014	0.0013	<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 <30 days, 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 using reference station WQR1 collected March 4 (Table F-2).

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 E-2:
Summary of Marine Water Quality Results Received at the Time of Reporting**

Parameter	Unit	Lowest Applicable Guideline ¹		Reference Station	Reference Station	Reference Station
				WQR1	WQR1	WQR1
				0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				WQR1-0.5	WQR1-2m	WQR1-SF
			VA26A5157-007	VA26A5157-008	VA26A5157-009	
		Long Term	Short Term	2026-03-04 12:15	2026-03-04 12:05	2026-03-04 11:55
General Parameters						
pH - Field	pH units	7.0 - 8.7	-	7.73	7.60	7.52
Specific Conductivity - Field	µS/cm	-	-	19650	37237	44937
Temperature - Field	°C	-	-	6.6	6.9	9.0
Salinity - Field	ppt	Narrative ²	-	11.62	23.33	28.84
Turbidity - Field	NTU	Narrative ²	Narrative ²	2.02	1.96	1.13
TSS	mg/L	Narrative ²	Narrative ²	<2.0	<2.0	<2.0
Dissolved Oxygen - Field	mg/L	>=8	-	11.37	10.92	<u>7.13</u>
Total Hardness	mg/L	-	-	2300	5000	5850
Dissolved Hardness	mg/L	-	-	2190	2550	5950
Anions and Nutrients						
Sulphate	mg/L	-	-	897	1110	2300
Chloride	mg/L	-	-	6800	8270	16700
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0
Ammonia (N-NH ₃)	mg/L	7.2-12 ³	48-78 ³	0.0096	0.0091	0.0116
Nitrite (N-NO ₂)	mg/L	-	-	<0.10	<0.10	<0.10
Nitrate (N-NO ₃)	mg/L	3.7	339	<0.50	<0.50	<0.50
Total Organic Carbon (TOC)	mg/L	-	-	1.71	1.42	0.95
Dissolved Organic Carbon (DOC)	mg/L	-	-	2.18	1.12	0.85
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	0.0365	0.0124	0.0074
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	0.00072	0.00139	0.00164
Barium, total (T-Ba)	mg/L	-	-	0.0093	0.0095	0.009
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	<u>1.75</u>	<u>3.63</u>	<u>4.27</u>
Cadmium, total (T-Cd)	mg/L	0.00012	-	0.000038	0.00006	0.000072
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000082	0.000062	0.000064
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00069	<0.00050	<0.00050
Iron, total (T-Fe)	mg/L	-	-	0.126	0.034	0.014
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.00010	<0.00010	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.00957	0.00377	0.00228
Molybdenum, total (T-Mo)	mg/L	-	-	0.00429	0.00871	0.0103
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	<0.00050	<0.00050	<0.00050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.00010	<0.00010	<0.00010
Thallium, total (T-Tl)	mg/L	-	-	<0.000050	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.00112	0.00231	0.00257
Vanadium, total (T-V)	mg/L	0.005	-	0.0011	0.00142	0.00152
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	0.0053	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	0.000031	0.00003	0.000072
Copper, dissolved (D-Cu)	mg/L	-	-	0.00052	0.00055	<0.00050
Iron, dissolved (D-Fe)	mg/L	-	-	0.016	0.016	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00871	0.00851	0.00119
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	2.63	3.03	6.82
Vanadium, dissolved (D-V)	mg/L	-	-	0.00077	0.00086	0.00155
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0013	0.0012	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010
Acridine	mg/L	-	-	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.11	-	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<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.

**Table E-3:
Marine 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	Position in Water Column	Sample ID	Lab ID	Sampling Date		
Station IDZ-E1						
IDZ-E1	0.5 m Below Surface	IDZ-E1-0.5	VA26A3197-001	2026-02-09	0.00180	2.47
IDZ-E1	0.5 m Below Surface	IDZ-E1-0.5-DUP	VA26A3197-002	2026-02-09	0.0144	2.42
IDZ-E1	2 m Below Surface	IDZ-E1-2m	VA26A3199-005	2026-02-09	0.00415	1.65
IDZ-E1	2 m Above Seafloor	IDZ-E1-SF	VA26A3197-006	2026-02-09	0.00131	2.90
Station IDZ-E2						
IDZ-E2	0.5 m Below Surface	IDZ-E2-0.5	VA26A3197-007	2026-02-09	0.0176	2.84
IDZ-E2	2 m Below Surface	IDZ-E2-2m	VA26A3197-008	2026-02-09	0	1.84
IDZ-E2	2 m Above Seafloor	IDZ-E2-SF	VA26A3197-009	2026-02-09	0	1.64
Station IDZ-W1						
IDZ-W1	0.5 m Below Surface	IDZ-W1-0.5	VA26A3194-001	2026-02-09	0.00794	3.02
IDZ-W1	2 m Below Surface	IDZ-W1-2m	VA26A3194-002	2026-02-09	0	3.01
IDZ-W1	2 m Above Seafloor	IDZ-W1-SF	VA26A3194-003	2026-02-09	0	1.97
Station IDZ-W2						
IDZ-W2	0.5 m Below Surface	IDZ-W2-0.5	VA26A3194-004	2026-02-09	0	2.44
IDZ-W2	2 m Below Surface	IDZ-W2-2m	VA26A3194-005	2026-02-09	0	1.87
IDZ-W2	2 m Above Seafloor	IDZ-W2-SF	VA26A3194-006	2026-02-09	0	2.23
Reference Station WQR1						
WQR1	0.5 m Below Surface	WQR1-0.5	VA26A3197-010	2026-02-09	0.00118	2.93
WQR1	2 m Below Surface	WQR1-2m	VA26A3197-011	2026-02-09	0.0819	2.16
WQR1	2 m Above Seafloor	WQR1-SF	VA26A3197-012	2026-02-09	0	1.94
Reference Station WQR2						
WQR2	0.5 m Below Surface	WQR2-0.5	VA26A3194-007	2026-02-09	0	1.98
WQR2	2 m Below Surface	WQR2-2m	VA26A3194-008	2026-02-09	0.00667	1.97
WQR2	2 m Above Seafloor	WQR2-SF	VA26A3194-009	2026-02-09	0.0500	1.27

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.