



TECHNICAL MEMORANDUM

To: Ian McAllister, Ashleigh Crompton, Mike Champion,
Mark Zan and Ryan Schucroft (Woodfibre LNG) **Date:** 6 Feb 2026

From: Holly Pelletier and Cheng Kuang (Lorax) **Project #:** A633-9

Subject: PE-111578 Weekly Discharge and Compliance Report #99 for January 25 – 31

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 #99) was prepared by Lorax and summarizes WDA monitoring conducted for the period of January 25 – 31. 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 #99 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 D 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 January 25 – 31 monitoring period, with precipitation recorded each day except on January 25 and 26. The total precipitation amount from January 27 to 31 was 128.8 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
2026-01-25	0	5.8	-1.9	Clear skies
2026-01-26	0	6.7	-0.1	Mix of sun and cloud
2026-01-27	0.4	9.7	2.6	Overcast
2026-01-28	37.8	7.4	4.9	Rain
2026-01-29	39.4	7.5	5.6	Rain
2026-01-30	35.2	9.2	6.1	Rain
2026-01-31	16.0	8.0	6.1	Rain

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

From January 25 – 31, the East Sedimentation Pond received water from the Area 1100 Sump, the M09 Sump, the 6403 Sump, the MOF Sump and recirculated effluent from the East WWTP (Appendix A, Figure 2). A total of 2,535 m³ from the East Sedimentation Pond was transferred to the West Sedimentation Pond from January 25 – 31 (Appendix B, Table B-7).

Routine operation of the East WWTP continued during the monitoring period (January 25 – 31). Concrete contact water and water from the Wash Bay and Hydrovac Pit 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 (January 25 – 31). Daily water volumes processed by the East WWTP are provided in Appendix B (Table B-7).

From January 25 – 31, the West Sedimentation Pond received water from the Area 4100 and Area 4200 Sumps, the East Sedimentation Pond 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 (January 25 – 31) and either recirculated back to the pond or intermittently discharged to Howe Sound. A total of 9,075 m³ of clarified effluent was intermittently discharged to Howe Sound from station SP-W-OUT each day during the monitoring period (January 25 – 31) except on January 25 and 27. 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-6).

2. Monitoring Summary

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

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

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

- Howe Sound reference and IDZ monitoring stations (WQR1, WQR2, IDZ-E1, IDZ-E2, IDZ-W1, and IDZ-W2).

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

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

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

Water quality was monitored at stations SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN, WWTP-E-OUT, SP-W-IN, SP-W-OUT, 2700GPM-IN, W2700T5-OUT, and W2700T6-OUT during the monitoring period (January 25 – 31). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (January 25 – 31) 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 (January 25 – 31). Daily field parameters were not collected at the west catchment compliance station (SP-W-OUT) on January 25 as there was no discharge to Howe Sound from the West Sedimentation Pond. 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 (January 25 – 31).

**Table 2:
Summary of PE-111578 Monitoring Samples Collected January 25 – 31.**

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
January 25, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
January 26, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field, 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	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
	W2700T5-OUT	2700GPM TSS settling system at the outlet of Train 5	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	P
W2700T6-OUT	2700GPM TSS settling system at the outlet of Train 6			
January 27, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-OUT	Residual West Sedimentation Pond clarified effluent, 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
January 28, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M ₂ , W
	WWTP-E-IN	East WWTP at the influent meter box	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M ₂ , W
	WWTP-E-OUT	East WWTP at the effluent meter box		
	COMB-WWTP-E-IN	Combined East WWTP influent from the concrete contact water treatment stream and the East Sedimentation Pond, collected from the heated frac tank	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	P
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	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
January 29, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	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
January 30, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box	Field Parameters, Hexavalent Chromium.	D, P
	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.	D

**Table 2 (continued):
Summary of PE-111578 Monitoring Samples Collected January 25 – 31.**

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
January 31, 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 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

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 #99) are listed below in Table 3, with additional field measurements presented in Table B-6 (Appendix B) and Table C-5 (Appendix C). Testing for methylmercury, dioxins, furans and toxicity may require four weeks or longer to complete. Analytical results not reported will be included in future weekly reports. Reporting of results is pending for the following samples and parameters:

- SP-W-IN, SP-W-OUT and 2700GPM-IN collected January 4 (dioxins and furans);
- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected January 5 (dioxins and furans);
- SW-01, SW-02, SW-03, SW-04 and SW-07 collected January 5 (dioxins and furans);
- SP-W-OUT and 2700GPM-IN collected January 11 (dioxins and furans);
- IDZ-W1, IDZ-W2 and WQR2 collected January 11 (dioxins and furans);
- SP-E-OUT collected January 12 (dioxins and furans);
- IDZ-E1, IDZ-E2 and WQR1 collected January 14 (dioxins and furans);

**Table 3:
Summary of Analytical Results and Associated Field Measurements Included in Weekly Discharge and Compliance Report #99.**

Sample	Description	Sampling Date	Parameters Reported
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	November 25, 2025	Chronic Toxicity
IDZ-E2-0.5	Howe Sound IDZ station E2; 0.5 m below surface		
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface		
IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
WQR1-0.5	Reference site 1; 0.5 m below surface		
WQR2-0.5	Reference site 2; 0.5 m below surface		
SP-E-OUT	East WWTP treated effluent, collected at the sampling port	December 16, 2025	Dioxins and Furans.
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 new SP-W-OUT sampling port	December 26, 2025	Dioxins and Furans.
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
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 new SP-W-OUT sampling port	December 28, 2025	Dioxins and Furans.
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface	January 11, 2026	Methylmercury.
IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		
WQR2-0.5	Reference site 2; 0.5 m below surface		
WQR2-2m	Reference site 2; 2 m below surface		
WQR2-SF	Reference site 2; 2 m above the seafloor		
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	January 14, 2026	Methylmercury.
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	January 22, 2026	Hexavalent Chromium.
WWTP-E-OUT	East WWTP at the effluent meter box		
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	January 26, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, 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 new SP-W-OUT sampling port		
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		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond		
WWTP-E-IN	East WWTP at the influent meter box	January 28, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, and Methylmercury.
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		
WWTP-E-OUT	East WWTP at the effluent meter box		
WWTP-E-OUT	East WWTP at the effluent meter box	January 30, 2026	Hexavalent Chromium.

3.2 Screening and Reporting Overview

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

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

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

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

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

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

A summary of reported and pending results is provided in Section 3.1. Results for effluents from East WWTP, 2700GPM TSS settling system, and East and West Sedimentation Ponds are discussed in Section 3.2 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 January 25 – 31 as well as analytical results for samples collected January 28 (stations SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN and WWTP-E-OUT) and hexavalent chromium results for samples collected January 22 and 30 (station WWTP-E-OUT). Field measurements for the East WWTP effluent samples (WWTP-E-OUT) collected January 25 – 31 and the analytical samples collected January 22, 28 and 30 met MDOs except for hexavalent chromium on January 28 (0.00153 mg/L; Appendix B, Table B-1, Table B-3, Table B-4 and Table B-6). Follow-up actions for hexavalent chromium are tracked in Table 4.

East WWTP effluent was directed to the East Sedimentation Pond and there was no discharge from the pond to Howe Sound from January 25 – 31 (Section 1.2; Table B-7 of Appendix B). Therefore,

water quality samples and field measurements were not collected at the SP-E-OUT sedimentation pond effluent station.

Dioxins and furans results were available at the time of reporting for East WWTP effluent that was discharged to Howe Sound from SP-E-OUT on December 16 (as discussed in Report #95). Results are presented in Appendix B, Table B-5.

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 9,075 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 (January 25 – 31) except on January 25 and 27.

Field measurements of influent and effluent quality for the West Sedimentation Pond and the 2700GPM TSS settling system collected January 25 – 31, as well as analytical samples collected January 26 (stations SP-W-IN, SP-W-OUT, 2700GPM-IN, W2700T5-OUT and W2700T6-OUT) were available at the time of reporting (Appendix C, Table C-1 through Table C-3 and Table C-5). Field measurements and the analytical sample collected at SP-W-OUT on January 26 met PE-111578 discharge limits and WQGs.

Dioxins and furans results were available at the time of reporting for clarified sedimentation pond effluent from the 2700GPM TSS Settling System that was discharged to Howe Sound from SP-W-OUT on December 26 and 28 (as discussed in Report #95). Results are presented in Appendix C, Table C-4.

3.5 Non-Contact Water Diversion Ditch Outlets

There are no outstanding analytical results at the time of reporting for the non-contact water diversion ditch outlet samples.

3.6 Freshwater and Estuarine Water Receiving Environment

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

3.7 Marine Water Receiving Environment

Methylmercury analytical results 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 January 11 (stations IDZ-W1, IDZ-W2 and WQR2) and January 14 (stations IDZ-E1, IDZ-E2 and WQR1), as discussed in Report #97. For all samples, methylmercury concentrations ranged from <0.000020 to 0.000027 µg/L and met the WQG. The corresponding total mercury results met WQGs. Results are tabulated in Appendix F, Table F-1.

Chronic toxicity test results for marine receiving environment samples collected November 25, 2025 (as discussed in Report #92) are summarized herein. Marine water samples were tested for chronic toxicity to inland silverside (fish) and echinoderm (invertebrate). All chronic toxicity tests were conducted using 100% (undiluted) marine water collected from 0.5 m below the surface at stations IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, and marine reference stations WQR1 and WQR2 in the receiving environment of Howe Sound. Salinity adjustment was made prior to testing as per standard test protocol.

The November 25 chronic toxicity test results showed no statistically significant differences between the marine samples and laboratory controls for any of the endpoints tested for inland silverside. For the echinoderm test, a statistically significant difference in fertilization rate was observed in samples collected from stations IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, and from marine reference stations WQR1 and WQR2 relative to the laboratory controls.

Analytical results of water samples collected from the marine receiving environment in tandem with the November 25 toxicity samples show that water quality parameter concentrations met WQGs except for total boron at IDZ-E2 and field pH at IDZ-W2 (Appendix G; Report #95). There is no clear link between water quality and chronic effect on the echinoderm test species that was observed in the IDZ and reference locations. Considering that the November 25 reference station results showed inhibition of echinoderm fertilization rate similar to the IDZ station results, and that some reference station samples collected in 2025 also showed similar effects, it is inferred that there is a natural condition in the Howe Sound marine water collected at 0.5 m depth that periodically induces a chronic effect (*i.e.*, inhibition of fertilization rate) to echinoderm, that is not attributable to project influence.

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 (January 25 – 31, Report #99)		
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.
Ongoing Items from Previous Weekly Reports		
Report #92: Pending Data	Analytical results not reported.	Previously pending chronic toxicity results for receiving environment samples collected November 25 are included in Report #99. This item is closed.
Report #95: Pending Data	Analytical results not reported.	Previously pending dioxins and furans results for contact and treated water samples collected December 16, 26 and 28 are included in Report #99. Testing for dioxins and furans for contact and treated water samples collected December 17 was cancelled. This item is closed.
Report #96: Pending Data	Analytical results not reported.	Dioxins and furans results for contact and treated water samples collected January 4 and 5 and for receiving environment samples collected January 5 are pending and will be included in future weekly reports when available. This item remains open.
Report #97: Pending Data	Analytical results not reported.	Previously pending total mercury and methylmercury results for receiving environment samples collected January 11 and 14 are included in Report #99. Dioxins and furans results for receiving environment samples collected January 11 and 14 and contact and treated water samples collected January 11 and 12 are pending and will be included in future weekly reports when available. This item remains open.
Report #98: Pending Data	Analytical results not reported.	Previously pending hexavalent chromium results for contact and treated water samples collected January 22 are included in Report #99. This item is closed.
Report #98: WWTP Performance Evaluation	Hexavalent chromium above the MDO.	The hexavalent chromium concentration was 0.00154 mg/L in the sample collected at WWTP-E-OUT on January 20 and was above the MDO (0.0015 mg/L). Hexavalent chromium was also above the MDO in the sample collected at WWTP-E-OUT on January 28 (0.00153 mg/L). The WWTP treatment performance for hexavalent chromium will continue to be evaluated through the end of February 2026 to determine if this is an isolated event or a recurring issue that requires additional investigation. 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

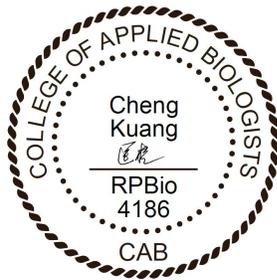
This weekly report is a desktop review by Lorax of the PE-111578 discharge and compliance monitoring program records, reports and results provided by Woodfibre LNG and prime contractor McDermott International and their sub-contractors. The records reviewed and analyzed by Lorax include ALS Environmental 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:	Feb 06, 2026
DRAWN BY:	DM
REVIEWED:	PM
VERSION:	1

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

0 100 200 Metres

CLIENT:

PROJECT: **Woodfibre LNG Project Construction Phase**

TITLE: Site Layout and Water Quality Monitoring Stations for PE-111578 (January 31, 2026)

PROJECT #: A633-9

FIGURE: 1

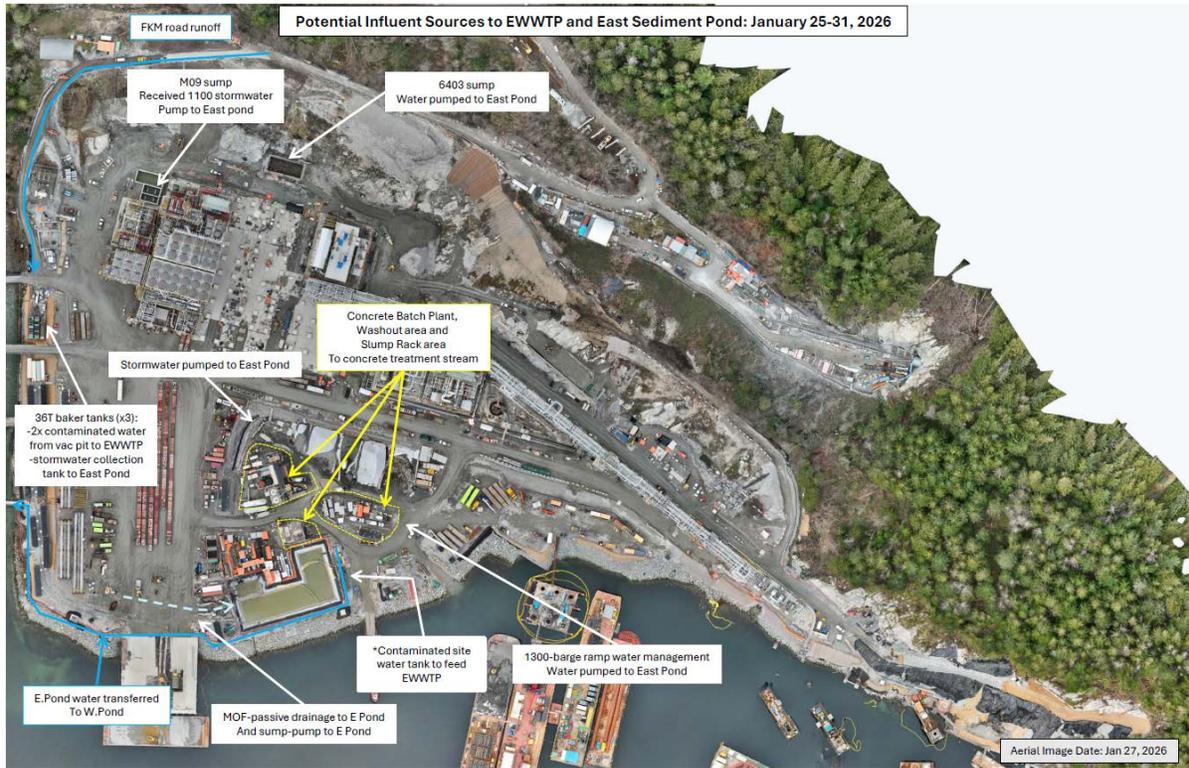


Figure 2: East Catchment contact water management facilities (January 25 – 31).



Figure 3: West Catchment contact water management facilities (January 25 – 31).



Figure 4: Aerial view of the East Sedimentation Pond (January 27, 2026). The East WWTP is located on the left side of the pond.

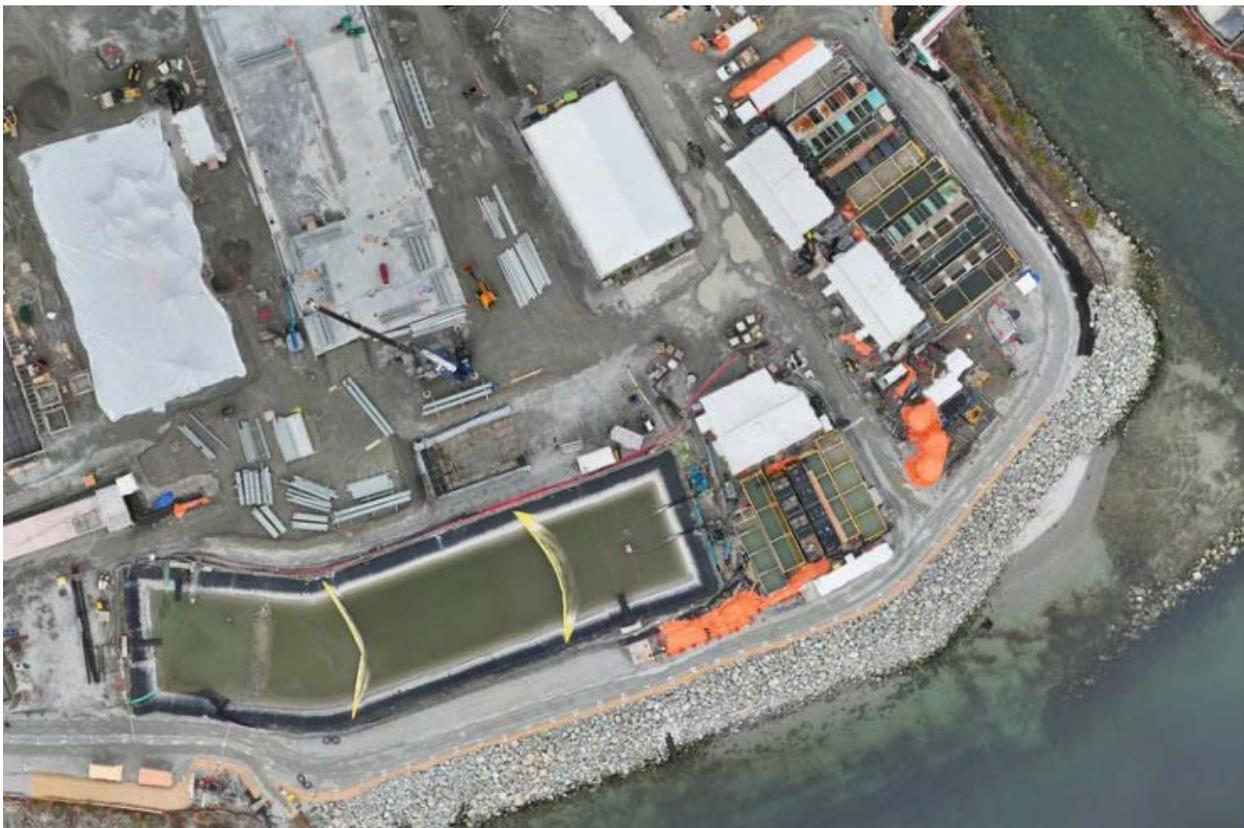


Figure 5: Aerial view of the West Sedimentation Pond (January 27, 2026).

***Appendix B:
East Catchment Monitoring Results***

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

Parameter	Unit	Lowest Applicable Guideline ¹		PE-111578 Discharge Limit	Station WWTP-E-IN	Station COMB-WWTP-E-IN	Station WWTP-E-OUT
					Influent	Influent	Effluent
					WWTP-E-IN	COMB-WWTP-E-IN	WWTP-E-OUT
					VA26A2037-002 2026-01-28 9:32	VA26A2037-003 2026-01-28 10:08	VA26A2037-004 2026-01-28 14:58
		Long Term	Short Term				
General Parameters							
pH - Field	pH units	- ²	-	5.5 - 9.0	6.9	9.3	7.1
Specific Conductivity - Field	µS/cm	-	-	-	1475	1687	1749
Temperature - Field	°C	-	-	-	7.5	6.1	8.2
Salinity - Field	ppt	-	-	-	0.74	0.85	0.89
Turbidity - Field	NTU	-	-	-	175.12	75.43	1.97
TSS	mg/L	-	-	25 or 75 ⁶	160	224	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	12.6	12.87	13.38
Total Hardness	mg/L	-	-	-	69	185	20.2
Dissolved Hardness	mg/L	-	-	-	45.7	51.4	20.4
Anions and Nutrients							
Sulphate	mg/L	-	-	-	516	698	601
Chloride	mg/L	-	-	-	4.41	<5.00	<5.00
Fluoride	mg/L	-	1.5	-	<0.100	<0.200	<0.200
Ammonia (N-NH ₃)	mg/L	0.31-29 ³	2.1-191 ³	-	0.0167	0.0291	0.0092
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0123	0.0141	<0.0100
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.206	0.233	0.224
Total Organic Carbon (TOC)	mg/L	-	-	-	4.04	5.22	2.38
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	2.31	3.53	2.20
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	9.94	2.24	0.0368
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.0007	0.00074	0.00076
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00156	0.00134	0.00079
Barium, total (T-Ba)	mg/L	-	-	-	0.0839	0.116	0.00518
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.00015	0.000046	<0.000040
Boron, total (T-B)	mg/L	1.2	-	-	0.017	<0.020	<0.020
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.000068	<0.0000750	<0.0000250
Chromium, total (T-Cr)	mg/L	-	-	-	0.00363	0.0359	0.00172
Cobalt, total (T-Co)	mg/L	-	-	-	0.00301	0.00075	<0.00020
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00764	0.00973	0.0021
Iron, total (T-Fe)	mg/L	-	-	-	8.12	2.17	<0.020
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.0022	0.00105	<0.000100
Manganese, total (T-Mn)	mg/L	-	-	-	0.339	0.0914	0.0035
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0614	0.254	0.0961
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00246	0.00141	<0.00100
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000336	0.00131	0.00054
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.000011	<0.000020	<0.000020
Thallium, total (T-Tl)	mg/L	-	-	-	0.000024	<0.000020	<0.000020
Uranium, total (T-U)	mg/L	-	-	-	0.0113	0.01	0.0146
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.0138	0.00415	0.00146
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.038	0.0132	<0.0060
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.0007	0.0102	0.00153
Dissolved Metals							
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000250	<0.0000350	<0.0000250
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.0012	0.00151	0.00144
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.022	<0.020	<0.020
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	<0.000100	<0.000100
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0365	0.00733	0.00315
Nickel, dissolved (D-Ni)	mg/L	-	-	-	0.00052	<0.00100	<0.00100
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.146	0.278	0.117
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00097	0.00119	0.00134
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0025	<0.0020	0.0028
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 (January 25 - 31).

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 When MeHg ≤ 0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.

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-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
					VA26A2037-001 2026-01-28 10:39
General Parameters					
pH - Field	pH units	- ²	-	5.5 - 9.0	8.1
Specific Conductivity - Field	µS/cm	-	-	-	1097
Temperature - Field	°C	-	-	-	6.3
Salinity - Field	ppt	-	-	-	0.54
Turbidity - Field	NTU	-	-	-	234.98
TSS	mg/L	-	-	25 or 75 ⁶	154
Dissolved Oxygen - Field	mg/L	≥8	-	-	13
Total Hardness	mg/L	-	-	-	73.4
Dissolved Hardness	mg/L	-	-	-	39.2
Anions and Nutrients					
Sulphate	mg/L	-	-	-	367
Chloride	mg/L	-	-	-	12.4
Fluoride	mg/L	-	1.5	-	<0.100
Ammonia (N-NH ₃)	mg/L	2.9 ³	19 ³	-	0.0598
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0488
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.378
Total Organic Carbon (TOC)	mg/L	-	-	-	8.99
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	5.91
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	11.9
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00074
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00251
Barium, total (T-Ba)	mg/L	-	-	-	0.122
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000201
Boron, total (T-B)	mg/L	1.2	-	-	0.027
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.0000989
Chromium, total (T-Cr)	mg/L	-	-	-	0.00406
Cobalt, total (T-Co)	mg/L	-	-	-	0.00368
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00961
Iron, total (T-Fe)	mg/L	-	-	-	10.3
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.00272
Manganese, total (T-Mn)	mg/L	-	-	-	0.454
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0481
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00243
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000272
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.000033
Thallium, total (T-Tl)	mg/L	-	-	-	0.000025
Uranium, total (T-U)	mg/L	-	-	-	0.0122
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.0164
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.072
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.0007
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000250
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00173
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.014
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0362
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.115
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.001
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 (January 25 - 31).

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 When MeHg ≤ 0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.

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-3:
East Catchment Hexavalent Chromium Results Received at the Time of Reporting.**

Parameter					Hexavalent Chromium
Unit					mg/L
Lowest Applicable Guideline ¹					0.0015
Station	Water Type	Sample ID	Lab ID	Sampling Date	
Influent					
SP-E-IN	Influent	SP-E-IN	VA26A1495-002	2026-01-22 9:37	0.00051
Effluent					
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA26A1495-001	2026-01-22 9:20	0.00070
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA26A2337-001	2026-01-30 13:51	<0.00050

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 aquatic life.

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

**Table B-4:
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	0.0077-0.016 ^{3,4}
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-E-IN	Influent	SP-E-IN	VA26A2037-001	2026-01-28	<u>0.000151</u>	<u>0.0117</u>
WWTP-E-IN	Influent	WWTP-E-IN	VA26A2037-002	2026-01-28	<u>0.000115</u>	<u>0.0123</u>
COMB-WWTP-E-IN	Influent	COMB-WWTP-E-IN	VA26A2037-003	2026-01-28	<u>0.000182</u>	<u>0.284</u>
Effluent						
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA26A2037-004	2026-01-28	0.000045	0.00681

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 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-5:
East Catchment Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.**

Parameter					Lower Bound PCDD/F TEQ	Upper Bound PCDD/F TEQ
Unit					pg/L	pg/L
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Effluent						
SP-E-OUT	Effluent	SP-E-OUT	VA25D3534-001	2025-12-16	0.000708	1.53
SP-E-OUT	Effluent	SP-E-OUT-DUP	VA25D3534-002	2025-12-16	0.0393	1.38

Notes:

PCDD = polychlorinated dibenzodioxins (dioxins)

PCDF = polychlorinated dibenzofurans (furans)

TEQ = toxic equivalency

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

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

**Table B-6:
East Catchment Field Measurements Collected During the Monitoring Period (January 25 – 31).**

Parameter	Temp.	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 Guideline¹	-	≥8	-	-	- ²	- ²	-	-		
Station ID	Water Type	Date								
Influent⁴										
SP-E-IN	Influent	2026-01-25 11:45	2.3	13.53	0.31	41.67	34.1	7.7	645	No
SP-E-IN	Influent	2026-01-26 11:26	4.3	13.09	0.83	10.02	10.5	7.4	1648	No
SP-E-IN	Influent	2026-01-27 12:18	6.0	13.16	0.87	4.08	6.0	6.9	1712	No
SP-E-IN	Influent	2026-01-28 10:39	6.3	13.00	0.54	234.98	178.2	8.1	1097	No
SP-E-IN	Influent	2026-01-29 10:02	6.4	12.09	0.23	115.43	89.1	7.2	475	No
SP-E-IN	Influent	2026-01-30 13:34	7.1	12.29	0.19	543.33	408.2	7.5	391	No
SP-E-IN	Influent	2026-01-31 10:54	6.8	11.90	0.12	44.58	36.2	7.0	245	No
WWTP-E-IN	Influent	2026-01-25 14:41	5.6	13.49	0.84	9.9	10.4	7.8	1661	No
WWTP-E-IN	Influent	2026-01-26 11:34	5.1	13.01	0.8	13.28	12.9	7	1596	No
WWTP-E-IN	Influent	2026-01-27 12:06	6.9	13.22	0.83	4.14	6.1	6.9	1646	No
WWTP-E-IN	Influent	2026-01-28 9:32	7.5	12.6	0.74	175.12	133.6	6.9	1475	No
WWTP-E-IN	Influent	2026-01-29 9:54	6.8	12.41	0.28	279.86	211.7	6.9	580	No
WWTP-E-IN	Influent	2026-01-30 13:44	7.4	12.18	0.17	541.39	406.8	7.5	349	No
WWTP-E-IN	Influent	2026-01-31 10:47	7.3	12.18	0.17	223.38	169.6	6.4	363	No
Effluent⁵										
WWTP-E-OUT	Effluent	2026-01-25 14:48	6.0	13.69	0.97	1.60	4.2	8.1	1906	No
WWTP-E-OUT	Effluent	2026-01-25 14:53	6.1	13.47	0.99	2.02	4.5	7.8	1938	No
WWTP-E-OUT	Effluent	2026-01-26 11:38	5.4	13.03	0.91	1.45	4.1	7.1	1789	No
WWTP-E-OUT	Effluent	2026-01-27 12:11	5.8	12.71	0.87	2.78	5.1	6.7	1729	No
WWTP-E-OUT	Effluent	2026-01-28 9:58	7.8	12.99	0.87	2.35	4.8	8.5	1720	No
WWTP-E-OUT	Effluent	2026-01-28 14:58	8.2	13.38	0.89	1.97	4.5	7.1	1749	No
WWTP-E-OUT	Effluent	2026-01-29 9:50	7.4	11.93	0.83	1.38	4.0	6.1	1634	No
WWTP-E-OUT	Effluent	2026-01-30 13:51	7.9	12.22	0.51	3.34	5.5	6.1	1021	No
WWTP-E-OUT	Effluent	2026-01-31 10:45	8.1	12.46	0.33	0.78	3.6	6.3	668	No

Notes:

The east catchment did not discharge to Howe Sound during the monitoring period (January 25 - 31). 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 $TSS = 0.7458 * [\text{turbidity as NTU}] + 3$.

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

⁵ There was no discharge at the authorized discharge location (SP-E-OUT) during the monitoring period (January 25 - 31), therefore daily field measurements for SP-E-OUT were not collected on those days.

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

**Table B-7:
East Catchment Daily Discharge Volumes for the Monitoring Period (January 25 – 31).**

	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	-	-	1100	- ¹
Date				
2026-01-25	0	0	340	0
2026-01-26	0	0	536	0
2026-01-27	0	0	665	0
2026-01-28	0	0	498	0
2026-01-29	0	0	421	0
2026-01-30	0	307	539	0
2026-01-31	0	2,228	514	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 W2700T5-OUT	Station W2700T6-OUT
					Influent	Effluent	Effluent
					2700GPM-IN	W2700T5-OUT	W2700T6-OUT
					VA26A1779-002	VA26A1779-003	VA26A1779-004
		Long Term	Short Term		2026-01-26 13:23	2026-01-26 12:52	2026-01-26 12:57
General Parameters							
pH - Field	pH units	- ²	-	5.5 - 9.0	7.8	7.8	7.9
Specific Conductivity - Field	µS/cm	-	-	-	651	224	223
Temperature - Field	°C	-	-	-	4.1	4.3	3.7
Salinity - Field	ppt	-	-	-	0.32	0.11	0.11
Turbidity - Field	NTU	-	-	-	20.81	1.88	1.18
TSS	mg/L	-	-	25 or 75 ⁶	<3.0	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	13.8	13.21	13.74
Total Hardness	mg/L	-	-	-	53.5	56	54.5
Dissolved Hardness	mg/L	-	-	-	54.3	53.5	54.2
Anions and Nutrients							
Sulphate	mg/L	-	-	-	23.1	21.7	21.6
Chloride	mg/L	-	-	-	4.98	4.98	4.96
Fluoride	mg/L	-	1.5	-	0.097	0.097	0.095
Ammonia (N-NH ₃)	mg/L	6.6 ³	44 ³	-	<0.0050	0.0255	0.0082
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0326	0.0347	0.034
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.145	0.149	0.142
Total Organic Carbon (TOC)	mg/L	-	-	-	2.03	1.68	1.91
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	1.89	1.75	1.71
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	0.0784	0.015	0.0152
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00054	0.00054	0.00055
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00172	0.0017	0.00165
Barium, total (T-Ba)	mg/L	-	-	-	0.00364	0.00197	0.00193
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020	<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	-	-	<0.0000050	<0.0000050	<0.0000050
Chromium, total (T-Cr)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	<0.00010	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00402	0.00083	0.00118
Iron, total (T-Fe)	mg/L	-	-	-	0.046	<0.010	<0.010
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.000203	0.000061	0.000173
Manganese, total (T-Mn)	mg/L	-	-	-	0.0207	0.0205	0.02
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.00748	0.00663	0.00673
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000051	<0.000050	<0.000050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000017	0.000016	0.000017
Uranium, total (T-U)	mg/L	-	-	-	0.00457	0.00342	0.00381
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00067	0.0005	<0.00050
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	<0.0030	<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	-	-	-	<0.0000050	<0.0000050	<0.0000050
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00065	0.00063	0.00064
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000053	0.000079	0.000088
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.019	0.0208	0.0201
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.0663	0.0662	0.0645
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00055	<0.00050	<0.00050
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0016	0.0015	0.0015
Polycyclic Aromatic Hydrocarbons (PAHs)							
Acenaphthene	mg/L	0.006	-	-	-	-	-
Acridine	mg/L	-	-	-	-	-	-
Anthracene	mg/L	-	-	-	-	-	-
Benz(a)anthracene	mg/L	-	-	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-	-
Chrysene	mg/L	0.0001	-	-	-	-	-
Fluoranthene	mg/L	-	-	-	-	-	-
Fluorene	mg/L	0.012	-	-	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	-	-	-
Naphthalene	mg/L	0.001	-	-	-	-	-
Phenanthrene	mg/L	-	-	-	-	-	-
Pyrene	mg/L	-	-	-	-	-	-
Quinoline	mg/L	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)							
Benzene	mg/L	0.11	-	-	-	-	-
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 (January 25 - 31) except on January 25 and 27.

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

² The WQG was not evaluated for parameters with discharge limits.

³ The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.

⁴ The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.

⁵ When MeHg ≤ 0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.

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

Parameter	Unit	Lowest Applicable Guideline ¹		PE-111578 Discharge Limit	Station SP-W-IN	Station SP-W-OUT
					Influent	Effluent
		SP-W-IN	SP-W-OUT			
		VA26A1779-001 2026-01-26 13:23	VA26A1779-005 2026-01-26 13:42			
		Long Term	Short Term			
General Parameters						
pH - Field	pH units	- ²	-	5.5 - 9.0	7.8	7.7
Specific Conductivity - Field	µS/cm	-	-	-	651	224
Temperature - Field	°C	-	-	-	4.1	3.9
Salinity - Field	ppt	-	-	-	0.32	0.11
Turbidity - Field	NTU	-	-	-	20.81	1.83
TSS	mg/L	-	-	25 or 75 ⁶	66.6	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	13.8	15.36
Total Hardness	mg/L	-	-	-	72.6	54.2
Dissolved Hardness	mg/L	-	-	-	58.9	56.6
Anions and Nutrients						
Sulphate	mg/L	-	-	-	190	21.8
Chloride	mg/L	-	-	-	4.3	4.99
Fluoride	mg/L	-	1.5	-	0.101	0.096
Ammonia (N-NH ₃)	mg/L	6.6-10 ³	44-69 ³	-	0.0059	0.008
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0241	0.0337
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.169	0.15
Total Organic Carbon (TOC)	mg/L	-	-	-	2.55	1.84
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	2.13	1.68
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	4.52	0.0173
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00064	0.00054
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00232	0.00167
Barium, total (T-Ba)	mg/L	-	-	-	0.041	0.00204
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000084	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	<0.010	<0.010
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.0000773	<0.0000050
Chromium, total (T-Cr)	mg/L	-	-	-	0.00271	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.00147	<0.00010
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00633	0.00348
Iron, total (T-Fe)	mg/L	-	-	-	3.95	<0.010
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.004	0.000322
Manganese, total (T-Mn)	mg/L	-	-	-	0.174	0.0196
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0283	0.00678
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00137	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000267	<0.000050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000038	0.000017
Uranium, total (T-U)	mg/L	-	-	-	0.00804	0.00401
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00643	<0.00050
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0288	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000250	<0.0000050
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.0006	0.00064
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010	0.019
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0226	0.0218
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.122	0.0649
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00073	<0.00050
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0013	0.0034
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 (January 25 - 31) except on January 25 and 27.

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

² The WQG was not evaluated for parameters with discharge limits.

³ The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.

⁴ The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.

⁵ When MeHg ≤ 0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.

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-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	0.0025-0.018 ^{3,4}
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-W-IN	Influent	SP-W-IN	VA26A1779-001	2026-01-26	0.000088	0.0158
2700GPM-IN	Influent	2700GPM-IN	VA26A1779-002	2026-01-26	<0.000020	<0.00050
Effluent						
SP-W-OUT	Effluent	SP-W-OUT	VA26A1779-005	2026-01-26	<0.000020	<0.00050
W2700T5-OUT	Effluent	W2700T5-OUT	VA26A1779-003	2026-01-26	<0.000020	<0.00050
W2700T6-OUT	Effluent	W2700T6-OUT	VA26A1779-004	2026-01-26	<0.000020	<0.00050

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 Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.**

Parameter					Lower Bound PCDD/F TEQ	Upper Bound PCDD/F TEQ
Unit					pg/L	pg/L
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
2700GPM-IN	Influent	2700GPM-IN	VA25D4186-001	2025-12-26	0.0941	1.75
2700GPM-IN	Influent	2700GPM-IN	VA25D4205-002	2025-12-28	0	1.97
Effluent						
SP-W-OUT	Effluent	SP-W-OUT	VA25D4186-002	2025-12-26	0.00940	1.32
SP-W-OUT	Effluent	SP-W-OUT	VA25D4205-005	2025-12-28	0	1.24

Notes:

PCDD = polychlorinated dibenzodioxins (dioxins)

PCDF = polychlorinated dibenzofurans (furans)

TEQ = toxic equivalency

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

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

**Table C-5:
West Catchment Field Measurements Collected During the Monitoring Period (January 25 – 31).**

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 Guideline¹			-	≥8	-	-	- ²	- ²	-	-
Station ID	Water Type	Date								
Influent⁴										
SP-W-IN	Influent	2026-01-25 11:25	5.0	12.11	0.11	3.86	5.9	6.7	235	No
SP-W-IN	Influent	2026-01-26 13:23	4.1	13.80	0.32	20.81	18.5	7.8	651	No
SP-W-IN	Influent	2026-01-27 12:55	5.0	12.07	0.44	1.82	4.4	8.3	897	No
SP-W-IN	Influent	2026-01-28 11:29	5.4	12.41	0.42	14.19	13.6	8.3	849	No
SP-W-IN	Influent	2026-01-29 10:41	6.1	12.75	0.21	258.57	195.8	8.0	432	No
SP-W-IN	Influent	2026-01-30 14:18	7.0	12.86	0.07	154.23	118.0	7.0	142	No
SP-W-IN	Influent	2026-01-31 14:02	7.2	12.69	0.13	370.45	279.3	7.7	275	No
2700GPM-IN	Influent	2026-01-25 12:12	3.8	13.76	0.11	4.29	6.2	8.1	222	No
2700GPM-IN	Influent	2026-01-26 13:23	4.1	13.8	0.32	20.81	18.5	7.8	651	No
2700GPM-IN	Influent	2026-01-27 12:43	5.1	12.72	0.46	5.66	7.2	8	926	No
2700GPM-IN	Influent	2026-01-28 11:17	5.4	12.54	0.41	57.25	45.7	8.3	828	No
2700GPM-IN	Influent	2026-01-29 8:48	6.4	12.52	0.31	308.21	232.9	7.7	627	No
2700GPM-IN	Influent	2026-01-30 13:19	7.4	12.26	0.07	139.88	107.3	7.4	155	No
2700GPM-IN	Influent	2026-01-31 13:52	7.8	12.32	0.14	133.79	102.8	7.9	284	No
Effluent⁵										
SP-W-OUT	Effluent	2026-01-26 13:42	3.9	15.36	0.11	1.83	4.4	7.7	224	No
SP-W-OUT	Effluent	2026-01-26 13:45	3.9	15.59	0.11	0.54	3.4	7.7	224	No
SP-W-OUT	Effluent	2026-01-27 12:49	5.5	13.82	0.46	2.89	5.2	7.8	937	No
SP-W-OUT	Effluent	2026-01-28 11:24	5.2	12.65	0.42	2.27	4.7	8.3	855	No
SP-W-OUT	Effluent	2026-01-29 8:38	6.6	13.76	0.34	1.57	4.2	7.9	692	No
SP-W-OUT	Effluent	2026-01-29 10:36	6.4	12.8	0.20	3.1	5.3	8.0	410	No
SP-W-OUT	Effluent	2026-01-29 13:12	7.8	12.21	0.29	4.61	6.4	7.1	588	No
SP-W-OUT	Effluent	2026-01-30 12:22	8.2	12.18	0.05	18.09	16.5	7.4	115	No
SP-W-OUT	Effluent	2026-01-30 12:27	7.4	12.32	0.06	17.12	15.8	7.5	118	No
SP-W-OUT	Effluent	2026-01-30 12:33	7.4	12.27	0.06	13.69	13.2	7.5	121	No
SP-W-OUT	Effluent	2026-01-30 12:46	8.3	12.55	0.06	14.54	13.8	6.8	126	No
SP-W-OUT	Effluent	2026-01-30 14:11	7.4	12.76	0.07	13.64	13.2	6.4	142	No
SP-W-OUT	Effluent	2026-01-30 16:31	7.5	12.91	0.11	10.82	11.1	6.9	235	No
SP-W-OUT	Effluent	2026-01-31 12:52	8.3	11.66	0.15	4.14	6.1	8.3	315	No
SP-W-OUT	Effluent	2026-01-31 13:30	8.1	12.84	0.14	5.99	7.5	8.3	294	No

Notes:

West catchment influents for January 25 - 31 were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.

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

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

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

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

² The WQG was not evaluated for parameters with discharge limits.

³ TSS concentration is estimated from field turbidity measurements using a site-specific relationship TSS = 0.7458 * [turbidity as NTU] + 3.

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

⁵ As described in Section 1.1, when there is surplus water, West Sedimentation Pond clarified effluent from the individual 2700GPM trains is directed to SP-W-OUT for discharge. 2700GPM clarified effluent from all six trains was intermittently discharged to Howe Sound at the authorized discharge location (SP-W-OUT) each day during the monitoring period (January 25 - 31) except on January 25 and 27. Field measurements collected January 27 at SP-W-OUT were collected from residual water in the sampling port.

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

**Table C-6:
West Catchment Daily Discharge Volumes for the Monitoring Period (January 25 – 31).**

	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					
2026-01-25	0	914	0	0	0
2026-01-26	0	1,235	0	0	504
2026-01-27	0	509	0	0	0
2026-01-28	0	2,042	0	0	465
2026-01-29	0	3,687	0	0	3,195
2026-01-30	0	4,836	0	0	2,827
2026-01-31	0	4,853	0	0	2,083

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:
Marine Water Receiving Environment Results***

**Table D-1:
Marine Water Methylmercury and Corresponding Total Mercury Results Received at the Time of Reporting.**

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline ¹					0.0001 ²	0.016-0.019 ^{3,4}
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	VA26A0856-001	2026-01-14	<0.000020	<0.0050
IDZ-E1	2 m Below Surface	IDZ-E1-2m	VA26A0856-002	2026-01-14	<0.000020	<0.0050
IDZ-E1	2 m Above Seafloor	IDZ-E1-SF	VA26A0856-003	2026-01-14	0.000025	<0.0050
Station IDZ-E2						
IDZ-E2	0.5 m Below Surface	IDZ-E2-0.5	VA26A0856-004	2026-01-14	<0.000020	<0.0050
IDZ-E2	2 m Below Surface	IDZ-E2-2m	VA26A0856-005	2026-01-14	<0.000020	<0.0050
IDZ-E2	2 m Above Seafloor	IDZ-E2-SF	VA26A0856-006	2026-01-14	0.000020	<0.0050
Station IDZ-W1						
IDZ-W1	0.5 m Below Surface	IDZ-W1-0.5	VA26A0598-001	2026-01-11	<0.000020	<0.0050
IDZ-W1	2 m Below Surface	IDZ-W1-2m	VA26A0598-002	2026-01-11	<0.000020	<0.0050
IDZ-W1	2 m Above Seafloor	IDZ-W1-SF	VA26A0598-003	2026-01-11	<0.000020	<0.0050
IDZ-W1	2 m Above Seafloor	IDZ-W1-SF-DUP	VA26A0598-004	2026-01-11	0.000021	<0.0050
Station IDZ-W2						
IDZ-W2	0.5 m Below Surface	IDZ-W2-0.5	VA26A0598-007	2026-01-11	<0.000020	<0.0050
IDZ-W2	2 m Below Surface	IDZ-W2-2m	VA26A0598-008	2026-01-11	<0.000020	<0.0050
IDZ-W2	2 m Above Seafloor	IDZ-W2-SF	VA26A0598-009	2026-01-11	0.000024	<0.0050
Reference Station WQR1						
WQR1	0.5 m Below Surface	WQR1-0.5	VA26A0856-007	2026-01-14	<0.000020	<0.0050
WQR1	2 m Below Surface	WQR1-2m	VA26A0856-008	2026-01-14	<0.000020	<0.0050
WQR1	2 m Above Seafloor	WQR1-SF	VA26A0856-009	2026-01-14	<0.000020	<0.0050
Reference Station WQR2						
WQR2	0.5 m Below Surface	WQR2-0.5	VA26A0598-010	2026-01-11	0.000022	<0.0050
WQR2	2 m Below Surface	WQR2-2m	VA26A0598-011	2026-01-11	<0.000020	<0.0050
WQR2	2 m Above Seafloor	WQR2-SF	VA26A0598-012	2026-01-11	0.000027	<0.0050

Notes:

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.

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